



YEZID SAYIGH

OWNERS *OF THE* REPUBLIC

AN ANATOMY OF EGYPT'S MILITARY ECONOMY



CARNEGIE
MIDDLE EAST CENTER

YEZID SAYIGH

OWNERS
OF THE

REPUBLIC

AN ANATOMY OF EGYPT'S MILITARY ECONOMY

This report is published by the program on Civil-Military Relations of the Arab States (CMRAS) of the Carnegie Middle East Center.

© 2019 Carnegie Endowment for International Peace. All rights reserved.

Carnegie does not take institutional positions on public policy issues; the views represented herein are the author's own and do not necessarily reflect the views of Carnegie, its staff, or its trustees.

No part of this publication may be reproduced or transmitted in any form or by any means without permission in writing from the Carnegie Middle East Center or the Carnegie Endowment for International Peace. Please direct inquiries to:

Carnegie Endowment for International Peace
Publications Department
1779 Massachusetts Avenue NW
Washington, DC 20036
P: +1 202 483 7600
F: +1 202 483 1840
CarnegieEndowment.org

Carnegie Middle East Center
Lazarich Tower, 5th floor
Bldg. No. 2026 1210, Emir Bechir Street
P.O. Box 11-1061 Riad El Solh
Beirut, Lebanon
Carnegie-MEC.org

This publication can be downloaded at no cost at Carnegie-MEC.org.

To the memory of Robert Mabro and Samer Soliman, in affection and friendship,

To the quest for truth and justice for Giulio Regeni,

And to all students of Egypt.

TABLE OF CONTENTS

About the Author	vii
Acknowledgments	ix
List of Acronyms	xii
List of Figures, Maps, and Tables	xiii
Summary	xv
Introduction	1
CHAPTER 1	
Enabling the Military Economy	17

CHAPTER 2

Mapping the Formal Military Economy Part 1: A “Citadel” of Egyptian Industry	47
-----------------------------------------------------------------------------------------	-----------

CHAPTER 3.

Mapping the Formal Military Economy Part 2: We Build Egypt, We Feed Egypt, We Are Egypt	89
----------------------------------------------------------------------------------------------------	-----------

CHAPTER 4

Mapping the Informal Military Economy: The Officers’ Republic	155
--------------------------------------------------------------------------	------------

CHAPTER 5

Soldiers and Businessmen	187
---------------------------------	------------

CHAPTER 6

A Military Unbound: Transformation in the Sisi Era	237
-----------------------------------------------------------	------------

CHAPTER 7

Behind the Veil: Managing the Finances	297
-----------------------------------------------	------------

CONCLUSION

What’s At Stake?	331
-------------------------	------------

Carnegie Middle East Center	339
------------------------------------	------------

ABOUT THE AUTHOR

YEZID SAYIGH is a senior fellow at the Carnegie Middle East Center in Beirut, where his work focuses on the Syrian conflict, the political role of Arab armies, security sector transformation in Arab transitions, and the reinvention of authoritarianism.

Previously, Sayigh was professor of Middle East studies at King's College London. From 1994 to 2003, he served as assistant director of studies at the Center of International Studies, Cambridge. He is the author of numerous publications, including most recently "Crumbling States: Security Sector Reform in Libya and Yemen" (June 2015), "Missed Opportunity: The Politics of Police Reform in Egypt and Tunisia" (March 2015); "Militaries, Civilians and the Crisis of the Arab State" (December 2014); "The Syrian Opposition's Leadership Problem" (April 2013); "Above the State: The Officers' Republic in Egypt" (August 2012); *"We Serve the People": Hamas Policing in Gaza* (2011); and "Policing the People, Building the State: Authoritarian Transformation in the West Bank and Gaza" (2011).

ACKNOWLEDGMENTS

THE AUTHOR GRATEFULLY ACKNOWLEDGES the critical feedback on various drafts of this report from George Abed, Lori Allen, David Butter, Ishac Diwan, Clement Moore Henry, Oussama Kanaan, Adeel Malik, Shana Marshall, Andrew Miller, Bessma Momani, Pete Moore, Aram Nerguizian, Robert Springborg, and “Pink” Williams. Six Egyptian reviewers are sincerely thanked anonymously.

The author is also grateful for the research assistance of Dina Arakji, Farah Al Farhan, Ibrahim Nasr, Mohy-Dean Tabbara, Alexei Touma, Sally Youssef, and six Egyptian researchers to whom he owes a special debt but who must remain anonymous.

Last but not least, big thanks are owed to Samuel Brase for his patience and encouragement in editing successive drafts, Jocelyn Soly for her creative work on the graphics for this report, and colleagues in the Communications teams in Beirut and Washington, DC, for their enthusiastic contributions to presenting its findings to a wide audience.

LIST OF ACRONYMS

ACUD	Administrative Capital Urban Development Company
AMA	Administrative Monitoring Authority
AOI	Arab Organization for Industrialization
CAO	Central Accounting Organization
CAPMAS	Central Agency for Public Mobilization and Statistics
EAf	Egyptian Armed Forces
EP	Egyptian pound
GDP	gross domestic product
GID	General Intelligence Directorate
GSA	General Services Agency
IMF	International Monetary Fund
MOD	Ministry of Defense
MOI	Ministry of Interior
MOMP	Ministry of Military Production
NAMP	National Authority for Military Production
NAPWASD	National Authority for Potable Water and Sanitary Drainage
NDP	National Democratic Party
NSPO	National Service Projects Organization
NUCA	New Urban Communities Authority
SCA	Suez Canal Authority
SCAF	Supreme Council of the Armed Forces
VAT	value-added tax

LIST OF FIGURES, MAPS, AND TABLES

FIGURE 1	Sectors of Economic Activity Involving Military Agencies
FIGURE 2	Timeline of the Evolution of the Military Economy Since the 1950s
FIGURE 3	Economically Active MOMP and AOI Companies
FIGURE 4	Ministry of Military Production, Output, 2000–2018
FIGURE 5	Establishment of Military Companies, 1949–2019
FIGURE 6	Economically Active MOD Agencies and Companies
FIGURE 7	Retired EAF Officers in State Agencies
FIGURE 8	Military Market Share for Select Civilian Products
FIGURE 9	Average Annual Public Spending on Infrastructure
MAP 1	Principal Military Economic Activities and Interests
MAP 2	Principal Military-Owned Economic Production Sites
MAP 3	Land Reclamation Areas
MAP 4	New Cities
MAP 5	Suez Canal Economic Zone
MAP 6	Development Zones
MAP 7	National Roads Built or Controlled by the Military
TABLE 1	The Egyptian Military’s Economic Advantages
TABLE 2	Enabling Legal Framework
TABLE 3	Quid Pro Quo in Military Relationships With the Private Sector, by Category

SUMMARY

THE EGYPTIAN MILITARY accounts for far less of the national economy than is commonly believed, but its takeover in 2013 and the subsequent rise of President Abdel Fattah el-Sisi have transformed its role in both scope and scale and turned it into an autonomous actor that can reshape markets and influence government policy setting and investment strategies.

The military delivers massive infrastructure projects, produces consumer goods ranging from food to household appliances, manufactures industrial chemicals and transport equipment, and imports basic commodities for civilian markets. It has expanded into new sectors as diverse as gold prospecting, steel production, and managing religious endowments and pilgrimage. In parallel, thousands of retired senior officers benefit from the military's powerful political influence to occupy senior positions throughout the state's civilian apparatus and public sector companies, complementing the formal military economy while benefiting themselves.

The military boasts of superior managerial skills and technological advances and claims to act as a developmental spearhead, but its role comes at a high cost. It has replicated the rentierism of Egypt's political economy, benefiting like its civilian counterparts (in both the public and private business sectors) from an environment in which legal permissibility, bureaucratic complexity, and discretionary powers allow considerable space for predation and corruption. At best, the military makes good engineers, but bad economists: the massive surge of megaprojects in public infrastructure and housing it has managed since 2013

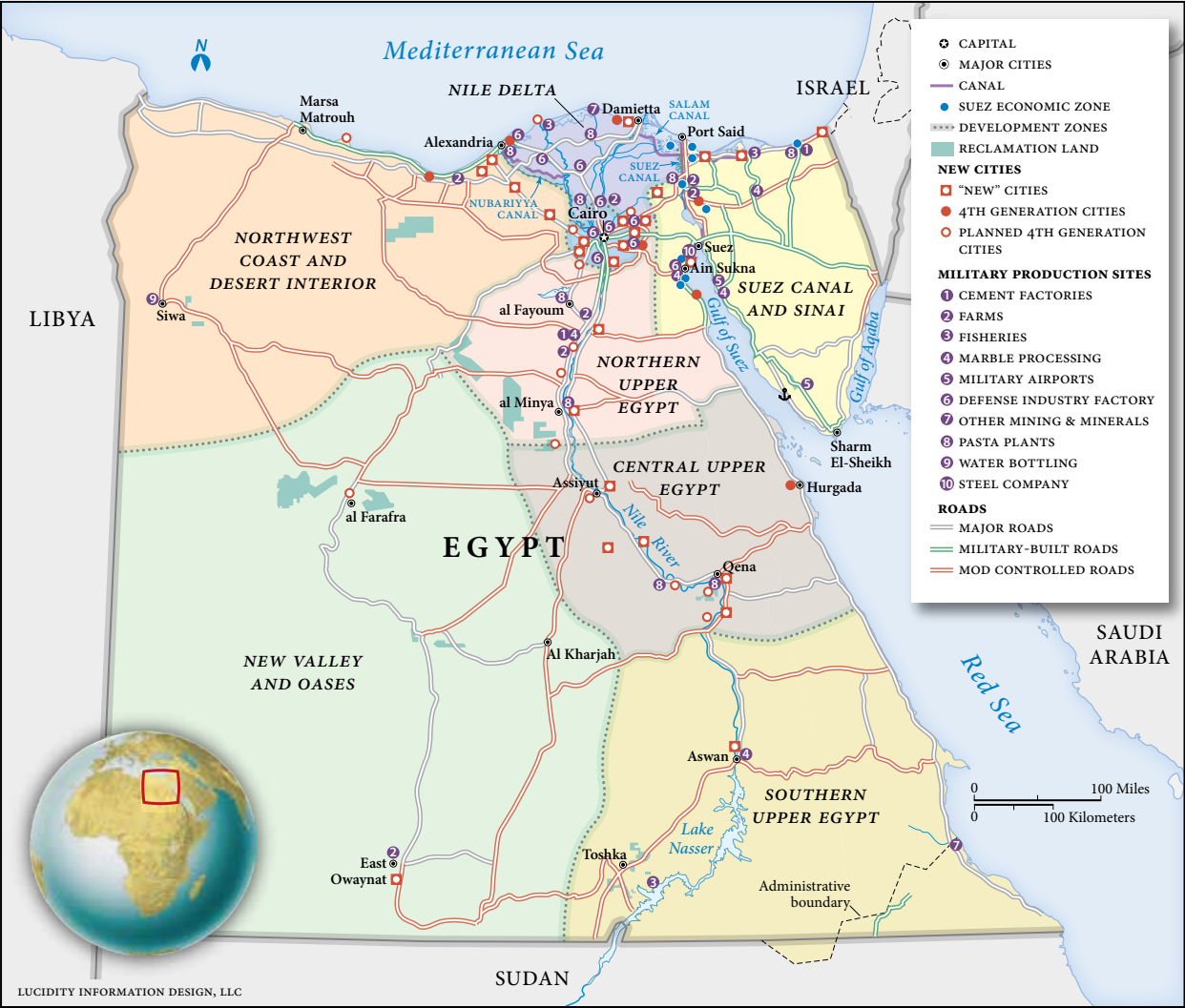
is generating significant amounts of dead capital and stranded assets, diverting investment and resources from other economic sectors.

The military economy's entrenchment is detrimental to Egypt's democratic politics, however flawed. The military economy must be reversed in most sectors, rationalized in select remaining ones, and brought under unambiguous civilian control if Egypt is to resolve the chronic structural problems that impede its social and economic development, inhibit productivity and investment, subvert market dynamics, and distort private sector growth. Nor can any Egyptian government exercise efficient economic management until informal officer networks in the civilian bureaucracy, public sector companies, and local government are disabled.

Rosy assessments of Egypt's macroeconomic indicators issued by Egyptian officials and their counterparts in Western governments and international financial institutions disregard fundamental problems of low productivity and innovation, limited value added, and insufficient investment in most economic sectors. These officials may be hoping Sisi can somehow build a successful development dictatorship, which would explain why they gloss over the social consequences of his administration's economic approach and its fierce repression of political and social freedoms and egregious human rights violations. A corollary is the faith that the military is as good an economic actor and manager as it claims to be, and that it will withdraw from the economy as the latter grows. Yet current trends suggest Sisi will remain hostage to key partners in the governing coalition, including the military leading its involvement in the economy to accelerate.

MAP 1

Principal Military Economic Activities and Interests



INTRODUCTION

MILITARY AGENCIES ARE SIGNIFICANT economic actors in Egypt. They deliver massive infrastructure projects, produce consumer goods ranging from food to household appliances, manufacture industrial chemicals and transport equipment, and import basic commodities for civilian markets. They have expanded into new sectors as diverse as steel production, pharmaceuticals, gold prospecting, and managing religious endowments and pilgrimage. In parallel, thousands of retired senior officers have benefited from the powerful political influence of the military to occupy senior positions throughout the state's civilian apparatus and public sector companies, securing extra postretirement incomes for themselves while complementing the formal military economy in return. Both parts of the military economy have become increasingly assertive since the EAF took power in July 2013, destabilizing market dynamics, crowding the private sector in important sectors, and altering Egypt's path to economic growth, social development, and political transition.

The military claims to act as a developmental spearhead, generating revenue for the state and jobs, but its role comes at a high cost. Despite boasting of superior managerial skills and technological advances, it has largely replicated the business model of virtually all economic actors in Egypt since the establishment of the republic in 1952, along with the model's adaptations to an evolving policy and regulatory environment and most of its shortcomings. This is not to say that the military is not adept at delivering engineering projects or building up its funds with income from land it controls, but that it operates in a problematic political and economic system it has done much to shape. Whatever the intentions at command level, the military's economic strategies and activities are undertaken in an environment in

which legal permissibility, discretionary powers, and bureaucratic complexity allow considerable space for predation and corruption at lower levels.

The military does not, however, undertake this role independently. It is an integral element of the incumbent regime governing Egypt, albeit one of a wider bureaucratic constellation that also comprises senior civil servants, security officials and judges, state economic managers, and technocrats. All are informed by the same political logic in their approach to the general management of the national economy and public finances, which prioritizes appeasing key constituencies and maintaining the governing system rather than undertaking the kind of reforms that could galvanize economic productivity and mobilize domestic resources more effectively. And all seek to occupy spaces within the national economy and lay claim to public finances in proportion to their political influence, explaining the marked

tendencies of both to siloing (wasteful duplication of investment and effort) and fragmentation.

The military claims to act as a developmental spearhead, generating revenue for the state and jobs, but its role comes at a high cost.

The military economy is two-faced, therefore: it is self-serving, but also conforms to and reproduces the broader regime maintenance strategy. For this reason it has replicated the predominant rentier mode (reliance

on the capture of existing income streams rather than increasing productivity) of the Egyptian political economy: its constituent parts have closely tracked the behavior of other actors in both the public and private sectors, and responded in similar ways to new rent-seeking opportunities opened up by major shifts in the country's economic orientation. The military economy may offer efficiencies in some civilian activities—principally large-scale engineering works—but what comes out at the end is negative economic value as losses are obscured and the cost of capital investment often exceeds its return.

It is the government and, more frequently, the presidency who create the policy context and assign national goals; despite being a springboard to power, the military is not a full political partner.¹ Nonetheless, in working toward these policy goals—generating opportunities for myriad forms of rent-seeking along the way—the military contributes significantly to reproducing the chronic structural problems of the Egyptian economy, distorted private sector development, and the erosion of social conditions for large numbers of Egyptians. Western governments, international donor agencies and financial institutions, and foreign investors knowingly acquiesce, presenting a façade of ebullient optimism about Egypt's macroeconomic indicators and potential while masking growing anxiety behind a slogan of “Egypt is too big to fail.”

The military's progressive capture of state power since the popular uprising that forced then president Hosni Mubarak from office in February 2011 has transformed the scope and scale

of its economic activity. The assumption of the president's executive and legislative functions by the Supreme Council of the Armed Forces (SCAF) was followed in quick order by the military ouster in July 2013 of his successor Mohamed Morsi—the first civilian to be elected to the presidency since the establishment of the republic by the armed forces sixty years earlier—and then by the election of former defense minister Major General Abdel Fattah el-Sisi as president in May 2014. Since then, the military has come to play a major role in managing massive public works projects, supplying markets, and expanding into new economic sectors in an attempt to deliver government targets and increase state revenue.

Developments in the military economy since 2013 mark a significant transformation of scope and scale in what for decades was a protected but essentially limited enclave. Until then, the military was just “part of the deal” in which other civilian actors had their part of the overall pie—measured in ownership or control of material assets such as machinery and land or in regulatory power over licensing access to specific sectors—with the lion's share going to politically connected business cronies of the president and, from the early 2000s, his son Gamal and clustered in the governing National Democratic Party. The relative weight of the military economy shifted at important turning points: economic liberalization and reorientation to the West starting in the mid-1970s, financial retrenchment from the mid-1980s, the first phase of privatization in 1991, and the second phase of privatization in the early 2000s. But it did not undergo serious transformation, whether measured in terms of the scope and scale of its activities, apparent net income and profitability, or impacts on other economic actors (including the public and private business sectors) and on policymaking.

Until 2011, the military principally practiced what Egypt researcher W. J. Dorman refers to as “self-aggrandizing enclavization.”² Nothing it did in the economic sphere disrupted the workings of the governing system, whose principal characteristics evolved in the era of president Gamal Abdel Nasser and through the presidencies of his successors Anwar Sadat and Hosni Mubarak—from 1952 to 2011. They still shape the military economy, whether with regard to its modalities and the symbiotic relationships between its formal and informal components or to the sense of technical superiority and moral entitlement that imbues the senior officer corps of the Egyptian Armed Forces (EAF).

However, the deepening crisis of the Egyptian political economy that produced the 2011 revolution, coupled with the repositioning of the military economy since 2013, have set the stage for deeper mutations in both. Sisi, who was elected president in May 2014, catapulted the military into a more central economic position. Since then, acting on his orders, it has managed roughly one-quarter of total government spending on a crash program of public infrastructure and housing projects, stepped in to resolve shortages of food commodities and medical supplies in civilian markets, intervened in productive sectors deemed strategic with the ostensible aim of stabilizing prices, and generally scrambled to generate revenue for the state treasury.

This degree of reliance on the military to deliver public goods and services and help attain national development goals is unprecedented even in comparison to the Nasser era, which established the pattern. Underlying it are two sentiments that set the Sisi presidency apart from its predecessors: undisguised contempt for the competence and integrity of civilian state agencies, and frank belief that only the military can escape the confines of government bureaucracy to “get things done.”³ A corollary article of faith for the president is that the military is also a far better economic performer than the private sector. “I will tell you simply,” he stated at the inauguration of greenhouses built by EAF engineers, that “it would take the private sector three to four years to complete the executive procedures to do something this big, such as roads and water projects, and to this standard.”⁴ The military shares these sentiments, making it the obvious partner to a strongman president who prides himself on making rapid policy decisions.⁵ It is moreover highly unlikely to return willingly to its pre-2013 economic enclave in the future, no matter which way the country’s economy and politics head.

THE MILITARY ECONOMY: AN OVERVIEW

Today’s military economy has evolved out of the interaction between three main spheres:

- The defense industry, founded in the 1950s, and its later offshoots that comprise officially registered and commercially oriented military enterprises involved in manufacturing and established at various times since the mid-1970s.
- Agencies of the Ministry of Defense (MOD) that are tasked with enhancing EAF self-sufficiency in food, personal kit, and other noncombat consumables, others that provide fee-paying services to civilians or produce tradable agricultural and industrial commodities, and, most importantly, EAF departments that engage in public works. Together with the defense industry, these constitute the formal military economic sector, which is discussed in Chapters 2 and 3.
- The “officers’ republic,” as I have labeled it elsewhere, which comprises the extensive, informal officer networks that permeate the state civilian apparatus as well as state-owned companies and government entities engaged in public works and infrastructure, various public services, natural resource management, and commercial manufacturing.⁶ The cloak of nominal legality enjoyed by these military bureaucrats enables and protects insider practices in the award of contracts, access to state land, and investment of EAF special funds. A subsphere consists of officers-turned-entrepreneurs and privileged private sector partners and subcontractors of military-run projects.

Common to all three spheres is their privileged access to state resources and public contracts. Military agencies arguably make a significant contribution to the economy by providing public infrastructure, though at what real cost to the state treasury and to the capacity of

the civilian agencies that should have managed or undertaken national projects is open to question. The net economic contribution of the defense industry’s civilian production is considerably more dubious. The opacity or formal withholding of financial information prevents definitive conclusions about economic cost-effectiveness, but the evidence points to the inefficiencies and hidden losses typical of many state-owned enterprises in both the pre- and postprivatization eras in Egypt.

FIGURE 1

Sectors of Economic Activity Involving Military Agencies

MOD, NSPO, EAF, MOMP, AOI				
Administrative and Regulatory	Shares and Acquisitions	Public Sector	Supply	Production of Civilian Goods
<p>FORMAL</p> <ul style="list-style-type: none"> Planning and licensing use of state land Telecommunications Mineral extraction Residency permits in military and select strategic zones <p>INFORMAL</p> <ul style="list-style-type: none"> New cities Water and sanitation Official statistics Religious endowments Audit Development funds 	<ul style="list-style-type: none"> Investments in civilian companies (minority shares) Transfer of publicly owned companies to military ownership Acquisition of civilian companies or majority shares Establishment of joint ventures with Egyptian and foreign companies 	<ul style="list-style-type: none"> Housing New cities Roads, bridges, and tunnels Water and sanitation Agricultural irrigation and storage Land reclamation Industrial zones Ports (sea, air, and dry) 	<ul style="list-style-type: none"> Meat Poultry Medical equipment and pharmaceuticals Consumer commodities (non-perishables, retail) Basic and processed food commodities General procurement for government agencies and services ministries 	<ul style="list-style-type: none"> Household appliances Electrical appliances and electronics Industrial and agricultural machinery, components, and tools Construction materials and building supplies Industrial chemicals Fertilizer Food Minerals Marble and granite Steel Cement Transport vehicles and equipment

NOTES: This diagram illustrates direct contributions to economic activity by formal military agencies and does not include activities by civilian bodies that have a military presence.

“Public sector” includes public works and related services.

“Supply” includes both domestic and imported goods.

The military economy's primary mode may be described as a kind of institutional or regulatory seizure: it captures a disproportionate share of public revenues and resources that would otherwise have gone to competing state institutions and private companies, and diverts considerable amounts of investment capital from other productive sectors of the economy. In this sense, at least, military agencies differ less than they like to claim from civilian state agencies and private firms, which are often viewed by the general public and members of parliament as corrupt, unpatriotic, and incompetent in their own rent-seeking behavior.

The military economy captures a disproportionate share of public revenues and resources from competing state institutions and private companies, diverting considerable amounts of investment capital from other productive sectors of the economy.

The rentier mode is typical of the officers' republic and of private military entrepreneurs especially, but also characterizes the formal military economic sector's involvement in massive white elephant projects, such as land reclamation schemes and the construction of a string of failed "desert" cities.

Consequently, frequent claims made by military officials that their projects stimulate economic growth and jobs are exaggerated at best, and often demonstrably false. The urgency with which Sisi has

sought to raise revenue since assuming office has only exacerbated siloing and rentierism. However, the military establishment's preeminent political position and ability to control public discourse—enhanced by the takeover of a swath of Egyptian media by various military and intelligence agencies since 2013—enable it to paper over shortcomings and inefficiencies. Military economic agencies moreover shield themselves from external scrutiny by embellishing a public image that highlights their contribution to national development through building basic infrastructure, providing civilian commodities and consumables at discounted prices, stepping in at short notice to resolve bread shortages and other supply crises, and distributing EAF food packages to the poor during Islam's holy month of Ramadan.

Importantly, the EAF's senior officer corps has come since the 1980s to regard both the formal military economic sector and its more informal access to the state apparatus and civilian economy as an entitlement. Speaking in 2012, Major General Mahmoud Nasr, then assistant defense minister for finance and SCAF member, was blunt: "We will not leave the [fruits of our] sweat that shaded us for thirty years to be destroyed by anyone, and we will not allow anyone, no matter who, to interfere with EAF ventures."⁷ Anyone seeking to subordinate the military economy to civilian control or demanding curtailment or divestment, he added pointedly, "threatens Egypt's national security."

Nonetheless, portrayals of the military economy's evolution as linear, unvaryingly predatory, and orchestrated by a military establishment pursuing clear institutional interests or

else captured by crony officer networks pursuing narrow selfish ones are inadequate. There has been a clear trajectory of growth and expansion since the mid-1970s, but this has been contingent on landmark political and economic events generated by others that altered its structure of incentives, opportunities, and resource availability. A handful of trailblazing studies have outlined some of the military economy's contours, but this report parses its various components in depth in order to produce an accurate assessment of what drives each and of its positive contributions and negative impacts.⁸ By enabling a more nuanced understanding of how and why the military economy has arrived at its present shape, the comprehensive and detailed anatomy provided here can inform policy proposals to contain, reverse, and ultimately dismantle those elements that go beyond the strict needs of maintaining and upgrading the operational capability of the EAF.

A SENSE OF PROPORTION: OWNERSHIP, CONTROL, AND INFLUENCE

Despite its visibility and much self-promotion, the military economy does considerably less than either its representatives or its detractors claim. Even now, halfway into its seventh decade and following several years of accelerated expansion, it still accounts for a small share of the national economy. Estimates that the EAF owns or controls 25, 40, or even 60 percent of the economy are often bandied about, but are based on little data and even less systematic analysis. None specify whether they refer to the military share of annual production of goods and services or to assets, and all are highly inflated. Firstly, they confuse three distinct spheres:

- formally registered, military-owned factories, companies, and farms, whose combined output of military and civilian goods and services is measurably more modest than commonly believed or portrayed, and other military agencies such as the EAF's Engineering Authority and Megaprojects Department that generate considerably more income from undertaking public works contracts;
- the much larger number of public sector economic authorities, state-owned enterprises, and private sector firms that are headed by or employ retired EAF officers in management positions, but whose assets and profits do not in fact belong to the military, even though it can influence their business decisions to its benefit; and
- regulatory jurisdiction to derive income from licensing land use, leasing military and public facilities, highway tolls, levies on mines and quarries, demining, peacekeeping, clearing imports, and similar fee-paying services; and investing in joint ventures with national and international private companies.

When Sisi and defense sector officials estimated the formal military economy varyingly to represent 1.0–1.5 or 1.5–2.0 percent of Egypt's gross domestic product (GDP) in 2016, they were probably referring to the total value of goods and services produced by all

military agencies: the Ministry of Military Production (MOMP), the Arab Organization for Industrialization (AOI), and the MOD and its subordinate agencies.⁹ It is unclear if these estimates specifically included MOD income from public works contracts implemented or managed by EAF departments, but this is not implausible, since all incoming funds (including extra-budgetary incomings) would be logged in the ministry's internal books and subsumed under the overall figures provided to the president. In any case, the military has access to significant extra-budgetary income streams and accumulated funds and has come since 2013 to manage a substantial share of public capital expenditure, but its economy is both less extensive and considerably less productive than commonly believed, and certainly far less cost-effective than the military itself portrays.

The percentages cited by Sisi and others therefore appear close to the truth. But even if they are taken only as indicative, they still point to a significant overall value. Estimating Egypt's GDP is complicated by the sharp devaluations of the Egyptian pound in March and November 2016, but in constant dollar terms the military economy's share of GDP at that time would have ranged from \$3.32 billion to \$6.64 billion, using Sisi's percentages and the figure from the International Monetary Fund (IMF) for nominal GDP of \$332 billion in the 2015–2016 fiscal year.¹⁰ Indeed, these are significant amounts when the poor performance of pillars of the military economy such as the MOMP and AOI is taken into account. The “big push” of megaprojects assigned to the EAF since 2013 has increased MOD income from management fees and profit margins and consequently raised the military's overall share of GDP, but probably only by an additional percentage point at most.

Second, inflated estimates confuse ownership, control, and influence. The military owns certain productive and services enterprises outright, legally controls access to factors of production that civilian economic actors need such as land, undertakes or manages various public works and procurements under official government contracts, and disposes of the incomes and surplus funds generated by all the preceding at its sole discretion. Although the net value of military income from sales and fees is not published in full, at least it is quantifiable should access be given to the data. Nonetheless, sufficient detail can be assembled to support the contention made in this report that the net income of the formal military economy cannot exceed a few percentage points of GDP.

Harder to assess is the income that the military derives from more nebulous relationships with public and private sector companies and with governmental economic agencies. Even after nearly three decades of privatization, the legacy of state intervention in the economy and its continued ownership of hundreds of companies and partnership in nearly as many joint ventures have also made it easier for military agencies and retirees to maintain cozy relationships and “sweet deals” across all sectors. Military businesses form joint ventures or feeder arrangements with private companies that gain access to subsidized inputs and protection from possible competitors through such relationships, or for which the military is the single or largest client.¹¹ Military agencies—or their allies in the state bureaucracy

and parliament—can manipulate the award of contracts or import licenses and create non-tariff barriers tailored to favor specific companies or deny entry to others (especially foreign competitors). The officers' republic of thousands of retired EAF officers employed in government ministries and economic authorities wields the additional authority to award contracts to military agencies (and to each other).¹² And because they remain subject to the military judicial system, they have a strong incentive to ensure that the government bodies and sector companies they head or belong to comply with the military's expectations.

The picture has shifted somewhat since 2013, as the quickening pace of compulsory take-overs of private firms (most visibly in the media) or the predatory acquisition of equity or board membership in start-ups confirms. But, in most cases, military control is indirect rather than direct, and often should instead be thought of as influence. Various studies have shown that in Egypt political connectivity is the key determinant of the access of companies (both private and public) to contracts and credit and of their overall productivity: with the lion's share going to politically connected cronies of Mubarak's son Gamal and his associates in the 2000s, not the military. As pertinently, close relationships between military agencies and favored private companies are mutually beneficial, and cannot be regarded as purely reflecting military control. Furthermore, a significant portion of the benefits gained by military agencies and businesses from relationships with private and public sector companies—including from controlling or influencing their procurement and investment decisions—is subsumed within the declared turnover of the formal military economy. In many respects, the principal beneficiaries of the officers' republic are the EAF retirees themselves, who secure their sinecures by demonstrating their usefulness but in doing so primarily increase their postretirement incomes.

The third source of inflated estimates of the military economy comes from oversimplifying or misrepresenting the military's relationship to key assets such as state land. Indeed, this kind of estimate often confuses assets with the income that may be generated from utilizing them, that is, with output or turnover. Much of the commentary asserts that the MOD owns all state land, estimated at 90–95 percent of Egypt's surface area, but this is simply not true.¹³ The MOD holds the power to license use of state land, but in fact is one (albeit the most powerful) of several government ministries that have similar regulatory jurisdictions. So although control of land use is indisputably one of the military's most significant economic advantages—and one of the most detrimental brakes on the general economy and private sector—the actual income derived is not directly proportional to the extent of military control. Nor can it be calculated from an assumed valuation of state land, since this has no meaningful price until it is licensed for economic or residential development and thus turned into real estate: only then does it acquire clear market value, which the military may benefit from, but not capture in whole. Nonetheless, the ability to re-designate military-controlled land has been a major source of income for at least three decades, providing the seed capital for the expansion of military farms since the mid-1980s and the acquisition or launch of new companies since the 1990s and yielding high, speculative gains generally.

BETWEEN PRESERVATION, POLITICS, AND PREDATION

The military economy's net worth is impossible to quantify, therefore. Indeed, the contradictory figures given at different times by both the minister and official spokesperson of the MOMP for its annual turnover in the period 2014–2017 show that even the military faces problems keeping its own books.¹⁴ But in any case, trying to determine the proportion of the Egyptian economy controlled by the military is a red herring. Instead, the more consequential questions are why the military undertakes various economic activities, and what effects that has—good or bad—on Egypt's economic growth, public services, and private sector development. The answers lie in a fluid mix of three principal drivers: an instinctive, corporate effort by the military to preserve the productive capacity of the defense industry; the striving of senior defense officials to serve the political priorities and goals of the president; and the self-serving responses of various military and civilian actors

Serving the president's political goals is a hallmark of military economic activity under the Sisi administration, and explains the dramatic increase in its scope and scale since 2013.

to capture the opportunities for economic predation opened up by top-level policies and projects in a highly permissive legal and bureaucratic environment.

Sustaining the defense industry built by then president Gamal Abdel Nasser in the 1950s still shapes investment and commercial strategies. Officials frequently recite the mantra that production for civil-

ian markets is merely a means of utilizing excess capacity in military-owned factories. Yet both the MOMP and the National Service Projects Organization, which comes under the MOD, have ambitiously built new facilities, expanded production lines, and broadened their range of goods and services for civilian markets since 2013, belying the argument that they seek only to utilize idle capacity. Defense production is rarely economical unless a country is able to capture a significant share of export markets, which Egypt has completely failed to do. A major impediment in this context is its staggeringly low level of investment in genuine research and development (R&D), which has severely limited absorption of foreign technology, generation of indigenous adaptation and innovation, and increases in local content (consequently keeping value added to a minimum). Reflecting this, the minister for military production admitted that the majority of his ministry's twenty companies were still making losses in 2018, after several years of claimed surges in production.¹⁵ The economic inefficiencies of maintaining the civilian side of the defense industry or expanding it are probably no worse than in comparable public sector companies in Egypt, but result in a similar drain on the state treasury and more dead capital (stranded assets that cannot be salvaged under present or foreseeable economic circumstances).

Serving the president's political goals is a hallmark of military economic activity under the Sisi administration, and explains the dramatic increase in its scope and scale since 2013.

The military's role in delivering public goods and services, which is highly publicized and extolled, is believed to reinforce political stability and the administration's domestic legitimacy while demonstrating its credibility to foreign governments and investors. "We mean business" is the intended signal to all audiences, rather than profit-making. The degree of reliance on the military to spearhead this effort is unprecedented, even compared to the Nasser era, but what the Sisi administration does share with all its predecessors, and magnifies, is an overriding technocratic bias that responds to social and economic challenges with engineering solutions and technical fixes.¹⁶

The most graphic embodiment of this approach is the enduring fixation on resolving overcrowding in the Nile River valley (and its consequent environmental damage, transport congestion, and loss of agricultural land) by reclaiming land in desert areas and moving the bulk of the population to new settlements there. This thinking has dominated presidential and government thinking for over sixty years, and provided a framework to justify massive investment despite the failure of almost all previous schemes. It has also given rise to an "edifice complex" that Sisi has elevated to new heights with megaprojects such as an expansion of the Suez Canal and a grandiose scheme for an entirely new administrative capital, both of which were placed under military management.¹⁷ It does not appear that any of this is instigated by the military, let alone imposed by it—with the possible exception of infrastructure and industrial development in the Suez Canal zone, which the military regards as its economic sinecure. But it is equally evident that the military shares Sisi's mindset, including his faith in its own engineering and management skills.

Consequently, the military does not visibly object to Sisi's approach to generating economic growth, which revolves largely around launching a seemingly endless series of construction projects. To the extent that either Sisi or the military thinks conceptually about the economy, if at all, it is assumed to be the sum-total of discrete projects to build highways and bridges, power stations and water treatment plants, desert cities and luxury resorts. There is little grasp in this top-down vision of how markets actually work, or of how to increase productivity and efficiency, generate sustained growth in investment and jobs, and enable genuine private sector development. And there is even less sense of how any of this touches on the lives of the majority of Egyptians, some 60 percent of whom were either poor or vulnerable as of 2019, let alone an inclination to pursue inclusive economic growth strategies or participatory policy development.¹⁸

Paradoxically, the technocratic bias of its state leaders and military has taken Egypt in a divergent direction from that described by political scientist Ayesha Siddiqi in Pakistan, where "military governments depend more on technocrats, especially experts in commerce and economics, and on the entrepreneurial class, to earn the bulk of financial resources channeled for military modernization that can be fulfilled from national budgets."¹⁹ Egypt has no shortage of capable technocrats, but the lack of a clear profit motive behind this aspect of military economic activity and ambivalent relations between the military and big

business have led to a fundamentally different model that has some noncapitalist aspects and is heavily based on public funding (and borrowing). The contrast is even sharper with Turkey, whose past model of military guardianship the Egyptian military now seeks to emulate, where military-owned civilian companies function wholly along business lines within competitive markets and the defense industry is privately owned and subject to normal commercial logic.²⁰

Not everything the military does in the economic sphere is overweening, damaging, or predatory. Its displacement of the civilian actors that should have been providing public housing and infrastructure compounds the shortcomings of the state apparatus, but can still make a positive contribution. Military engineering agencies moreover appear to deliver good quality, to budget, and on time—although this is far from true across the board, and often hides many costs or significant outstanding dues to civilian contractors. The core problem of the Egyptian economy lies, rather, in how the state functions, itself a reflection

The core problem of the Egyptian economy lies in how the state functions, itself a reflection of how political power is generated and used. The military is evidently an integral part and a principal beneficiary of this system.

of how political power is generated and used. The military is evidently an integral part and a principal beneficiary of this system, and bears a major responsibility for ensuring its survival. But it has been successive presidencies, not the military, that have repeatedly decreed sinking enormous amounts of capital in megaprojects that are often based on false assumptions about expected impacts and returns.

reached an estimated 108.7 percent of GDP by June 2016, a twelve-year high.²¹ Three years later, national external debt had risen to \$106.2 billion, representing 35.1 percent of GDP, and government domestic debt to 4.2 trillion Egyptian pounds (EP), which represents 92.5 percent of GDP).²² The surge of mega- and national projects under the Sisi administration reportedly accounted for 54 percent of the increase in government borrowing from Egyptian banks and foreign lenders between December 2016 and May 2019.²³ Public debt service consumed up to 40 percent of the government's budget, and foreign direct investment was plummeting as of 2019.²⁴

The costs could be extremely high. Total government debt (domestic and external)

The result is negative economic value added in many politically motivated projects decreed by Sisi and implemented by the military, as the cost of economic capital exceeds its return. Much of this investment represents dead capital, imposing a long-term financial drain and making it harder to pull back and follow a different approach in the future. Four years after it was launched, for example, the new administrative capital is struggling to raise the \$58 billion it needs and has seen major foreign investors pull out.²⁵

The military's central political role since 2011, and especially since the takeover of power in 2013, has made it an enabler of this economic approach. Its empowerment under Sisi may moreover be taking it to the point where it can no longer be extricated from the economy. In addition to the impacts on the national economy, this has major implications for private sector development. While the military's managerial role in public works and housing projects since 2013 has drawn admiration domestically—including from the private sector firms subcontracted to do the actual work—its expansion into new sectors has prompted accusations of predatory economic behavior. Military entry into sectors such as steel and cement that are both oversaturated and almost fully supplied by private sector companies turns military agencies into direct competitors, for example, while elbowing aside struggling state-owned companies already operating in these sectors, rather than salvaging and making them more profitable. Furthermore, the fact that this entry is linked to providing the needs of military-managed public construction, the overall volume of which is already declining as projects are completed or government funding and foreign investment runs out, threatens to leave the military with additional stranded assets in the form of excessive manufacturing capacity. The military makes good engineers, but bad industrialists and even worse economists.

The military makes good engineers, but bad industrialists and even worse economists.

Whatever drives policymaking by the country's political leadership and top military command, it provides a context for predation at lower levels of the military economy. The Egyptian state's complex, indeed labyrinthine legal, regulatory, and administrative system allows considerable discretion and extensive opportunity for insider information-sharing and profiteering, rent-seeking, and capture of informal income streams. The dramatic expansion in scope and scale of the military economy since 2013 may have been intended to serve the president's political agenda, but it builds on modes of doing business established over the preceding thirty years at least, if not the six and a half decades since the start of the Nasser era. Officer networks have followed in the wake of formal military agencies to muscle into a widening range of sectors, sometimes operating through family members to set up private companies as fronts with the goal of capturing contracts (or winning them in order to sell them on at a profit). This may also help to explain the military's marked tendency to favor small or medium companies, often unknown, with public works contracts for which they lack the skill and capacity.

The relationship between the formal and informal spheres of the military economy is, for the most part, mutually beneficial. But their complementarity is mostly self-serving rather than adding value to public finances or to the wider economy. Distinguishing the two spheres is nonetheless necessary if they are ever to be prised apart, should the political will to do so materialize. In theory at least, so long as the overall driving forces of the military economy cannot be reduced to predation alone, it should be possible to dismantle and

divest those parts of it that do not relate specifically to providing defense needs. But its evolution since 2013 may result in a qualitative transformation—not just a quantitative, linear increase—making it ever harder to dislodge the opportunistic accretions that accumulate and deepen with every passing year. The 2019 constitutional amendment empowering the military to step in when it deems necessary to “protect the constitution and democracy, and safeguard the basic components of the State and its civilian nature, and the people’s gains, and individual rights and freedoms” effectively ensures that its formal economic role and informal extensions also cannot be challenged—unless it decides to do so itself.²⁶

RESEARCH CHALLENGES

Researching the Egyptian military economy presents challenges. Financial opacity and poor quality of data complicate estimating important economic indicators such as GDP, while the steady depreciation of the Egyptian pound, which slumped by 200 percent in November 2016, makes it difficult to convert into a U.S. dollar value. (Conversions offered in this report are based on current rather than constant or real dollar rates for the dates indicated. They should be taken as merely indicative, especially when relating to periods of major exchange rate fluctuations.) Besides these problems, compiling and fact-checking is complicated by the very vastness of the state apparatus, which has a complex structure comprising 295 so-called units and 2,449 administrative entities.²⁷ At times, government bodies and information agencies themselves appear confused about not only the proper name of certain units, but even which ministry or public authority they belong to. And when media cite military officials speaking about economic activity, they often use terms interchangeably that in fact have distinct meanings—such as output or production and turnover—or confuse these with net income or profit.

But while the military establishment does not publish its financial books, it is not coy about its economic activity. Quite the opposite, officials are keen to tout supposed achievements. Consequently, this report relies mainly on open-source material, much of it primary: military company websites, the official gazette, business registers, and statements by officials and officers carried in progovernment media. This allowed listing, for example, of all general economic and national authorities, state-owned companies, and privatized former public sector companies with retired EAF officers on their boards of directors, shedding light on their preferred areas of concentration and influence. Qualitative assessment and mapping of informal practices is backed by interviews conducted from 2008 to 2019 with several dozen Egyptians—retired EAF officers, cabinet ministers, representatives, businessmen, economists, journalists, researchers, and activists—and with an additional number of non-Egyptians—foreign diplomats, international financial officials, defense personnel, and analysts. Their names have been withheld for their protection. Taken together, these various sources provide numerous data points from which relationships and the direction of resource flows can be inferred and an overall picture drawn.

NOTES

- 1 This is also the view of various analysts, including Mohamed Brik, “The Legal Framework of Civil-Military Relations in Egypt After January 2011,” draft chapter, 29, October 2015, viewed with permission.
- 2 “Exclusion and Informality: The Praetorian Politics of Land Management in Cairo, Egypt,” *International Journal of Urban and Regional Research* 37, no. 5 (2013): 5, <https://bit.ly/2lMKcVU>.
- 3 This sentiment is expressed, for example, by a former cabinet minister regarding Sisi. Anonymized interview by the Author. Then head of the EAF Engineering Authority Major General Kamel al-Wazir quoted the same sentiment by big businessman Naguib Sawiris, cited in: Hani Abdelrahman, “Al-Wazeer: The President Instructed Us to Build a Steel Factory to Prevent Monopoly,” *al-Masry al-Youm*, April 9, 2016, <https://bit.ly/2kHo9jk>.
- 4 Cited in Janet McBride and Michael Georgy, “Special Report: From War Room to Boardroom. Military Firms Flourish in Sisi’s Egypt,” Reuters, May 16, 2018, <https://reut.rs/2lQxqFM>.
- 5 Political scientist and Egypt expert Robert Springborg describes Sisi’s “delegative” approach in Robert Springborg, “Egyptian Parliamentary Elections Are Just a Sideshow in the Sissi Regime,” *Washington Post*, October 9, 2015, <https://wapo.st/2kwsGFm>.
- 6 Yezid Sayigh, “Above the State: The Officers’ Republic in Egypt,” Carnegie Middle East Center, August 2012, <https://bit.ly/2mbb4z3>.
- 7 Cited by Wael Gamal, “The [Military] Council: Our Projects Are the Sweat [of the Brow] of the Defense Ministry, and We Will Not Permit the State to Interfere in Them,” *Shorouk News*, March 27, 2012, <http://bit.ly/2n7rlFP>.
- 8 Most prominent are Zeinab Abul-Magd’s excellent *Militarizing the Nation: The Army, Business, and Revolution in Egypt* (Columbia: Columbia University Press, 2018); and Zeinab Abul-Magd, “Egypt’s Adaptable Officers: Business, Nationalism, and Discontent,” in Elke Grawert and Zeinab Abul-Magd (eds), *Businessmen in Arms: How the Military and Other Armed Groups Profit in the MENA Region* (Rowman & Littlefield Publishers, 2016). Other useful studies with a narrower focus include Jessica Noll, *Egypt’s Armed Forces Cement Economic Power Military Business Expansion Impedes Structural Reforms*, SWP Comments 5, February 2017, <https://bit.ly/2o40Rpp>.
- 9 Ali Abdelaty, “UPDATE 1-Egypt’s Sisi Says Military Economy Just 1-1.5 Pct of GDP,” Reuters, October 26, 2016, <https://bit.ly/2md5ah0>; and “Egypt’s Sisi Says Military Accounts for 1.5-2 Percent of Economy,” Reuters, December 24, 2016, <https://reut.rs/2ktQREl>.
- 10 IMF figure from “Egypt: IMF Executive Board Completes Third Review Under the Extended Fund Facility (EFF),” International Monetary Fund, July 2, 2018, <https://bit.ly/2lKesqj>. The Central Bank of Egypt gave GDP as EP2.709 trillion. Calculated from the CBE Annual Report for 2015/2016, <https://bit.ly/2kJ9YdB>.
- 11 As noted by Robert Springborg and Clement Henry, *Globalization and the Politics of Development in the Middle East* (Cambridge University Press, 2nd edition, 2010), 151 and 154.
- 12 Yezid Sayigh, “Above the State: The Officers’ Republic in Egypt,” Carnegie Middle East Center, August 2012, <https://bit.ly/2mbb4z3>.
- 13 Estimate from World Bank, “Egypt: Public Land Management Strategy,” Report No. 36520, Vol. I: Policy Note June 15, 2006, <https://bit.ly/2kG0P5m>.

- 14 Minister of State for Military Production Major General Mohamed al-Assar cited in “Minister of Military Production: We Target EP12 Billion in Sales in 2018,” *Dostor*, March 5, 2018, <https://bit.ly/2kIMsx9>; and Mohamed Youssef, “Minister of Military Production: We Achieved EP 8.9bn in Sales in 2017,” *al-Watan*, March 5, 2018, <https://bit.ly/2kid2gC>. MOMP spokesperson Major General Amro Fuad cited in Tarek Shaltout, “Assar Speaking on Military Production Day: We Strongly Participate in Most National and Developmental Projects,” *al-Mogaz*, October 24, 2016, <https://bit.ly/2kG1eF3>; and in Karim El Khatib, “Military Production in 2016,” *Sada al-Balad*, December 30, 2016, <https://bit.ly/2lKhvZU>.
- 15 Hambdy Mobarez, “Military Production Minister: We Target EP 12bn in Sales in 2018,” *al-Alam al-Youm*, March 5, 2018, <https://bit.ly/2kG2s37>.
- 16 Indeed, Timothy Mitchell sees this bias as a defining feature of Egyptian state administrators since the turn of the twentieth century. *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley, CA: University of California Press, 2002).
- 17 John Waterbury applied the term “edifice complex” coined by Ichman to Nasser and Aziz Sidqi, prime minister in 1972–1973 who was nicknamed the “father of Egyptian industry.” John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 81.
- 18 “World Bank Group to Extend Current Strategy in Egypt to Maintain Momentum on Reforms,” World Bank press release, April 30, 2019, <https://bit.ly/32SBTZd>.
- 19 Ayesha Siddiqi, *Military Inc.: Inside Pakistan’s Military Economy* (London: Pluto Press, 2007), 239.
- 20 İsmet Akça, *Military-Economic Structure in Turkey: Present Situation, Problems, and Solutions* (Istanbul: Tesev, July 2010), <https://bit.ly/2rdvSFa>; and Fırat Demir, “Militarization of the Market and Rent-Seeking Coalitions in Turkey,” *Development and Change* 36, no. 4 (2005): 667–690.
- 21 “EGYPT: Enabling Private Investment and Commercial Financing in Infrastructure,” International Bank for Reconstruction and Development, World Bank, 2018, <https://bit.ly/2kG8YH5>.
- 22 Figures for external debt and percentage of GDP from “Egypt External Debt,” CEIC Data, accessed October 28, 2019, <https://bit.ly/2JojhZs>; and Hossam Mounir, “Egypt’s External Debt Reaches 35.1% of GDP at End-2018, but Still Within Safe Limits: CBE,” *Daily News Egypt*, August 1, 2019, <https://bit.ly/2Pndzed>. Figures for government domestic debt and percentage of GDP from “Domestic Debt Reaches LE4.2T by End of March,” *Egypt Today*, September 12, 2019, <https://bit.ly/349LDyL>; and Garbis Iradian, “Egypt: Resilient Against External Headwinds, but Challenges Remain,” The Institute of International Finance, August 19, 2019, <https://bit.ly/2pS8EaD>.
- 23 “Egypt- National Projects Most Likely to Capture Bank Financing, Foreign Loans,” *Daily News Egypt*, May 23, 2019, <https://bit.ly/2kHvejU>.
- 24 Stephan Roll and Luca Miehe, “Egypt Engulfed by Militarism,” *Mediterranean Yearbook 2019*, IEMed, 3, <https://bit.ly/2Z0udlv>.
- 25 According to Major General Ahmed Zaki al-Abdin, head of the New Administrative Capital Company for Urban Development. Cited in Aidan Lewis and Mohamed Abdellah, “Egypt’s New Desert Capital Faces Delays as It Battles for Funds,” Reuters, May 13, 2019, <https://bit.ly/2m8gElH>.
- 26 See “Egypt: Constitutional Amendments Entrench Repression,” Human Rights Watch, April 20, 2019, <https://bit.ly/2XoeE68>.
- 27 “New Vision for Administrative Reform in Egypt,” Ministry of Planning, May 4, 2015, slide 2, <https://bit.ly/2lQzWvK>.

CHAPTER 1

ENABLING THE MILITARY ECONOMY

UNDERPINNING THE ENTIRE MILITARY economy is the ability of the Egyptian Armed Forces to leverage its official primary role in defending the nation and the formal and informal powers it wields within the Egyptian state. These are anchored in laws and their implementing regulations, presidential decrees, and other instruments that empower the Ministry of Defense and its affiliated agencies (including the EAF and its various departments), Ministry of Military Production, and the autonomous Arab Organization for Industrialization to engage in diverse forms of economic activity outside the specific, narrower sphere of defense production. This legal and regulatory framework imbues military economic actors with three critical advantages: legal permissibility, discretionary powers, and lack of transparency.

The gray area between what the legal framework explicitly authorizes and what it does not expressly prohibit has allowed new forms and avenues of commercial activity that are blatantly self-serving yet not strictly illegal. But the legal veneer of permissibility—behavior that is “undesirable but legally permitted,” to borrow a phrase from interpretations of Islamic jurisprudence—has eroded severely over time, leading to substantial encroachment on public and private assets and to frankly illegal practices. At the same time, the military has colluded with others in the governing bureaucratic constellation, of which it is a part, to promulgate legal instruments or administrative regulations (such as nontariff barriers to trade) with the specific purpose of circumventing domestic laws or international trade agreements that threaten to constrain it, while remaining formally within the law.

The defense sector—broadly comprising all the military agencies listed above—moreover exercises very considerable discretionary powers. Over the past four decades it has acquired, and in some instances appropriated, the right to award commercial contracts, make substantial investments, and “gift” funds or other assets—such as land, bridges and highways, and food—to other state bodies, quasi-governmental organizations, and the general public, without requiring prior approval or subsequent ratification from any external authority. Nor do military agencies have to coordinate with any state body responsible for economic planning or management when designing or implementing their own trade, production, and investment strategies; forming business partnerships; or disposing of the proceeds.

The defense sector’s ability to veil its activities in the name of national security has exacerbated the opacity of information about financial transactions that is typical of many state institutions in Egypt, and which accounts for its poor ranking in Transparency International’s Corruption Perceptions Index, which worsened to 105 out of 180 countries in 2018 (from 94 in 2014).¹ But the lack of transparency has played an enabling role in the evolution of the military economy that is particularly perverse. The formal military economic sector may make claims about its efficiency in comparison to civilian or private competitors, but such claims cannot be independently corroborated or challenged. This opacity has also contributed to an environment in which insider trading, diversion of state resources, and racketeering can take place.

These trends have accelerated thanks to the assurance of impunity. The bulk of the formal military economic sector does not fall within the remit of Egypt’s audit and anticorruption agencies, whether de jure or de facto. Indeed, the most powerful of these agencies—the Administrative Monitoring Authority—is headed and heavily staffed by EAF officers—some retired but mostly still in active service—ensuring an additional layer of protection from inspection. A legislative decree issued by the ruling Supreme Council of the Armed Forces in May 2011 moreover transferred the authority to determine whether EAF officers accused of illicit gains should be tried in military or civilian courts to MOD prosecutors, even if the suspects had left service. Coming against a backdrop of neoliberal economics and crony privatization since the early 2000s that have opened up new opportunities for well-positioned actors, the outcome has been both a sharp acceleration and qualitative transformation of the military economy.

REPRODUCING EGYPT’S RENTIER SYSTEM: THE HISTORICAL TRAJECTORY

Egyptian defense officials have cited various justifications for military involvement in the civilian economy. They stress the need to utilize spare capacity in the defense industry, and above all repeatedly insist that military companies and EAF agencies are able to deliver products and services (especially construction) at lower cost, break market monopolies in

certain commodities, and contribute directly to socioeconomic development and trade. But although the contribution to providing public infrastructure and jobs is real, the rest of these claims are largely false and depend on several sleights of hand in how costs and benefits are calculated.

Instead, the military economy's primary mode is rentier. It replicates the regime logic of utilizing public resources to appease key constituencies—heavily concentrated in the public sector and state institutions—while seeking rent income for itself. Contrary to the suggestion that sound economic or commercial thinking has driven it at any stage, the military economy has in fact evolved principally by capturing income streams generated by its privileged access to state-controlled funds and assets and to public contracts.

Along with both public and private sector civilian counterparts, military institutional actors and interest groups have seized the opportunities opened up by major political developments in Egypt's international and domestic environments to consolidate and expand their structural advantage within the economy.

The trajectory of the military economy bears this out. Egypt's modern defense industry was built under then president Gamal Abdel Nasser in the 1950s and 1960s, in the dual context of the conflict with Israel and of an era when economic nationalism and import substituting industrialization strategies were popular among developing countries. This was also a period in which the EAF officers were called on to assume managerial roles in the state bureaucracy, partly to provide technical skills and reduce the nascent republican regime's reliance on the civil service it had inherited from the monarchy. The defense industry's foray into civilian production starting in the late 1950s proved a failure, however, and the military did not become involved, as an institution, in public works and the civilian economy up to Nasser's death in 1970.

The presidency of Nasser's successor, Anwar Sadat, was initially marked by his struggle to contain and dismantle hostile factions in the armed forces and security services. But this gave way in the second half of the 1970s to reducing Egypt's defense burden, resolving its perennial shortage of capital, and demilitarizing domestic politics and government. This reorientation moreover unfolded amid a strategic reorientation of military and economic ties away from the Soviet Union, toward the West, and the peace process with Israel.

The military economy's primary mode is rentier. It replicates the regime logic of utilizing public resources to appease key constituencies—heavily concentrated in the public sector and state institutions—while seeking rent income for itself.

These priorities shaped the military economy. In 1975, Sadat launched the AOI, a commercial military enterprise funded by Saudi Arabia, Qatar, and the United Arab Emirates, as a means of drawing significant investments to Egypt and making the country a regional industrial hub. Four years later, the peace treaty with Israel allowed significant reductions in the armed forces and defense budget. The EAF led reconstruction and rehabilitation of urban centers and infrastructure in the Suez Canal zone, funded partly by international assistance, positioning it to assert *de facto* claims to economic assets and activities there subsequently. The MOD was authorized to produce the EAF's basic needs of food, noncombat equipment, and services, for which purpose Sadat established several economic agencies. From placating the EAF officer corps in the wake of the Camp David Accords with Israel, the focus of economic activity shifted to ensuring their living standards at a time of budgetary constraints.²

By one estimate, defense spending had already been reduced from 16 percent of GDP in 1970 to 9 percent in 1978, so further cuts were largely nominal, achieved mainly by moving select expenditures off government books.³ But they set the stage for the rise and diversification of a parallel military economy under Hosni Mubarak, who assumed the presidency in 1981. Over the next thirty years, the military economy underwent three distinct phases, each shaped by similar convergences of political and economic factors and equally dependent on the sector's status as an enclave enjoying state protection.

In the first decade, Mubarak endorsed the MOD's self-supporting approach as a means of securing political influence within a restive officer corps while shifting defense costs at a time of deepening financial austerity. U.S. economic aid of \$250 million annually and other Western credit lines did not compensate fully for the cessation of official Arab budgetary assistance and development loans in 1978 or for declining revenue from petroleum exports as global oil prices dropped sharply during the 1980s.⁴ Pressure from international financial institutions to reduce the defense budget inadvertently encouraged the growth of a largely off-budget military economy. So did the behind-the-scenes contest for power between Mubarak and then defense minister Field Marshall Abdul-Halim Abu-Ghazalah, who used military production of civilian goods and services and the proceeds from exporting surplus weapons and ammunition to Iraq during its war with Iran to cement his own standing within the EAF and with the general public.

The MOD invested in food production, constructed housing and infrastructure, leased state-owned facilities placed under its authority (such as ports in the Suez Canal zone), and leveraged its control of military zones around the capital and other cities to acquire a financial return on approving the use of land for state-funded projects. Notably, military entry into food sectors such as macaroni, dairy, or bottled water mimicked the behavior of the large numbers of so-called *infitah* companies that had appeared in response to the economic liberalization policy introduced by Sadat in the previous decade. The military's market share

was probably much smaller than commonly assumed, therefore, and it was almost certainly leasing and land use licensing that provided the MOD with seed capital for expansion in the next stage.⁵

Mubarak's dismissal of Abu-Ghazalah in 1989 marked a second phase, centered on a simple trade-off: the military could increase its economic engagement in return for staying out of politics. Mubarak had been compelled in 1986 to rely on the EAF to quell a rebellion by the Central Security Forces—a large paramilitary organization attached to the Ministry of Interior (MOI)—thus empowering Abu-Ghazalah. To confront the growing jihadi insurgency in the 1990s, in contrast, the president relied chiefly on the police and internal security agencies. He increased the Ministry of Interior's manpower and budget at a rate far exceeding the MOD's, and assigned the MOI's State Security Investigations department to monitor EAF officers and influence their promotion.⁶

Abu-Ghazalah's successor as minister of defense, Colonel General Youssef Sabri Abu-Taleb, curbed the military economy's expansion.⁷ His tenure only lasted two years, but Field Marshall Mohamed Hussein Tantawi, who succeeded him in 1991, proved fully compliant with Mubarak's goal of marginalizing the military politically. The new defense minister oversaw a veritable mushrooming of the officers' republic as he worked to co-opt the senior officer corps: during his tenure, which was to last an unprecedented twenty years, it became standard for EAF retirees to move into posts in the state bureaucracy and public sector companies, often in sectors related to those they had served in (such as aviation or maritime transport), which literally became sinecures of those branches of the EAF.

The timing was propitious. The partial write-off of Egypt's \$50 billion debt to Western countries in return for its support for the U.S.-led intervention in the 1990–1991 Gulf crisis eased budgetary pressures on the government, while the simultaneous launch of a sweeping privatization program of state-owned companies also increased revenues. This allowed the transformation of military-owned defense companies and factories into public businesses governed by commercial rules and regulations, effectively privatizing profits while socializing losses. These and other military agencies diversified their activities and business partners over the next decade, but there is little evidence that their overall turnover or percentage of GDP grew dramatically in this period—although both presumably grew in tandem. The more important consequence of this economic reorientation was that it helped expand the military's share of public works contracts and replicate the pattern of real estate speculation and insider trading that characterized the wider economy, in effect serving the officers' republic more than the formal military economy.

Resumption of the privatization program in the 2000s signaled a third phase, offering the military an opportunity to extend further into the civilian economy. It did so partly by acquiring a few failing state-owned companies or establishing new military companies,

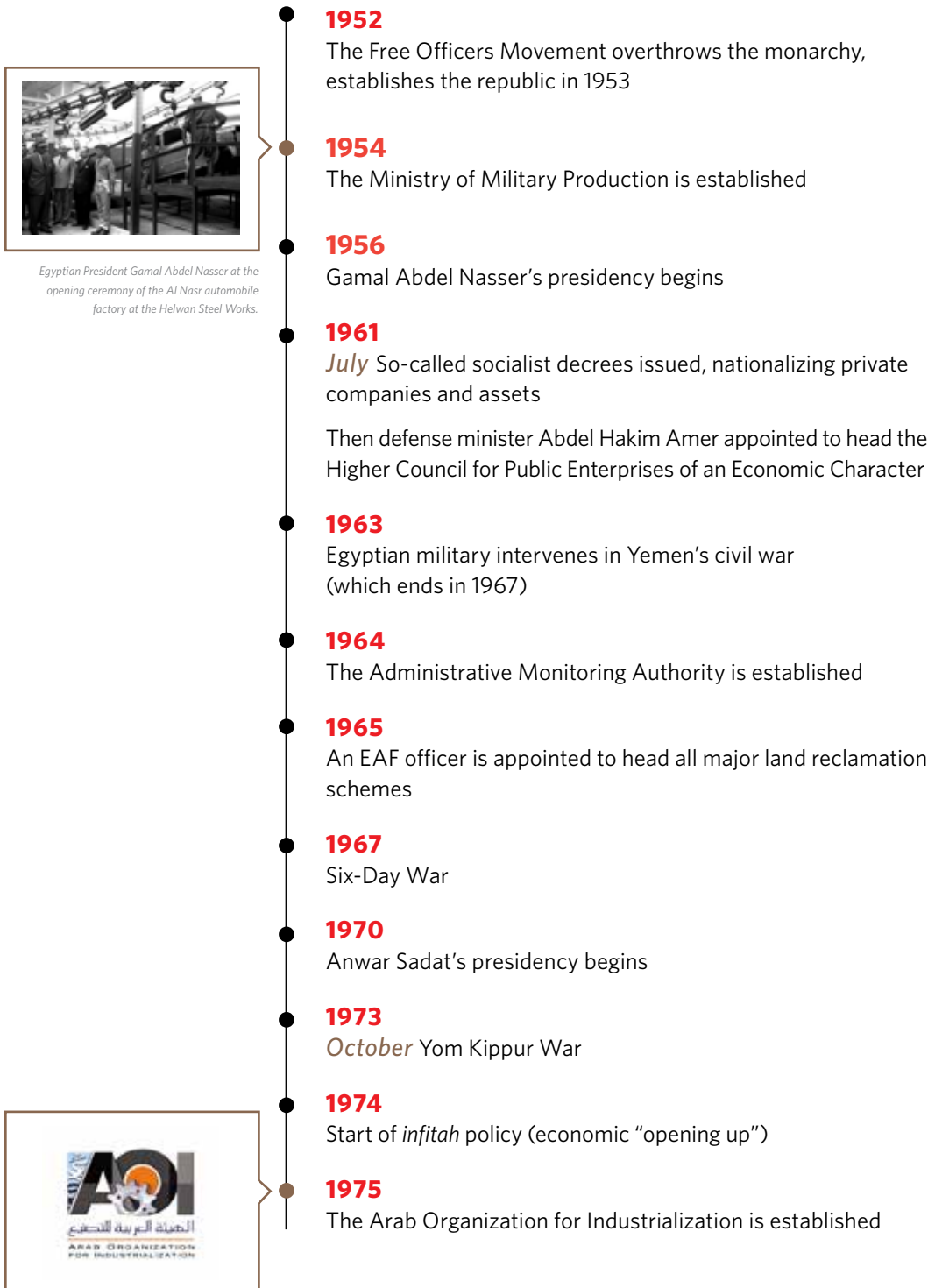
but also by seeking partnerships and joint ventures with Egyptian and foreign private businesses. Nonetheless, although the military was able to consolidate its economic enclave, this was not a period of unbridled growth. The formal military economy remained heavily reliant on MOD management of public works such as land reclamation and construction of new cities. Instead it was crony businessmen close to Mubarak, his son Gamal, and the ruling National Democratic Party who reaped the principal benefits of privatization, capturing market share in important economic sectors and overshadowing the military as the source of political connections sought by both public and private companies to win contracts. This loss of influence was a factor in the military's discomfort with, and at times open opposition to, privatization of key state assets and the grooming of Gamal Mubarak to succeed his father, setting the stage for its siding against him during the 2011 uprising.

A brief interregnum followed Mubarak's ouster in February 2011. The Supreme Council of the Armed Forces, which assumed the president's powers, appeared not to have clear plans for expanding the military economy, but revealed its determination to preserve what it already had, which it regarded as necessary for meeting the needs both of the EAF as a whole and of its officers and enlisted personnel. This was the blunt gist of the statement by the assistant defense minister for finance and SCAF member in April 2012, that the military would not allow anyone "to interfere with EAF ventures."⁸ Just how far the military would go to defend its stake was highlighted in spring 2013 when the MOD publicly compelled then president Mohamed Morsi (elected in 2012) to abandon his plans to place development of the Suez Canal zone, which the military saw as its exclusive economic preserve, under a new civilian body attached to the presidency.

This open challenge came mere months before the EAF ousted Morsi in July 2013. Having toyed with a succession of constitutional amendments enshrining its budgetary and operational autonomy from any civilian authority, the EAF now assumed a position of complete power and unbridled opportunity. If the 2011 revolution had seemed momentarily to threaten the protected status of the military economy, any remaining constraints on it were in fact removed. Under Sisi, who was elected president in May 2014, the military has emerged as a principal economic broker and manager.

FIGURE 2

Timeline of the Evolution of the Military Economy Since the 1950s





(Amanda Hsu Perkins / Alamy Stock Photo)

1978

Camp David Accords signed with Israel; the EAF takes a lead role in reconstruction and rehabilitation of urban centers and infrastructure in the Suez Canal zone

1979

Peace treaty signed with Israel; annual U.S. economic and military assistance starts

The National Service Projects Organization is established

1981

Lieutenant General Abdul-Halim Abu-Ghazalah appointed minister of defense, plays a major role expanding the military economy in the 1980s

The General Services Agency is established

The EAF's Land Projects Agency is established

Hosni Mubarak's presidency begins

1983

MOMP subsidiaries reclassified as public sector companies

1984

The National Authority for Military Production is established

1985

Creation of "civilian construction brigades" under the MOD (comprising EAF conscripts)

1991

Launch of privatization under the Economic Reform and Structural Transformation Program; military-owned defense companies and factories become public businesses governed by commercial rules and regulations

Lieutenant General Mohamed Hussein Tantawi appointed minister of defense, oversees the expansion of the officers' republic

1994

Founding Arab partners relinquish their shares in AOI, leaving it wholly owned by Egypt

2003

The Maritime Industries and Services Agency (under the MOD) is established; the agency receives control of Egyptian Ship Building and Repair Company and Alexandria Shipyard



(Hans Splinter)

2004

Privatization program relaunched under government of then prime minister Ahmed Nazif

2011

Amid a general uprising, Mubarak is ousted, and the Supreme Council of the Armed Forces assumes the president's powers

2012

June Mohamed Morsi's presidency begins

2013

March–May The MOD and Morsi clash over economic development of Suez Canal zone

July The EAF overthrows Morsi, and Adly Mansour named interim president

September Start of massive increase in major public works and procurement contracts managed by military agencies

2014

May Abdel Fattah el-Sisi's presidency begins

August The MOD launches Suez Canal expansion

2015

March The MOD launches new administrative capital project

November Inauguration of Suez Economic Development Corridor program

November The EAF's Land Projects Agency authorized to form joint ventures with Egyptian and foreign companies, and to use military-designated land as equity

2016

February The Administrative Capital Urban Development Company is made a public limited company (owned by the Land Projects Agency, NUCA, and NSPO)

2017

Administrative Monitoring Authority's jurisdiction is explicitly limited to civilian individuals and bodies, effectively excluding the military

2018

December Egypt Defense Expo held for the first time

THE LEGAL FRAMEWORK

The enabling legal framework of the military economy has evolved continuously under the successive presidential administrations that have governed Egypt since the Free Officers seized power in 1952. The foundations were laid in the Nasser era, during which the military was exempted from paying taxes, fees, and duties and shielded from government regulations on procurement and other aspects of financial management and reporting required of the rest of the public sector. Later amendments under the Sadat, Mubarak, and Sisi presidencies reaffirmed or expanded these exemptions; reinforced the military's autonomy, discretionary powers, and exception from divulging information to civilian authorities or submitting to external audit in relation to its about its finances; broadened its control of public assets such as land; and generally widened the scope of its economic and commercial activity.

The foundations for the military economy were laid in the Nasser era, during which the military was exempted from taxes, fees, and duties and shielded from regulations on procurement and financial management and reporting.

The special status of the military was confirmed shortly before Nasser became president of the republic in 1956. Decree 263 of 1956, which he issued while still prime minister, exempted the military's "secret stores" from inspection by the state's central Accounting Department (*Diwan al-Muhasabah*) and the Ministry of Finance and Economy, empowering the MOD to undertake this role and report on its findings to them instead.⁹ This was probably the basis for the exclusion of all military agencies and assets from civilian

monitoring and audit ever since. Law 204 of 1957 next exempted the MOD and its associated entities—chiefly the EAF at the time—from "taxes and fees and financial regulations and laws amending them" in relation to armaments contracts and customs duties on imports.¹⁰ Although significant numbers of EAF officers were appointed to senior posts in the state bureaucracy—1,500 of them in 1954–1962, by the estimate of Egyptian sociologist Anouar Abdel-Malek—the military had not yet come to play a direct, formal role as an institution in the national economy.¹¹ Indeed, the MOMP, which was set up in 1954, performed so poorly that it was abolished in 1969.

The real impetus for the development of the formal military economy and its legal framework came under Sadat, albeit in distinct stages. The new constitution of 1971 gave the president authority to oversee and approve defense contracts, which was expanded in Law 29 of 1972 to include arms imports and related defense allocations (subject to ratification by parliament) and the additional power to authorize spending beyond the approved budget.¹² Sadat later used Law 29 to extend his presidential prerogatives in other ways.

The revised Armed Forces Retirement, Social Security, and Pensions Law 90 of 1975, for example, drew on the president's powers under Law 29 to prevent EAF personnel who took civilian jobs from receiving their military pensions at the same time as their new salaries. (In 1995, nearly fourteen years after his death, the Constitutional Court ruled that Sadat's use of Law 29 to modify this provision of Law 90 had been unconstitutional. But the law and the provision both stood.¹³) And in 1980, Sadat ended the exemption of the quasi-military AOI from applying this provision of Law 90 to the retired EAF personnel it employed.¹⁴ In Law 146 of 1981, he again claimed Law 29 as the basis for expanding his powers of oversight and approval to include defense exports.

The preceding laws did not relate to the military economy directly, but they established a pattern of presidential prerogative and intervention that set it on an upward trend in the second half of Sadat's presidency and laid the basis for its accelerated expansion under his successor, Mubarak. Sadat had reinstituted the MOMP in 1971, but it remained largely dormant, and so the announcement of the AOI in 1975 represented the first significant step in building up the military economy. The AOI was in fact an anomaly: Law 12 established it not as an Egyptian company but as an "international organization," because it had been set up in partnership with several Gulf states.¹⁵ Consequently, it was governed by its own bylaws rather than government regulations. But Sadat moved formal military agencies in the same direction. He had already relieved them of other, lesser fees, such as the so-called jihad tax levied under Law 117 of 1973, to support the national defense burden. He later extended the MOD's exemption from paying customs duties under Law 204 of 1957 to both the MOMP and the AOI. And when he established the National Service Projects Organization (NSPO) in 1979, he empowered it to regulate itself independently of the Ministries of Defense and Finance and freed it from complying with government regulations on procurement, accounting, and auditing.

Most important, however, was the legal foundation that Sadat laid for the military's formal control of the use of state land, which has proved to be one of its foremost assets. Law 38 of 1977 had already required tourism agencies to obtain MOD permission in order to operate in border areas, which included the country's coasts, a principal tourist destination.¹⁶

Presidential Decree 143 of 1981 expanded this requirement to include all "desert land," that is, any area not previously registered in cadastral surveys as *zimag*—owned by legal persons or entities, public or private, and subject to real estate tax.¹⁷ This encompassed an estimated 90–95 percent of Egypt's total surface area, thereby expanding the military's potential economic benefits significantly. Sadat followed this up with Law 531 of 1981 establishing the

The Mubarak era expanded the prerogatives and trends established under Sadat, putting the military economy on an accelerated growth path.

EAF Land Projects Agency, which was allowed to generate income from military real estate, much of which lay in desert and border areas.¹⁸

The Mubarak era expanded the prerogatives and trends established under Sadat, putting the military economy on an accelerated growth path. Law 186 of 1986 extended the customs exemption in Law 204 of 1957 to include all imports of equipment, transport vehicles, medicine, and other noncombat items, in addition to arms.¹⁹ Since then, in fact, all commodities imported by military agencies are exempt from duties, including food intended for sale in civilian markets. Law 11 of 1991 also exempted the MOD and all its affiliate branches and agencies from the sales tax, an exemption that was extended in Law 17 of 2001 to all the commanders of all EAF branches, departments, agencies, and funds, as well as to companies belonging to the AOI and MOMP.²⁰ All exemptions were routinely renewed, moreover; the exemption from customs duties was reaffirmed in Law 91 of 2005, for example, and all EAF facilities that offer commercial services (hotels, clubs, hospitals and clinics, cinemas, and supermarkets) were exempted from the real estate tax levied under Law 196 of 2008.²¹

In parallel, MOMP companies were reclassified in 1991 in accordance with Public Sector and Companies Law 97 of 1983, which provided for the formation of joint stock companies.²² Two years later, the Council of Ministers decreed that MOMP companies would be relieved of the costs of defense production, which would instead be borne by the state treasury. (In theory, at least, this decree did not apply to their civilian production, but in practice the distinction does not appear to have been enforced, if annual accounts released in 2011 are a guide to their accounting practices.) In the meantime, cargo destined for military firms was additionally exempted from inspection at the country's ports of entry. Possibly at this time also, MOMP companies were allowed to defer budgetary surpluses, that is, carry them forward to the next accounting year; these were deposited in "special funds" that they subsequently retained as disposable capital.

These legal developments reinforced the military's special corporate status and prepared the ground for its economic expansion. But two stood out in particular: Law 89 of 1998 on bids and tenders, and the series of laws granting extensive military control over state land culminating in Presidential Decree 152 of 2001 designating "strategic areas of military importance in desert land."

In the first instance, Egypt is a member of the World Trade Organization, but is not party to its Government Procurement Agreement.²³ This explains the significance of Law 89, which awarded government ministries and agencies extensive power to award contracts up to a certain value and within specific domains by what is commonly known as "direct order"—that is, on a no-bid, noncompetitive basis. Crucially, the law conferred the same power on the MOD and MOMP.²⁴ Consequently, all parts of the formal military economy can follow what is variously termed "limited bidding," "local bidding," "limited practice,"

or “direct agreement” with contractors, and may delegate these powers in relation to any contract or activity falling within their remit without being subject to thresholds on the contract’s value.

Military authority over state land was formally expanded in 1988, when a prime ministerial decree required the Ministries of Agriculture and Land Reclamation; Housing, Utilities and Urban Development; and Tourism to obtain MOD permission to operate in areas it deemed of military importance.²⁵ Law 7 of 1991 consolidated and updated this authority, by requiring newly established general economic authorities also to coordinate their planned land uses and zoning with the MOD, and granted the president the additional power to delineate desert areas as strategic and of military importance.²⁶ Law 5 of 1996 did not relate to the military, but in empowering the president to set the rules and procedures governing the disposal of state land to investors for free or at nominal rent, it set the stage for the rampant speculation in real estate that was to follow, in which the military also engaged.²⁷

The most significant development, however, came in Presidential Decree 152 of 2001, which empowered the president to designate “strategic areas of military importance in desert land.”²⁸ This set out criteria that had to be met by any civilian agency or person seeking to undertake construction or other activity—whether over or under the ground, along roads, or off the shores of seas and lakes—within the vicinity of military installations.²⁹ In effect, the decree granted the MOD discretion to designate land for commercial use.³⁰ The location of strategic areas was to be determined by the MOD, which would also specify the distances to be maintained from their perimeters by new civilian construction, the permissible heights of structures built in the vicinity, and the technical specifications for waste-producing activities (solid, gaseous, or effluent) undertaken nearby.³¹ This was immediately followed by Presidential Decree 153 setting up the National Center for Planning State Land Uses, which sought to inventory and govern use of all state land, in coordination with the Military Survey Department; an MOD representative sat on the new center’s board, whose head was moreover to be approved by the ministry and has often been a retired EAF officer.³²

Notably, these various laws coincided with the partial privatization process that Egypt underwent in stages between 1991 and 2009, and with sharp parallel increases in real estate speculation and corruption. The award of contracts by direct order underpins the ability of military companies to sell products of inferior quality or at inflated prices to government agencies, and enables the military to award contracts for government-funded projects they manage to favored private contractors (or those willing to pay hefty bribes, as numerous interviews conducted for this report confirm). A former member of the short-lived government of prime minister Hesham Qandil (2012–2013) later claimed, for instance, that senior officials in his ministry had ordered its procurement department to pay a defense industry company 400 million Egyptian pounds (then approximately \$63 million) for mobile phones worth some 50 million Egyptian pounds on the open market.³³

Similarly, the MOD has used its effective veto power over the use of state land and physical access to zones containing exploitable natural resources to exact licensing fees and under-the-table payments—neither of which can be quantified, but which must be considerable—from both private investors and government agencies such as the Ministries of Housing and Transport, which depend heavily on access to state land. Senior officials including the assistant defense minister for financial affairs have repeatedly claimed that the MOD merely seeks compensation for military facilities that must be dismantled or moved or for ceding land designated for military use. But such designations are always asserted *ex post facto*, and cannot be substantiated as the maps they are based on are kept secret. The MOD heads a “hierarchy of *de jure* control over unallocated public land,” as a World Bank report noted in 2006.³⁴ Obtaining military clearance for land use applications could take more than a year, creating a powerful incentive for applicants to pay bribes in order to expedite the process or jump the queue.³⁵ The MOD’s special role in land management has moreover provided officer networks with inside information, enabling them to purchase desert land at rock-bottom prices before planned developments push up its value. Possibly in response to the threat of legal action that surfaced after the 2011 revolution, SCAF head and acting president Tantawi issued Presidential Decree 45 empowering military prosecutors to determine whether accusations against EAF officers should be referred to military courts or civilian agencies, effectively removing this power from the attorney general’s office.³⁶

Predictably, all military exemptions, prerogatives, and privileges have been reconfirmed and expanded since the EAF coup d’état of July 2013. A foremost instance was the amendment issued in September 2013 by interim president Adly Mansour to Law 89 of 1998 on bids and tenders, which raised the upper limits on the value of contracts that government ministers and agencies could issue directly to contractors of their choice without open bidding, “in case of emergency.” The MOD, MOMP, and their affiliated bodies were similarly empowered, as was the AOI some months later; crucially, the amended law did not state a

threshold for their no-bid transactions.³⁷

Furthermore, although Article 9 of the amended law related specifically to armament contracts as defined under Law 204 of 1957, it has been taken to apply to all contracts issued by military agencies to civilian suppliers and subcontractors, including for government-funded public works.

Predictably, all military exemptions, prerogatives, and privileges have been reconfirmed and expanded since the EAF coup d’état of July 2013.

The EAF’s resurgent political influence after 2011 and its growing role in economic management after 2013 have translated into a sharp increase in the award of contracts by direct order to the Egyptian private sector, which derives a major part of its income from public works and procurement contracts, expanding the scope for corruption and cronyism. Presidential Decree 32 of 2014, which banned third-party challenges to contracts awarded

by government agencies, reinforced the ability of well-positioned actors, including the military, to capture lucrative income streams and protect themselves from inspection and prosecution at the same time. The main purpose was to prevent legal challenges to the award of public contracts and protect both the government officials awarding them and the contractors.³⁸ At the same time, Law 5 of 2015 exempted military agencies from complying with the requirement that government procurement contracts prefer Egyptian manufactured goods, allowing them to turn to foreign imports if they wished.³⁹

Several subsequent laws related to the military more directly. Most significantly, Presidential Decree 446 of 2015 authorized the EAF Land Projects Agency to utilize its assets as equity in forming joint ventures with domestic and foreign companies. Exactly one month later, Presidential Decree 127 authorized any government entity to establish public limited companies after obtaining cabinet approval, paving the way for further military companies and joint ventures.⁴⁰ The effect of granting the military commercial utilization of state land and, de facto, retention of all incomes arising from that, was demonstrated when Presidential Decree 57 of 2016 instructed the agency to form a public limited company (along with the MOD's NSPO and the Ministry of Housing's New Urban Communities Authority) to manage the new administrative capital project and the Sheikh Mohammed bin Zayed City.⁴¹ These decrees further magnified the scope for real estate speculation, reflected, for example, in the discernible shift of commercial land developers' attention from previously desirable areas such as New Cairo to the new capital.

The military's tax exemptions have also been reaffirmed or extended. In 2016, military agencies were again exempted when the sales tax was converted into a value-added tax (VAT) as part of IMF-inspired reforms.⁴² The military does not have to pay VAT on goods, equipment, machinery, services, and raw materials needed for the purposes of armament, defense and national security, nor on any goods or services sold by military agencies and outlets such as MOD-owned hotels or NSPO petrol stations. And when Sisi imposed a 25 percent levy on the deferred surpluses of governmental "service, economic, and national general authorities" to the benefit of the state treasury in the same year, he exempted the National Authority for Military Production, which manages MOMP companies.⁴³ In May, Presidential Decree 233 designated twenty-one national roads as "strategic zones of military importance" that, combined with prior laws, effectively granted the MOD exclusive commercial franchise along them.⁴⁴ Five months later, amendments to the Military Judiciary Law brought all incidents occurring at or in civilian areas and facilities run by the military, such as petrol stations serving the general public, under the jurisdiction of military courts.⁴⁵ Legislation passed in 2014 had already placed all "public and vital facilities," such as ministries and universities, under military jurisdiction for two years, and in 2016 this law was extended to 2021.⁴⁶ Other advantages followed, such as the exemption of the defense sector from a 43 percent government-mandated increase in electricity prices imposed on industrial manufacturers in 2018.⁴⁷

Last but not least, the military economy was shielded even further from external audit. The de facto exclusion of the military generally from inspection by the Administrative Monitoring Authority (AMA), Egypt's main audit agency, was made de jure when its jurisdiction was specifically limited to civilian individuals and entities in Law 207 of 2017.⁴⁸ As importantly, the same law made the AMA directly accountable to the president, who was also given the power to appoint its head, effectively confirming it as a tool of presidential power and cementing his influence over the military. Former prime minister Ibrahim Mahlab had moreover designated the AMA two years earlier as a government agency whose contracts were classified as secret "for national security reasons," effectively exempting it from Law 5 of 2015 requiring government agencies "to buy Egyptian" and further enhancing its distinctiveness and autonomy from civilian agencies.⁴⁹

EXTENDING AND BENDING THE RULES

The legal framework summarized above reveals a skeleton upon which are hung a host of prerogatives that appear to be asserted de facto as often as awarded de jure, and from which emanate practices that range from the formal to the informal and frankly illegal. The military economy operates within a complex and labyrinthine body of laws and bylaws that are not harmonized and often conflicting, having accumulated over decades during which powerful institutional and social constituencies lobbied hard to acquire or preserve economic gains as the government instituted major changes of economic orientation: from the capitalist mode of the pre-1952 monarchy, through socialist nationalization under Nasser, controlled liberalization under Sadat, and finally under Mubarak to a nominally free market

Among the numerous legally sanctioned advantages enjoyed by the formal military economy are preferential access to building materials, public infrastructure, subsidized energy, and, crucially, hard currency at discounted rates.

system that in fact combines an extensive residual role for the state in ownership and capital expenditure along with crony capitalism. An equally complex and fragmented administrative structure for managing public finances and assets makes it even harder to enforce rules and regulations that, to paraphrase the 2006 World Bank report cited previously, encompass a multitude of differentiated, nontransparent, complex, and arbitrary procedures.⁵⁰

Among the numerous legally sanctioned advantages enjoyed by the formal military economy are preferential access to building materials, public infrastructure, subsidized energy, and, crucially, hard currency at discounted rates.⁵¹ Some advantages are provided in laws of establishment and may also be enjoyed by

civilian public agencies and private businesses (such as energy subsidies). But others may be tucked away in bylaws such as those of the revised Mineral Wealth Law 198 of 2014, for example, which required MOD approval for the extraction of mineral wealth anywhere in Egypt and empowering it to levy fees on all output at production sites.⁵² Military economic entities can furthermore maintain deposits in banks of their own choosing—unlike civilian government agencies that may only hold accounts with the Central Bank of Egypt—and can hold foreign currency accounts and access extra-budgetary financing without government supervision.

TABLE 1
The Egyptian Military’s Economic Advantages

Land	Legal right to use military-designated land as equity in commercial joint ventures; Power to award or withhold licenses for use of state land by any civilian individual or entity, public or private
Labor	Use of free conscript labor
Taxes, duties, and fees	Exemption from income tax, property tax, customs duties, and other fees and levies
Energy	Government subsidies (also available to big civilian businesses) benefit energy-intensive military construction and industry
Foreign currency	Military receives favorable exchange rates; Military may retain foreign currency in special bank accounts
Audit	No civilian agency has power to audit military agencies; De facto military control of the Administrative Monitoring Authority protects the military and can be used to intimidate and punish civilian businesses
Permits	Informal power to expedite or delay bureaucratic paperwork needed by civilian investors, exercised through retired officers in state agencies

All military entities, facilities, and assets come exclusively under the jurisdiction of military courts. The rights of civilian business partners involved in joint ventures or even as subcontractors fall into a legal gray zone.

But the military economy also benefits from a marked degree of ambiguity. Senior defense industry officials have occasionally claimed that the sector is subject to normal taxes, but this is certainly untrue. In January 2017, Minister of State for Military Production Major General Mohamed al-Assar made a significant distinction by stating that the industry paid taxes, customs duties, and social security contributions on the

civilian side of its production, while acknowledging that similar payments were not made on military output.⁵³ But confusion remains about the legal status of military companies that are registered as part of the public business sector, and of the joint ventures with private companies, both domestic and foreign, that military agencies have been permitted to establish under Presidential Decree 127 of December 2015. Nominally, they should come under normal tax regulations, but in practice they do not, as Assar admitted. Nor is there any evidence (or public claim) that the MOD pays taxes or other contributions on net income its agencies make from managing public works projects. No less importantly, all military entities, facilities, and assets come exclusively under the jurisdiction of military courts, and so the rights of civilian business partners involved in joint ventures or even as subcontractors fall into a legal gray zone that has yet to be tackled by Egyptian legislators or policymakers.

Similarly, Law 6 of 1984 establishing the National Authority for Military Production (NAMP), which oversees MOMP companies and factories, confirmed that their boards of directors would receive bonuses and incentives and a share of profits. The introduction of commercial incentives followed practice in the rest of the public business sector after 1983, but the absence of external oversight over the defense industry meant that there has been no way of verifying actual performance or confirming that profits (net of all expenses and contingencies) have in fact been made. NAMP annual balance sheets released in 2011 showed none, and Assar has repeatedly acknowledged that most MOMP companies incur losses, suggesting that bonuses and shares of supposed profit are calculated on the basis of turnover (overall financial flows handled) and distributed to directors and managers before net balances are calculated. A decree issued by Sisi in September 2016 that personnel of the NAMP and its subsidiary companies should receive “not less than 25 percent of *net* profits” (emphasis added), but the lack of transparency surrounding NAMP financial accounts and bylaws prevents definitive assessment, not only of its economic viability, but also of legal compliance.⁵⁴

As noted previously, the formal military economy is empowered by law to operate outside much of the regulatory framework that applies to other state institutions. In some cases, as with the mining sector noted above, specific bylaws govern the military’s income generation

from public assets or natural resources. Less clear is what regulates the charging and retention of fees or profits from public works and commercial franchises, investments in and dividends from commercial companies, and employment of conscript labor, both in the latter and in profit-making activities. The latter example is particularly egregious. EAF conscripts are used as cheap labor in virtually all sectors of the military economy. The practice started in 1986 when then minister of defense Field Marshall Abdul-Halim Abu-Ghazalah announced that 30,000 conscripts would be organized into so-called development battalions to contribute to the national economy.⁵⁵ Over thirty years later, these battalions (now known as civilian construction brigades) are still employed to implement publicly funded projects, especially in construction, agriculture, and land reclamation, whether undertaken by public or private contractors. MOD, MOMP, and AOI companies also employ conscripts who are in their final six months of service, and sometimes for considerably longer, and interviews confirm that skilled conscripts are routinely loaned to private sector companies.

Last but not least is the extent to which the military's legally sanctioned presence in various state bodies and informal relationships with civilian officials and legislators enables rules to be bent to benefit the formal military economy. Political scientist Robert Springborg noted, for example, how Abu-Ghazalah used his position as chairman of the Ministerial Policy Committee in the 1980s to award land reclamation contracts to military agencies or withhold them from their public sector rivals (and offer sweet deals to retired EAF officers and private sector businessmen).⁵⁶ A World Bank working paper published in 2018 confirmed that such political connections remained important in obtaining government contracts to procure goods or services, some thirty years later.⁵⁷ More generally, as big businessman Naguib Sawiris complained, the military can get work done because "when it gets involved permits are unimportant, it doesn't have to pay bribes, and it can overcome all the problems that we all wish we could overcome."⁵⁸

Military agencies and affiliated companies or private sector partners also benefit from other le-

gal devices such as nontariff barriers to trade, which can be designed to favor particular companies and exclude competitors, including foreign ones. As economists Ishac Diwan, Philip Keefer, and Marc Schiffbauer note, trade protection is firm- and not sector-specific in Egypt, which had one of the highest nontariff barrier frequencies in the world in 2010.⁵⁹ Government agencies can skew markets in additional ways: three months after the MOMP concluded a partnership with the Chinese firm Galantz to manufacture air conditioners locally in June 2016, for example, the authorities restricted the import of foreign-made

Military agencies and affiliated companies or private sector partners also benefit from other legal devices such as nontariff barriers to trade, which can be designed to favor particular companies and exclude competitors, including foreign ones.

air conditioners.⁶⁰ Military agencies were able to secure a similar legislative amendment that blocked competition from more highly specialized Dutch companies for large water projects. And when legal devices fail, the EAF is known to resort to means such as blocking the entry of imported machinery to Egypt in order to compel companies to accept its terms—such as receiving a share of factory output—in return for issuing the necessary licenses allowing them to set up in certain geographical zones or manufacturing sectors.⁶¹

A LEGAL BALANCE SHEET

Military agencies are not alone in enjoying economic advantages afforded by the law. Many state agencies and public companies were also exempted from paying customs duties on imported goods during the Nasser era, subsequently reaffirmed in Law 91 of 1983.⁶² So were importers of goods and services for trading purposes, exports, basic foodstuffs, catering, natural gas, books and magazines, and goods used for scientific, educative, and cultural purposes. Most importantly, the private sector had been allowed to import building materials free of duties starting in 1977; this was a major advantage because construction, which accounted for a large part of public contracts awarded to the private sector, was never fully nationalized.⁶³ But because the public sector continued to monopolize the distribution of building materials, officials could expedite or delay allocations to extract bribes and sell to the black market.⁶⁴ Most of such advantages remain in place. Furthermore, as Egyptian political economist Amr Adly has noted, the private sector's contribution to state revenue through taxes on industrial, commercial, and capital gains is also small, not exceeding 7 percent in 2008–2012, because of tax evasion among small and medium-sized enterprises and broad tax exemptions and government incentives for large companies.⁶⁵ Similarly, property taxes from all sources averaged 2.9 percent of state revenue in the same period. Tax exemptions for the military are therefore part of a general problem for state revenue, and may not make an appreciable dent in the budget deficit on their own.

In fact, all economic actors in Egypt benefit from extensive loopholes in the regulatory framework, as a 2003 World Bank report described:

Although the Law and the Executive Statutes provide important concepts for public procurement and are based on sound principles, they are broad and not always sufficiently clear for consistent application. To compensate for this lack of clarity and completeness of the written law and statutes available to them, different ministries have created their own unwritten procurement “rules.” These unwritten “rules” have become known to bidders only through application to actual cases and can vary. Consequently, discretionary decisions by the Competent Authority have become the rule rather than the exception, as for example, in the selection of the applicable procurement method or acceptance of bid modifications after the bid opening.⁶⁶

Military companies are also not alone in benefiting from the legal preference that allows awarding government contracts to Egyptian companies whose bids are within 15 percent of competing bids.⁶⁷

The preceding emphasizes that, to a considerable degree, the problem for Egypt is not that the military is different from its civilian counterparts, but rather that it is very much the same. The military’s advantages are rooted in law, but along with many others in the state bureaucracy, it uses its considerable discretionary power to bend the rules and assert rights that are not explicitly sanctioned in law or that clearly exceed, if not frankly violate, its provisions. The legal and regulatory framework affords all wide scope to further their economic interests while remaining ostensibly within the law.

What determines the balance between formality, informality, and illegality is the degree of political influence or connectedness of each interest group. This has not always favored the military; under Sadat, the balance shifted clearly toward the new, so-called *infitah* bourgeoisie, while National Democratic Party bosses and allied business cronies were the primary beneficiaries in the last decade of Mubarak’s rule. But his ouster in 2011 and the subsequent transformation of the military’s political and economic fortunes since 2013 have shifted the scales for the foreseeable future. The military’s full legal and constitutional autonomy from any form of civilian jurisdiction—whether executive, legislative, or judicial—ensure preservation of the military economy even as it intrudes into its civilian counterpart.

TABLE 2
Enabling Legal Framework

Date	Law	Purpose
1956	Prime Ministerial Decree 263 Excluding Ministry of Defense Stores of a Secret Nature from Inspection by the Accounting Department and the Ministry of Finance and Economy	By empowering the Ministry of Defense to undertake this role instead, the decree set the basis for the general exclusion of military agencies and assets from civilian monitoring and audit from there on.
1957	Law 204 on Exempting Armament Contracts from Taxes, Fees, and Financial Regulations	Exempted military agencies from taxes, customs duties, and any other fees relating to armament contracts.
1964	Law 147 Amending Certain Rulings of Law 204 of 1957 on Exempting Armament Contracts from Taxes, Fees, and Financial Regulations	Extended exemptions to include works and services contracts and the import and domestic supply of all equipment and machinery relating to those contracts.
1972	Law 29 on Authorizing the President of the Republic to Issue Decrees with the Force of Law	Expanded the scope of the president’s powers to include arms imports and related defense allocations (requiring ratification by parliament) and the additional power to authorize spending beyond the approved budget.

Date	Law	Purpose
1975	Law 90 on Retirement, Social Security, and Pensions for the Armed Forces	Regulated all financial aspects of retirement, including entitlements of military personnel assigned to civilian jobs during active service.
1975	Presidential Decree 12	Ratifying an agreement from April 29, 1975, establishing the Arab Organization for Industrialization.
1976	Presidential Decree 150 on Immunities and Privileges of the Arab Organization for Industrialization	Exempted the Arab Organization for Industrialization from all taxes, fees, and customs duties, and authorized it to open foreign currency accounts in any bank of its choosing in Egypt or abroad and to convert currency deposits freely.
1977	Law 38 on Regulating Tourism Companies	Required tourism agencies to obtain Ministry of Defense permission in order to operate in border areas.
1979	Presidential Decree 32 on the National Service Projects Organization	Established the National Services Project Organization under the Ministry of Defense.
1979	Law 59 on Establishing New Urban Communities	Established the New Urban Communities Authority.
1981	Law 531 on Regulations for Disposing of Lands and Real Estate Vacated by the Armed Forces and Allocating the Revenue to Establish Replacement Military Cities and Zones	Established the EAF's Land Projects Agency.
1981	Presidential Decree 143 on Rules of Disposal of Lands and Real Estate Vacated by the Armed Forces and Assignment of Return to Construct Replacement Military Cities and Areas	Expanded the requirement in Law 38 of 1977 for tourism agencies to obtain Ministry of Defense permission in order to operate in all "desert land" areas.
1981	Law 146 Amending Certain Rulings of the Law Mandating the President of the Republic to Issue Decree with the Force of Law	Expanded the scope of the president's powers to include oversight and approval of defense exports.
1983	Law 97 Concerning Public Sector Authorities and Its Companies	Used as the legal basis for converting military companies into public sector companies.
1984	Law 6 Establishing of National Authority for Military Production	Established the National Authority for Military Production under the Ministry of Military Production.

Date	Law	Purpose
1986	Law 186 on Publication of Law Regulating Customs Exemptions	Extended the customs exemption for military agencies to include all their imports of equipment, transport vehicles, medicine, and other noncombat items, in addition to arms.
1988	Prime Ministerial Decree 933 on Land Reclamation and Reconstruction Areas	Required Ministry of Agriculture; Ministry of Land Reclamation; Ministry of Housing, Utilities, and Urban Development; and Ministry of Tourism to obtain Ministry of Defense permission to operate in areas it deemed of military importance.
1990	Presidential Decree 245 on Regulations Organizing Disposal of Revenue From Sale and Rental of Plots Vacated by the Armed Forces	Expanding uses of revenue to include investment and service projects and other activities increasing funds for the EAF's Land Projects Agency, allocation toward pay, bonuses and incentives, and allowances, and allocating 20% of income for armament purposes.
1991	Law 203 on Public Enterprise	Exempted public sector enterprises including military companies from standard government procurement and contract procedures, and placed them on par with private sector firms in relation to salaries, benefits, pensions, bonuses, and so on.
1991	Law 7 on Some Decrees Relating to the Private Properties of the State	Granted the president additional power to delineate desert areas as strategic and of military importance, and required general economic authorities also to coordinate their planned land uses and zoning with the Ministry of Defense.
1991	Law 11 on General Tax on Sales (replacing Law 133 of 1981)	Exempted the Ministry of Defense and all its affiliate branches and agencies from the sales tax.
1996	Law 5 on Regulating the Disposal of State-Owned Desert Lands	Empowered the president to set rules and procedures governing disposal of state land.
1998	Law 89 on Regulating Bids and Tenders	Extended power to award contracts up to certain values on a no-bid, noncompetitive basis to the Ministry of Defense and Ministry of Military Production.
2001	Law 17 Amending Certain Rulings of the Law on General Tax on Sales	Exemption from sales tax extended to all the commanders of all Egyptian Armed Forces branches, departments, agencies, and funds, as well as to companies belonging to the Arab Organization for Industrialization and Ministry of Military Production.

Date	Law	Purpose
2001	Presidential Decree 152 on Designating Strategic Zones of Military Importance in Desert Land and Regulations Pertaining to Them	Granted the Ministry of Defense discretion to block sale of land, claim it for military use, designate it for commercial use, and set criteria for all civilian construction or activity over or under the ground, roads, and shores near military zones.
2001	Presidential Decree 153 on Promulgating the Establishment of the National Center for Planning State Land Uses	Requiring coordination of use of all state land with the Ministry of Defense.
2005	Law 91 on Income Tax	Renewed exemption of military agencies from customs duties.
2007	ministerial decree	Determined that buildings in industrial zones anywhere in the country could not exceed 15 meters in height without Ministry of Defense (and civil aviation) approval.
2008	Law 196 on Tax on Built-Up Land Plots (Property Tax)	Exempted all Egyptian Armed Forces facilities that offer commercial services such as hotels, clubs, hospitals and clinics, cinemas, and supermarkets from the real estate tax. Renewed annually by presidential waiver.
2011	Decree with the Force of Law 45 Amending Certain Rulings of the Military Justice Law 25 of 1966	Empowered military prosecutors to determine whether accusations against Egyptian Armed Forces officers should be referred to military courts or civilian agencies.
2013	Presidential Decree 82 Amending Certain Rulings of Law 89 of 1998 Regulating Bids and Tenders	Applied upper thresholds on the award of contracts to civilian state agencies specifically, effectively excluding the Ministry of Defense, Ministry of Military Production, and their affiliates.
2014	Presidential Decree 32 Regulating Certain Procedures for Challenging State Contracts (status unclear)	Banned third-party challenges to contracts awarded by government agencies. Parliament voted the law down in 2016, and its current status is unclear.
2014	Presidential Decree 48 Amending Certain Rulings of Law 89 of 1998 Regulating Bids and Tenders	Exempted the Arab Organization for Industrialization from the upper thresholds on the award of contracts contained in Law 89 of 1998.

Date	Law	Purpose
2014	Presidential Decree 136 on Securing and Protecting Public and Vital Facilities	Legislation designated vital infrastructure (such as power stations, oil and gas fields, railways, road networks and bridges) and unspecified public facilities as military and placed criminal acts affecting them under the jurisdiction of military courts for two years (extended in 2016 until 2021).
2015	Law 5 on Preference of Egyptian Products in Government Contracts	Exempted military agencies from complying with the requirement that government procurement contracts prefer Egyptian manufactured goods.
2015	Presidential Decree 446 Amending Decree Regulating Rules for Disposal of Land and Real Estate Vacated by the Armed Forces	Authorized the EAF's Land Projects Agency to utilize assets as equity in forming joint ventures with domestic and foreign companies.
2015	Presidential Decree 127 on Licensing Public Law Persons to Establish Public Limited Companies	Paved the way for other military agencies to establish public limited companies and joint ventures by allowing any state agency receiving government approval to join or establish commercial companies in accordance with public sector company laws 159 of 1981, 97 of 1983, and 203 of 1991.
2015	Prime Ministerial Decree 1657 Issuing the Implementation Statutes for the Mineral Wealth Law	Required Ministry of Defense approval for the extraction of mineral wealth anywhere in Egypt and empowered it to levy fees on all output at production sites.
2015	Minister of Defense and Military Production Decree 68 on Exempting Certain Units Belonging to the Armed Forces From the Tax on Built-Up Plots	Exempted facilities that offer commercial services (hotels, clubs, resorts and rest houses, parks, sports facilities, cinemas and stages, and supermarkets) belonging to 38 branches and departments of the Egyptian Armed Forces and Ministry of Defense from paying the tax and from inventorying and valuation.
2015	Prime Ministerial Decree 1196 on Designating the Administrative Monitoring Authority as an Authority Whose Transactions Require Confidentiality for National Security Reasons	Shielded the Administrative Monitoring Authority, headed and extensively staffed by EAF officers, from any scrutiny, indirectly shielding formal and informal military economic activities.
2016	Law 69 Amending Certain Rulings of the Law Pertaining to the Establishment of the National Authority for Military Production	Decreed that personnel of the National Authority for Military Production and its subsidiary companies should receive "not less than 25% of net profits."

Date	Law	Purpose
2016	Presidential Decree 57 Regarding Lands of the New Administrative Capital and the Sheikh Mohammed bin Zayed Urban Community to be part of New Urban Communities Areas	Instructed the EAF's Land Projects Agency to form a public limited company to manage the new administrative capital project and Sheikh Mohammed bin Zayed City.
2016	General Budget of the State for FY 2016–2017	Exempted the National Authority for Military Production (and its subsidiaries) from a 25% levy on the deferred surpluses of governmental service, economic, and national general authorities.
2016	Presidential Decree 233 on Allocating Desert Lands to the Ministry of Defense and Regarding Them as Strategic Zones of Military Importance	Designated twenty-one national roads as strategic zones of military importance, effectively granting the Ministry of Defense exclusive commercial franchise along them.
2016	Law 65 Extending Application of Law 136 of 2014 on Securing and Protecting Public and Vital Facilities	Extended Law 136 of 2014 (placing public infrastructure and facilities under military protection and the jurisdiction of military courts) for another five years, to 2021.
2016	Law 69 Amending Certain Rulings of Law 6 of 1984 Establishing the National Authority for Military Production	Assigned distribution of 10% of net profits (after allocation for reserves) in cash payments to employees and 15% for purposes determined by the board of directors (such as employee housing and social services).
2017	Finance Minister Decree 66 on Implementation Statutes for Law on Value-Added Tax	Exempted military agencies from value-added tax (converted from sales tax).
2017	Law 207 Amending Certain Rulings of Law 54 of 1964 on Reorganization of the Monitoring Authority	Limited the Administrative Monitoring Authority's jurisdiction to civilian individuals and entities, effectively excluding the military.
2018	Presidential Decree 244 of 2018 Designating the Ministry of Military Production as an Entity of Special Nature	Exempted the ministry from applying Articles 17 and 20 of the civil service law of 2015 requiring competitive hiring to senior management posts.
2019	Presidential Decree 378 Allocating Desert Lands to the Ministry of Defense and Regarding Them as Strategic Zones of Military Importance	Placed land with potential for tourist development around Zafarana and Gamsha Bay on the Red Sea coast under military control.
2019	Presidential Decree 380 Allocating Desert Lands to the Ministry of Defense and Regarding Them as Strategic Zones of Military Importance	Placed 47 Red Sea islands with potential for tourist development under military control.

NOTES

- 1 2014 ranking at “Corruption Perceptions Index 2014: Results,” Transparency International, 2014, <https://bit.ly/1AgRivL>; and 2018 ranking at “Corruption Perceptions Index 2018,” Transparency International, 2018, <https://bit.ly/2B7SAEu>. This nonetheless represented a distinct improvement over its ranking of 117 in 2017.
- 2 “The Economic Empire of the Egyptian Army,” *Middle East Observer*, June 21, 2018, <https://bit.ly/2lN7EIU>.
- 3 Percentages from Khalid Ikram, *The Egyptian Economy, 1952–2000: Performance, Policies, and Issues* (London: Routledge, 2006), 157.
- 4 Waterbury disagrees, saying that \$17 billion in Western nonmilitary aid flowed to Egypt in 1974–1980 (six years), in addition to credit lines worth \$2–\$4 billion for arms. John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 408.
- 5 Samia Sa’id, *Who Owns Egypt?* (Cairo: Dar al-Mustaqbal al-‘Arabi, 1986), 200.
- 6 On the growth of Ministry of Interior budgets and manpower, Samer Soliman, *The Autumn of Dictatorship: Fiscal Crisis and Political Change in Egypt Under Mubarak* (Stanford, CA: Stanford University Press, 2011). On the role of the State Security Investigations, author’s interview with Samer Soliman (now deceased), Cairo, November 14, 2011.
- 7 Hazem Kandil, *Soldiers, Spies, and Statesmen: Egypt’s Road to Revolt* (Brooklyn, NY: Verso Books, 2012), 181.
- 8 Major General Mahmoud Nasr, cited by Wael Gamal, “The [Military] Council: Our Projects Are the Sweat [of the Brow] of the Defense Ministry, and We Will Not Permit the State to Interfere in Them,” *Shorouk News*, March 27, 2012, <http://bit.ly/2n7rlFP>.
- 9 Text at <https://bit.ly/345RPro>.
- 10 Text of law at <https://bit.ly/2m8zKbn>.
- 11 Anouar Abdel-Malek, “Nasserism and Socialism,” *Socialist Register* 1 (1964): 45.
- 12 On the 1972 constitution, Kandil, *Soldiers, Spies, and Statesmen*, 185.
- 13 Constitutional Court ruling accessed at <https://bit.ly/2kJ4Bee>.
- 14 Sadat’s ruling in Presidential Decree 102 of 1980 (decree with the power of law). Cited in a court case on its constitutionality in 1992, viewed at <https://bit.ly/2mdtnno>.
- 15 As explained by the Fatwa and Legislation Department of the State Council, available at <https://bit.ly/2kejbKC>.
- 16 Text of law at <https://bit.ly/2lR1ws>.
- 17 Law 7 of 1991 assigned the power to designate new uses of desert land to the president. Text of Law 143/2001 at <https://bit.ly/2lMdVOM>; and text of Law 7 of 1991 at <https://bit.ly/2kx1gz8>.
- 18 Text at <https://bit.ly/2m6kITw>.
- 19 Text of Law 186 of 1986 at <https://bit.ly/2m6l6Bs>.
- 20 Text of Law 17 of 2001 at <https://bit.ly/2BzhJr6>.
- 21 Their exemption is renewed annually at the request of the defense minister, through a waiver issued by the president. “Defense Minister Exempts 574 Military Installations From Real Estate Tax,” *Egypt Independent*, June 3, 2015, <https://bit.ly/2kJ7BY2>.
- 22 Text of Law 97 of 1983 at <https://bit.ly/2lNxciz>.

- 23 World Trade Organization, “Agreement on Government Procurement Parties, Observers and Accessions,” WTO, accessed on September 12, 2019, <https://bit.ly/2e02eKV>.
- 24 Text of Law 89 of 1998 at <https://bit.ly/2kHhZ2E>. Interim President ‘Adly Mansour amended Law 89 of 1998 to include the AOI in June 2014, through law 48 of 2014. Text at <https://bit.ly/2kcaY9K>.
- 25 Text of Prime Ministerial decree 933/1988 on Land reclamation and reconstruction areas, at <https://bit.ly/2mdgcTp>.
- 26 Text at <https://bit.ly/2kukQfn>.
- 27 Text of Law on Regulating the Disposal of State-Owned Desert Lands, at <https://bit.ly/2m6pRei>.
- 28 Text of Presidential Decree 152 of 2001 at <https://bit.ly/2kx2QRC>.
- 29 Ibid. Numerous sources erroneously relate these powers to a nonexistent presidential decree issued in 1997, apparently citing each other.
- 30 Laila Sawaf, “The Armed Forces and Egypt’s Land,” *Mada Masr*, April 26, 2016, <https://bit.ly/2kesjim>.
- 31 The latter power was expanded by a ministerial decree in 2007, which determined that buildings in industrial zones anywhere in the country could not exceed 15 meters in height without MOD (and civil aviation) approval. Text at <https://bit.ly/342RzCL>.
- 32 Text of Decree at <https://bit.ly/2lRb6vI5>. The frequency of EAF officers heading the center is noted in Zeinab Abul-Magd, *Militarizing the Nation: The Army, Business, and Revolution in Egypt* (Columbia: Columbia University Press, 2018), 138.
- 33 Anonymized interview.
- 34 World Bank, “Egypt: Public Land Management Strategy,” Report No. 36520, Vol. I: Policy Note, June 15, 2006, <https://bit.ly/2kG0P5m>.
- 35 On delays in obtaining military clearance, see *ibid*.
- 36 Text of decree at <https://bit.ly/2kdDiZl>.
- 37 Text of Law 82 of 2013 at <https://bit.ly/2kJo926>. Mansour added article 38 including the AOI on June 5, 2014. Text of Law 48 of 2014 at <https://bit.ly/2kcaY9K>.
- 38 In the view of an Egyptian economic analyst. Anonymized interview.
- 39 Text of law at <https://bit.ly/2JeMB4F>. For a discussion of this issue, Sübidey Togan, “Potential Accession to the Revised WTO Government Procurement Agreement: The Cases of Egypt and Turkey,” Femise Research Papers FEM42-02, November 2017, <https://bit.ly/2lNuhGS>.
- 40 Presidential Decree 446 of 2015, text at <https://bit.ly/2kxjeBA>. Law 127 of 2015, text at <https://bit.ly/2kcp76Q>. Parliament approved the decree on 18 Jan 2016, with a majority of 380 to 3, with 1 abstention. Nour Ali, Noura Fakhry and Mahmoud Hussein, “Parliament Approves a Decree Authorizing Public Entities to Establish Public Limited Companies,” *Parlamany*, January 18, 2016, <https://bit.ly/2kGEogx>.
- 41 Text of decree at Mohamed al-Gali, “Presidential Decree Amending the Laws on Managing Lands Emptied by the Armed Forces,” *Yom7*, December 3, 2015, <https://bit.ly/2kuvzGF>.
- 42 Law 11 of 1991, text at <https://bit.ly/2keAX0i>. On 2016 extension, Egyptian Sales Tax Law exemptions. EY, “Worldwide VAT, GST and Sales Tax Guide,” 2016, [http://www.ey.com/Publication/vwLUAssets/Worldwide-VAT-GST-and-sales-tax-guide-2016/\\$FILE/Worldwide%20VAT,%20GST%20&%20Sales%20Tax%20Guide%202016.pdf](http://www.ey.com/Publication/vwLUAssets/Worldwide-VAT-GST-and-sales-tax-guide-2016/$FILE/Worldwide%20VAT,%20GST%20&%20Sales%20Tax%20Guide%202016.pdf). Text of the implementing statutes of the 2016 law published in the Official Gazette on July 3, 2017. Text at <https://bit.ly/2kuwQxr>.

- 43 Article 14 of the state budget law imposing a 25 percent levy on surpluses of economic and service general authorities and national authorities at <https://bit.ly/2N0fjHv>.
- 44 Text paraphrased at <https://bit.ly/2JHlyOH>.
- 45 Sahar Aziz, "The Expanding Jurisdiction of Egypt's Military Courts," *Sada* (blog), Carnegie Endowment for International Peace, October 12, 2016, <https://bit.ly/2lN3MBs>; and "12 Things That Could Land You in Military Court Under the New Laws," *Mada Masr*, January 12, 2015, <https://bit.ly/2lPs25V>.
- 46 George Abed, Chun Jin, and Boban Markovic, "Egypt: Good Progress to Date, but Sustainability Requires Deep, Transformational Change," Institute of International Finance, February 20, 2019, 5, <https://bit.ly/2lSkdfE>.
- 47 "Government Raises Electricity Tariffs for Industrial Producers by Up to 43%," *Mada Masr*, June 13, 2018, <https://bit.ly/2kzms7F>.
- 48 Text of law at <https://bit.ly/2kaLE3U>.
- 49 Text of prime minister's decree at <https://bit.ly/2lLFTdF>. AMA was briefly abolished in 1980, through Presidential Decree 337 of 1980, text at <https://bit.ly/2mcTzhP>.
- 50 World Bank, "Egypt: Public Land Management Strategy."
- 51 As noted by Shana Marshall, "The New Politics of Patronage: The Arms Trade and Clientelism in the Arab World," unpublished manuscript viewed by the author with permission, 11.
- 52 Text of law at: <https://bit.ly/2lKzJdD>; and text of implementation statutes, Prime Minister's Decree 1657 of 2015 at <https://bit.ly/2m9Qcbn>. When MOD mining and quarrying activity is conducted with outside partners, it retains its share of income.
- 53 Assar speaking in a television interview, Sahar Azzam, "Assar: Military Production Pays Taxes, Customs and Insurance to the State," *Masrawy*, January 24, 2017, <https://bit.ly/2lRIe6U>.
- 54 Law 69 of 2016, text at <https://bit.ly/2lUdMZx>. Of the 25 percent share of profits, 10 percent is distributed to employees in cash payments, with 15 percent allocated by the board of directors to social benefits for employees such as housing, or for other purposes it decides.
- 55 Robert Springborg, "The President and the Field Marshal: Civil-Military Relations in Egypt Today," MERIP Middle East Report, No. 147, July-August, 1987, 14, <https://bit.ly/2maWU0Q>.
- 56 Ibid.
- 57 David Francis, Sahar Hussain, and Marc Schiffbauer, "Do Politically Connected Firms Innovate, Contributing to Long-Term Economic Growth?," Policy Research Working Paper 8502, June 2018, <https://bit.ly/2lSoeke>.
- 58 In an interview with CBC television on September 29, 2014, posted at <https://bit.ly/2mcUcrH>. Cited in "The Army's Economic Empire: The Ruling Authority's Support Threatens the Private Sector's Influence," *Mada Masr*, December 24, 2014, <https://bit.ly/2m8qNij>.
- 59 Nontariff barriers include exclusive license requirements, rules of origin, or quality controls. Ishac Diwan, Philip Keefer, and Marc Schiffbauer, "Pyramid Capitalism: Cronyism, Regulation, and Firm Productivity in Egypt," September 16, 2016, 23 and 39. Draft, cited with permission.
- 60 Jamal Boukhari, "Conscripts Serving the Military-Industrial Complex in Egypt," *Orient XXI*, August 28, 2017, <https://bit.ly/2ivoVyn>.
- 61 According to a field researcher working in the Suez Canal zone, anonymized interview.
- 62 Text of law at <https://bit.ly/2m9TP0x>.
- 63 Waterbury, *The Egypt of Nasser and Sadat*, 184.
- 64 Ibid.

- 65 Amr Adly, “Politics of Taxation in Sisi’s Egypt,” Carnegie Middle East Center, August 11, 2014, <https://bit.ly/1pqOlaY>.
- 66 World Bank, “Arab Republic of Egypt-Country Procurement Assessment Report,” December 2003, iii: <https://bit.ly/2kKwliD>.
- 67 Export.gov, “Egypt Country Commercial Guide: Selling to the Government,” August 9, 2019, <https://bit.ly/2kftiih>.

CHAPTER 2

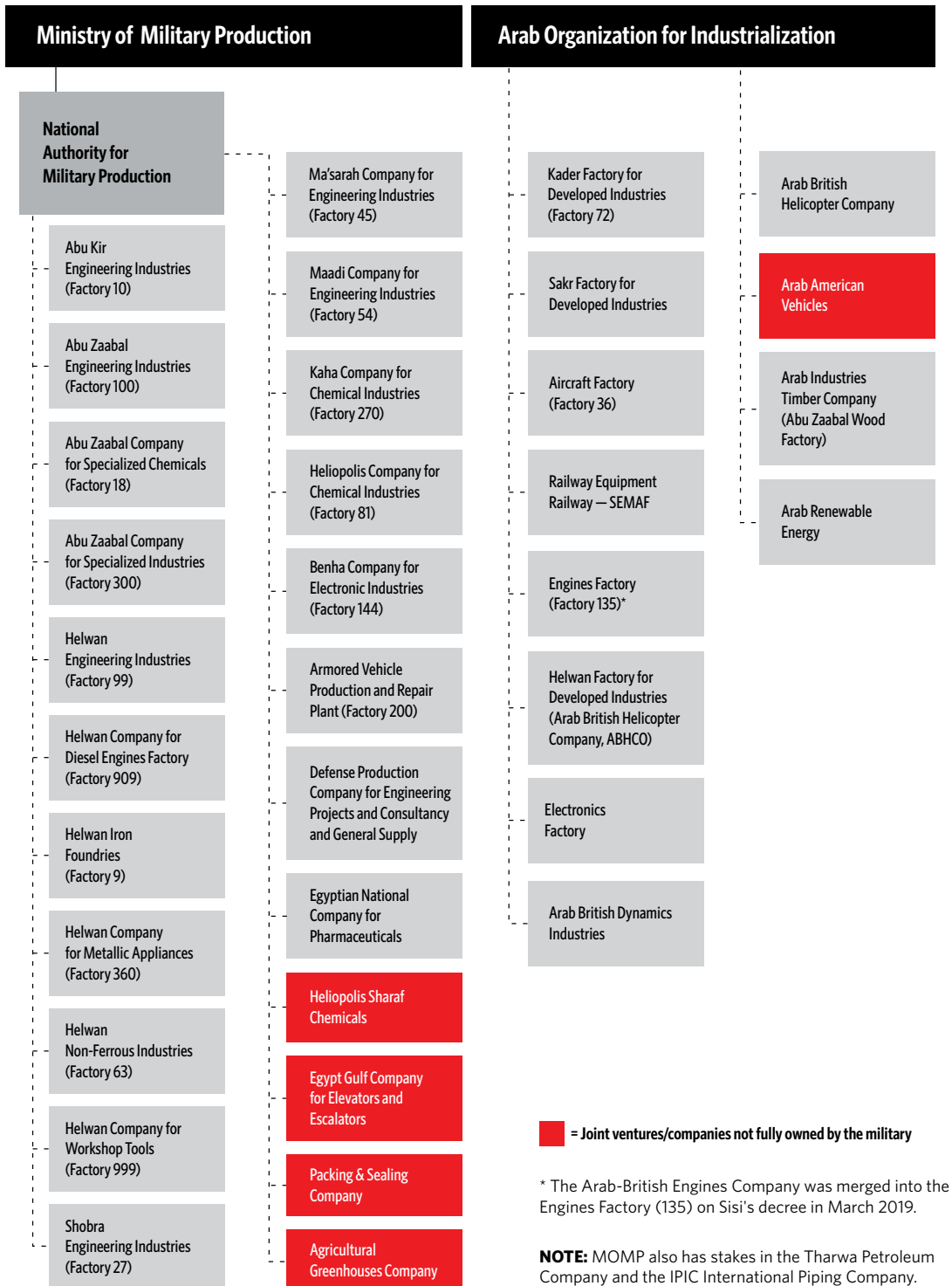
MAPPING THE FORMAL MILITARY ECONOMY PART 1: A “CITADEL” OF EGYPTIAN INDUSTRY

THE STATE-OWNED DEFENSE INDUSTRY is the oldest part of Egypt’s formal military economy. Indeed, Egyptian sources commonly trace its lineage to Mehmet Ali, who ruled the country in the early nineteenth century and founded modern factories with French assistance to produce weapons and munitions.¹ But today’s industry leaders, such as Minister of State for Military Production Mohamed al-Assar, more correctly credit then president Gamal Abdel Nasser with launching what they call “this giant complex” in the 1950s.² However, its present form derives more heavily from the second half of the 1970s, when Nasser’s successor, Anwar Sadat, saw it as a means of reducing the cost of fulfilling Egypt’s weapons needs and resolving its perennial shortage of capital. Since then, the sector has evolved to include two main clusters of factories and companies that come under the Ministry of Military Production and the Arab Organization for Industrialization, with a minor contribution from companies belonging to the Ministry of Defense (discussed in Chapter 3).

Despite its long lineage, the defense industry has been chronically hobbled by inadequate funding, and minimal investment in research and development. Consequently, its ability to undertake technological adaptation and innovation, raise productivity, and add value is limited, resulting in poor quality, low competitiveness, and marked inefficiencies. Industry officials have repeatedly claimed increases in the proportion of indigenous content in military (and civilian) hardware produced or assembled in Egypt, and promised to contribute to the national economy by reducing imports, boosting exports, and saving hard currency. But in reality, the sector has been dogged by severe delays in bringing production lines into operation, massive underutilization of plants and machinery, and investment decisions that

FIGURE 3

Economically Active MOMP and AOI Companies



are not based on performance or efficiency. It has only survived by being allowed to displace its losses onto the state treasury and, especially since 2013, to poach public contracts from both public and private civilian competitors.

MINISTRY OF MILITARY PRODUCTION: INDUSTRIAL FLAGSHIP OR RESIDUAL ENCLAVE OF STATE-OWNED ENTERPRISES?

The MOMP exemplifies both the defense industry's hopes and its shortcomings.³ Its establishment in 1954 reflected the government's adoption of an import-substituting industrialization strategy, which saw the launch of a huge iron and steel plant alongside car assembly lines and a military aircraft factory.⁴ But its cost effectiveness was low and expansion too rapid and ambitious, at a time when Egypt was moreover importing massive amounts of Soviet weaponry, overshadowing the MOMP and leading it to close down in 1969.⁵ The MOMP was officially resurrected in 1971 following an agreement allowing Egypt to co-produce Soviet weapons, which was not in fact implemented. It resumed production of low-technology military consumables, such as light arms, artillery and tank shells, metal forgings, and vehicle batteries, for the next decade.⁶ But as a U.S. Central Intelligence Agency (CIA) research paper observed in 1985, this activity was guided as much by "personalities, contacts, and gratuities of the services 'old-boy' networks as ... by any long-range requirements or projected capabilities shortfalls."⁷

Lack of funding was also a perennial problem. The defense industry was estimated to need \$4–\$6 billion in new investments in the late 1980s, but was hobbled by Egypt's massive external debt (then approaching \$50 billion) and poor credit rating.⁸ As defense analysts Florence Gaub and Zoe Stanley-Lockman note, this prevented setting up new ventures and impeded the transfer of technology and manufacturing know-how through production under license from advanced industrialized countries, leading to the delay or cancellation of projects.⁹ The same CIA paper confirmed these impediments, and highlighted others: lack of coherent and centralized planning, programming, and budgeting processes; lack of a marketing organization to target export markets; overstaffing; poor management; shortages of skills; and overreliance on foreign technology.¹⁰

Thirty-four years later most, if not all, these problems still plague the twenty-plus companies and attached seventeen factories belonging to the MOMP, which together have a workforce stated in 2016 to be 35,000–40,000.¹¹ Originally set up in the 1950s, MOMP subsidiaries were reclassified in accordance with Public Sector Companies Law 97 of 1983 that, in theory at least, made them subject to audit by Egypt's Central Accounting Organization.¹² A year later, they were brought together under a newly established National Authority for Military Production, which continues to oversee them.¹³ The NAMP was allowed by law to retain funds under the heading of "free currency"—that is, it could acquire foreign currencies at commercial, rather than the official, exchange rates—in order to import

necessary intermediate materials and make investments, and to settle unforeseen dues in foreign currencies. It was also allowed to charge fees for managing projects on behalf of civilian agencies.

Despite these advantages, the MOMP continued to struggle financially. In 1993, the Council of Ministers decreed that its companies would be relieved of the costs of defense production, which would instead be borne by the state treasury. The MOMP still needed annual subventions from the Ministry of Finance; according to the Central Accounting Organization, these amounted to approximately EP3.6 billion (\$190 million) between the 2010–2011 and 2014–2015 fiscal years. In June 2014, the Ministry of Finance wrote off EP1.15 billion in cumulative debt from 1994–1995 and allowed the MOMP to carry remaining losses forward, but the latter ministry nonetheless built up arrears of EP960 million over the next year.¹⁴

Undeterred by this lackluster record, senior defense industry officials present it as a means of utilizing the country's natural resources, contributing to national development plans and economic growth, achieving mutually beneficial commercial synergies with the domestic private sector, and gaining access to foreign sources of credit, technology, and markets. Major programs to modernize and upgrade MOMP capabilities were announced in the context of successive five-year plans for 2003–2007 and 2007–2012.¹⁵ In December 2017, local media reported a new strategic development plan extending to 2052;¹⁶ the first phase, lasting until 2030, aims to raise technological levels, increase local content and value through greater investment in research and development, integrate artificial intelligence and robotic technology in production lines, and use information and communications technology effectively.

Grand Plans ...

Sound in theory, the strategy faces multiple obstacles. The MOMP's course over the past two decades reveals that it has been driven by contradictory objectives and has suffered persistent delays, misleading reporting, and inherent inefficiencies. This is demonstrated by the trajectory of the Defense Industries Complex, which was launched in the early 2000s in order to relocate all MOMP factories and production shops to a single site. Ostensibly, its aim was to provide the whole sector with modern infrastructure and create a logistics hub from which

the industry could supply customers, including abroad. But it may also have been an attempt to prepare the groundwork for the creation of a special economic zone for military industrial production (akin to the model followed by Jordan and the United Arab Emirates).¹⁷

The MOMP has been driven by contradictory objectives and has suffered persistent delays, misleading reports, and inherent inefficiencies.

Originally, twenty-eight production units were to have been relocated between 2007 and 2010 to Abu Zaabal, immediately northeast of Cairo, which was already home to several MOMP factories. Construction was also slated to commence in October 2010 on a second site at nearby Belbeis; described by then minister of military production Major General Sayyed Meshaal as “a gift” to the president, this was to be named the Mubarak-II Defense Industries Complex.¹⁸ Two factories were reportedly relocated to what was commonly referred to as the Mubarak-I complex in 2007, and in 2013 a Facebook post by the Egyptian Special Forces confirmed that twenty-eight factories had relocated there by the end of 2012, the original date announced by Meshaal, with plans for another thirty-four industrial sites.¹⁹ It also claimed that the Mubarak-II complex would open for business at the start of 2014.²⁰

But none of this was true. Of three defense factories slated to relocate in 2007, only one, the Shobra Engineering Industries Company (Factory 27), had been moved to the Defense Industries Complex (no longer named after Mubarak) by the end of 2017.²¹ Speaking in mid-2015, then minister of military production Major General Ibrahim Younes stated that the complex was “entirely complete and 100 percent ready,” but admitted it was operating at low capacity, which he attributed to “the political situation in previous years” and to delays in the delivery of manufacturing equipment from Europe.²² Younes expected the complex to be ready in 2016, but it was not until May 2017 that his successor, Assar, finally declared the complex ready to receive relocated companies.²³

It had been thirty-three years since the resolution passed by the two houses of parliament in 1984 to move defense factories away from population centers, which ultimately led to the creation of the Defense Industries Complex.²⁴ According to the Central Accounting Organization, buildings valued at EP269 million (\$38 million) were written off when the Shobra company moved in 2014, and another EP69 million had to be paid to the contractors in compensation for price differences resulting from the lengthy delay.²⁵ Machinery belonging to the Abu Zaabal chemicals company worth EP2.5 billion sat in crates for five years, while moving the Heliopolis Company for Chemical Industries cost EP1 billion worth of buildings and EP226 million worth of equipment and machinery, besides EP126.8 million in interest owed before it had even resumed operations.²⁶ An accidental explosion at one of its storage facilities near Cairo International Airport on July 12, 2018, moreover revealed that it had not even completed the transfer.²⁷ Indeed, an interactive map posted by the MOMP showing the locations of its companies, services, and retail outlets suggests that not one ever made it to the new complex.²⁸

... Dubious Results

Claims of increases in output and productivity have been equally inconsistent, raising serious doubts about the MOMP’s ability to compile and process production data, undertake financial reporting, and evaluate operations in order to improve performance. Output

reportedly grew steadily. Speaking in August 2010, for example, Meshaal boasted that the defense industry had achieved an “unprecedented leap in the preceding thirty years... attaining enormous technological and economic capabilities of all kinds in recent years.”²⁹ The MOMP’s implementation arm, the NAMP, was credited with output worth EP3.8 billion (\$618 million) in 2007–2008 (for an investment of EP1.515 billion), up from an output of EP1.4 billion nine years earlier.³⁰ Total investment during the Mubarak era came to EP8 billion, Meshaal added, with cumulative production worth EP30 billion.³¹ He also claimed that MOMP production had reached EP4 billion in the preceding year, with investments of EP2.5 billion, and was growing at 15 percent thanks to productivity increasing from EP107,000 per worker to EP117,000.³²

But these figures were misleading. Sustained growth at the rate claimed by Meshaal in 2010 would have resulted in an overall production value of more than EP6 billion within three years, but in fact it reached EP4.5 billion at most, and probably fell considerably short of that.³³ As significantly, the Central Accounting Organization later revealed that the state treasury bore the cost of investment in MOMP companies: in other words, they were not generating enough income to reinvest in their own operations. Losses stood at 134 percent of capital for Benha Company for Electronic Industries, 104 percent for Maadi Company for Engineering Industries, 103 percent for Helwan Company for Diesel Engines, 59 percent for Helwan Company for Machine Tools, and 56 percent for both Helwan and Masarah Companies for Engineering Industries. Meshaal’s intimation that all costs of constructing the new Defense Industries Complex—including roads, electricity infrastructure, and water desalination plants—were covered by MOMP income was untrue.³⁴

Statements by Meshaal’s successors, along with evidence that raising productivity and increasing local content and value added in MOMP companies remained serious challenges, belied at least some of his boasts. Soon after becoming minister of military production in September 2015, Assar replaced the heads of several companies, and later acknowledged that the ministry had suffered “imbalance in financial structures and losses in some companies.”³⁵ A major problem, he explained, was “chaotic hiring” that had taken the MOMP wages bill from EP800 million in 2010 to EP2 billion in 2015 (\$38 million to \$230 million), with the result that it came to 56 percent of production costs in 2014, rising in some factories to 200 percent.³⁶ “If we produce something for EP100, for example,” he noted, “we pay EP200 in wages and incur a major loss.”³⁷ Facing financial difficulties, MOMP companies accumulated significant arrears in social insurance payments for staff, compelling the ministry to negotiate a settlement with the Ministry of Social Solidarity in March 2016.³⁸

Ironically, Assar’s admissions coincided with glowing statements about performance. Speaking to the heads of the Central Bank of Egypt and several other banks in September

2017, he assured them that the MOMP's "financial indicators show performance has been on an upward curve over the past five years."³⁹ This was true, strictly speaking, but the figures he and the MOMP official spokesperson gave for output in 2015–2016 were modest nonetheless: military products worth EP1.95 billion, and civilian goods and services worth EP970 million, for a total of EP2.92 billion.⁴⁰ In dollar terms—a relevant measure since MOMP companies rely heavily on imported machinery and intermediate goods and are energy-intensive—the values of military and civilian output were approximately \$234 million and \$117 million respectively, or half the dollar equivalent of the MOMP's total output value in 2010 (\$700 million).⁴¹

What makes the output figures for 2015–2016 even more striking is that, according to Assar, they represented an increase of 230 percent in military output and 115 percent in civilian output over the preceding year.⁴² Using these percentages and historical exchange rates, total production in 2014–2015 would have been EP1.692 billion (\$226 million), split almost exactly between military and civilian output.⁴³ In November 2017, Assar claimed that MOMP turnover in 2016–2017 had increased over the preceding year by another EP8.8–EP10 billion, or 140 percent, and anticipated a further increase to EP13 billion in the next year (2017–2018).⁴⁴ He subsequently modified all his claims, stating in March 2019 that overall MOMP production had risen from EP4.2 billion in 2014–2015 to EP6.3 billion in 2015–2016, EP8.9 billion in 2016–2017, and EP11.6 billion 2017–2018.⁴⁵

Assar's original claims and predictions would have seen total MOMP output reach EP25–EP26 billion in 2017–2018, so actual results fell far short of that mark. Even these reflect significant inflation, as the Egyptian pound lost more than half its value against the U.S. dollar in November 2016, with the value of one dollar going from EP8.88 to EP18 virtually overnight (and staying between EP16.2 and EP18 ever since). Using Assar's revised figures, MOMP output grew impressively in 2014–2016 in U.S. dollar terms, from \$236 million to \$712 million, but slipped in 2016–2017 and 2017–2018 to around \$664–\$665 million.

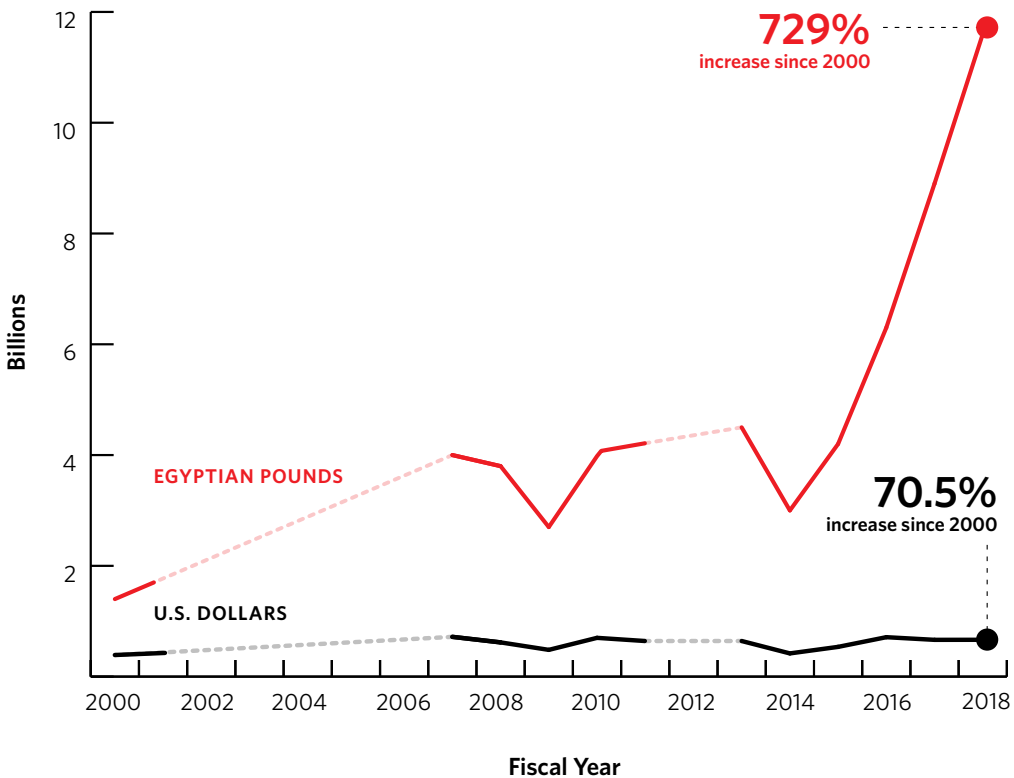
The MOMP has moreover never been a significant exporter, nor a hard currency earner of note. Egyptian arms exports peaked in the 1980s, consisting mainly of basic munitions and secondhand EAF equipment sold to Iraq during its war with Iran. The total value of military exports

during the entire decade has been estimated at \$505 million, although presidential decrees approving military export sales totaling \$2.52 billion were issued in 1981–1984 alone, of which at least \$1 billion was for materiel from EAF stocks.⁴⁶ In any case, exports are reliably believed to have dropped to between \$5 million and \$22 million annually in 1990–2015.⁴⁷

The MOMP has never been a significant exporter, nor a hard currency earner of note.

Consequently, the Egyptian defense industry's gains from the sharp depreciation of the Egyptian pound after 2015 would have been limited. Indeed, its reliance on imports of production machinery and intermediate goods and its access to foreign currencies at favorable rates mean that the relative cost of its production to the public purse can only have risen as the Egyptian pound fell.⁴⁸ Currency depreciation and government measures limiting the dollar supply denied private businesses the hard currency to finance their imports of production goods, but the defense industry showed no signs of slowing down.

FIGURE 4
Ministry of Military Production, Output, 2000-2018⁴⁹



NOTES: All figures are for Egyptian fiscal years, which start on July 1 and end on June 30 each year.
Dotted lines indicate periods for which data is unavailable.

Enduring Handicaps

Whatever the accuracy of the production figures cited above, the combination of an inflated workforce and low productivity had clearly reduced turnover to a minimum in the years preceding 2016–2017. Indeed, Assar took the highly unusual step of admitting in November 2017 that “this is the first time in eight years that profits exceed losses.”⁵⁰ His admission also raises questions about previous claims that profits were reinvested in the MOMP and AOI and their subsidiaries;⁵¹ if they ran at a loss, then either they were not making new investments regularly—whether for retraining personnel, upgrading equipment, expanding production lines, and marketing goods—or operating costs were being borne by other bodies, like the state treasury or discretionary MOD funds.⁵² Shortages of disposable income may explain the slow completion of the Defense Industries Complex, among other things: estimated at EP1.5 billion in 2010 (\$259 million), its cost had reportedly doubled by 2013.

Conversely, the dramatic rise in production claimed in a single year lends credence to Assar’s assertion that the MOMP factories had considerable surplus capacity.⁵³ The Abu Zaabal Company for Engineering Industries has invested EP2.3 billion in its steel rolling line, but this was used at a mere 13.13 percent of capacity in the five years up to mid-2015. The company achieved sales of EP531 million in that period, but 25 percent of raw materials used in production were being lost—instead of the standard rate of 4–5 percent. Underutilization and waste on such a scale points to a much wider range of shortcomings. Assar’s response to the MOMP’s financial problems confirms this. In May 2017, he underlined that MOMP companies needed to increase production and improve performance through better quality control, marketing, research, and management.⁵⁴ Among other things, he argued, this would bring down the wage bill as a proportion to total production costs: he claimed that it had already dropped from 54 to 36 percent thanks to the surge in turnover in 2015–2016, and in March 2018 stated that it had dropped to 20 percent.⁵⁵ (The wage bill reduced as a percentage because output increased, but Assar did not clarify how much the cost of other factors of production rose, nor whether this allowed a net profit. Furthermore, wages are paid in Egyptian pounds, whereas many other inputs must be imported or substituted for exports, such as fuel, and are denominated in U.S. dollars, so their total cost must have risen.)

Assar insisted that reducing wages was not an option, but in late 2016 MOMP spokesperson Major General Amro Fuad confirmed plans were in place to cut the workforce from 35,000 to 30,000 within five years.⁵⁶ Fuad also stated that the MOMP was “encouraging youth” by appointing four new company heads, and requiring all heads of boards of directors to take strategic management training. (Most second-tier managers and workers in MOMP companies and factories are in fact civilians, and probably contribute the most to production and financial management, while the top 5 to 10 percent of positions are held by EAF officers, for which role they receive second salaries.⁵⁷) In September 2017, Assar commissioned state-owned investment company NI Capital to prepare financial restructuring plans

for MOMP companies in order to improve performance.⁵⁸ At the same time, he contracted with the Egyptian-Korean Development Association (representing seven South Korean companies) to refurbish and upgrade MOMP factories (though there is no evidence this happened). For good measure, Assar also instructed MOMP companies in January 2017 to post the telephone number of the Administrative Monitoring Authority so their employees could report corruption, and two years later he ordered them to play the MOMP “anthem” over their public address systems to exhort their workers to greater productivity.⁵⁹

Poaching as an Economic Strategy

While these steps made economic and administrative sense, their potential effects could not have materialized so quickly. Past experience confirms this: Meshaal had previously claimed that a program to “maintain and upgrade military factories and retrain personnel and workers” was already 80 percent complete as far back as 2010.⁶⁰ Nor have mass layoffs at MOMP factories been reported. Rather, the reason for the immediate surge in MOMP balance sheets in 2015–2016 was Assar’s aggressive drive to win contracts from other government ministries. By the start of 2017, he boasted that the MOMP had signed cooperation protocols with “forty entities including twenty-one ministries, several governorates and universities, al-Azhar religious authority, and the Development Company for Egypt’s New Rural Areas, Long Live Egypt Fund, the Social Fund for Development, and others.”⁶¹ Later that year, the deputy head of the NAMP said it had “partnerships in all activities undertaken by the other ministries, ... we provide all their needs.”⁶²

Instead of contributing net value added to the national economy, as Assar and other defense industry officials frequently claimed, the MOMP had only shifted its accounts into the black by replacing other economic actors that would otherwise have won public works and

The MOMP only shifted its accounts into the black by replacing other economic actors that would otherwise have won public works and procurement contracts.

procurement contracts. This was achieved, thanks not to competitive quality or pricing, but to the powerful political position that the military has enjoyed since 2013. In a speech announcing MOMP profits in November 2017, Assar proudly revealed that it had signed memoranda of understanding with thirty-five government ministries, authorities, and governorates (as

well as cooperation agreements with thirty-four foreign companies and thirty-two domestic ones) in the preceding year.⁶³ Poaching contracts was the cause of the dramatic increase in turnover for the third year running. Famously, the MOMP took over management of the “smart cards” program intended to direct government subsidies toward the poorest sectors in Egypt, but critics note that this has left “77 percent of the top spending bracket [with] smart

cards entitling them to subsidized goods, while 82 percent of the poor do not benefit from Egypt's social insurance program, which is plagued by corruption and fraud."⁶⁴

The MOMP was moreover entering sectors in which other military economic actors already operated: construction of roads, water treatment plants, residential housing, sports facilities, and other buildings, and development projects in Sinai (usually undertaken by the EAF's Engineering Authority and its Megaprojects and Water Departments); railway vehicles and equipment, solar panels and other renewable energy equipment, water heaters and coolers and other household appliances, laptops, butane cylinders, piping and parts for the petroleum industry, and agricultural machinery (usually produced by the Arab Organization for Industrialization); and land reclamation, agricultural cultivation, and agro-industry (normally the purview of the EAF Engineering Authority and the NSPO).⁶⁵ (Indeed, MOMP companies and factories also duplicated many items in their respective ranges of civilian products.⁶⁶)

Reinforcing this trend, the MOMP announced in May 2015 that it was setting up a dedicated company to undertake public works and procurement contracts (launched in late 2016 as the Military Production Company for Engineering Projects and Consultancy and General Supply). In theory, setting up a construction-specific conglomerate provides the MOMP with the capacity to undertake massive infrastructure projects and allows it to funnel external assistance. But in reality, both the EAF and the NSPO have their own construction arms and continue to operate in the same domain.⁶⁷ Besides obvious duplication in construction, related consultancy and contracting, and land reclamation, the new company was intended to operate in the medical, public relations and advertising, real estate, and tourism sectors, in which the NSPO and other MOD agencies are already heavily present.⁶⁸ Assar also revealed at various times in 2017 that the MOMP was planting 69,000 feddans with aromatic plants for export, managing agricultural land owned by the religious endowments authority in the Delta, and discussing a joint venture with Emirati investors to plant 20 million date palms on 92,000 feddans of land in the South Valley, departing clearly from manufacturing and services as well as duplicating the NSPO's sphere of activity.⁶⁹ And in the course of 2019 he added that his ministry was forming a company to manufacture elevators (which the NSPO had already done years earlier) and establishing new joint ventures to produce greenhouses and packing and sealing (again replicating existing NSPO activity).⁷⁰

Duplication is not new. Without detailed data, it is difficult to establish the extent to which the MOMP competes directly with other military economic actors for contracts, or if this drives down prices of the goods and services they sell to the public and private sectors or to Egyptian consumers generally. But the latest phase of expansion and diversification of MOMP civilian output clearly came in response to the drive by Sisi to generate and increase income streams. This appears to lie behind much of the defense sector's involvement in a constantly widening range of economic sectors, along with the belief that improving

the supply of affordable commodities is a means of shoring up middle-class support and underpinning social stability. It also explains why the various arms of the formal military economy target the same sectors, although focusing on separate complementary sectors would be more efficient and make greater commercial sense.

Assar inadvertently revealed the limitations hobbling the MOMP in March 2018, when after boasting of large surges in turnover, he admitted that only six of its twenty companies had made a profit in the previous fiscal year.⁷¹ The cost of raw and intermediate materials, imported machinery and spare parts, and other factors of production such as electricity and fuel had presumably increased in direct proportion to the massive increases claimed for turnover, consequently limiting net income. In June 2019, he also stated that the MOMP's contracting company had undertaken public contracts with an overall value of EP15 billion (under \$1 billion) in the three years since it was formed, but the fact that this included importing goods such as 1,500 elevators for the new administrative capital indicated that MOMP was acting as a middleman as much as a manufacturer of goods and services, though the balance between the two roles is unclear.⁷² He nonetheless boasted, without apparent irony, that the MOMP complex was distinguished and unique, "without peer in Egyptian industry."⁷³

ARAB ORGANIZATION FOR INDUSTRIALIZATION: "THE WORK SITE OF THE STATE"

The AOI reveals the same patterns as the MOMP. The second main arm of the formal military economy in terms of date of establishment and manufacturing capability, though not of net contribution, it was set up as a joint venture with Saudi Arabia, the United Arab Emirates, and Qatar in 1975 with a startup capital of \$1 billion.⁷⁴ The AOI was intended to provide the participating countries with a degree of self-sufficiency in conventional military hardware, reduce defense costs, build a manufacturing and scientific base for Arab industry, and generate exports to Arab and Muslim countries.⁷⁵ It benefited from the recently issued Law 43 of 1974 and Law 111 of 1975 that allowed Arab investors (unlike other foreigners) to own real estate, thereby enabling military companies to offer land and infrastructure as equity.⁷⁶ (The MOMP and MOD later set up their own joint ventures on this basis.) The Gulf states suspended their participation in the AOI after Egypt signed the 1979 peace treaty with Israel and then relinquished their shares, valued at \$1.8 billion, in 1994, leaving the organization wholly owned by Egypt, albeit with its legal status as "a specialized international regional organization" unchanged.⁷⁷

The AOI differs from other defense companies in being registered as an international organization, and in having the president of the republic and governor of the central bank on its board.⁷⁸ But like the rest of the defense industry, it was exempted from the outset from "all taxes and fees" (including customs duties on imports and taxes and fees normally levied on

exports). It was also authorized to open foreign currency accounts in any bank it chose in Egypt or abroad and to convert its currency deposits freely—a major advantage in a country that applied rigid exchange controls until 2015.⁷⁹ A further presidential decree in 1977 extended the same exemptions to its subsidiary companies—which were additionally allowed to take tax- and fee-free loans—and to all AOI suppliers and subcontractors.⁸⁰

According to Lieutenant General Hamdy Waheibah, who headed the AOI from 2005 to 2012, the AOI was also not subject to audit by the Central Accounting Organization, nor to the provisions of Labor Law 137 of 1981 and its 2003 amendment.⁸¹ The 2014 modification to Law 89 of 1998 on tenders and bids additionally granted the AOI the same power as the MOD and MOMP to award contracts on a no-bid, direct-order basis to suppliers and subcontractors of its own choosing.⁸² In line with all other military economic actors, the AOI may retain profits (rather than submit them to the state treasury); and like the MOMP, it claims to reinvest all profits in its subsidiaries.⁸³ The AOI is moreover exempt from the health and safety provision of Labor Law 12 of 2003, allowing it to monitor itself.⁸⁴

The AOI initially comprised four defense factories that were transferred from the MOMP, but has grown to a total of twelve companies and factories with a workforce of 15,000–17,000, including 1,250 engineers.⁸⁵ The AOI took full ownership of two joint ventures that were originally established with British Aerospace and Rolls-Royce—Arab-British Dynamics Company and Arab British Engine Company—in 1998 and 2009, leaving a third—Arab American Vehicles—still jointly owned with Chrysler.⁸⁶ Most of its defense-related output consisted of co-production, including assembly, of Western equipment.⁸⁷ By 2006, Waheibah claimed, 30 percent of AOI military output was being exported to Arab states, averaging \$20 million annually in the two preceding years.⁸⁸ This suggested a modest volume of military production, but six years later, Waheibah stated that the AOI had made a net overall profit of EP470–EP475 million (\$78 million) on sales of military and civilian products and services of EP3.4 billion (\$563 million) in 2011–2012.⁸⁹ His successor, Lieutenant General Abdul-Aziz Seif-el-Din, gave lower figures for overall production (EP3 billion) and net profits (approximately EP220 million) in 2012–2013, but this still indicated a steady flow of work.⁹⁰

The July 2013 military takeover transformed the picture. Since then, public sector entities and private sector companies, which typically sought to build ties with influential political actors in order to secure contracts and market access in every presidential era, have increased their ties with defense sector entities as a means of securing business. The AOI subsequently stated that it had won contracts totaling \$965 million (including \$400 million in sales) and \$855 million (including \$760 million in sales) in 2015 and 2016, respectively.⁹¹

Despite the dip in 2016, these rates showed impressive growth compared to previous periods. But they did not result from planned improvements in organizational structure and staff training that the AOI had previously announced.⁹² Rather, as with the MOMP, the

jump in output and sales was almost entirely due to the AOI's drive to win a larger share of public works and procurement contracts, displacing other suppliers and contractors. Seif-el-Din boasted repeatedly of working with numerous government ministries and state universities; AOI annual reports and periodic updates of projects confirm unequivocally that these bodies account for the largest portion by far of AOI contracts and sales. This may explain the claim by unidentified government sources that the AOI increased its sales

As with the MOMP, the jump in output and sales was almost entirely due to the AOI's drive to win a larger share of public works and procurement contracts, displacing other suppliers and contractors.

to \$500 million in the second half of 2017, an increase of 7 percent compared to the first half.⁹³

That the AOI depends on assured contracts from the Egyptian public sector is also reflected in the minimal volume of its exports: a mere \$2.9 million in 2015, they reached only \$18.5 million in 2016, forty years after it came into being.⁹⁴ A contract in 2016 to supply Pakistan with twelve

Chinese-designed K-8P trainer aircraft, which are assembled and part-manufactured under license in Egypt, was expected to improve these figures, but the AOI has generally been unable to build or sustain significant export levels. Indeed, production of all the more advanced military hardware it assembled under foreign licenses in its first decade or so for the EAF and for export—most notably the Alpha jet, Tucano trainer aircraft, and Gazelle helicopter—has long been discontinued. The main exception has been its success in exporting a total of 745 Fahd and Walid armored personnel carriers to seven Arab and African states, but even this was relatively modest when taking into account that its total production cost of roughly EP3.725 million (\$600 million) was spread over three decades from the start of exports.⁹⁵ These results belie boasts about AOI success in “bringing in hard currency to help the national economy.” To the contrary, it used hard currency to import intermediate goods, assembly kits, and manufacturing machinery.

THE RESEARCH AND DEVELOPMENT HANDICAP

Although the MOMP and AOI have undoubtedly made strides in acquiring technology and production know-how, glowing reports in Egyptian media and their own self-congratulatory statements contain considerable hyperbole. Seif-el-Din labeled the AOI “an important citadel” of Egyptian industry soon after becoming chairman in 2012, while Assar marked the MOMP's sixty-third anniversary in 2017 by declaring its “greater goal” to be “attaining a defense complex that is 100 percent Egyptian.”⁹⁶ But serious deficiencies in the defense industry's capacity for research and development (R&D), which is crucial to absorbing external technology and knowledge and converting them into local output, have greatly limited its economic impact.

In the mid-1990s, Stephen Gotowicki, who then worked in the U.S. Army's Foreign Military Studies Office, anticipated that "in the coming years, Egypt's military production sector will probably decline. Egypt suffers from low productivity, a lack of adequate funding and a dearth of external markets." His prediction of decline proved wrong, but the rest of his critique was accurate:

Egypt's military industries have not promoted import substitution or sustained export earnings. The technological benefit of the armed forces' military industrial endeavors have proven to be only marginal to Egypt's economic developments. While Egypt does assemble sophisticated military weapons systems, the facilities to do so are provided by Western businesses on a "turn key" basis. The Egyptians receive kits for assembly, but the technology involved is closely maintained by the Western partner. Hence, little technology that would allow independent Egyptian development of systems has been received. For Egypt, technology is a conundrum—high technology industrial efforts are a capital intensive endeavor; Egypt has a labor intensive economy with little capital.⁹⁷

Drawing on insight from U.S. defense officials, political scientists Robert Springborg and Clement Moore Henry assessed a few years later that "many if not most of [the Egyptian defense industry's] efforts in manufacturing appear to be direct spin-offs from relatively low-level military technology."⁹⁸ Since the primary national security value of local defense industries lies in their contribution to the military adaptation capacity of states, inadequate investment in R&D reflects either incompetence or lack of commitment to sustaining a genuinely capable defense industry on the part of its managers and political leaders.⁹⁹

Egyptian defense industry leaders have repeatedly acknowledged the need to invest in R&D. In 2010, Meshaal stated that his ministry had collaborated with "all Egyptian universities to set up a scientific research and excellence center to serve the defense industry." In other interviews he explained that the R&D units of all MOMP factories and companies had been grouped in a single new Center for Scientific Distinction in 2005 at a cost of EP200 million (\$35 million), and that it would commence operation in October 2011.¹⁰⁰ Separately, an Integrated Technology Complex encompassing a technical secondary school, intermediate institute, and a technology college had been set up; this had 180 master's and forty doctoral students, and trained 300 "engineers and chemists" annually.¹⁰¹ For its part, the AOI has an Arab Institute for Advanced Technology and two centers that are advertised as developing capacity in administration, engineering and technology, information systems, and languages. But in all these cases, the emphasis appears to be on acquiring narrow technical skills for limited applications, rather than on creating an interactive organizational climate for technological and commercial innovation.¹⁰²

Then AOI head Waheibah appeared to acknowledge the lack of genuine R&D when he commented, in 2009, that "Egypt lives in a major industrial coma... [it] lacks design

[ability] in 99 percent of industries, from needles, camping stoves, and water taps to [cigarette] lighters. Everything in our markets is a foreign design.”¹⁰³ His evocation of a famous speech in 1962 in which Nasser envisioned Egypt making everything from “the needle to the rocket” was intended to present the AOI as the exception that was leading the way with genuine R&D capability.¹⁰⁴ But analyst Sarah Chayes found little evidence of this when she visited an AOI factory producing consumer electronics and electric appliances in 2013:

[It] merely assembles low-grade Chinese components for products visibly below the standards of readily available Samsung or Sony alternatives. Its line of computers—discontinued since the revolution [in 2011]—was sold only to government ministries. Currently, the twelve-person research and development department is focused on electrical controllers for a prospective solar streetlight project, also aimed at government purchasers. The department, even according to [one of its engineers], generates no innovation. Young engineers, hired right out of school, cycled through on their way to higher-paying jobs in the private sector, at least until the mid-2000s, according to another engineer.¹⁰⁵

As a consequence, both the AOI and MOMP have struggled to raise the proportion of local content in products they assemble under foreign license. This is a familiar means of acquiring technology and production know-how and a route to adding value and spurring domestic feeder industries worldwide, but the slow rates of growth in local content reveal inadequate R&D capacity and limit economic returns. The examples of the Walid armored personnel carrier and its successor, the Fahd, is telling: both were based on German designs and produced in Egypt under license (starting in 1960 for the Walid and 1985 for the Fahd), but it took thirty years for local content in the Fahd to go from the initial 25 percent to 68 percent.¹⁰⁶ Much the same is true of the Jeep J8, which has been produced in Egypt since late 2008 from knockdown kits supplied by U.S. firm Chrysler: its civilian and military precursors have been assembled in Egypt by the AOI’s Arab American Vehicles since 1978, but in April 2017 local content was stated still to be at only 45 percent.¹⁰⁷

The licensed production since 1992 of the U.S.-designed M1A1 Abrams main battle tank, in which Egyptian defense officials take special pride, has been similarly affected. From the outset, the MOMP’s purpose-built Tank Plant (Factory 200) manufactured about 40 percent of the components of the first 555 M1 tanks covered by the original agreement, while importing 60 percent.¹⁰⁸ This was already an impressive level of local content for one of the world’s most advanced fighting vehicles. Meshaal claimed in 2010 that local content had risen to 75 percent, even boasting this was “higher than in the United States,” and then claimed that it had reached 95 percent by October 2011. Yet this was true only of specific components such as the chassis, and even that only became true in 2015; the engine was also not produced locally.¹⁰⁹ Reflecting these limitations, co-production in fact “dramatically increased the per-unit cost of tanks and other jointly manufactured equipment,” according to the U.S. General Accounting Office, which evaluated the program routinely

in the late 1990s and early 2000s.¹¹⁰ Factory 200 moreover employed inflated numbers of personnel; it resisted pressure from U.S. manufacturer General Motors to reduce its workforce from 6,000 to 1,200—although U.S. officials privately estimated at the outset that it only needed 200—finally settling at 4,000 personnel and then bringing this figure down to 2,500 as production came to a close in 2018.¹¹¹

Egyptian military enterprises appear invested in raising local content—and in acquiring the technology and production means to do so—for high-profile combat equipment that boosts the EAF’s strategic capacity and prestige. Insistence on maintaining M1 co-production moreover reflects hope of using this as a springboard for exports; in the meantime, the Tank Plant is being used to upgrade earlier M1A1 versions.¹¹² This makes good sense, but the limitations of the underlying R&D base impose a ceiling on this and other efforts such as that of Unit 1703 of the MOD’s Military Intelligence and Reconnaissance Administration, which supplements military technology transfer by acquiring equipment that is then reverse engineered by the MOD’s Center for Technological Research, Design, and Development.¹¹³ A review of military hardware advertised on the official MOMP and AOI websites shows only vintage technologies; the sole exception is the M1 tank kits, but even these were included by the Defense Security Cooperation Agency of the U.S. Department of Defense in 2015 as one of a number of “older, outdated, or third-party produced systems” in the EAF inventory that “should be transitioned from [U.S. foreign military financing] or ended.”¹¹⁴

Conversely, political scientist Shana Marshall argues that the defense industry has actively pursued third-party transfers of technology through co-production and licensed manufacturing agreements with diverse second- and third-tier foreign defense companies since the early 2000s.¹¹⁵ This is a more promising route to advanced technology, but the sector has a poor track record in this regard: more than four decades after the AOI formed joint ventures with several major Western arms manufacturers and nearly three since the M1 tank assembly line started production, local content has risen relatively little on average. Indeed, not only has the weakness of Egypt’s R&D base seriously impeded absorbing new technology, preventing significant indigenous adaptations or innovations, but it has also limited the addition of value that could be attained by undertaking maintenance, repair, and upgrades in-country. The motivation for building relationships with foreign companies may therefore have less to do with the transfer of technology and know-how than with investing ministry funds abroad with the aim of securing income streams from dividends and acquiring stakes outside Egypt.

Not only has the weakness of Egypt’s R&D base seriously impeded absorbing new technology, preventing significant indigenous adaptations or innovations, but it has also limited the addition of value that could be attained by undertaking maintenance, repair, and upgrades in-country.

A case in point is the agreement covering the donation of 92 second-hand BMP 1A1 infantry fighting vehicles from Greece to the EAF in late 2018. Egypt financed the technical inspection and upgrades to be conducted by Greek industry rather than undertaking these tasks itself; it moreover opted for this deal instead of upgrading the 205 BMP-1 vehicles already in EAF stores.¹¹⁶ Similarly, when the MOD acquired a fleet of Chinese Wing Loong medium-range drones in 2017, it was UAE defense contractors who adapted the communication, observation, and target localization systems for integration into the EAF.¹¹⁷ Waheibah had previously announced that the AOI was producing twelve Chinese-designed ASN-209 unmanned aerial vehicles (that is, drones) in 2012, but his claim that local content reached 99.5 percent is not verified.¹¹⁸

As telling of the real limitations are repeated delays in the launch of new production projects and delivery. Nine years passed between the initial order for 120 K-8E trainer aircraft and the start of assembly in Egypt of the final forty using kits supplied by the Chinese Hongdu Aviation Industry Corporation in 2008, for example.¹¹⁹ Following the U.S. decision to reallocate foreign military funds away from major weapons systems such as the M1 tank and F16 fighter aircraft in 2013, the MOMP once again demonstrated its bias toward big-ticket military technology by negotiating with Russian company UralVagonZavod in 2017 for the assembly and partial manufacture of 400–500 T-90 main battle tanks in Egypt (which has also not taken place).¹²⁰

Undeterred by the defense industry's underachievement, Assar has campaigned to raise its international profile. As if in response to the critique made in the 1985 CIA research paper cited earlier about the lack of effective information collection and marketing organization for exports by the MOMP, he showcased its military production at the International Defense Exhibition (IDEX) in Abu Dhabi in February 2017, its first participation in such an event in over ten years.¹²¹ AOI head Seif-el-Din had promised an international defense exhibition in Egypt in early 2013, but it was not until December 2018 that his counterpart Assar finally inaugurated the first Egypt Defense Expo (EDEX), again intended to drum up orders for the defense industry's military products.¹²²

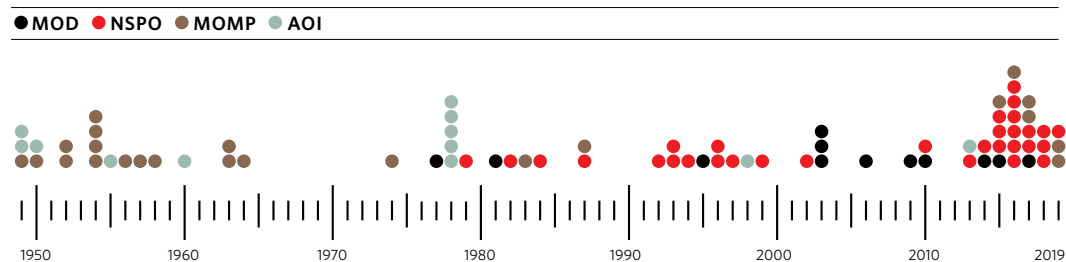
But while the effort was commendable, marketing has been constrained by the poor competitiveness of Egyptian defense products in global markets. Most notable among those on display at EDEX were upgrades of the Fahd and Temsah armored personnel carriers, both based on adaptations of German and Ukrainian vehicles, and prototypes of the ST-100 and ST-500 vehicles, developed under the auspices of the South African International Marathon United Technology Group.¹²³ The Temsah reflected the entry of the Engineering Industries Complex of the EAF's Vehicles Department as a minor new defense producer into the field; inaugurated in May 2015, it has ten factories that produce everything from vehicle spare parts (exhaust pipes, radiators, nonmetallic rubber parts, foam seats, and the first all-Egyptian-made battery) to tank transporters for M1A1 tanks.¹²⁴

EDEX did not visibly mark the launch of Egypt as an arms exporter. The sale of 19 Fahds to Burundi was agreed in March 2019, and the MOMP claimed a few months later that the ST-100 was being trialed by Abu Dhabi, but no other orders for any of these vehicles have been confirmed, even by the EAF, which has instead continued to use Mine Resistant Ambush Protected vehicles supplied by the United States since 2015 through its Excess Defense Article program.¹²⁵ EDEX instead proved to be a marketing opportunity for foreign defense companies to conclude a diverse array of contracts with the EAF.¹²⁶

“OUR FINGERPRINTS IN EVERY HOUSE”: THE TRAVALS OF CIVILIAN PRODUCTION

The defense industry is no less ambitious in relation to its civilian production. This covers a very wide range of finished and intermediate products for household, service institutions, agricultural, industrial, and environmental uses: kitchen utensils, washing machines, refrigerators, televisions, satellite receivers, laptops, electric and water meters, water filters and coolers, air conditioning, lighting and heating, cooking gas cylinders and regulators, and wood furniture; hospital equipment, disposable syringes, medications and solvents, firefighting vehicles and ambulances, garbage trucks, sports screens and seating, educational tablets; fertilizer, water pumps and piping, agricultural machinery and storage equipment, lateral move irrigation systems, and refrigerated food trucks; concrete mixers, cooling towers, metal fittings, fans, gas taps and fuel injectors, construction explosives, water purification and desalination plants, and paint; agricultural waste recycling and water treatment plants, and renewable energy equipment.¹²⁷ The defense industry also provides civilian services including contracting and construction, supply and import, installation and upgrade of IT and monitoring systems for public institutions, and technical training.

FIGURE 5
Establishment of Military Companies, 1949–2019



NOTES: The five AOI companies established prior to 1975 were originally part of the MOMP, but ownership was transferred to the AOI when it was established.
Companies formed under the monarchy came under the MOMP in 1954.

No wonder a director of one MOMP factory boasted that “our fingerprints are in every house in Egypt.”¹²⁸ But the shortcomings of the defense industry’s military production are even more consequential for its civilian production. Here, the jumble of official rationales for producing civilian goods and services is partly to blame. Leading officials have repeatedly stated that the defense industry is merely redirecting output that is surplus to EAF needs to civilian markets, utilizing spare capacity, breaking monopolies and stabilizing prices of supposedly “strategic” commodities, reducing imports and saving foreign currency reserves,

But shortcomings of the defense industry’s military production are even more consequential for its civilian production.

contributing to social and economic development and GDP generally and to the state’s national development plan specifically, helping to reform the economy, and supporting the private sector.

In theory, some of these aims could be compatible with each other, but in practice most are contradictory. Underutilization

of capacity in the defense industry is severe, to take one example, and yet the MOMP in particular has been on an expansionist trajectory for several years, adding production lines, factories, and new companies to its portfolio in pursuance of Assar’s stated strategy of expanding.¹²⁹ Almost none of the economic sectors in which military agencies are active suffer private sector monopolies that require breaking, regulating markets and prices is the business of government ministries and specialized state agencies, and reassurances about not competing with the private sector are belied by statements about competing with it in order to bring down prices.

Indeed, defense industry leaders make contradictory statements about their own main purpose and contribution. Assar complained in 2017 that it was difficult to increase civilian compared to military output “due to many challenges including competition and imports,” for example, and yet asserted a year later that “if we only produced defense products we would not achieve an economic return.”¹³⁰ Lieutenant General Abdel-Monem Bayyouni al-Terras, who became head of the AOI in August 2018, separately confirmed that providing the “top-quality” needs of the EAF was its primary goal rather than profit making, which was ironic given the discontinuation of its higher-technology military programs and the aging technology of its remaining military output.¹³¹ These statements moreover belied the fact that at least 60 percent of production is civilian according to figures given by the same sector leaders.¹³²

Preserving the Military Industrial Enclave, Replicating the Past

These contradictions derive from multiple sources. Most important is that, as a protected enclave, the defense industry has inherited “the institutions, the administrative structure, the policy framework, the modes of production and organization, the vested interests, and

the habits of thought and work” characterizing much of the economy since the Nasser era, to borrow the assessment of Egypt’s productive sectors and infrastructure by Khalid Ikram, a former director of the World Bank’s Egypt department.¹³³ In part, this also means retention by the defense industry of capital stock originally formed by past investments, such as the huge iron and steel complex and automobile assembly plant established in the late 1950s, which were partly converted to defense production in order to utilize spare capacity, or the aircraft factory that was turned to producing consumer durables.¹³⁴

Above all, the defense industry remains attached to the import substituting industrialization strategies introduced in the 1950s and 1960s, albeit in a distorted and much reduced form. In addition to investing in new manufacturing ventures in select sectors protected by high customs barriers (such as intermediate chemicals, fertilizers, cement, and steel), defense industry leaders more often exploit their privileged relationship with government ministries and agencies to secure public procurement contracts by direct order, for goods that cannot otherwise compete with domestic or foreign goods that are cheaper or better quality. They have also campaigned to drum up sales with slogans such as “Buy Egyptian,” “Made in Egypt,” and “Encourage Egypt,” and the formation of a “Together to Support the Civilian Output of [Ministry of] Military Production” Facebook group.¹³⁵ The MOMP announced in November 2017 that it was setting up twenty-two sales outlets across the country, took regular part in the Cairo trade fair, and frequently offered “enormous reductions” on home appliances “in celebration” of special days such as “the new year and festive days of our Christian brothers” and National Police Day.¹³⁶ The ministry also contracted briefly with a private firm to market its civilian products under the “Make an Egyptian Happy” label.¹³⁷

The defense industry is quite simply not viable without a captive market. This is almost entirely domestic, as the defense industry has failed signally to achieve significant export capability; and where it has, as in the case of phosphate and fertilizer, it benefits from its multiple hidden subsidies. As with the military side of its production, a critical handicap for the defense industry in producing output for civilian markets has been the weakness of R&D, limiting increases in local content and value added. This is part of a general problem for Egypt; former director of the Middle East and Central Asia Department at the International Monetary Fund George Abed noted in 2019 that it spends only 0.6 percent of GDP on R&D compared to 4.3 percent in South Korea and Israel, 2.2 percent in Singapore, 2 percent in China, and 1.3 percent in Malaysia and Brazil.¹³⁸ As a result, he concluded, Egypt has neglected to transform its industrial structure and fallen continuously behind its peers in integrating its economy into the global manufacturing value chain.¹³⁹

The defense industry remains attached to the import substituting industrialization strategies introduced in the 1950s and 1960s, albeit in a distorted and much reduced form.

This handicap is why the increasing emphasis by defense industry leaders on the importance of *tawteen* (resettlement), the transfer of technology and manufacturing know-how to Egypt through assembly and licensed production deals with foreign companies, is unconvincing. Although sound in theory, the defense industry's low technological starting base and insufficient investment in R&D severely limit its ability to attract or benefit from transfers. The need for developing the R&D base has been evident for decades, and was repeatedly acknowledged by past ministers of military production and AOI heads over the past twenty years, but the prerequisites for doing so have remained largely ignored in reality. *Tawteen* appears to have emerged as a new mantra only in response to what AOI head Terras called "President Sisi's mandate for the transfer and resettlement of technology and the deepening of local manufacturing in cooperation with international expertise."¹⁴⁰

A review of new deals signed with foreign companies since then suggests that little has changed in fact. In a typical instance, the MOMP agreed in December 2018 to identify needs and secure licenses and permits for joint energy and infrastructure projects with the China Energy Engineering Group Corporation, which will provide the actual engineering designs, supply equipment, and undertake the necessary construction services and technical support.¹⁴¹ Almost none of the co-production agreements reached with foreign companies in 2016–2019 in the automotive and railway sectors, for example, envisage Egyptian local content higher than 45–50 percent, only rising to 60 percent in rare instances. Indeed, under these circumstances the sheer number of protocols signed with foreign companies and governments suggests that the Egyptian defense industry remains as reliant on foreign technology and know-how as it was in 1985 when the CIA research paper cited previously identified this as a foremost problem.

These handicaps are largely why conversion of a large part of defense industry capacity to civilian production, which could make good economic sense, has proven ineffective. It is also why so few of the dozens of memorandums of understanding and cooperation agreements between the MOMP and AOI on the one side and Egyptian government ministries and foreign companies and governments on the other side are converted into actual deliverables. Talk of attracting Arab partners to reinvest in the AOI or emerging defense industries in Saudi Arabia and the UAE to partner with their Egyptian counterparts is highly improbable for the same reasons.¹⁴² Poor competitiveness and high production costs moreover account for the persistence of the chronic problem of serious underutilization of capacity in defense industry companies, even as new capacity is added. Duplication in the production of manufactured goods and services could generate useful competition, but in the absence of tangible technological innovation and deepening it means that defense companies can continue to market similar products only because their customers are tied in, and the real costs of redundancy and idle capacity are shifted onto the public purse. And despite the defense industry's claims about offering products at affordable prices, private companies have complained of the high prices of inputs they buy from the MOMP and threatened to turn to imports instead.¹⁴³

The defense industry is positioned between the roles of producer and procurer: it can manufacture low-tech civilian products at reasonable cost but remains stuck at the stage of assembling imported components as it attempts to climb up the technology ladder, which offers the least local content and value added, and therefore reverts to acting as a middleman for imported goods. This is illustrated by its efforts to produce automotive vehicles, railway cars, and electronics.

In Pursuit of the “100-Percent-Egyptian Car”

The advanced technological content and multiple production linkages of the automotive industry make it a classic starting point for defense industries and a nexus for commercial synergies between military and civilian manufacturing sectors worldwide. But the handicaps discussed above have prevented economic synergies, and threaten to raise the costs of new forays into vehicle production planned by the defense industry. This is graphically displayed by the periodic efforts to revive the bankrupt state-owned Nasr Automotive Manufacturing Company by placing it under the wing of the MOMP, and by more recent attempts by the MOMP and AOI to launch their own vehicle production lines.

Once regarded as a flagship of Egyptian manufacturing, Nasr was among the hundreds of state-owned companies placed under commercial management in 1991, but not privatized. After struggling for many years with loss-making subsidiaries, the Council of Ministers slated it for liquidation in 2009, and production ceased. But in April 2013, then minister of military production Lieutenant General Rida Hafez proposed reviving Nasr’s four factories under the aegis of the MOMP, and later promised that the company would build the first fully Egyptian car within two years.¹⁴⁴

Hafez’s proposal generated resistance from retired officers heading other companies whose approval was needed. The head of the Holding Company for Metallurgical Industries, to which Nasr Automotive Manufacturing Company belonged, claimed publicly to support its transfer to the MOMP, but only on the condition that the ministry assumed the company’s debt—then EP1.2 billion (\$172 million)—and committed to paying its remaining workforce for another three years (a total cost of EP180–EP216 million).¹⁴⁵ Hafez, conversely, wished the holding company to absorb the debt. The retired major general who was executive director of the Egyptian Automobile Manufacturers Association, which stood to lose from the revival of Nasr and competition by the MOMP, was more openly opposed, claiming that restoring the company would require \$10 billion in investments.¹⁴⁶ Hafez’s death precluded completion of the transfer, which was blocked by his successor Major General Ibrahim Younes. Younes now made the MOMP’s acquisition of Nasr subject to finding a major global partner who could guarantee production of at least 200,000 vehicles annually, an impossible condition.¹⁴⁷

The idea of reviving Nasr refused to die, however. In October 2015, its supporters resumed lobbying Assar, who had succeeded Younes as the head of the MOMP. Assar confirmed two months later that the company's fate was still under review, but showed little interest in absorbing it within his ministry.¹⁴⁸ Apparently, neither the military's professed interest in helping to save leading national economic enterprises nor the perception among its critics that it seeks merely to raid civilian assets outweighed realistic market thinking with respect to Nasr. Various ideas were floated over the next four years, including an announcement in September 2017 that Nasr would be restructured with the assistance of the MOMP, but none of this materialized, and the Ministry of Public Enterprise Sector once again took up the search for foreign partners as part of its plan to develop troubled public sector companies in 2019.¹⁴⁹

The defense industry has instead sought to strike out on its own. Between June 2018 and September 2019, the MOMP and AOI agreed co-production of trucks and earthmoving loaders with the Minsk Automobile Plant (Belarus), electric buses with Foton (China), electric cars with Geely (China), and charging stations for electric vehicles with SEE and Marathon (China).¹⁵⁰ The routine rationales have been cited in each case—transferring technology and know-how, reducing imports, providing affordable goods, and supporting development—but there is little reason to expect that the defense industry can escape the travails faced by the civilian automotive industry. Despite the heavy trade protection the latter enjoyed until 2019, locally assembled cars were estimated to cost 20–30 percent more to assemble in Egypt than to import in 2005 and still around 30 percent in 2012—at which time the automotive sector was operating at 30 percent of capacity.¹⁵¹ The reliance of the automotive industry on imports for at least 60 percent of its components (not to mention production machinery, tools, and materials) means that it has not been able to benefit from the sharp devaluation of the Egyptian pound to gain a real competitive advantage. As importantly, Minister of Public Enterprise Sector Hisham Tawfik estimated in January 2019 that local components accounted for a mere 17 percent of the final product.¹⁵² Sales of locally assembled cars improved by 18 percent on the sharp depreciation of the Egyptian pound, yet sales of imported cars rose by 58 percent after the abolition of customs duties on imports of European vehicles as previously demanded in the 2004 EU-Egypt Association Agreement.¹⁵³

Claims by defense industry leaders such as Terras, who promised in November 2018 that the AOI would soon produce a “100-percent-Egyptian car,” must be viewed skeptically, therefore.¹⁵⁴ The AOI had launched a cheap three-wheel car modeled on the ubiquitous “tuk-tuk” a year earlier, which it more credibly claimed to contain 90 percent local content in parts and labor.¹⁵⁵ But the MOMP agreement in September 2019 to co-produce electric buses with Chinese company Foton was more revealing of the true situation: Foton will supply the components—including the battery and electric motor, which are the most technologically complex parts—and Egyptian company IMUT will supply the capital, while the MOMP will contribute a minor share of capital in addition to the land and labor.¹⁵⁶ Once again, the inadequacy of R&D is blocking potential increases in local content and value added. The fact that the head of the AOI's Arab American Vehicles still felt a need

to promise investment in R&D in March 2015, thirty-eight years after the company was founded, gives some indication of how severe the deficiency remains.¹⁵⁷ So did his boast of maintaining local content in passenger cars at 45–47 percent, which was no more than the minimum requirement decreed by the Ministry of Industry. Similarly, Assar’s claim in 2017 that MAZ trucks were being produced in Egypt with 60 percent local content was not only contradicted by then transport minister Hisham Arafat, who lowered the figure to 50 percent a year later, but also violated the Ministry of Industry’s stipulated 70 percent minimum for local content in this vehicle category.¹⁵⁸

In Slow Motion: Railways and Electronics

The inherent shortcomings of the defense industry are especially apparent in two more domains: rail transport, which offers significant efficiency and savings, and electronics, which are critical to industrial innovation and to Egypt’s integration into the global value chain. As importantly, these two sectors illustrate the manner in which the wider policy setting and political economy present obstacles to industrial development by distorting cost-benefit calculations and incentive structures, and how these are also reflected in the defense industry.

In stark contrast to massive public investment in roads and highway and the associated emphasis on the automotive industry, Egypt’s railway system has suffered decades of neglect and underinvestment. Analyst Tamer Hafez observed in late 2016 that the “notoriously unreliable, dangerous railway system has not motivated Egyptian businesses to rely on trains to ship goods—even though rail is a far cheaper and more efficient means of moving cargo, particular[ly] given the congested and unsafe state of the nation’s roads. Nonetheless, rail freight has shrunk to almost zero in recent years.”¹⁵⁹ By then, less than 1 percent of the country’s freight was being transported by railway (rising to 1.2 percent by 2017), and only twenty of approximately 700 train platforms were full-service points where trains could load and unload cargo.¹⁶⁰ But rather than focus on providing cheap public transport and freight services, ambitious planning currently under way envisages high-speed and monorail links worth \$13.9 billion, which can only serve affluent passengers or vanity schemes such as the new administrative capital.¹⁶¹

The marked government bias toward road transport appears to be entirely shared by the military, which has managed most of the so-called national roads construction

projects since late 2013. As Hafez noted, none of the new desert cities lying outside the Nile valley and delta, most of which have been constructed with military assistance or management, are “anywhere near the railroad.” Similarly, development of rail transport with Sudan

The marked government bias toward road transport appears to be entirely shared by the military, which has managed most of the so-called national roads construction projects since late 2013.

has been severely neglected despite the large number of travelers and volume of goods that move between the two countries annually and despite major government investment in new urban communities and large land reclamation and agricultural schemes projects along the route in Upper Egypt. The construction of a rail link was under study in 2009 but abandoned until Egypt's presidency of the African Union prompted a renewal of negotiations in 2019, but the railway authority admitted that it had neither funding nor a start date for the project.¹⁶²

Policy bias and the familiar problem of minimal investment in R&D have resulted in an underwhelming contribution by the defense industry to rail transport. The Egyptian Railways Equipment Company, SEMAF, which belongs to the AOI, claimed in 2018 that local content reached 95 percent in unsophisticated items such as cargo cars, but acknowledged that this dropped to “25–45 percent for subway trains as they contain electronic and electrical systems that are not yet manufactured locally in Egypt.”¹⁶³ Despite touting its production of railway vehicles and equipment as a showcase of local manufacturing capability, the AOI's difficulties in delivering a much advertised order for 212 stainless steel, air-conditioned passenger cars in 2012 revealed otherwise. A promotional video released in October 2013 confirmed that only the chassis, paint, and seating for the cars were being manufactured in Egypt; an Italian subcontractor was to supply the engines, operating systems, and other components.¹⁶⁴ The AOI switched to a Chinese supplier in 2014, allowing the order to be completed by 2017, but of the total number of the cars the AOI fully assembled only twelve, and imported 108.¹⁶⁵

Indeed, instead of the AOI, it is the MOMP that has led the running to supply railway needs. It was already involved in discussions over supplying signal boxes, engines, and passenger cars in early 2015, and in 2017 announced plans to upgrade or supply 295 signal boxes and rehabilitate eighty-six rail stations.¹⁶⁶ In January 2018, it discussed joint manufacture of railway control equipment and fast-speed tracks with the private sector Orascom Construction Limited.¹⁶⁷ SEMAF, which by the start of 2018 had not received any new orders in six months, was also in discussion with the Ministry of Transport to provide the signal boxes; but the contract worth EP22 billion (then \$1.17 billion) with Russian-Hungarian consortium Transmashholding-Hungary to deliver 1,300 passenger cars and provide maintenance services over fifteen years was finally concluded with the MOMP. Until then, only the Railway Authority workshops and SEMAF had manufactured railway cars, but the MOMP will import 700 cars and receive components and sub-assemblies for final fitting of the remaining cars at its Tank Plant.¹⁶⁸ Lieutenant General Kamel al-Wazir, the former head of the EAF Engineering Authority who became minister of transport in March 2019, optimistically promised to attain 100 percent local content in railway cars “within a few years.”¹⁶⁹ But Transmashholding stated more modestly that it would help the MOMP attain 80 percent local content by the end of the project, while the Tank Plant director stated that it would start at 45 percent.¹⁷⁰

While this kind of investment was necessary, it reproduced the typical effort to meet problems with technical fixes focusing on the acquisition of new equipment and expansion of new infrastructure, rather than resolve underlying problems in the existing railway sector and in the policies that determine its economic feasibility within the wider transport system. Much the same applies in the case of the defense industry's production of electronics. Here, too, it suffers from low local content, poor competitiveness, and underutilization of capacity. In 2002, South Korean Daewoo Electronics canceled a contract with the MOMP's Benha Company for Electronic Industries to assemble consumer electronics goods after the latter undershot its production and sales targets by a large margin.¹⁷¹ A consultancy report prepared for the Industrial Modernization Center in 2008 noted that utilization reached 50 percent "at best" for some consumer electronics such as televisions, satellite receivers, video recorders, monitors, and computers. It concluded that "Egypt cannot integrate in the Global Electronics Value Chain at this stage. ... Currently, Egyptian Manufacturers mostly work only in the last layer of the Value Chain."¹⁷² Eight years later, the head of the electronics sector at the Federation of Egyptian Industries complained that the eight largest producers, including the MOMP, accounted for only 10 percent of the domestic market despite having enough capacity.¹⁷³ Faced with these continuing challenges, the defense industry depends on direct orders from public sector customers such as Cairo University, which contracted Benha in early 2017 to assemble or otherwise supply 750,000 educational tablets for its students.¹⁷⁴

CONCLUSION: THE LAST REFUGE OF NASSER-ERA ENTERPRISES

Lack of profitability might be understandable for military products that are not primarily intended for export, but the only reason that the Egyptian defense industry has survived low levels of productivity, utilization of capacity, and technological innovation in its civilian output of goods and services is that its losses and hidden costs are transferred to the state treasury, reducing its marginal costs of capital to a minimum. This is not for any lack of genuine manufacturing capability and technical skills, but for the wider political economy within which the sector operates, and which allows its leaders to disregard the need for meaningful cost-benefit analysis. (This was further underlined by Presidential Decree 244 of 2018 designating the MOMP as a state entity "of special nature," exempting it from applying the requirement in the civil service law of 2015 to fill senior management posts through competitive hiring.¹⁷⁵)

The problem also applies to protected public sector businesses and politically connected private companies in Egypt generally, but the defense industry is assured immunity even under market conditions that would prompt the government to restructure or privatize the former and that would penalize the latter. In a very real sense, the defense industry has access to capital (in the form of public sector contracts) that is equivalent to the capital Nasser

generated through the land reform, nationalization, and socialist policies of the 1950s and 1960s, and that is utilized with equal inefficiency.

The knowledge that their inefficiency is cost-free helps explain why the various entities constituting the defense industry and their subsidiary companies and factories duplicate activities rather than complement each other. This is also why they do not pursue product specialization, technological deepening, or mergers and consolidation. Their real net contribution to the national economy and to consumers is at best questionable, and yet those in command show little inclination to streamline the sector, whether by divesting certain subsectors and activities or by subjecting all to the transparency and cost-effectiveness measures in order both to provide Egyptian defense needs and attain economic feasibility. The key to such transformation would be to end the defense industry's assured access to public procurement contracts, which papers over its major shortcomings and financial losses and blocks any talk of reform. But this is unlikely to happen, so long as it functions primarily to uphold the regime maintenance logic in place since the 1950s and service the military component of the governing bureaucratic coalition.

NOTES

- 1 See, for example, the historical account posted on the Ministry of Military Production's website, at <https://bit.ly/2kk37XU>, accessed January 14, 2018.
- 2 For example, Assar, quoted in Ali Abdel-Rahman and Ibrahim Said, "Minister of Military Production Honors Workers on Achievement Day," *Youm7*, January 10, 2017, <https://bit.ly/2lKN9X3>.
- 3 This is the ministry's official translation of its name, although a more correct translation is Defense Production.
- 4 Noted by Khalid Ikram, *The Political Economy of Reforms in Egypt: Issues and Policymaking Since 1952* (London: I.B.Tauris, 2018), 97.
- 5 The ministry went through some odd permutations in the meantime. In 1966 it included the civil aviation and meteorological agencies, Cairo airport, and general organizations for air transport and training. And in 1971 it was revived as a single ministry for military production and maritime transport. Presidential Decrees 4330 of 1966 and 778 of 1971, texts at <https://bit.ly/32UVNTs> and <https://bit.ly/2otAr0I>.
- 6 A useful list of all products is provided in "The Egyptian Arms Industry [Redacted]," A Research Paper (Declassified in Part), U.S. Directorate of Intelligence, NESA 85-10191, September 1985, Table 1, <https://bit.ly/2mgCgN7>.
- 7 Ibid., iii.
- 8 Yezid Sayigh, "Arab Military Industrialization: Security Incentives and Economic Impact," in Bahgat Korany, Paul Noble, Rex Brynen, eds., *The Many Faces of National Security in the Arab World* (London: Palgrave Macmillan, 1993), 216.
- 9 Florence Gaub and Zoe Stanley-Lockman, "Defence Industries in Arab States: Players and Strategies," Chaillot Papers no. 141, March 2017, 16, <https://bit.ly/2pENblm>.
- 10 "The Egyptian Arms Industry [Redacted]," iii and 1.
- 11 Workforce figures from Meshaal, cited in "Military Production: Egypt's Civilized Frontier," *al-Ahram al-Masaa'i*, November 7, 2010, <https://bit.ly/2mfT5aR>. More recent figures of 37,000 and 35,000 came from MOMP spokesperson Major General Amro Fuad speaking in Feb 2015 and in November 2016. "Military Production Spokesperson: to the Kuwaiti al-Jarida, 'We Manufacture the Best Tank in the World,'" *Youm7*, February 2, 2015, <https://bit.ly/2kL618f>. Karim al-Khatib, "Ministry of Military Production in 2016: Manufacturing, Agriculture, Mining, Supply, and Health, a Year of Hard Labor on National Projects," *Sada el-Balad*, December 30, 2016, <https://bit.ly/2kfKRie>. In May 2017, Assar said the MOMP had 34,500 employees. Mohamed Hassan and Maha Salem, "New Development in Military Factories' Production," *al-Ahram*, May 20, 2017, reposted in *Masress*, <https://bit.ly/2NhAZz5>.
- 12 Text of the law at <https://bit.ly/2lNxciz>.
- 13 The NAMP was established under Law 6 of 1984, text at <https://bit.ly/2kvIok1>.
- 14 Except where noted, all details in this paragraph are from the "Analysis of the Costs of Corruption in Application to Some Sectors in Egypt," Central Accounting Organization, 2016, 307 and 308.
- 15 On the first five-year plan, Shana Marshall, "Egypt's Other Revolution: Modernizing the Military-Industrial Complex," *Pambazuka News*, February 16, 2012, <https://bit.ly/2kHWD5f>. On the second five-year plan, "Military Production, Egypt's Civilized Frontier," *al-Ahram al-Masaa'i*, November 7, 2010, <http://massai.ahram.org.eg/Archive/Inner.aspx?ContentID=21765>.

- 16 Mohamed Ibrahim, "Egyptian Military Factories on Their Way to Become World-Class," *Sada al-Balad*, December 12, 2017, <http://www.elbalad.news/3076383>.
- 17 I owe this insight to Shana Marshall, "The New Politics of Patronage: The Arms Trade and Clientilism in the Arab World," draft book manuscript, viewed with permission.
- 18 "Military Production: Egypt's Civilized Frontier," *al-Ahram al-Masaai*, November 7, 2010, <http://massai.ahram.org.eg/Archive/Inner.aspx?ContentID=21765>.
- 19 Meshaal speaking in an interview with Samia Zain Elabedin, "Dr. Sayyed Meshaal in an Important Interview With al-Masaa," *al-Masaa*, November 27, 2010, reposted at <https://bit.ly/2kfKZOR>.
- 20 On claimed move of three factories, Meshaal cited in "Military Production: Egypt's Civilized Frontier," *al-Ahram al-Masaai*. And post on the Egyptian Special Forces, Facebook, September 22, 2013, <https://www.facebook.com/Unit777/photos/a.166738246712170.52000.166686073384054/613078988744758/>.
- 21 A review of the websites or other sources for eleven of the MOMP's then sixteen companies, only Shobra stated its location as in the complex as of January 2018. Site accessed on January 29, 2018. But in fact its address as given on the Chamber of Engineering Industries' website and that of the MOMP is in Shobra, not in the complex. Entry for "Shobra Company for Engineering Industries-Factory 27," Chamber of Engineering Industries, <https://bit.ly/2kfQo8B>. Accessed on July 24, 2018. Indeed, at that time the MOMP website did not show any of its factories as located in the complex. Interactive maps, Ministry of Military production official website, <http://www.momp.gov.eg/Ar/AttractiveMap.aspx>. Accessed on July 24, 2018. In 2010, Meshaal stated that Factory 81 had been moved to Belbeis so as to make way for the expansion of Cairo International Airport, but this was not to an existing complex. "Military Production: Egypt's Civilized Frontier," *al-Ahram al-Masaai*. A fire at Factory 81 in July 2018 revealed that it remained in the Cairo airport area. Abdu Abu Ghneima, "Chairman of the Airports Holding Company: No Explosions Inside Cairo Airport," *el-Watan News*, July 12, 2018, <https://bit.ly/2mf2Tls>.
- 22 Statements by Younes in Mohamed Hassan, "Minister of Military Production to al-Ahram: Implementing the Defense Industries Complex With Exclusively Egyptian Hands," *al-Ahram*, June 11, 2015; and in "Minister of military Production in an Interview with al-Bawaba News: Our Mission Is to Supply the Armed Forces Needs of Equipment and Advanced Weaponry," *al-Bawaba News*, June 10, 2015, <https://bit.ly/2lSFvd4>.
- 23 Hassan and Salem, "New Development in Military Factories' Production."
- 24 The resolution was "tabled following an accidental explosion in a densely populated area. "Military Production: Egypt's Civilized Frontier," *al-Ahram al-Masaai*.
- 25 "Analysis of the Costs of Corruption in Application to Some Sectors in Egypt," Central Accounting Organization, 308.
- 26 *Ibid.*, 309.
- 27 Yvonne Midhat, "Minister of Military Production Visits the Wounded of the Heliopolis Factory," *Shorouk News*, July 13, 2018, <https://bit.ly/2mf4ZSm>.
- 28 At <https://bit.ly/2PkAJ4Z>. Last accessed on October 28, 2019. The website was redesigned within the past two years, and so the map is no more than older.
- 29 Claim cited in "Sayyed Meshaal: The Field of Egyptian Military Production Witnessed an Enormous Leap," *al-Ahram*, December 31, 2010, gate.ahram.org.eg/News/27080.aspx.
- 30 On investment in 2007–2008 "Egyptian Military Production's Strategic Projects," Arab Army Forum, August 11, 2009, <http://www.arabic-military.com/t15852-topic>.

- On NAMP output in the same year, “Egypt Manufactures 75% of Its Arms,” *al-Akhhbar*, October 24, 2008, <https://bit.ly/2kkJA9O>.
- 31 “Military Production: Egypt’s Civilized Frontier,” *al-Ahram al-Masaai*. In November of the same year, Meshaal said total output came to EP29 billion in the preceding ten years. Elabedin, “Dr. Sayyed Meshaal in an Important Interview with al-Masaa.”
 - 32 Elabedin, “Dr. Sayyed Meshaal in an Important Interview With al-Masaa.”
 - 33 This is based on a statement by the head of the Arab Organization for Industrialization Lt-Gen. Abdul-Aziz Seif-el-Din, who stated that the organization’s overall production in 2012–2013 was EP3 billion, which he said represented about 40 percent of total defense industry production, indicating a total of around EP7.5 billion. The MOMP almost certainly accounted for the bulk of the remaining EP4.5 billion, but was not alone: Ministry of Defense companies such as the Alexandria Arsenal (shipyard) were presumably also included in the overall estimate, and possibly also the companies belonging to the ministry’s National Service Projects Organization. Dalia Othman, “Lieutenant General Abdul-Aziz Seif-el-Din, Chairman of the Arab Organization for Industrialization: Here We Manufacture Airplanes, Rockets, and Combat Vehicles,” *al-Masry al-Youm*, October 12, 2013, <https://bit.ly/2BFzbdQ>.
 - 34 “Analysis of the Costs of Corruption in Application to Some Sectors in Egypt,” Central Accounting Organization, 307.
 - 35 “Minister of Military Production Visits a Number of Factories and Makes a Series of Changes,” *Dot Masr*, November 7, 2015. January 2017 statement cited in Abdel-Rahman and Said, “Minister of Military Production Honors Workers on Achievement Day.”
 - 36 Quote from Tarek Shaltout, “Major General Mohamed al-Assar Speaks to el-Mogaz About the 2017 Development Plan,” *el-Mogaz*, January 17, 2017, <https://bit.ly/2BFvJ2V>. On percentages, Hassan and Salem, “New Development in Military Factories’ Production.”
 - 37 Abdel-Rahman and Said, “Minister of Military Production Honors Workers on Achievement Day.”
 - 38 Mostafa Ali, “Ismail Witnesses Signing of Agreements to Supply Energy for New Projects,” *Dot Masr*, March 9, 2016, <https://bit.ly/32Puw4T>.
 - 39 “Assar Meets Central Bank Governor and Heads of Boards of Directors of Banks,” *al-Bawabah*, September 29, 2017, reposted in *Masress*, <https://bit.ly/2okh8qz>.
 - 40 MOMP spokesperson Major General Amro Fuad cited in Tareq Shaltout, “Assar Speaks on Anniversary of Ministry of Military Production: We Participate Actively in Most National and Development Projects to Achieve Comprehensive Renaissance for the Country,” *el-Mogaz*, October 24, 2016, <https://bit.ly/2ohHI3p>; and in al-Khatib, “Ministry of Military Production in 2016.” These sources include a breakdown of civilian goods and services.
 - 41 According to then minister Meshaal. Figures for 2015–2016 were reached using a simple average for the exchange rate during the fiscal year. All rates from xe.com.
 - 42 Cited in Sahar Azzam, “Assar: Ministry of Military Production Pays Taxes and Customs Duties and Social Insurance to the State,” *Masrawy*, January 24, 2017, <https://bit.ly/368Af7M>.
 - 43 Simple average used for the exchange rate during the fiscal year. Source xe.com.
 - 44 Oddly, different sources reporting the same speech quoted different figures for overall turnover. The higher figure of EP10 billion comes from Abdel-Rahim Abu Shameh, “Minister of Military Production: 10 Billion Pounds Increase in Ministry’s Activity Compared to Last Year,” *al-Wafd*, November 20, 2017, <https://bit.ly/2JoS357>. The lower figure of EP8.8 billion (referred to as “profits”) came from Assar cited in Zaki al-Qadi, “Minister of Military Production: We Achieved 8.8 Billion Pounds and Our Production Increased by 250%,” *Youm7*, November 20, 2017, <https://bit.ly/2PfY2wO>.

- 45 For 2015–2018, Assar, cited in Ahmed Ali, “An Increase of 176%: Assar Announces Rise in Income of Ministry of Military Production,” *Masrawy*, March 11, 2019, <https://bit.ly/35RSQ86>.
- 46 Figures compiled from presidential decrees published in the official gazette, posted at <https://bit.ly/2Piqr5m>.
- 47 Arms exports figures generated from the Stockholm International Peace Research Institute’s Importer/Exporter Trend Indicator Values tables of arms exports from Egypt, 1950–2016, http://armstrade.sipri.org/armstrade/html/export_values.php. Accessed February 24, 2018.
- 48 The cost of wages and other EP-denominated factors of production would have dropped, but unless MOMP accounts are reconciled with the state treasury this would not impact the latter, while benefiting the MOMP. But the treasury necessarily bears the cost of MOMP purchases of hard currency.
- 49 Figures for 1999 and 2001–2006 are an average based on a statement by then Minister of military production Major General Sayyed Meshal that total output in 1999–2008 was EP29 billion. The figures for 2000, 2007, and 2008 were provided by him separately. Figure for 2014 is based on a Ministry of Military Production projection that its operating revenues would reach 15 billion Egyptian pounds in 2019, five times higher than in 2014. Minister of military production Major General Mohamed al-Assar and ministry spokesperson Major General Amro Fuad gave contradictory output figures at different times. The figure for 2015 was given by Assar in March 2019. US dollar figures were calculated using historical currency conversion rates for June 30 of each year taken from xe.com, <https://fxtop.com/en/historical-currency-converter.php?C1=EGP&C2=USD&DD=01&MM=01&YYYY=1986&A=100&B=1>, and https://en.wikipedia.org/wiki/Egyptian_pound#US_dollar. The 2010 figure was calculated from the given amount of \$700 million, at a rate of \$1=EP5.68. The 2013 figure was derived from a statement by the head of the Arab Organization for Industrialization Lieutenant General Abdul-Aziz Seif-el-Din, who stated that the organization’s overall production in FY 2013 was EP3 billion, which he said represented about 40 percent of total defense industry production, indicating a total of around EP7.5 billion. The MOMP almost certainly accounted for the bulk of the remaining EP4.5 billion. Figures for 2016 were reached using historical currency conversion rates and then averaging.
- 50 Abdel-Rahim Abu Shameh, “Minister of Military Production: 10 Billion Pounds Increase in Ministry’s Activity Compared to Last Year,” *al-Wafiq*, November 20, 2017, <https://bit.ly/2JoS357>.
- 51 For example, AOI head Seif-el-Din said it receives no funds whatsoever from the state, and relied wholly on its own income for investment and production. Interviewed in Fatimah Sayyed Ahmed, “Lieutenant General Abdul-Aziz Seif Head of the Arab Organization for Industrialization: Army and Organization Will Soon Hold an International Exhibition for Defense Industries,” *Rose al-Youssef*, April 24, 2013.
- 52 On EAF funds, see section on “Banking, Borrowing, and Black Boxes” below.
- 53 Hassan and Salem, “New Development in Military Factories’ Production.”
- 54 Ibid.
- 55 Cited in Hamdy Mubaraz, “Minister of Military Production: We Target 12 Billion Pounds in 2018,” *al-Alam el-Youm*, March 5, 2018, <https://bit.ly/2MNkAmT>.
- 56 For example, cited in al-Khatib, “Ministry of Military Production in 2016.”

- 57 Retired EAF brigadier general. Anonymized interview.
- 58 NI Capital, which comes under the Financial Monitoring Authority and belongs to the state-owned National Investment Bank, was to start with Factory 99. Minister of Planning, Follow-Up and Administrative Reform Hala Said, who oversaw the contract, said this was part of a plan to restructure all ministries. Zaki al-Qadi, "Assar Discusses Means to Restructure Ministry of Military Production Companies With Ministry of Planning," *Youm7*, November 14, 2017, <https://bit.ly/2WeflJf>.
- 59 Ali Abdel-Rahman, "Minister of Military Production: Posting Telephone Numbers of Administrative Monitoring Authority in Factories to Confront Corruption," *Youm7*, January 10, 2017, <https://bit.ly/32Pk5y7>; and "Assar: We Broadcast the Anthem of the Ministry of Military Production in Factories to Enthuse Workers," *Masrawy*, January 14, 2019, <https://bit.ly/2Jn9t1U>.
- 60 Elabedin, "Dr. Sayyed Meshaal in an Important Interview With al-Masaa."
- 61 Abdel-Rahman and Said, "Minister of Military Production Honors Workers on Achievement Day."
- 62 Abdel-Fattah al-Ajami, "Ministry of Military Production: Consumers Trust Us, We Will Return Stronger Than Before," *al-Tahrir*, November 20, 2017, reposted in *Masress*, <https://bit.ly/2BGY8Wc>.
- 63 Abdel-Rahim Abu Shameh, "Minister of Military Production: 10 Billion Pounds Increase in Ministry's Activity Compared to Last Year," *al-Wafd*, November 20, 2017, <https://bit.ly/2JoS357>. Al-Qadi, "Minister of Military Production."
- 64 Beesan Kassab, "Household Survey Highlights Rise in Poverty, Inequality in Egypt," Mada, July 27, 2016, <https://bit.ly/31NRqsf>, and Eric Knecht, "Baking Bad: Egypt's Dirty Wheat Problem," Reuters, March 15, 2016, <https://reut.rs/2peHFpB>. Both cited in Bessma Momani, "Egypt's IMF Program: Assessing the Political Economy Challenges," Brookings Doha Center, January 2018, <https://brook.gs/2NcQcBp>.
- 65 For example, Mostafa al-Manshawī, "Assar and Foudah Discuss Developing Abu Zunaimah Zone in South Sinai," *Masrawy*, September 9, 2017, <https://bit.ly/2pcVFjy>; Cooperation Protocol Between Ministry of Military Production and Orascom Construction to Undertake Several Projects, *Akhbarak*, January 30, 2018, <https://bit.ly/2pSqMku>; and Maha Salem, "Ministry of Military Production: Undertakes Construction and Development Projects in Alexandria Stadium and Alexandrine Union Club at a Cost of 50 Million Pounds," *al-Ahram*, July 23, 2017, <https://bit.ly/2WeGzWU>.
- 66 Noted in Zeinab Abul-Magd, *Militarizing the Nation: The Army, Business, and Revolution in Egypt* (Columbia: Columbia University Press, 2018), 118.
- 67 The author is grateful to Shana Marshall for the observation on the MOMP's contracting arm. Email June 3, 2015.
- 68 Decree 64 for 2015, Official Gazette on May 18, 2015. Text at <https://bit.ly/34bua99>.
- 69 Ministerial Decree 189 in Official Gazette on December 13, 2016. MP was set up by Ministerial Decree 64 of 2015, on May 18, 2015. Text at <https://bit.ly/31OielK>. The company was actually launched on November 5, 2016, after being renamed. Assar's statements about agricultural projects cited in Sahar Azzam, "Assar: Ministry of Military Production Pays Taxes and Customs Duties and Social Insurance to the State," *Masrawy*, January 24, 2017, <https://bit.ly/368Af7M> and in Awatef al-Wasif, "Ministry of Military Production Intends to Establish Largest Defense Industries Complex in the Middle East," *el-Muwatin*, May 21, 2017, <https://bit.ly/2pepAYM>.

- 70 Establishment of elevator company cited in Zaki al-Qadi, “Ministry of Military Production Establishes a Public Limited Company to Manufacture Elevators and Electric Ladders,” *Youm7*, January 12, 2018, <https://bit.ly/2BypjIW>. New companies announced by Assar in 2019 cited in “Assar Witnesses Signing Ceremony for Establishment of Packing and Sealing Company,” State Information Service, October 17, 2019, <https://bit.ly/2MCctJM>; and in Ahmed al-Lahouni, “Ministry of Military Production Signs Contract Establishing an Agricultural Greenhouses Company,” *al-Mal*, September 21, 2019, <https://bit.ly/32BkJPD>.
- 71 Hamdy Mubarak, “Minister of Military Production: We Target 12 Billion Pounds in 2018,” *al-Alam el-Youm*, March 5, 2018, <https://bit.ly/2MNkAmT>.
- 72 Cited in “Minister of Military Production: The Ministry Contributes Works Worth 15 Billion Pounds to Local Contracting Sector,” *Youm7*, June 16, 2015; <https://t.co/xK1K4Xmia7>.
- 73 Cited in Maha Salem, “Minister of Military Production Reveals Income of Ministry for First Time and Confirms ‘We Pay Taxes and Customs Duties,’” *al-Ahram*, May 22, 2018, <https://bit.ly/2N9BbQQ>.
- 74 In Egypt, the AOI was established under Law 12 of 1975. Text at <https://bit.ly/340YPWv>.
- 75 Official text of agreement at <https://bit.ly/2PmsB3O>. On goals, Nabil Ibrahim Ahmad, “Arab Defence Industries: A Future Perspective,” *al-Baheth al-‘Arabi*, No. 12, July–September 1987, 87 (in Arabic); and Raimo Vayrynen, “La lente construction de l’industrie militaire égyptienne,” *Le monde diplomatique*, October 1980. On startup capital, AOI website at <https://bit.ly/2BHITfG>, last accessed October 25, 2019.
- 76 John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 132.
- 77 Valuation of Gulf shares according to the AOI Facebook page at <https://bit.ly/2PovTDJ>, last accessed October 25, 2019. The preceding source gave the date of Gulf withdrawal as 1993, but Presidential Decree 219 ratifying this agreement was in fact issued on September 14, 1994, <https://bit.ly/366ifuN>. The AOI’s status was reaffirmed by a court ruling in 1994, which ironically stated this as the basis for reasoning that the organization does not belong to the Arab Republic of Egypt. Text of ruling at <https://bit.ly/32ORFV8>.
- 78 Run by a board including central bank governor. Details on official website at <https://bit.ly/2JnzhLn>.
- 79 Presidential Decree 150 of 1976, issued on November 10, 1976, text at <https://bit.ly/2MMZxAJ>.
- 80 Presidential Decree 51 of 1977, issued on September 30, 1977, text at <https://bit.ly/2JoTxfu>.
- 81 Waheibah cited in Omar Halawa, “Profile: The Arab Organization for Industrialization,” *Egypt Independent*, September 5, 2012, <https://bit.ly/2NcZQE1>. Zeinab Abul-Magd notes that exemption from the labor law means that AOI workers are prohibited from creating trade unions or resorting to civilian courts to resolve disputes with their administration. “Workers and Officers in Egypt: The Other Failed Revolution,” *Jadaliyya*, January 11, 2018, <https://bit.ly/344FzHM>.
- 82 Presidential Decree 48 of 2014, text at <https://bit.ly/2kcaY9K>.
- 83 AOI head Seif-el-Din said it receives no funds whatsoever from the state, and relies wholly on its own income for investment and production. Fatimah Sayyed Ahmed, “Lieutenant General Abdul-Aziz Seif Head of the Arab Organization for Industrialization: Army and Organization Will Soon Hold an International Exhibition for Defense Industries,” *Rose al-Youssef*, April 24, 2013.

- 84 “Report: Alexandria Shipyard Workers Between Policy of Starvation and Military Trials,” Egyptian Center for Economic & Social Rights, October 18, 2016, <https://bit.ly/2qHdOGE>.
- 85 On transfer of factories, Ministry of Military Production website at <https://bit.ly/2Ni1WTn>. The AOI’s own website previously gave the lower figure of 15,000 (accessed October 9, 2016). Website redesigned and link removed.
- 86 According to the Arab American Vehicles website, the AOI has 51 percent ownership, and Chrysler 49 percent. Oddly, the company website has not been updated since 2007, and it is not listed as a subsidiary on the AOI’s main website, although it remains in business. View at <http://www.aav.com.eg/Index.html>.
- 87 A useful list of all products is provided in “The Egyptian Arms Industry [Redacted],” Table 2.
- 88 It is difficult to extrapolate total production from these figures, but in later years the AOI’s military output was said to represent 30 percent of the total. Using this percentage, total out in 2004–2006 would have stood at roughly \$67 million annually. From an item that has been archived at <http://www.ahram.org.eg/Archive/2006/10/6/INVE4.HTM>.
- 89 Cited in Omar Halawa, “Profile: The Arab Organization for Industrialization,” *Egypt Independent*, September 5, 2012, <https://bit.ly/2NcZQE1>.
- 90 Othman, “Lieutenant General Abdul-Aziz Seif-el-Din.”
- 91 Figures for 2015 in an item that has been archived at: <http://www.ahram.org.eg/NewsQ/466498.aspx>. Figures for 2016 in Shirin Hanafi, “Most Prominent Achievements of Arab Organization for Industrialization in 2016,” *al-Bawaba*, January 7, 2017, <https://bit.ly/2MOZN2i>.
- 92 On upgrade, Hani Fathi, “Harvest of 2015: Achievements of the 40th Year of the Arab Organization for Industrialization, \$965 Million Worth of Contracts Last Year,” *al-Ahram*, January 4, 2016.
- 93 Shaimaa al-Badawi, “\$500 Million Sales by Arab Organization for Industrialization in 6 Months,” *al-Boursab*, January 14, 2018, <https://bit.ly/2mhsomb>.
- 94 Figures for 2015 in an item that has been archived at <http://www.ahram.org.eg/NewsQ/466498.aspx>. Figures for 2016 in Hanafi, “Most Prominent Achievements of Arab Organization for Industrialization in 2016.”
- 95 On Pakistan export deal, Hanafi, “Most Prominent Achievements of Arab Organization for Industrialization in 2016.” Total exports figure for Fahd and Walid carriers from Gaub and Stanley-Lockman, “Defence Industries in Arab States,” Figure 1, 36. AOI head Waheibah said in 2009 that each Fahd vehicle cost EP5 million to produce. The Walid would have been cheaper, but assuming the same unit price the AOI exported carriers worth roughly EP3.725 billion (\$600 million) in production costs. Sales price and profit are unknown. Cited in Dandarawi al-Hawari, “Arab Organization for Industrialization Head Lieutenant General Hamdy Waheibah: I Don’t Sell Fava Beans, I Sell Military Equipment Subject to Sovereign Decisions,” *Youm7*, February 20, 2009, <https://bit.ly/2MOVEoI>. Countries to which the Fahd or Walid were exported to listed in “Fahd 4×4 Armoured Personnel Carrier,” Army Technology, <https://bit.ly/2BW2jhb>. Last accessed on October 25, 2019.
- 96 Seif-el-Din quoted in Othman, “Lieutenant General Abdul-Aziz Seif-el-Din.” Assar cited in Marwa Abdullah, We Seek to Attain a 100% Egyptian Defense System, *el-Watan*, November 20, 2016, <https://bit.ly/2BMdeKc>.
- 97 Lieutenant Colonel Stephen H. Gotowicki, *The Role of the Egyptian Military in Domestic Society*, n.d. [written in August 1994, published in 1997], <https://bit.ly/31My3jb>.

- 98 Robert Springborg and Clement Moore Henry, *Globalization and the Politics of Development in the Middle East*, 2nd edition (Cambridge, UK: Cambridge University Press, 2010), 151.
- 99 This assessment draws on Marc R. DeVore, "Armaments After Autonomy: Military Adaptation and the Drive for Domestic Defence Industries," *Journal of Strategic Studies*, May 30, 2019, <https://bit.ly/32PUAgd>.
- 100 Elabedin, "Dr. Sayyed Meshaal in an Important Interview With al-Masaa."
- 101 Some sources refer to the center as the Peace Complex for Scientific Research and Development. "Introduction to All Civilian Products of the Arab Organization for Industrialization," *al-Mal*, March 9, 2016, <https://bit.ly/2PkZrSJ>.
- 102 Cited in Hassan and Salem, "New Development in Military Factories' Production."
- 103 Cited in al-Hawari, "Arab Organization for Industrialization Head Lieutenant General Hamdy Waheibah."
- 104 Tamer Hafez, "New Law Gives Egyptian-made Products a Boost," *Business Monthly*, American Chamber of Commerce in Egypt, January 2015, <https://bit.ly/2pUZDgG>.
- 105 Sarah Chayes, "The Egyptian Restoration," Carnegie Endowment for International Peace, August 1, 2013, <https://bit.ly/2BKNwFL>.
- 106 "Fahd 4x4 Armoured Personnel Carrier," Army Technology. Walid description in "Walid," Army Guide, <https://bit.ly/2MMLcEG>. Last accessed on October 25, 2019. On local content percentages for the Fahd, AOI head Seif-el-Din cited in Maha Salem, "Ministry of Interior Receives Fahd Armored Vehicle From Arab Organization for Industrialization," *al-Abram*, July 27, 2016, <https://bit.ly/364s2lc>.
- 107 Assembly from kits upgraded to military use version mentioned in "The Jeep J8: Egyptian Military Jeep Wrangler," *Allpar.com*, <https://bit.ly/2MOjyHh>, last accessed on October 25, 2019. Export expectation cited in Scott Evans, "First Jeep J8 Military Vehicle Rolls Off the Line in Egypt," *MSN*, November 13, 2008, <https://bit.ly/32MGJqY>, last accessed on October 25, 2019. On 45 percent local content, report from Kader factory: Mostafa al-Gamal, "On Anniversary of Founding of Arab Organization for Industrialization, Sout al-Omma Tours the First Defense Factory in Egypt," *Sout al-Omma*, April 11, 2017, <https://bit.ly/2BM12Jc>. Some components were reportedly manufactured with a higher local content. For example, AOI head Seif El-Din said in 2013 that the J8 chassis contained 94 percent local content. Cited in Othman, "Lieutenant General Abdul-Aziz Seif-el-Din."
- 108 On percentages of local content, "M1A1 Abrams Tanks," *GlobalSecurity.org*, <https://bit.ly/2pT2kQ9>, last accessed on October 25, 2019.
- 109 Then minister Sayyed Meshaal claimed that 75 percent of the "strongest tank in the world" was produced locally by 2010 and that the percentage would reach 90 in 2011. "Sayyed Meshaal: We Witnessed an Enormous Surge, and Manufacture Abrams [Tank] at a Superior Level to America," December 31, 2010, reposted on Arab Forum for Defense and Armament, <https://bit.ly/2p5SOJt>. Figure of 95 percent from minister of military production Ali Sabri, cited in Mohamed Bahansawi, "Minister of Military Production Doctor Sayyed Meshaal: We Produce the Strongest Tank in the World With 95% Local Content," *al-Akhbar*, October 22, 2011, reposted in Masress, <https://bit.ly/32UNfw8>. On percentage of M1 chassis manufactured locally, minister of military production Ibrahim Younes cited in Mohamed Ahmed Tantawi, "Major General Ibrahim Younes Minister of Military Production to Youm7: Our Factories and Companies Produce Ammunition, Warheads, Mines, and Heavy Artillery," *Youm7*, July 10, 2015, <https://bit.ly/2JnKYli>.

- 110 Marshall, "The New Politics of Patronage." U.S. officials interviewed at the time of the original agreement in 1987 stated that the per-unit purchase cost of the M1 to the U.S. Army was about \$2 million, whereas the export price to Egypt would be about \$3 million. However, this was funded under the foreign military sales program, which Egypt would have to repay. Some officials predicted that the M1 would cost \$4 million to produce in Egypt if the cost of building production facilities was taken into account. Cited in Patrick E. Tyler, "Pentagon Agrees to Let Egypt Produce M1 Tank," *Washington Post*, June 29, 1987, <https://wapo.st/2JlhxQz>.
- 111 Information on personnel numbers from Springborg and Henry, *Globalization and the Politics of Development in the Middle East*, 151. The revised number is from "Egypt Producing M1A1 Abrams Main Battle Tanks," Egypt Defense Expo website, <https://bit.ly/32Osn9r>, last accessed on October 25, 2019.
- 112 According to a former head of the U.S. Military Cooperation Office with Egypt. Email correspondence with the author.
- 113 According to investigative journalist Mohamed Hosni, draft shared with author, October 2017.
- 114 "Egypt: U.S. Government Should Examine Options for Using Unobligated Funds and Evaluating Security Assistance Programs," U.S. Government Accountability Office, February 2015, 20, <https://bit.ly/2BIV3F5>.
- 115 Marshall, "Egypt's Other Revolution."
- 116 Details of the agreement in *Jane's Defence Weekly*, September 5, 2018. On the number of BMP-1 vehicles in EAF service, *The Military Balance 2018* (London: International Institute for Strategic Studies, 2018), 320.
- 117 "Abu Dhabi Exports Counter-Guerrilla Materiel," Intelligence Online, September 20, 2017, <https://bit.ly/32Pqjye>.
- 118 "Egypt Produces UAV in Cooperation With China," Unmanned Systems Technology, May 18, 2012, <https://bit.ly/2p5WLxN>.
- 119 On K8 aircraft, Gaub and Stanley-Lockman, "Defence Industries in Arab States," Box 6, 35. On railway cars, SEMAF head cited in Kheir Ragheb, "Engineer Abdel-Rahman Hossein, Head of Board of Directors of SEMAF Factory in an Interview with al-Masry al-Youm: Japan Was Amazed After We Manufactured Railway Cars for Metro's Third Line," *al-Masry al-Youm*, January 10, 2018, <https://bit.ly/2kz7qig>. The AOI blamed its Italian subcontractor for delays in delivering parts for the assembly of the railway cars, especially motors and operating systems, replacing it with a Chinese supplier in 2014. Rida Hobeishi, "Railways Announce End of Crisis with SEMAF Factory over Delayed 212 Railway Cars," *Youn7*, August 6, 2014, <https://bit.ly/2mfFWi2>.
- 120 "Egypt Looking to Domestically Produce T-90 Tanks," defenceWeb, July 7, 2017, <https://bit.ly/2phAuNj>.
- 121 Abdel-Hay Mohamed, "Egypt Resumes Exporting Weapons to Arab and African States," *al-Bayan*, February 20, 2017, <https://bit.ly/2NiiY3L>.
- 122 Seif-el-Din cited in Fatimah Sayyed Ahmed, "Lieutenant General Abdul-Aziz Seif Head of the Arab Organization for Industrialization: Army and Organization Will Soon Hold an International Exhibition for Defense Industries," *Rose al-Youssef*, April 24, 2013. The December 2018 EEDEX website at <https://bit.ly/2PkykHx>.
- 123 Items reported in, for example, "EDEX 2018: Fahd-300 New Egyptian-Made Upgrade of Fahd 4x4 APC Armored," EDEX 2018 News Official Show Daily, December 14, 2018, <https://bit.ly/2MQmeEl>; and Nanis al-Bili, "Temsah Bus: Story of a Vehicle Manufactured by the

- Armed Forces to Secure Transport of Troops in Sinai,” *Masrawy*, December 4, 2018, <https://bit.ly/3694fAL>. The role of International Marathon United Technology Group noted in Mohammed Najib, “EDEX 2018: IMUT Says New MRAP Close to Egyptian Order,” *Jane’s Defence Weekly*, December 7, 2018, <https://bit.ly/347KqrJ>; “New Armoured Vehicles Unveiled at Edex,” *defenceWeb*, December 7, 2018, <https://bit.ly/2MRCHbv>; Zaki al-Qadi, “Minister of Military Production Achieves 30% Increase in Income of 11.6 Billion Pounds in 2018,” *Youm7*, December 31, 2018, <https://bit.ly/2ofURKi>; and Abdel-Rahman Qennawi, “After Their Unveiling at EDEX 2018, Meet ST-100 and ST-500 Armored Vehicles,” *el-Watan*, December 6, 2018, <https://bit.ly/2peNrHP>.
- 124 Mohamed Ahmed Tantawi, “President Inaugurates Development Work on the Armed Forces’ Latest Armored Vehicles Factory,” *Youm7*, May 14, 2015, <https://bit.ly/2BMMARb>. And MOD promotional video posted on May 14, 2015, at <https://bit.ly/2PrNfjj>.
- 125 On Burundi sale, “Cooperation Protocol Between Arab Organization for Industrialization and Burundi to Supply 19 Fahd Armored Vehicles,” *Akhbar al-Yom*, March 29, 2019, <https://bit.ly/2Ph5ej7>. On Abu Dhabi trialling of the ST-100, Factory 200 head cited in Ahmed al-Lahouni, “Company Head: Armored Vehicles Factory Establishes a Public Limited Company to Manufacture Electric Vehicles, 24% MOMP Stake,” *al-Mal*, July 15, 2019, <https://bit.ly/33OOj4y>. The EAF is believed to have preferred the U.S. vehicles due to the inadequacy of the Fahd. According to online comments in *Egypt Defence Review*, July 23, 2019.
- 126 These ranged from the provision of equipment and support services to the Navy, satellite ground stations, technical support and spare parts for Rafale jet fighters, drones, advanced air defense radars, internal communications systems, and electronic jamming stations. “EDEX 2018 Concludes With Several Arms Contracts,” *Al-Defaiya*, December 7, 2018, <https://bit.ly/2oitE9S>.
- 127 The AOI issued a catalogue of its civilian products, now a few years out of date, at <https://bit.ly/31ERsSR>. Its website lists a smaller range, current as of October 2019, at <https://bit.ly/2ByybYS>. MOMP products are listed on its website at <https://bit.ly/2pIfkHY>. Indicative examples of civilian products and photographs of factory lines in Ali Abdel-Rahman, “Youm7 Visits Military Production Factories, a New Industrial Base Contributing to Economic Revival and Providing Commodities That Compete With Imports in Price and Quality,” *Youm7*, October 20, 2016, <https://bit.ly/2P80sxn>.
- 128 Director of Factory 99, Midhat Mostafa Abdel-Qader cited in Marwah Abdullah, “Al-Watan Inside the Factory 45 and Factory 99, the Ministry of Military Production’s Biggest Citadels,” *al-Watan*, October 23, 2016, <https://bit.ly/2BvewJi>.
- 129 Abdel-Rahman and Said, “Minister of Military Production Honors Workers on Achievement Day.”
- 130 First quote from a television interview cited in “Assar: Ministry of Military Production Pays Taxes, Customs Duties, and Social Security to the State,” *Masrawy*, January 24, 2017, <https://bit.ly/2w1j5YO>. Later assertion cited in “Minister of Military Production: We Target Sales of 12 billion Pounds in 2018,” *al-Alem al-Youm*, March 5, 2018, <https://bit.ly/2kG2s37>.
- 131 Cited in “Head of Arab Organization for Industrialization: The Organization Is Making Profits, We Provide Top-Quality Products,” *el-Watan*, December 1, 2018, <https://bit.ly/35Vlg17>.
- 132 Gaub and Stanley-Lockman, “Defence Industries in Arab States,” 31.
- 133 Ikram, *The Political Economy of Reforms in Egypt*, 18.
- 134 Ibid., 188 and 191.

- 135 For example, al-Khatib, “Ministry of Military Production in 2016.”
- 136 On new sales outlets, Assar cited in <https://bit.ly/2p6sj6m>. On discounted sales, Zaki al-Qadi, “Ministry of Military Production Announces Enormous Discounts at Its Outlets for Christmas Holidays,” *Youm7*, December 21, 2017, <https://bit.ly/33SdAuA>, <https://bit.ly/2W1tVut>; and Monatallah Gamal, “Witness: Ministry of Military Production Announces Discounts on Electrical Appliances,” *al-Wafd*, January 20, 2018, <https://bit.ly/32BP0Ov>.
- 137 This was the Matrix Group. The contract was cancelled in August 2017. “Cancels Cooperation Protocol With Matrix Group,” *Youm7*, August 27, 2017, <https://bit.ly/2MAB55v>.
- 138 George Abed, Chun Jin, and Boban Markovic, “Egypt: Good Progress to Date, but Sustainability Requires Deep, Transformational Change,” Institute of International Finance, February 20, 2019, 8.
- 139 Ibid., 9.
- 140 Cited in a statement published by Diehl Metering, which is assisting the AOI to produce smart water meters. “Arab Organization for Industrialization (AOI) Signs MOU with Diehl Metering,” Diehl Metering, August 1, 2018, <https://bit.ly/2qvoLLj>. A review of press statements by defense industry leaders shows that the emphasis on *tawteen* only picked up pace from May 2018. An example of Sisi’s “mandate” is in “President Sisi Calls for Shift From Assembly to Manufacturing and Resettlement of Transport Industry in Egypt,” State Information Service, August 4, 2019, <https://bit.ly/2MyLLlf>.
- 141 “Egypt’s Military Production Minister Signs MoU With Chinese Energy Company,” *Egypt Independent*, December 22, 2018, <https://bit.ly/2Ta7oJj>.
- 142 AOI head Abdel-Monem al-Terras stated bringing back Arab partners to the AOI as an aim, cited in Zaki al-Qadi, “First Interview With Lieutenant General Abdel-Monem al-Terras Since Becoming Head of the Arab Organization for Industrialization,” *Youm7*, December 1, 2018, <https://bit.ly/2BtOLJt>. He also stated that he was in talks with Saudi Arabian Military Industries with this aim in mind. Cited in “Egypt Seeks to Propose a Military Project to Arab Leaders,” *SDArabia*, November 30, 2018, <https://bit.ly/2o5Fp3m>; and “Egypt Interested in Reviving Return of Arab States to the Arab Organization for Industrialization,” *SDArabia*, December 3, 2018, <https://bit.ly/35UlcYG>.
- 143 Sources in the Chamber for Engineering Industries of the Federation of Industries cited in Ahmed al-Lahouni, “Engineering Industries Companies Call on Ministry of Military Production to Reduce Prices of Raw Materials,” *al-Mal*, December 18, 2017, <https://bit.ly/2MAVpDR>.
- 144 Nasmah Faris and Awad Mohamed Awad, “Nasr Cars Seeks Safe Exit From Liquidation Plans,” *al-Masryoun*, February 2, 2013, reposted at <https://bit.ly/2o8CrTN>; and Mohamed Ahmed Tantawi, “Manufacture of First Egyptian Car Two Years After Operating Nasr Company,” *Youm7*, October 24, 2013, <https://bit.ly/2W1qwvq>.
- 145 Major General Mohammed Youssef, cited in May 2013 in an item that has been removed. Originally posted at <http://ik.ahram.org.eg/News/1139.aspx>.
- 146 Retired Major General Hussein Mostafa, cited in an item that has been removed. Originally posted at <https://bit.ly/32TJWFt>.
- 147 On Younes blocking, Mahmoud al-Jamal, “Nasr Automotive File Will Be Presented to Major General Assar Within Days,” *el-Watan*, October 14, 2015, <https://bit.ly/2Bu9ugh>. Younes cited in Mohamed Hassan, “Minister of Military Production to al-Ahram: Implementing the Defense Industries Complex With Exclusively Egyptian Hands,” *al-Ahram*, June 11, 2015.

- 148 Assar cited in “Ministry of Military Production: We Participate in Mega National Projects Through Our Manufacturing and Human Resources,” *el-Watan*, December 29, 2015, <https://bit.ly/31DkEcW>.
- 149 Announcement by Major General Youssef Ibrahim, cited in Mahmoud al-Jamal, “Transport Holding Company: Developing Nasr Export Includes Human Cadres,” *el-Watan*, September 30, 2017, <https://bit.ly/2kqYlRf>. On role of MOMP, cited in Mahmoud al-Jamal, “Head of Transport Holding Company: Restructuring Plan in Cooperation With Ministry of Military Production,” *el-Watan*, September 30, 2017, <https://bit.ly/2W0BNMI>. On ministry of public enterprise search, Mohamed Al-Roubi, “Potential Egypt-China EV factory to Bring Back El Nasr Automotive,” *Daily News Egypt*, August 21, 2019, <https://bit.ly/2PfxHz3>; and Mona El-Fiqi, “Restructuring the Public Sector in Egypt,” February 16, 2019, <https://bit.ly/2Bz7ALi>. A co-production agreement was also announced between Nasr and Nissan in March 2019, although nothing further has been confirmed. “Egypt, Nissan Agree to Produce 100,000 Cars a Year - Minister,” Reuters, March 19, 2019, <https://reut.rs/2F9Yt4U>.
- 150 “Assar Discuss Joint Manufacture of Trucks With Head of Belorussian Maz Company,” *al-Borsa*, August 28, 2019, <https://bit.ly/31CVqLX>. On electric buses, Ahmed al-Lahouni, “Company Head: Armored Vehicles Factory Establishes a Public Limited Company to Manufacture Electric Vehicles, 24% Ministry of Military Production Stake,” *al-Mal*, July 15, 2019, <https://bit.ly/33OOj4y>. On electric cars, Abdel-Rahim Abu-Shameh, “Assar Discusses Manufacturing Electric Vehicles With Officials of Chinese Foton,” *al-Wafd*, June 26, 2019, <https://bit.ly/2X8qINe>. Agreement with Geely, cited in Zaki al-Qadi, “Assar Witnesses Signing of MoU with Chinese Geely to Produce Electric Cars,” *Yum7*, September 6, 2019, <https://bit.ly/2MzCiu3>. On agreement with SEE and Marathon, Ibrahim Abul-Ula, “Ministry of Military Production Cooperates With Chinese Company to Set Up a Factory for Charging Stations for Electric Vehicles,” *Faloo*, October 1, 2019, <https://bit.ly/2Jrnw6P>.
- 151 2005 cost comparison from the Economist Intelligence Unit, cited in “Strategic Study to Upgrade Egypt’s Automotive Sector,” International Trade Centre, Industrial Modernisation Centre with EU, 2005, 26, <https://bit.ly/2IVLPRq>. And by Martin Watson, managing director of Chrysler, cited in Mahmoud Kassem, “Egypt’s Car Industry Braces for 2005,” *Business Monthly*, American Chamber of Commerce in Egypt, April 2000, <https://bit.ly/2IPWRrk>. Cost in 2012 according to Randa Hamza, “Competitiveness Targeting: Automotive Industry in Egypt,” paper presented at the Cambridge Business & Economics Conference, June 27–28, 2012, 8.
- 152 Cited in “Can Egypt Become an Automotive Manufacturing Hub?,” Oxford Business Group, February 28, 2019, <https://bit.ly/35UwtPw>.
- 153 Fatma Khaled, “Egypt’s Automotive Industry: Between Challenges in Local Production and an Electric Future,” *Business Forward*, May 19, 2019, <https://bit.ly/2W1IsGm>.
- 154 Cited in Mohamed Sharqawi, “Ministry of Military Production: Production Soon of 100% Egyptian Cars,” *Yum7*, November 28, 2018, <https://bit.ly/2W3KTYV>.
- 155 Cited in Gad al-Kareem, “Meet the Egyptian ‘Maestro’ Car Made by the Ministry of Military Production,” *Rose al-Youssef*, December 11, 2017, <https://bit.ly/2p3zHQ6>.
- 156 Ahmed al-Lahouni, “Company Head: Armored Vehicles Factory Establishes a Public Limited Company to Manufacture Electric Vehicles, 24% Ministry of Military Production Stake,” *al-Mal*, July 15, 2019, <https://bit.ly/33OOj4y>.
- 157 Searchable at <https://bit.ly/2MAIGCu>.

- 158 Assar statement in “Surprise Meeting Between Sisi and Major General Mohamed al-Assar,” al-Nabaa, March 11, 2017, <https://bit.ly/2JszOeR>. Arafat statement cited in Karim al-Khatib, “Opening of a New Production Line for MAZ Trucks,” *Sada el-Balad*, February 18, 2018, <https://bit.ly/2JehSVj>.
- 159 Tamer Hafez, “Working on the Railroads,” *Business Monthly*, AmCham Egypt, November 2016, <https://bit.ly/2kRgoYb>.
- 160 Figure of 1.2 percent from “Egypt’s Railways: Notable History and Successive Achievements,” State Information Service, July 1, 2017, <https://bit.ly/2o6PAER>. Remaining figures from Hafez, “Working on the Railroads.”
- 161 Planned investments shown in table in “Weak Viability Plagues Egypt’s Electric Railway and New City Plans,” Fitch Solutions, January 25, 2019, <https://bit.ly/2W1aLF1>.
- 162 “Egypt Studies Building \$500 Mln Rail Link to Sudan,” Reuters, July 8, 2009, <https://reut.rs/31EE6pQ>. Deputy Chairman of the Railways Authority Magdy al-Sabbagh cited in “Egyptian-Sudanese Railway Linkage Project Negotiations in Progress,” *Egypt Independent*, February 11, 2019, <https://bit.ly/2MzQluc>. And Minister of Transport Hesham Arafat cited in “Egypt Wants to Establish Railway Axes With Africa,” *Egypt Today*, November 5, 2018, <https://bit.ly/33QPH6M>.
- 163 SEMAF head cited in Kheir Ragheb, “Engineer Abdel-Rahman Hossein, Head of Board of Directors of SEMAF Factory in an Interview With al-Masry al-Youm: Japan Was Amazed After We Manufactured Railway Cars for Metro’s Third Line,” *al-Masry al-Youm*, January 10, 2018, <https://bit.ly/2kz7qig>.
- 164 On video, Dina Salem, “Advanced Technology, Air Conditioned Subway Cars in Egypt for First Time,” *al-Aswq al-Arabiyya*, October 3, 2013, <https://bit.ly/2kmvZif>.
- 165 On replacement of supplier and delay, Rida Hobeishi, “Railways Announce End of Crisis With SEMAF Factory Over Delayed 212 Railway Cars,” *Yom7*, August 6, 2014, <https://bit.ly/2mfFWi2>.
- 166 On discussions in 2015, MOMP official spokesperson Major General Amro Fuad, cited in al-Khatib, “Ministry of Military Production in 2016.” On MOMP plans in 2017, Abdel-Rahman and Said, “Minister of Military Production Honors Workers on Achievement Day.”
- 167 “Cooperation Protocol Between and Orascom Construction to Implement Several Projects,” *Akhbarak*, January 30, 2018, <https://bit.ly/2IUSGu3>. On the lack of new SEMAF orders, al-Badawi, “\$500 Million Sales by Arab Organization for Industrialization in 6 Months.”
- 168 “Transmashholding-Hungary, a Russian-Hungarian Consortium to Deliver 1,300 Passenger Cars to Egyptian National Railways,” Transmashholding website, September 25, 2018, <https://bit.ly/32CI1ow>. On value of the deal and other details, “Transmashholding-Hungary Wins Deal to Supply Train Cars to Egypt,” *Railway Technology*, September 27, 2018, <https://bit.ly/31AjajK>; and Wael Saad, “Ministers: Manufacture and Import of 1,300 Railway Cars From Russian and Hungary for 22 Billion Pounds,” *el-Watan*, September 25, 2018, <https://bit.ly/31EI55M>. On import of 700 cars, initial agreement cited in Momen Mokhtar, “Russia and Hungary Prepare to Export 700 Air Conditioned Railways Cars to Egypt for \$500 million,” *Yom7*, August 22, 2017, <https://bit.ly/2P96b65>.
- 169 Nashwa Ahmed, “30 Days of Discipline: Kamel al-Wazir on Path to Reform Transport,” *Akhbar al-Yom*, April 12, 2019, <https://bit.ly/2Jactic>.

- 170 Statement by the deputy-head of the Transmashholding board of directors, cited in Wael Saad, “Ministers: Manufacture and Import of 1,300 Railway Cars from Russian and Hungary for 22 Billion Pounds,” *el-Watan*, September 25, 2018, <https://bit.ly/31EI55M>. Factory 200 head cited in Ahmed al-Lahouni, “Company Head: Armored Vehicles Factory Establishes a Public Limited Company to Manufacture Electric Vehicles, 24% Ministry of Military Production Stake,” *al-Mal*, July 15, 2019, <https://bit.ly/33OOj4y>.
- 171 Rania Oteify, “Breaking Up Is Hard to Do,” *Business Today Egypt*, September 2002, <https://bit.ly/2N6lmKA>.
- 172 “Electronics, Computers and Telecommunications Sector Development Strategy,” Final Report by Hands-on Management Consulting, Egypt & IDC Inc., USA, on behalf of the Industrial Modernisation Centre, n.d. (but 2008), 62 and 115, <https://bit.ly/2BBtNIo>.
- 173 Dana al-Hadidi, “Engineering Industries Chamber: Electronics Factories Operate at Only 10% of Capacity,” *Youn7*, December 4, 2016, <https://bit.ly/2Byx9w8>.
- 174 Ahmed al-Lahouni, “Ministry of Military Production Supplies Cairo University With 750 Thousand Tablets,” *al-Mal*, January 18, 2017, <https://bit.ly/2Bysb2d>.
- 175 Text at <https://bit.ly/2PmJfAt>.

CHAPTER 3

MAPPING THE FORMAL MILITARY ECONOMY PART 2: WE BUILD EGYPT, WE FEED EGYPT, WE ARE EGYPT

THE MINISTRY OF DEFENSE REPRESENTS the second main pillar of the formal military economy, but unlike the loss-making defense industry, it makes a significant contribution to extra-budgetary military funds. Together, the diverse range of departments, agencies, and companies the ministry encompasses provide the EAF with noncombat consumables and services and, increasingly importantly, undertake major public works under contract to government ministries and authorities. These MOD bodies, which include the EAF itself and its affiliated departments, have made tangible contributions in providing diverse civilian goods and services—from highways, bridges, and housing to intermediate chemicals—but at heavy cost. Just how heavy is obscured by the deliberate lack of transparency on the real economics of production, hiding considerable amounts of dead (that is, nonfunctioning) capital and opportunity cost sunk not only in the important white elephant schemes managed by the military but even in sectors that could contribute positively to social and economic development.

Most significant among the economically active MOD bodies are the National Service Projects Organization and the EAF Engineering Authority and Works, Megaprojects, Water, and Survey Departments, which are also backed by the Technical Consultancy Bureau in the Military Technical College. These departments moreover liaise closely with civilian bodies in which the MOD has a direct role by law, most prominently the National Center for Planning State Land Uses, and other major contracting public entities such as the Ministry of Housing's Central Construction Agency and New Urban Communities Authority. The MOD also comprises half a dozen additional departments that perform economic functions

and report directly to it, such as the so-called Mining Sector, as well as several maritime companies, and owns shares in a number of nonmilitary joint stock companies.

MOD-affiliated bodies differ considerably from the defense industry companies and factories belonging to the MOMP and AOI in terms of primary activity and categories of products, but their income-generating activities reveal similar characteristics. They benefit from an enabling regulatory framework of tax and customs exemptions and permission to receive state loans, retain revenues, carry surplus funds over fiscal years (customarily to be deposited and retained in their “special funds”), and hold deposits in commercial banks of their choosing.¹ They offer tangible contributions to public infrastructure and lower-income households but also reveal questionable commercial viability in terms of net cost to the treasury and of the quality of goods sold to consumer markets. And rent-seeking officer networks that straddle MOD-linked bodies, state-owned economic enterprises, and general authorities again play a significant role in steering contracts and investments.

THE NATIONAL SERVICE PROJECTS ORGANIZATION

The NSPO is an economic arm of the MOD but also a significant pillar of the military economy in its own right, listing thirty-five companies by 2019. As the reference in its name suggests, it employs young Egyptian males conducting national military service in the EAF, for terms of between eighteen and thirty-six months depending on educational qualification. The potential labor pool is massive: an estimated 1,551,000 Egyptian males reach the age for military service annually.² But although Sisi stated in 2015 that the EAF’s intake was around 1 million conscripts, Janes’ Sentinel Security Assessment and the International Institute for Strategic Studies more credibly estimated their number in service at between 220,000 and 410,000 in 2016–2017.³

Founded by Presidential Decree 32 in 1979 “to study and implement works and projects for ministries, [government] authorities, local government, and public sector companies,” the NSPO’s trajectory reflects the evolution of Egypt’s politics and economy.⁴ Its budget for the 1982–1983 financial year was EP50 million; nearly thirty years later, Major General Mahmoud Nasr, then assistant defense minister for financial affairs, stated that NSPO annual turnover had reached EP6.3 billion (\$1.06 billion) in 2011, with net profits since 1990 of EP7.7 billion.⁵ The NSPO Board of Directors includes the heads of the MOD’s Organization and Administration Authority and Logistics Authority; the ministry’s Financial Authority is believed to supervise the NSPO and monitor its projects.⁶

A Conscript Economic Army

The NSPO was transformed by then EAF chief of staff Lieutenant General Abdul-Halim Abu-Ghazalah following his appointment as defense minister in March 1981. An ambitious figure, he was promoted by Mubarak to the rank of field marshal and made deputy prime minister in April 1982. Under his direction, the NSPO set up a Food Security Division with the aim of providing much of the EAF's needs, in particular of livestock and poultry, eggs and dairy products, and bread. According to political scientist Robert Springborg, the NSPO also sought loans from the Principal Bank for Development and Agricultural Credit to prepare conscripts to undertake similar activities upon finishing their military service. In 1986, Abu-Ghazalah also announced that the EAF would organize 30,000 conscripts into development battalions.⁷ These battalions have been a source of cheap manual labor for both public and private companies undertaking public works projects ever since, working under the EAF Engineering Authority (rather than the NSPO).⁸

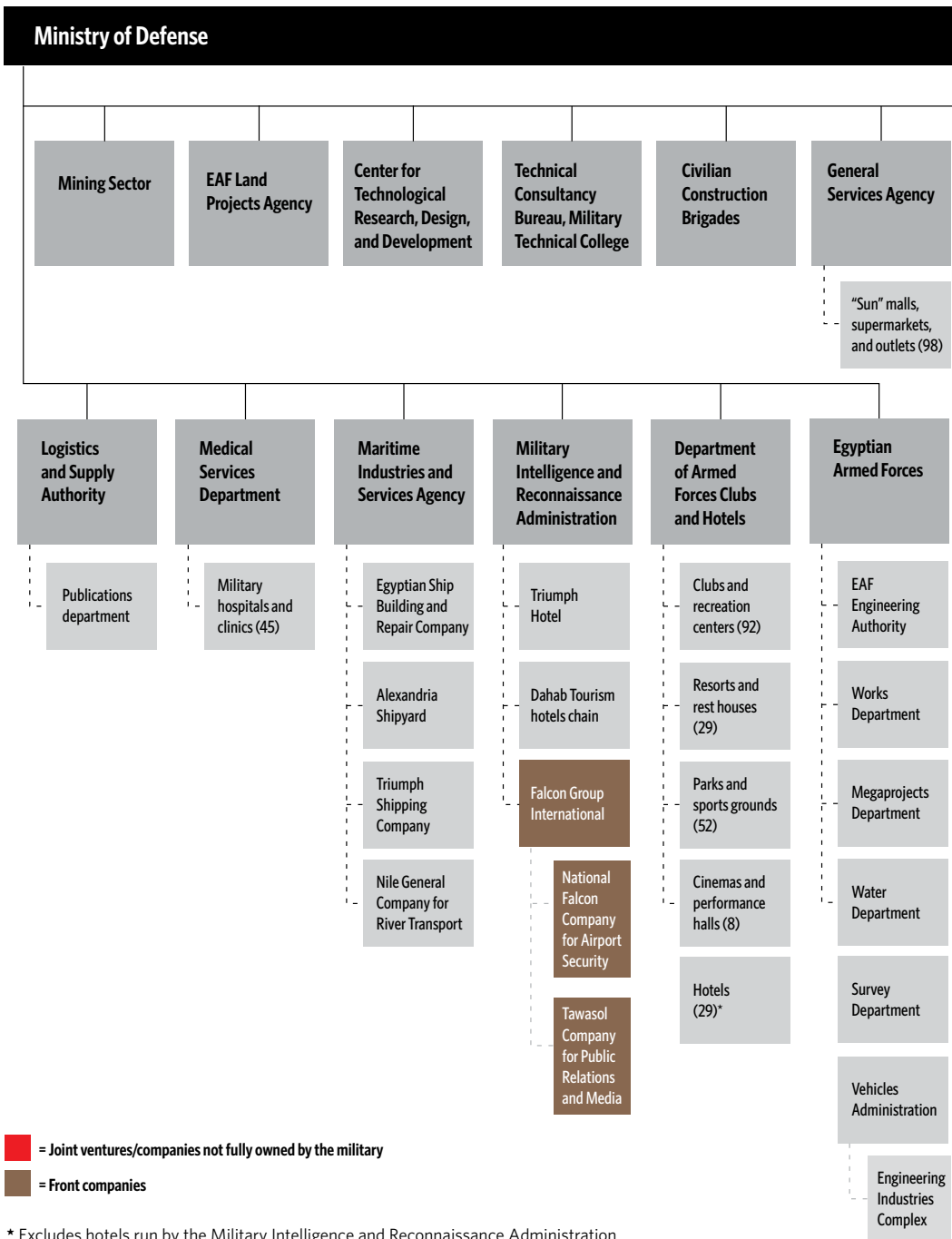
The rapid expansion of the NSPO reflected various factors. In 1986, Abu-Ghazalah and Mubarak claimed that half its earnings were spent on supplementing meager EAF salaries, with the other half going toward clothing, accommodation, and maintenance of equipment.⁹ The NSPO moreover followed in the footsteps of civilian businessmen who were benefiting from the partial liberalization of trade to invest in food, dairy, macaroni, and bottled water production in this period.¹⁰ As was the case for the MOMP's defense companies and factories, the NSPO also provided an opportunity to replicate the military "old boy" networks and clientilism established in the Nasser era. Much like then EAF commander in chief and defense minister Abdel Hakim Amer, who sat on the Higher Council for Nationalized Enterprises in the 1960s, Abu-Ghazalah chaired the Ministerial Policy Committee starting in 1986, which enabled him to award land to the NSPO for reclamation and cultivation while withholding it from adversaries and to favor EAF retirees joining the private sector and their civilian partners with contracts.¹¹

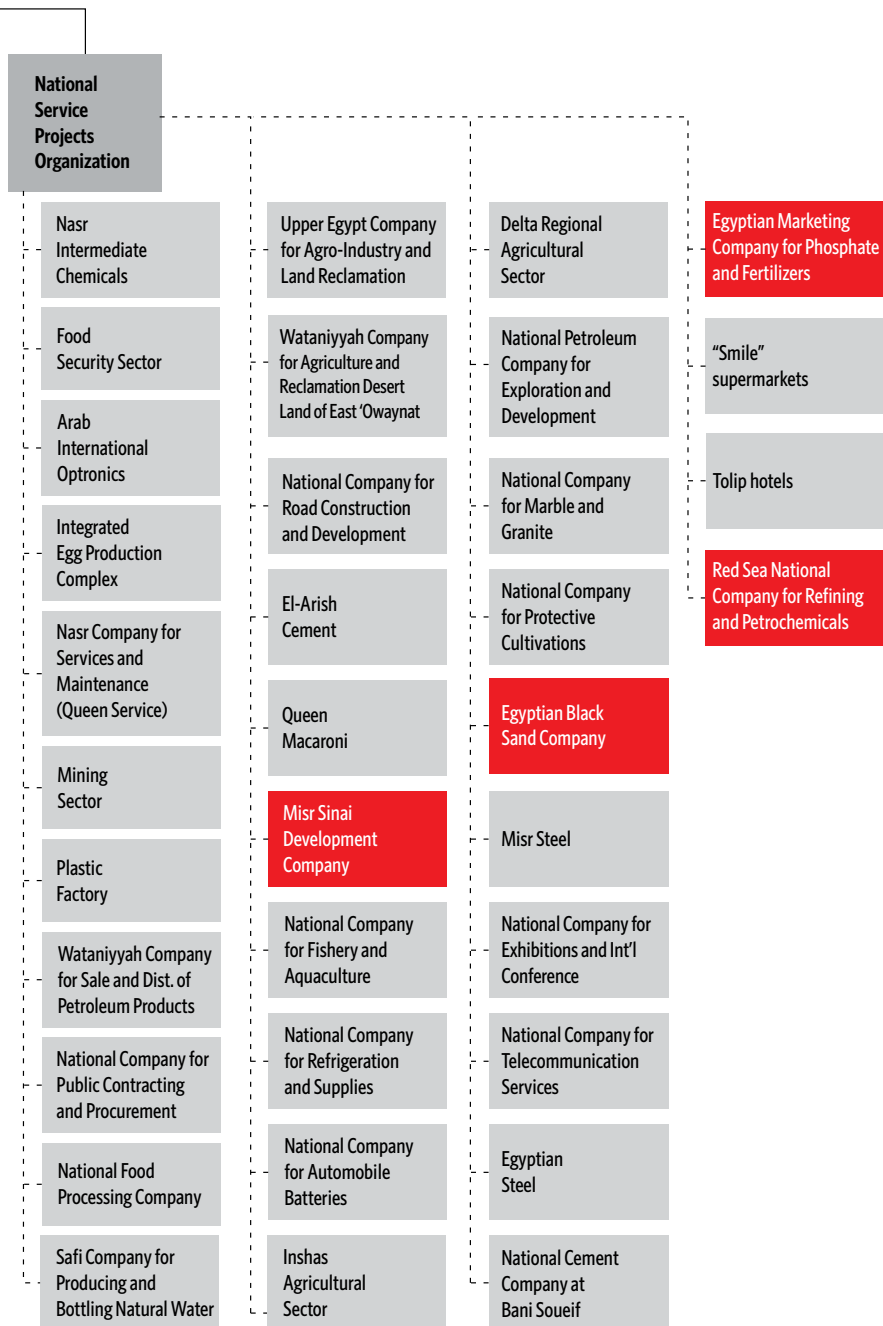
In any case, by 1986 the NSPO was already estimated to account for almost 5 percent of all housing construction and 18 percent of food production nationwide, which political economist Safinaz Tarouty valued at EP488 million.¹² These figures have not been confirmed, and seem excessive for a food production sector estimated to employ 5,000 EAF personnel at the time.¹³ Nonetheless, the NSPO also started production of macaroni across the country three years later, and subsequently grouped all its pasta factories into a single enterprise. It also set up support facilities such as an automated vegetable wrapping and packing plant.¹⁴

The NSPO followed in the footsteps of civilian businessmen who were benefiting from the partial liberalization of trade to invest in food, dairy, macaroni, and bottled water production in this period.

FIGURE 6

Economically Active MOD Agencies and Companies





Thanks to these activities, NSPO annual turnover grew from EP11 million in 1979 to EP644 million by 1990.¹⁵ This enabled a new phase of expansion. Reflecting the commercial opportunities provided by networking between various parts of the military economy and the public sector, the NSPO branched out in 1992 by constructing six gas stations to serve civilian markets, again using conscripts. These stations were brought under a new subsidiary called Wataniyyah in 2002, which subsequently expanded countrywide; the company now claims seventy-one stations.¹⁶ Sales of petrol, oil, and lubricants produced by NSPO companies ensure a large profit margin since they are acquired at a discount from refineries in which the General Intelligence Directorate is de facto gatekeeper. Wataniyyah has also sold detergents produced by the EAF's chemical warfare branch since 2015.¹⁷ Following the military takeover in 2013, a former head of the General Authority for Petroleum, which is responsible for supply to civilian markets, complained that "most stations don't even receive their full quota of petrol, after more fuel was assigned to state gas stations owned by the armed forces."¹⁸ Wataniyyah has diversified following market developments; introduced charging stations for electric vehicles at its stations in 2018, and won government approval to host conversion facilities for dual-fuel vehicles (to use natural gas) in 2019.¹⁹

NSPO expansion accelerated during the 1990s, with a continuing primary focus on agribusiness and labor-intensive services. In 1993, it established the National Company for Public Contracting and Procurement, followed a year later by a company producing plastic sheeting, and in 1996 by another producing fruit juices and jams, pickles, and olive oil. Nasr Company for Services and Maintenance (originally named Queen Service) was started in 1998, offering cleaning and sanitation, security, maintenance, and management of equipment and facilities including hotels, heavy haulage, and general procurement services for government and private companies, including supplying and importing food.

As significant was the NSPO's entry into the land reclamation market. In 1998 it established the Upper Egypt Company for Agro-Industry and Land Reclamation, which produced a range of farming goods. A year later it also established the East Owaynat Land Reclamation Company, which took over 100,000 feddans (42,000 hectares) in the Western Desert from a reclamation project launched in the early 1990s. It subsequently established farms irrigated by underground aquifers to produce cash crops for export to Europe; it claims to have provided the Ministry of Supply with 78,000 tons of wheat in 2015, and has leased land to Egyptian and foreign companies and to local farmers in the area.²⁰ Some experts believe the East Owaynat aquifer may be nonrenewable; the same is true of the Siwa aquifer whose water is marketed by the NSPO's Safi National Company for Producing and Bottling through twenty-seven outlets countrywide, as well as supplying troops under the U.S. Central Command and the Multinational Force in Sinai.²¹

As these examples show, the NSPO experienced a growth spurt in the last decade of Mubarak's rule, mirroring other sectors of the military and civilian economies. Its National Company for Road Construction and Development completed a highway from Cairo to the Red Sea

resort of Ain al-Sukhna in 2004; meanwhile, civilian public sector companies such as the Nile General Company for Road Construction built roads and an airport serving NSPO production sites in East Owaynat.²² From 1995 to 2004, the NSPO had also constructed or rehabilitated four museums, twenty-two archeological sites, and 390 schools, and in 2008 it consolidated its pasta production lines under the Queen label. Considerably more important was its construction of the Arish cement plant, which it took over when major civilian competitors balked at the starting price of EP300 million (\$54 million) for the project license in 2007.²³ By this point, the NSPO had become a holding company, having acquired existing state-owned enterprises—the Arab International Optronics Company and Nasr Company for Intermediate Chemicals—and having set up an elevator company.²⁴

Post-2013: Favored Contractor

The real market value of NSPO output cannot be verified, but according to one source, its closing accounts showed turnover of EP1.63 billion in 2012–2013, with profits of merely EP63 million.²⁵ Whatever the truth, the EAF's ouster of Morsi in July 2013 opened the way to unbridled growth. Between October 2013 and February 2014, the interim government headed by Hazem el-Beblawi awarded contracts by direct order to the NSPO to fund, build, and maintain two national highways. This included the exclusive right to charge tolls, sell advertising space, and lease land for the next ninety-nine years in the case of the Rod al-Farag corridor around Cairo, and for fifty years on the desert highway between Cairo and Alexandria.²⁶

The government's General Authority for Roads, Bridges, and Maritime Transport immediately annulled existing permits of private sector advertising companies in Rod al-Farag, and in July 2014 also ceded the right to license advertising on addi-

tional stretches of the road network around Cairo to the NSPO, with which it will split profits for fifty years.²⁷ The NSPO meanwhile increased heavy transport tolls on the Cairo–Alexandria highway by 800 percent; under its leasing arrangement the NSPO will pay the government roughly EP5 million in fees each year, but earn EP800 million annually (\$112 million at the time) for the duration of its fifty-year franchise.²⁸ (It is unclear how much of the cost of building and maintaining these and other highways and “national” roads managed by the military will be borne by the state treasury, which is responsible for this under Public Roads Law 84 of 1968.)²⁹

The Egyptian Armed Forces' ouster of Mohamed Morsi in July 2013 opened the way to unbridled growth.

The NSPO went from strength to strength: in 2014–2016 alone it won new contracts by direct order from individual government agencies to install traffic cameras at 250 junctions in Cairo Governorate for EP260 million, build a services complex in Gharbiyyah Governorate for EP240 million, a wastewater treatment plant and two electricity stations

in New Heliopolis for EP200 million and EP230 million respectively, and four buildings for the Matrouh branch of Alexandria University valued at EP346 million, and renovate the great pyramids site near Cairo for a modest EP20 million.³⁰ The NSPO also partnered with the Ayadi Company for Development and Investment, a state-owned public-private partnership established in March 2014, and the National Agency for Development of Sinai to develop northern Sinai through investments in local industry, agriculture, and other sectors.³¹ The government meanwhile decreed that operation of 500 kilometers of national roads being constructed by the Housing Ministry's Central Agency for Construction connecting the Farafra oasis (a focus of military economic activity) at a cost of EP2.275 billion would be awarded on completion to the NSPO, which would levy tolls and run its Wataniyyah service stations.³²

The NSPO has also expanded the activity of its security company, Queen Service, founded in 1988 and subsequently renamed Nasr Company for Services and Maintenance.³³ Still known by its former name, Queen Service has won numerous protection and service contracts since 2013 from clients including the Cairo subway, state banks, public universities, and government ministries. In late 2013, it won a \$600 million contract from a group of Saudi and Arab investors to provide integrated services for hospitals in Egypt. This added to its portfolio of managing services at 250 public hospitals, universities, and other public facilities in the country.³⁴ Since then, Queen Service has been involved in megaprojects run by the EAF, such as the Suez Canal expansion, while expanding its operations to include managing sea and land ports and providing IT and communications services. By January 2015 it claimed 20,000 employees, of whom 5,000 were from the EAF according to company director general, Major General Wasfi Mahmoud Arafeh, although another source claimed it employed 7,500 EAF enlisted personnel and conscripts.³⁵

Breaking Out

The NSPO has expanded operations at an accelerating pace as the military economy geared up to generate greater revenue, both feeding into and spinning off similar expansions by other military economic actors. This encompasses increasing capacity in existing ventures and entering new sectors, at times elbowing private companies aside to do so.

Most importantly, in May 2015 the NSPO announced plans for a new production line at its Arish cement plant that would take annual output to 6.4 million tons, and in early 2018 completed a second, larger plant in Beni Suef that boosted its overall capacity to 19.5 million tons.³⁶ From a 3 percent share of the national market, the NSPO jumped to 23 percent, throwing the private companies that account for the rest of the cement sector into serious financial difficulty. It also formed the Egyptian National Petroleum for Exploration and Development Company in 2016 with the aim of “meeting the state’s needs of petroleum and natural gas” and becoming “a leading energy company in the Middle East.”³⁷ This ignored the extensive oversaturation of the sector by public, private, and foreign companies

in Egypt (let alone the wider region), but may have been intended to tap into exploitation of Egypt's massive new Zohr offshore gas field.

The NSPO also positioned itself to benefit from impressive growth in Egypt's domestic and export markets for industrial chemicals, worth \$1.7 billion in 2017.³⁸ In February 2016, its Nasr Intermediate Chemicals Company moreover started construction on what it proclaimed as the "largest factory" in Egypt to supply fertilizer for Sisi's flagship 1.5-million-feddan land reclamation project.³⁹ A complex of nine new factories belonging to the Nasr Company for Phosphates Industries was also launched in Ain al-Sukhna at the same time. There was no obvious need for this expansion; according to the Ministry of Investment and International Cooperation, there already are twelve major fertilizer producers in Egypt. But the NSPO is doing what it and other military agencies have done in recent years: entered or rapidly expanded in a tradeable commodity sector that enjoys state subsidies and trade protection, even though it has excess capacity, with private producers underutilizing by 30 percent.⁴⁰ In October 2018, the NSPO joined three other state-owned companies in forming the Egyptian Marketing Company for Phosphate and Fertilizers, which has the declared aim of acting as the "exclusive commercial agent of all phosphate producers in Egypt."⁴¹

The NSPO's Mining Sector (sometimes presented as the MOD's) similarly sought to increase its stake. In August 2014, it took a 51 percent stake of the newly established Misr Sinai Development Company that planned to build marble, glass, and cement factories in the peninsula, in partnership with local clans.⁴² National output of marble and various minerals had reportedly reached 1.4 million tons in 2015, but the NSPO expanded its mining and quarrying activities in Ain al-Sukhna, Ras Seder, al-Mina, and Aswan.⁴³ It placed these under a newly established National Company for Marble and Granite in May 2016, which would seek "optimal exploitation of Egypt's natural resources... and self-sufficiency in meeting the armed forces' needs of these important strategic raw materials."⁴⁴ This company became the NSPO's partnership vehicle with the Misr Sinai Development Company.⁴⁵

Bizarrely, the NSPO claimed it would break a supposed monopoly in the marble and granite sector, while boasting that it was already meeting 70 percent of "the current gap" in supply.

Bizarrely, the new NSPO company claimed it would break a supposed monopoly in the marble and granite sector while boasting that it was already meeting 70 percent of "the current gap" in supply. That the NSPO was itself acquiring a monopolistic position was highlighted the following year, when it notified its private sector counterparts that it was taking its marble production capacity to 1 million cubic meters annually, or 80 percent of Egypt's total output.⁴⁶ In fact, the five marble plants and two granite factories it inaugurated in Beni Suef in 2018 took its production capacity to 3.6 million cubic meters a year,

equivalent to 1.44 million tons.⁴⁷ The NSPO reportedly also assumed the powers of the General Authority for Mineral Wealth to issue entry permits to mineral-rich military zones in the southern border region of Shalateen and to auction minerals extracted there.⁴⁸

Separately, the NSPO formed a National Company for Fishery and Aquaculture in 2015, and in late 2017 announced an EP1.7 billion (\$107 million) investment in what it proudly claimed was the largest fish farm in the Middle East.⁴⁹ In parallel, it announced plans to expand the area under cultivation in East Owaynat from 80,000 feddans to 100,000, and in December 2016 established the National Company for Protective Cultivations to expand greenhouse production with the aim of “plugging the gap in domestic food supply” and, contradictorily, increase Egyptian exports at the same time.⁵⁰ In 2017, it also acquired 25,000 feddans from the Kingdom Agricultural Development Company, originally purchased by Saudi billionaire Al-Waleed bin Talal in 1998.⁵¹

Net Assessment

That the NSPO was pursuing an aggressive growth strategy cannot be contested. An EP1 billion donation it made to Sisi’s pet Long Live Egypt Fund in 2014 reflected its growing confidence and swelling coffers.⁵² But media portrayal of military domination of “the markets for water, olive oil, cement, construction, hotels and gasoline”—mostly sectors in which the NSPO was invested—was inaccurate.⁵³ Even a cursory review reveals that its own dramatic claims and ambitious aims should be treated with caution.

For example, even after raising output from 37 million bottles annually to 50 million, the NSPO’s 4–5 percent share of the mineral water market is far from dominant.⁵⁴ Its declared annual output of eggs reached 120 million as of February 2018, enough to feed every Egyptian just over one egg a year, or every soldier in active service two eggs every three days. NSPO production of pasta is often cited, but overlooked is the fact that its famed Macaroni Queen Company produces only 24,000 tons annually despite a capacity to produce 150,000 tons, which itself represents a mere 1.5 kilograms per capita annually, or under 100 grams per soldier daily.⁵⁵ The NSPO accounted for a respectable but relatively small 6 percent of Egypt’s total exports of olive products in 2005, while the market share of its Wataniyyah gas stations stood at 4 percent in 2015 (with other government agencies accounting for 54 percent).⁵⁶ Similarly, East Owaynat, which is presented as “one of largest projects producing strategic crops (wheat, barley, maize),” has been unable to increase the area under cultivation to the advertised target of 100,000 feddans since 2012.⁵⁷ And despite highlighting its production of edible oils, the country still imported 97 percent of its needs in 2018.⁵⁸

The NSPO has continued to claim that it primarily aims to provide self-sufficiency for the EAF, despite these modest results and its aggressive expansion into unrelated sectors. Speaking to media in June 2019, the NSPO Director Major General Sabry Abdel-Latif likened its role to the United States’ military PX stores and online sales service and the

Navy, Army, and Air Force Institutes serving British armed forces overseas.⁵⁹ The NSPO has also stated that its food production seeks to “ease the burden on the civilian sector” and is provided at half the cost, but in fact it often pursues this aim by dumping cheaper, imported commodities—such as meat and frozen chicken parts—into domestic markets.⁶⁰

Then minister of defense Sedki Sobhi had previously told members of parliament that the NSPO imported “large amounts of cooking oil and baby milk,” and Abdel-Latif confirmed that the organization sold both locally grown and imported meat from Sudan.⁶¹

Clearly, this served the Sisi administration’s overriding political purpose of keeping prices affordable for its social constituency. In November 2016, for example,

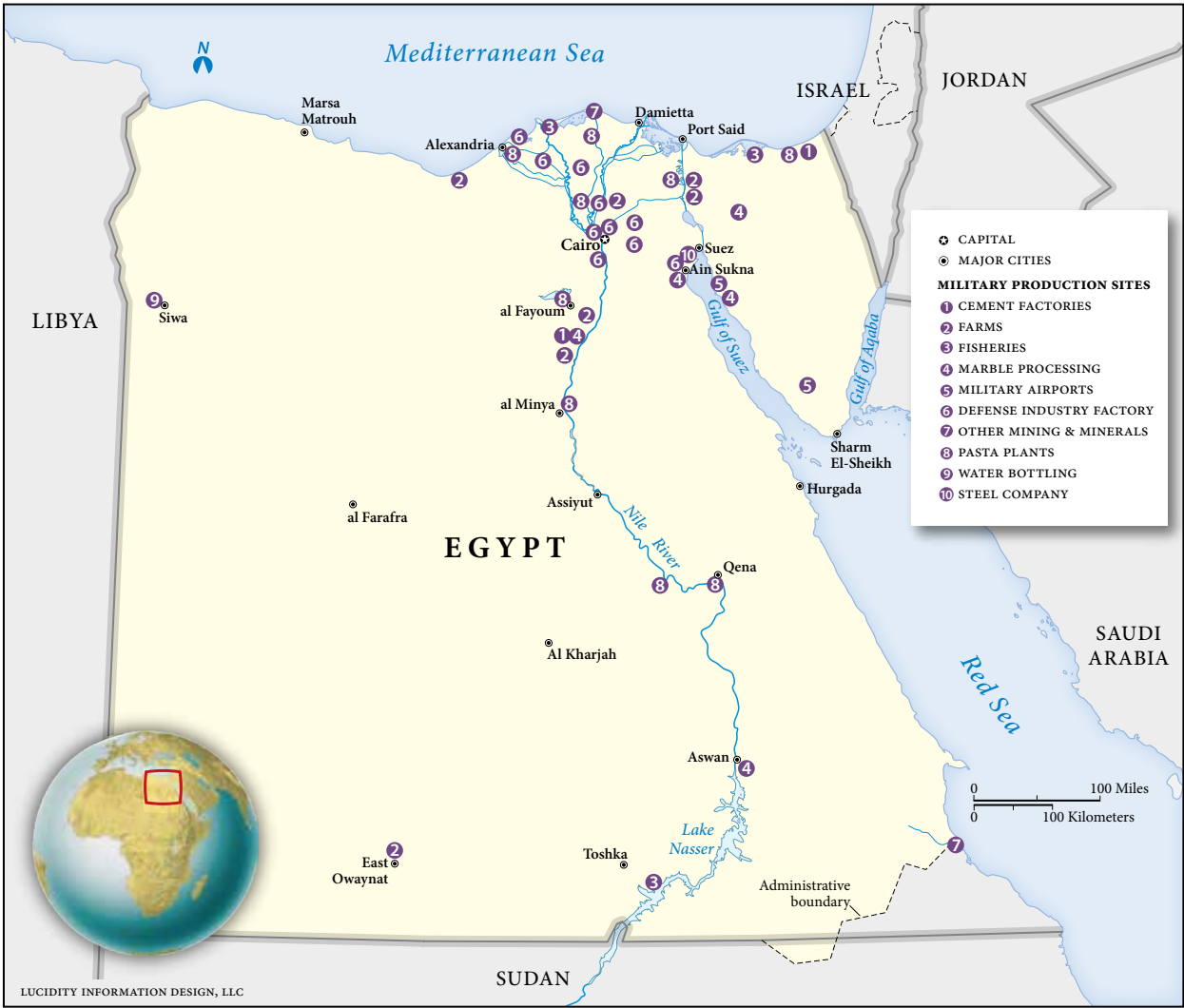
Egyptian media reported that he had urged government agencies including the NSPO to increase the number of outlets they ran selling basic food commodities ahead of the planned devaluation of the pound, which was expected to inflate prices.⁶² (Previous sharp hikes in 2008 and 2010 are believed to have contributed directly to the 2011 revolution.) But although NSPO officials publicly justify its imports as a contribution to fighting inflation and keeping living costs down, critical feedback from some customers indicated that its prices are no cheaper than at Ministry of Agriculture outlets, which rely on Egyptian farmers (and on imports), although other sources state that military (and police) outlets sell at 10 percent below market.⁶³ The NSPO nonetheless expanded its sales capacity fourfold by purchasing 250 food trucks from the AOI in 2016, adding to its existing sixty-one mobile outlets, manned by EAF conscripts.⁶⁴ Much of its produce is sold at outlets under the NSPO’s “Smile” label; an official representative said it had 193 fixed outlets and 1,029 mobile ones countrywide as of July 2019.⁶⁵ But it also markets goods through other retailers; its director general claimed it was present at ninety-eight malls, retail branches, and canteens across the country in the same year.⁶⁶

NSPO involvement in importing basic food commodities obviously alters its overall market share. But its modest share of local production is not insignificant. As the case of cement showed, the NSPO was able to jump from a 3 percent share of national production capacity to 23 percent in a few years; the fact that it enjoyed both a powerful political position and a market for its output in the megaprojects under military management enabled it to pose a serious challenge to the multinational and private Egyptian companies that dominated the sector.⁶⁷ Reflecting these advantages, the NSPO secured government approval for the award of land to establish new farming and agribusiness ventures in 2018, including 30,000 acres to cultivate olives and produce oil (with Spanish investors) and another 34,000 feddans for greenhouse cultivation to be managed by the National Company for

The NSPO stated that its food production seeks to “ease the burden on the civilian sector,” but in fact it often pursues this aim by dumping cheaper, imported commodities—such as meat and frozen chicken parts—into domestic markets.

MAP 2

Principal Military-Owned Economic Production Sites



Protective Cultivations it had set up in 2016.⁶⁸ Sisi sought to reassure farmers in August 2019 that the military's involvement in agriculture "will not exceed 10–15 percent of the country's overall projects," adding that this proportion "is not huge," but this only underlined the scale of its expansion.⁶⁹

As importantly, the NSPO has followed other military economic actors in achieving massive increases in turnover by wresting public contracts from competitors rather than by raising productivity. Some of those losing out are private sector companies: Queen Services replaced G4S in providing security at Cairo subway stations, despite charging 10 to 15 percent more.⁷⁰ But a large majority of the NSPO's new contracts have come from government agencies and public institutions, or from other military agencies. In December 2015, for example, the head of the MOD's Megaprojects Department, Major General Karam Salem Mohamed, stated that the NSPO would open a sales outlet to serve workers constructing New Ismailiya City.⁷¹ Weeks later, the governor of Faiyoun contracted with the NSPO to set up meat and poultry sales points, a fruit and vegetable processing factory, salt pans, an oil press, and other food production projects in the region.⁷² The NSPO has continued to pursue this approach, planning in 2019 to build a biscuit factory with the intention of supplying government schools and local markets, acquire two new dairy plants, expand its livestock, and open new Smile supermarkets in desert cities constructed by the New Urban Communities Agency (discussed later).⁷³

THE MILITARY AS CONTRACTOR, LAND AGENT, AND MANAGER

The contracts given to the NSPO since 2013 were part of a much bigger tranche of public works contracts given to the military, the lion's share of which went to other MOD departments. The republic's president, Gamal Abdel Nasser, had deployed individual EAF officers to ensure control of a civil service formed under the monarchy and to kick start large public works such as land reclamation in the 1950s, but his rivalry with defense minister and EAF commander in chief Abdel Hakim Amer dissuaded him from using the military as the primary institutional instrument of his major economic initiatives: land reform, Egyptianization of foreign businesses, or nationalization.⁷⁴

Consequently, the main contours of the military's formal economic role emerged in the wake of *infatih*, the limited economic liberalization launched by Sadat in 1974 in order to encourage foreign direct investment, and the 1979 peace treaty with Israel. The MOD benefited from major new influxes of foreign aid, undertook postwar reconstruction in Egypt's cities and the Suez Canal zone, and was awarded a say in the use of certain categories of state land. It expanded its rent-generating activities and increasingly diversified into other public works and infrastructure projects over the following two decades, acquiring an additional role as a contract broker. These developments laid the basis for the ministry's remarkable rise since 2013 as the manager of some of the largest public works projects in Egypt's history.

Seed Money

The MOD's initial purpose in generating income was to finance minor improvements in service conditions for EAF career personnel, covering food, leisure, and bonuses among other things. Over the years its recreational and service facilities—eventually numbering 574 by 2015, according to an official count—were also opened to middle-class customers—at rates that significantly undercut private sector competitors—with the profits being distributed to officers.⁷⁵ But the MOD also contributed to public infrastructure, with EAF departments reportedly installing more than 40 percent of new telephone links covered in the government's five-year development plan for 1982–1986 and constructing power lines, sewers, bridges, and overpasses in Cairo and other cities.⁷⁶ They were credited in later years with other notable public facilities including the Cairo International Airport road, Aida Opera House, and El Galaa theater.⁷⁷

MOD finances received a major boost thanks to a substantial increase in foreign military assistance, which offset most of the cost of converting from Soviet to Western hardware. It received initial military assistance of \$1.5 billion in 1978–1980, part of a five-year program worth \$3 billion, and credit lines worth \$2–\$4 billion for arms purchases.⁷⁸ According to the U.S. Arms Control and Disarmament Agency, the value of arms transfers to Egypt in 1983–1987 came to some \$7.8 billion.⁷⁹ Debt forgiveness also played a significant role. A ten-year moratorium imposed by Sadat in 1977 on repayment of \$4 billion in military debt to the Soviet Union relieved the MOD until 1987. Egypt then renewed the suspension, despite receiving an additional \$340 million in Soviet assistance in 1983–1987, finally settling all its military and civilian debts to Russia in 1994.⁸⁰

U.S. military assistance initially cost Egypt up to \$600 million annually in capital and interest repayments, but it gained similar relief when the United States converted its assistance into grants after 1984.⁸¹ The U.S. additionally wrote off \$7.1 billion in military debt in 1990 to reward Egyptian support for the U.S.-led intervention against Iraq in Kuwait.⁸² The U.S. Navy moreover paid above the standard fees that all military ships transiting the Suez Canal must pay, throughout this period and until the present.⁸³

In parallel, \$17 billion in Western nonmilitary aid that flowed to Egypt in 1974–1980 went partly into large capital infrastructure projects, including the reconstruction led by the MOD of cities and infrastructure in the Suez Canal zone and elsewhere.⁸⁴ The MOD is known to have implemented other development projects such as land reclamation using foreign aid in this period, setting a pattern that continues today. It also generated income by renting docking space at seaports to foreign companies bringing heavy machinery or cement into the country, or by requiring them to upgrade port facilities in return for allowing use.⁸⁵

The MOD still needed disposable capital. It earned an estimated \$500 million by selling munitions from EAF inventories to Iraq during its war with Iran, but the real estate market offered a more significant source of income. Sadat set the legal stage for this one week before

his assassination in October 1981, by establishing the EAF Land Projects Agency and investing it with the authority to sell or lease EAF facilities and real estate.⁸⁶ Up to 20 percent of the agency's income was to be spent on buying armaments, but since foreign assistance covered this need, the main effect was to accelerate MOD accumulation of capital.⁸⁷

The MOD's control of land licensing and its forays into dealing have probably provided it with the most significant and lasting of all sources of disposable capital. The development of extensive military zones along the Suez Canal and to the east of Cairo following the 1967 war with Israel had the side effect of granting the MOD a large reserve of land that it could leverage. And the pattern of selling prime real estate in cities that had previously housed EAF facilities or barracks to civilian investors was also initiated under Abu-Ghazalah in the 1980s.⁸⁸

The MOD was therefore ready to take advantage of significant public infrastructure projects in that decade. A foremost example was the ring-road that was to be constructed as part of the Greater Cairo master plan launched in 1981: as Egypt researcher W. D. Dorman has documented, the MOD blocked construction on the eastern arc of the capital, where it had its own scheme to convert military zones into large urban developments (including what later became New Cairo), and where much of urban planning in the interim was absorbed into military and police housing projects.⁸⁹ The acceleration of work on desert cities, four of which were under way in the 1980s, offered additional opportunities for the MOD to extract payment for allowing use of state land. Military-affiliated bodies such as cooperatives formed by EAF officers and retirees also took advantage by seizing more than their allocated land in these new urban communities.

The Ministry of Defense's control of land licensing has probably provided it with the most significant and lasting of all sources of disposable capital.

A lasting pattern was set. As urban researcher Florian Steinberg argued, "the Armed Forces were reluctant to relinquishing land under their control, largely because these lands... are expected to yield high, speculative gains."⁹⁰ MOD resistance prompted the German development agency GTZ and the World Bank to withdraw funding for projects in the mid-1980s, as Dorman notes, but the potential gain from future commercial sales to civilian users far outweighed such costs. According to one estimate, sale of military real estate in the Suez Canal zone alone amounted to EP1 billion (then \$295 million at the official exchange rate) by 1994.⁹¹ The MOD also leased or sold land it occupied in Nasr City (a district in Cairo) for commercial and residential uses. Conversely, the MOD occasionally reclaimed real estate it had previously ceded in prime locations—such as the grounds of Egypt's principal mental health hospital at al-Abbasiyyah—to erect new buildings for its own use.⁹² The exemption of the MOD and all its affiliate branches and agencies from sales tax in Law 11 of 1991 also helped its accumulation of capital.

White Elephants: Land Reclamation and Desert Cities

EAF involvement in land reclamation and the construction of dozens of new desert cities has offered the MOD a significant source of capital over the decades. Since the establishment of the republic, successive heads of state and senior officials have believed that “horizontal expansion” out of the Nile valley and delta—where 95 percent of the population live on 5 percent of the country’s territory—is necessary to reverse overcrowding and the loss of agricultural land due to urbanization. Presidents from Nasser to Sisi have repeatedly announced grandiose legacy projects aiming to reclaim over 6 million feddans (2.5 million hectares) and engineer the relocation of 20 million or more people to nearly fifty new towns and cities.⁹³ Crucially, these endeavors require massive financial outlays, but despite draining the treasury they have consistently fallen far short of goals, making them quintessential white elephants.

Making the Desert Bloom?

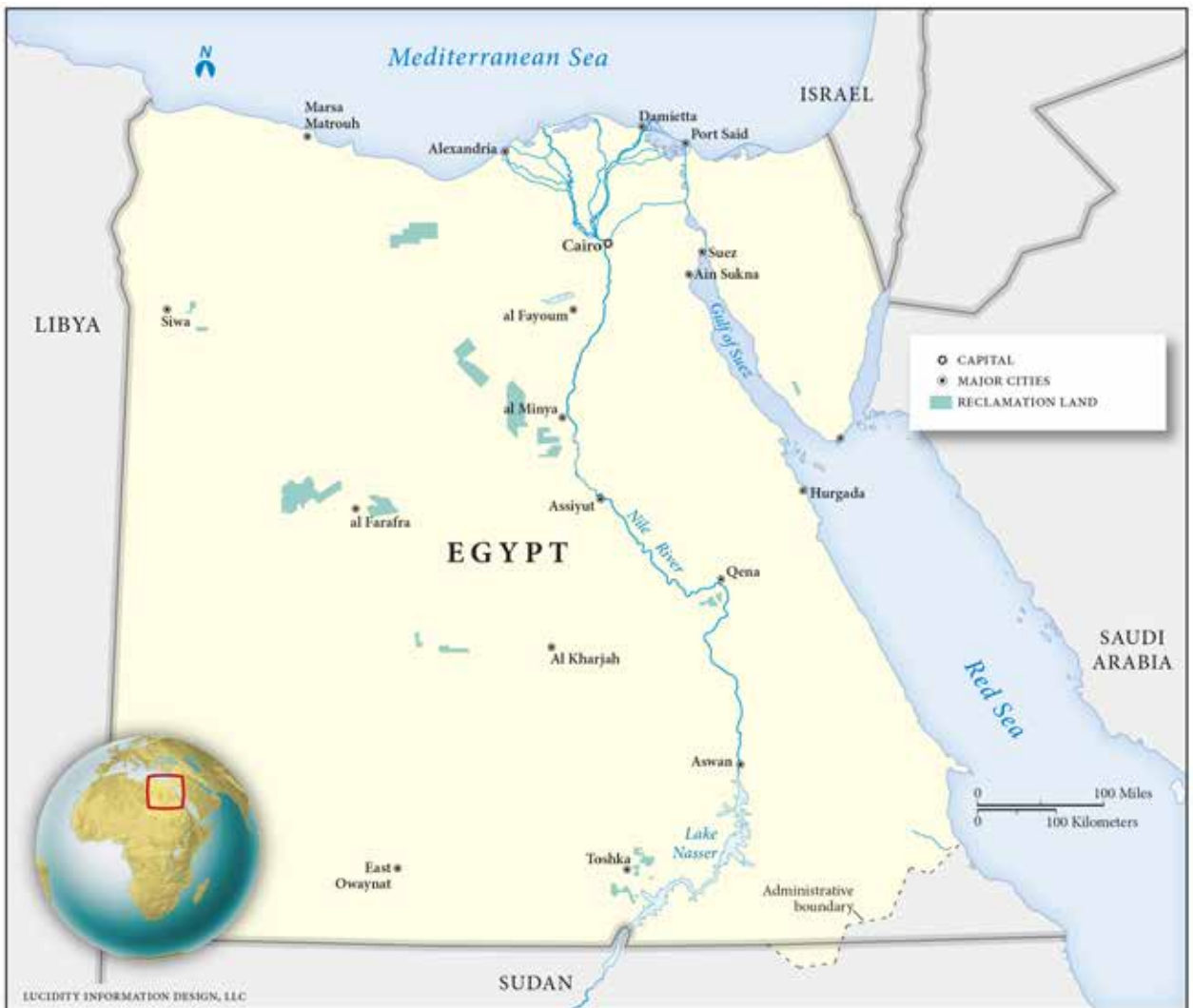
The military played a principal role from the outset and, despite a dismal record, continues to derive significant income streams from implementing or managing schemes intended to bring desert land under cultivation and construct entire cities with their associated infrastructure. The Free Officers assigned EAF engineers to undertake a technical assessment of a major land reclamation project in Tahrir Province soon after deposing the monarchy in 1952. An EAF officer was appointed to head the Tahrir Province Organization in charge of the work in 1961, and another assumed responsibility for all major land reclamation schemes in 1965.⁹⁴ But these efforts were hobbled by poor soil analysis, low drainage, or high salinity; excessive application of irrigation water; improper maintenance of canals; and very high costs generally—as they still are.⁹⁵ By 1970 only one-third of reclaimed land produced anything, prompting a halt and deterring Western donors from providing support when the government relaunched a reclamation project in Nubariyyah in 1977.⁹⁶ The EAF went ahead anyway, but the project again suffered waterlogging and salinization.⁹⁷

Robert Springborg noted that continuing investment in these schemes reflected “the development of a powerful institutional interest group of former military officers in the land reclamation bureaucracy.” This “provided a real bonanza” during the Nasser era and beyond, as

branches of the civil service and public sector with responsibility for reclamation and utilization of reclaimed land, including the Tahrir Province Organization, the General Organization for Desert Development, and the General Organization for Land Reclamation, were liberally stocked with officers....Who not only had an interest in pressing the government to reclaim ever increasing amounts of land, but also to retain the land under state control, for most of the reclamation companies and public sector organisations under the Ministry of Land Reclamation also had responsibilities for farming the land once it came under the plough.⁹⁸

MAP 3

Land Reclamation Areas



John Waterbury separately observed that EAF officers approached the task in the form of a “military campaign,” in which “there was no agricultural strategy, just the [Aswan] dam and land reclamation.”⁹⁹

Written in 1979 and 1983, Springborg’s and Waterbury’s observations remain true. Major land reclamation was suspended in 1980 (as was U.S. Agency for International Development funding), but it resumed after 1990 (along with support from the International Fund for Agricultural Development) as massive population growth drove urban expansion and loss of prime agricultural land in the Nile valley and delta. The NSPO took on the sizable East Owaynat project in 1998, but a year later the government revived a much larger plan (originally drafted in 1985, and shelved) for two mammoth projects to cultivate desert land, build six new cities, and develop four free-trade zones. Between them, the South Western Development (Egypt’s Southern or New Valley) and northern Sinai Development Projects—known as Toshka and Salam respectively—sought to reclaim 1.4 million feddans (588,000 hectares), create 3.6 million job opportunities, and resettle between 3 million and 6.3 million Egyptians over thirty years. Ultimately, the aim was to disperse the country’s population over 20 percent of its landmass compared to 5 percent, and to help increase the total arable area by up to 44 percent by 2017.¹⁰⁰

Crucially, the EAF and MOMP were made responsible for planning and excavation for the new projects. But both stalled: Salam lacked water resources and failed entirely at a cost of “billions,” according to the head of the North Sinai Investors Association, leaving water lifting and pumping stations that had already been constructed in Rafah dilapidated due to non-use; and Toshka was effectively suspended by the mid-2000s due to poor planning and equally inept management.¹⁰¹ Besides, only 3 percent of the 2.8 million feddans estimated by the government to be reclaimable nationwide at the start of the work was first-class and only 20 percent second-class—the remainder comprised coarse and gravelly sandy soils and loams of lower utility.¹⁰² But the state budget has continued to make annual allocations to these and nearly a dozen other, smaller reclamation projects ever since. Despite six and a half decades of land reclamation efforts, and even after a canal was constructed to connect Lake Nasser to a number of oases, the cultivated area of Egypt increased by only about 15 percent between 1947 and 2018.¹⁰³

These white elephant projects have resulted in significant losses for the public purse. The General Authority for Reconstruction Projects and Agricultural Development owed its principal stakeholder, the state-owned National Investment Bank, EP23.5 billion (\$3.59 billion) by 2011.¹⁰⁴ According to its head, Major General Magdy Amin, the authority was itself owed EP15 billion by various private and public sector companies as of 2013.¹⁰⁵ Typical of these was the Ahmad Orabi Land Reclamation Cooperative, whose members were mainly EAF retirees and reportedly did no agricultural work; meanwhile, scores of desert villages constructed by the New Urban Communities Authority (NUCA) remained mostly uninhabited.¹⁰⁶ And in 2014, subsidiaries of the public sector Holding Company

for Land Reclamation owed EP4.8 billion to the tax authority, banks, insurance companies, and other creditors.¹⁰⁷

Undeterred by these failures, dubious land quality, and prohibitive costs, Sisi made reclamation a pillar of the economic road map he announced during his electoral campaign for the presidency. In April 2014, he promised to reclaim a total of 1 million feddans (630,000 hectares) within a mere two years.¹⁰⁸ He later raised this to 1.5 million feddans, and stated that it was just the first phase of a 4-million-feddan target. Sisi also revived the Toshka project, even though it had still delivered only 10 percent of its goals by 2012.¹⁰⁹ Its original cost estimate of EP6 billion (then \$1.76 billion) in 1999 was believed to have reached as much as \$70 billion by 2015, although as usual dependable accounts and credible data are hard to come by.¹¹⁰

Revival of massive land reclamation schemes dovetailed with the effort to woo Gulf investors back to Egypt. Several individuals and companies had previously leased large tracts of land earmarked for agriculture in the Mubarak era, but faced legal challenges after the 2011 revolution on the grounds that they had diverted use from cultivation to real estate development. “Mega farms” in Toshka were advertised during the high-profile economic development conference held in Sharm el-Sheikh in March 2016, for example.¹¹¹ Additional investments continued to be made, with the Council of Ministers allocating \$1 billion to reclaim 181,000 feddans and establish a sugar factory in western Minya in January 2018, for example.¹¹² Waterbury’s wry observation in 1983 remains true: “Nearly anything can be justified in terms of ‘food security,’ and increased production.”¹¹³

Predictably, the MOD once again assumed a central role in these various schemes. In 2014, it received a government contract by direct order to reclaim 500,000 feddans in

The project’s original cost estimate of \$1.76 billion in 1999 was believed to have reached as much as \$70 billion by 2015, although as usual credible data is hard to come by.

the Paris and Farafra districts of the New Valley, to which the UAE pledged \$1.3 billion. To cut labor costs, which are generally estimated to account for half or more of the cost of reclaiming land, the EAF planned to use conscripts and local farmers.¹¹⁴ The NSPO meanwhile undertook a pilot project to reclaim 10,000 feddans, while the EAF Engineering Authority would construct two model villages.¹¹⁵ The MOD has worked closely since then with the General Authority for Reconstruction Projects and Agricultural Development and the Holding Company for Land Reclamation, both of which were headed by EAF retirees, and with the Egyptian Countryside Development Company, a new holding company formed by the government in late 2017.¹¹⁶ And when Sisi expressed dissatisfaction with the pace of implementation of the 1-million-feddan project in May of the same year, he warned that he would instruct the EAF and police to take back land that was not in agricultural use.¹¹⁷

Desert Cities, Dead Capital

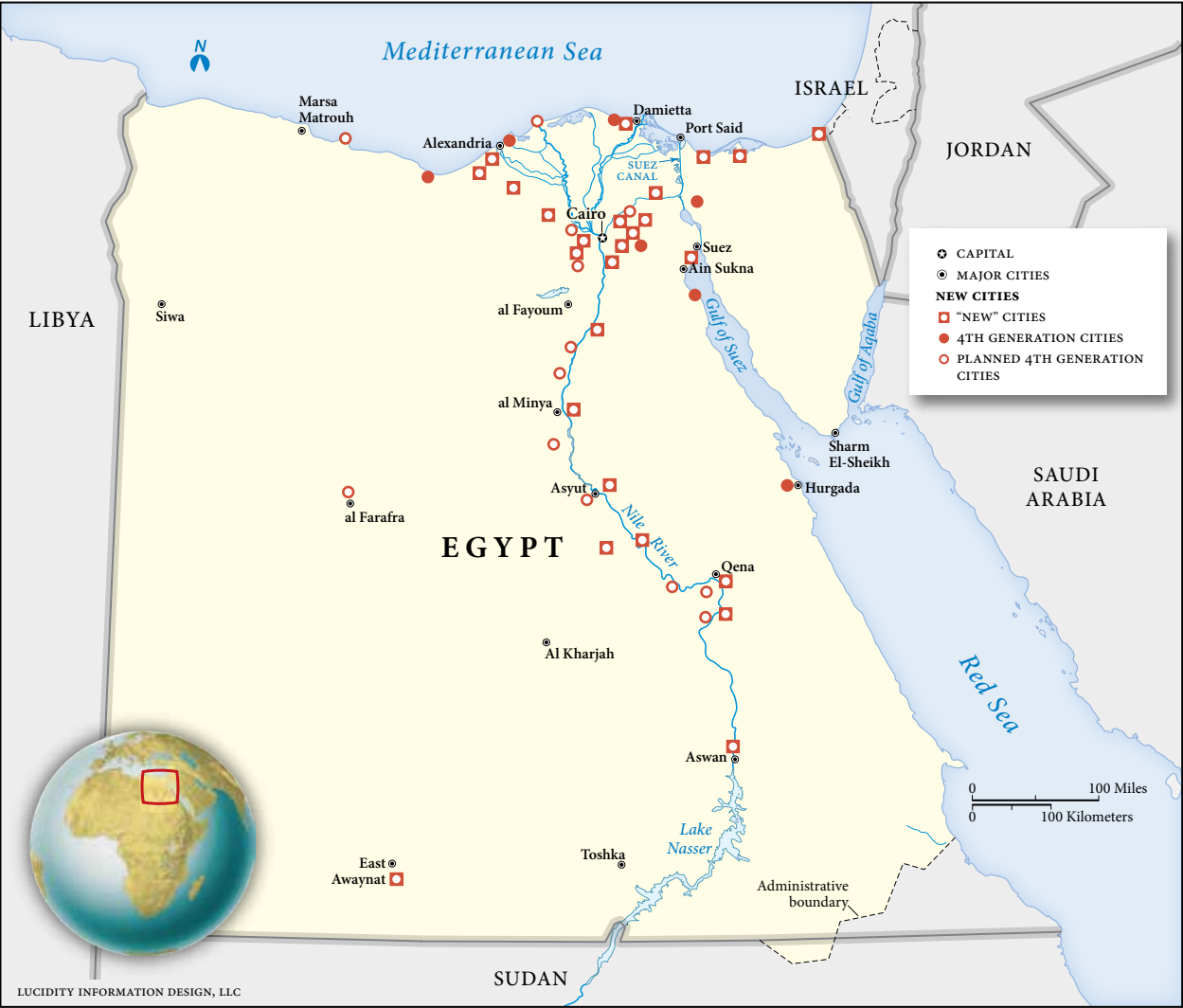
Sisi's 1-million-feddan project was part of a grandiose scheme to build forty-eight new cities and eight airports, taking the overall cost to an estimated \$140 billion.¹¹⁸ This was the latest in a long succession of schemes since at least the early 1960s, when planning started to move surplus population from Cairo to four satellite cities that would be built for this purpose in adjacent desert areas.¹¹⁹ Sadat relaunched the effort in 1974, and established NUCA in 1979 to see it through.¹²⁰ Official data issued by NUCA has been inconsistent, but the targets it published in 1997 and 2004 showed that it aimed to build between 41 and 44 new towns and cities with a population of 6.7–6.8 million.¹²¹ However, urban planning consultant David Sims has used figures published by the Central Agency for Public Mobilization and Statistics (CAPMAS) to show that the twenty-three towns and cities built by 2006 had a collective population of only 783,000, instead of what he calculated was the official target of 20.6 million.¹²² NUCA claimed to have taken the total number of cities built to twenty-seven with a population of 5 million by 2011, but the fact that the Toshka project was originally supposed to attract between 4 and 6 million inhabitants alone revealed how far short these desert cities were falling.¹²³ The authority also stated that it expected to reach a total relocated population of 17 million by 2022, after completing another five planned cities, but industry specialists observed they had once again “failed to attract anywhere close to the numbers of new residents expected” by 2019.¹²⁴

Indeed, Sims concluded in 2017 that “not a single proclaimed desert development target has been met, and most are several orders of magnitude out of sync.”¹²⁵ In all the new cities “especially around Cairo,” he noted, “housing and real estate ventures (both public and private) ... remain stalled, vacant or unexploited for years—no returns, not recirculated, and have little or no utility value.” A few first-generation new communities such as 6 October and New Cairo—the first of which hosts EAF officer housing, while the second was built on land leased from the MOD—have filled up since 2015 as the focus of real estate development has shifted toward the nearby new administrative capital project, but previously had attracted only about one-quarter of their targeted populations.¹²⁶ Overall, according to Sims, the population of all new cities accounted for only 3.8 percent of Egypt's total population increase, or roughly one-third the rate needed to start reversing overcrowding.¹²⁷

The result is what economists call dead capital on an extensive scale. In 2016, the Central Accounting Organization estimated total losses to Egypt arising from corruption, mismanagement, and lost income relating to new urban communities at EP880 billion (this covered a six-year period of repeated currency devaluations, so a dollar conversion is impractical).¹²⁸ The accuracy of the methodology used was questionable, but even if sharply discounted the findings indicate major problems. Yet heads of the Egyptian state and powerful institutional actors have persisted for over six decades in reclaiming land and building cities in desert areas. One reason is that “large segments now have important stakes—not just corporate elites but also government employees and small investors and millions working

MAP 4

New Cities



LUCIDITY INFORMATION DESIGN, LLC

in the Gulf.”¹²⁹ As if to confirm this, the “Egypt Property” roadshow organized by Tawasol for Public Relations, a subsidiary of Falcon Group International, a private security firm with close ties to Military Intelligence, pitched the three exhibitions it held in 2017–2019 to Egyptian expatriates in the United Arab Emirates and the United Kingdom.¹³⁰

But as important are the military interests embodied in white elephant schemes, which Springborg identified several decades ago. For example, the more successful new industrial zones have centered on Alexandria, Port Said, and Ismailiya, where the military economy already has multiple, overlapping investments and public works contracts. Planned cities outside the Nile valley and delta were developed as standalone clusters, an analyst working for the American-Egyptian Chamber of Commerce noted in 2016, with little thought given to public transport or existing railroads.¹³¹ But this has offered military economic agencies opportunities to undertake massive road construction contracts that connect Cairo and other main cities with these investment areas, including EAF-managed land reclamation schemes, but that serve no other purpose. With these exceptions, however, what is most noticeable about the spatial distribution of existing new cities and those planned until 2052 is that only two may properly be said to lie in desert areas; about half a dozen are pitched as coastal idylls for the affluent, with all the rest lying on the edge of the Nile valley or in the delta.

The same is true of water supply and waste treatment, both sectors in which the MOD and MOMP and their affiliates are active.¹³² Most of the land reclamation schemes and desert cities rely on carrying water in canals across hundreds of kilometers or on extraction from underground aquifers, a significant portion of which are nonrenewable. Toshka depended on lifting billions of cubic meters from Lake Nasser in a 240-kilometer canal, for example, while the Salam scheme in Sinai depended on transporting water from the Nile through tunnels under the Suez Canal.¹³³ Conversely, Sisi’s 1-million-feddan scheme takes 88.5 percent of its water needs from underground sources and only 11.5 percent from the Nile River.¹³⁴ In 2015, the government allocated EP6 billion (\$692 million) to drill more than 5,000 wells in the Western Desert to tap into aquifers, much of it implemented or managed by the EAF’s Engineering Authority in what national media dubbed a “miracle that will irrigate 7 million feddans.”¹³⁵

An additional problem lay in the heavy cost of pumping water to elevated locations such as Toshka or remote locations such as Sinai. Building a pumping station for this purpose in 2005 came to \$436 million, besides a projected cost of EP4.5 billion to construct the main carrier canal and branches; with fuel costs, the outlay of delivering water alone came to EP11,100 per feddan.¹³⁶ Nonetheless, Sisi’s relaunch of work in Toshka as part of his 1-million-feddan scheme gave new impetus to military business such as the AOI’s Kader factory, which manufactured water pumps for Toshka in 2016 and imported other irrigation equipment at a cost of some EP500 million a year later.¹³⁷ And as a former World Bank director for Egypt notes, even after incurring the costs, improving soil quality sufficiently to grow a simple grass cover could take five years or more.¹³⁸

Diversification and Synergy

Parallel to land reclamation and water carrying schemes, the MOD undertook a widening and increasingly diverse range of government-funded construction and management projects from the mid- or late 1990s onward. Like any big company accumulating capital, business know-how, and market access, the MOD moreover sought synergies between its different arms and activities. The EAF Engineering Authority and Works, Megaprojects, Water, and Survey Departments constructed highways and bridges, sanitation or water treatment facilities, and social housing; undertook or oversaw urban slum development; delivered other public works (such as stadiums, bakeries and slaughterhouses, schools, clinics, leisure and social centers, and government facilities like courthouses); and removed unlicensed encroachments on the Nile River and ancillary irrigation canals or ditches and on desert lands, especially around land reclamation schemes and new cities.

In many cases the EAF proudly labeled deliverables such as bridges as “gifts of the Armed Forces to the Egyptian people,” but most, if not all, were in fact financed by public funds.¹³⁹ The government was effectively awarding contracts to the MOD to implement or manage projects that would normally be done by civilian agencies (ministries of public works and housing, so-called general authorities and national authorities, and municipalities). EAF media have moreover not been above claiming successful commercial ventures by private sector firms in military-managed investment zones as the armed forces’ own.¹⁴⁰

Larger public works often served the MOD’s commercial interests as well, not least in food production and trade. Speaking to reporters in early 2015, for example, an unidentified military source stressed the importance of what he claimed were many Nile anchorages constructed by the EAF to stimulate tourism and trade exchange between Egypt and neighboring Sudan.¹⁴¹ Though he related this to achieving “comprehensive development” for the country, it also facilitated the import of livestock and other agricultural products from Sudan, a lucrative trade in which MOD agencies, EAF departments, and the NSPO are involved. As with other public works contracts or commercial activities, this dovetailed with companies headed by EAF retirees such as the joint stock Masria Company for Wholesale Trade, headed by a retired EAF major general, that also imports fresh meat and live animals from Sudan.¹⁴²

The MOD had already established some of the infrastructure for trade activity with the acquisition of the United Packaging Company (1995), the SEMAF railway company (2004, transferred to the AOI), and Alexandria shipyard, which builds river transport barges (2007).¹⁴³ At the start of 2014, the EAF invested EP7 billion (some \$930 million) of its own funds in linking the so-called Desert and Oases highways, serving its land reclamation schemes in the New Valley.¹⁴⁴ Similar motives may have prompted MOD involvement in 2004 in the construction of the highway to Ain al-Sukhna, originally a private seaport that has become the focal point for major military economic projects and foreign investment

in industry and infrastructure. The pattern has been replicated since then with development of the Sohag International Airport and Port of Hurghada, again along the Red Sea littoral where the EAF is extensively invested in tourism and real estate as well as in external trade. The same is again true of the development of the Alexandria salt pans and of licensing of land use and provision of infrastructure for major tourist resort development

The MOD has long used the national security argument to assert an almost exclusive right to undertake or lead development of civilian infrastructure and socioeconomic development projects in Sinai.

on Egypt's northern coast prior to 2011—with new highways added to connect them in 2015.¹⁴⁵

The focus on major publicly funded infrastructure projects in the Red Sea zone also served the EAF's strategic military deployment. The same is true of its involvement in the construction of new highways in South and North Sinai, which aid operations against the insurgency ongoing there

for nearly a decade. An Israeli study published by the Jerusalem Institute for Strategic Studies in January 2018 argued that, while new infrastructure is primarily intended for civilian development, it also reinforces the EAF's deployment capability by increasing the number of hardened air shelters and runways, protected fuel and ammunition stores, dumps, and improved road movement east of Cairo and on the Sinai Peninsula.¹⁴⁶

Whatever portion of the public works undertaken by the EAF are intended for military purposes, the MOD has long used the national security argument to assert an almost exclusive right to undertake or lead development of civilian infrastructure and socioeconomic development projects in Sinai, assuring it of continued access to public contracts. In late 2013, for example, the interim government that was formed after the military takeover allocated EP2.7 billion (then \$380 million) for development and EP527 million for housing in Sinai. The contracts were awarded—by direct order, as usual—to the EAF Engineering Authority.¹⁴⁷ In August 2015, Sisi announced that the EAF would take the lead in building new cities in the peninsula, and in March 2016 Saudi Arabia committed \$1.5 billion to finance agricultural development projects and residential complexes including hospitals and schools in the region.¹⁴⁸

Cashing in on Strategic Zones

As the preceding examples show, the MOD has been able to derive considerable income from portraying its mission and the public projects it undertakes as “strategic.” Backing this is the extensive authority it has been granted over the use of state land in wide areas of the country during the past four decades. Law 38 of 1977 already required tourism agencies to obtain MOD permission in order to operate in border areas, which included the country's coasts, a principal tourist destination.¹⁴⁹ Presidential Decree 143 of 1981 expanded this

requirement to include all “desert land,” that is, any area not previously registered in cadastral surveys as *zimag*—owned by legal persons or entities, public or private, and subject to real estate tax.¹⁵⁰ This encompassed an estimated 90–95 percent of Egypt’s total surface area.

The MOD’s prerogative regarding land use was significantly expanded by Presidential Decree 152 of 2001.¹⁵¹ This designated “strategic areas of military importance in desert land,” and set out criteria that had to be met by any civilian agency or person seeking to undertake construction or other activity—whether over or under the ground, along roads, or off the shores of seas and lakes—within the vicinity of military installations. In effect, the decree also granted the MOD discretion to designate land for commercial use.¹⁵² The location of strategic areas was to be determined by the MOD, which would also specify the distances to be maintained from their perimeters by new civilian construction, the permissible heights of structures built in the vicinity, and the technical specifications for waste-producing activities (solid, gaseous, or effluent) undertaken nearby.

Contrary to widespread assumption, these laws conferred neither ownership (*mulkiyya*) nor possession (*hiyaza*) of land on the MOD, but control of land use. Construction or development of any kind on desert land—whether residential, industrial, agricultural, or relating to services and infrastructure, either privately or publicly owned—can only be undertaken with the permission of the MOD and other ministries (including agriculture, antiquities, and petroleum). In 2006, for example, the World Bank reported the typical case of a large investor group that had been waiting for twelve years to obtain all the clearances needed to register its property; the New Urban Communities Authority, which is heavily dominated by retired EAF officers and works closely with military economic entities, also delayed the transfer of some plots of land, demanded a sharp increase of the original price, and eventually awarded the land to competing investors.¹⁵³

Crucially, although the designation of any land as a strategic area was to be ratified by presidential decree, the maps showing their precise coordinates are kept secret on grounds of national security. It is unclear whether specific areas were in fact demarcated in this way, or if the decree acts as a catch-all that may be invoked at any time and applied retroactively. This has permitted the MOD enormous leeway to claim that land for which approval is sought for a civilian venture lies in a strategic area without having to present further evidence. It is aided by the fact that a large proportion of privately owned land remains unregistered and untitled—one 2004 study estimated this applied to 92 percent of property owners—enabling the EAF routinely to take over what are claimed to be illegal encroachments.¹⁵⁴

Businessmen confirm that they have regularly been asked to donate to the EAF fund in return for receiving permission to register land or change its use since 2001, or to pay outright bribes.¹⁵⁵ Applications are often made to local EAF commanders rather than exclusively to a qualified department of the MOD—let alone from the Ministry of Trade and Industry or Ministry of Finance—creating opportunities to demand bribes, especially from smaller

businesses, but also from government ministries. Sometimes permits must be obtained from separate EAF branches: for example, the Air Force determines whether the height of structures might affect “air use.” Egyptian businessman Naguib Sawiris stated publicly during questioning over his large mobile telephone venture in 2011 that the EAF was “one of the many authorities that have to approve setting up masts.”¹⁵⁶

Coming on the eve of a massive speculative boom in real estate markets, Presidential Decree 152 of 2001 was a boon. The MOD charged for permitting private sector companies to build luxury residences and upmarket tourist resorts along the coast, for example. Urban sociologist Mona Abaza noted that in the subsequent period, sea resorts “multipl[ied] wildly all along the North Coast and the Red Sea, in spite of the countless run-down, failed resorts constructed during the past decades that look like war ruins.”¹⁵⁷ The MOD also capitalized on megaprojects such as the development of the affluent New Cairo extension of the capital, much of which was built on land held by the military and sold in opaque deals to investors and development tycoons.¹⁵⁸ The head of the MOD’s Financial Authority later claimed that it only took payment when it had to “move a battalion or find an alternative training ground for its activities,” but there is little to suggest this was really the norm.¹⁵⁹

The MOD also exploited its legal prerogative in other ways. As Egyptian journalist Ahmed Abouleinein has reported, it charges investors to verify that the land they are acquiring is free of mines and other military ordnance.¹⁶⁰ More importantly, private companies operating in remote areas after 2001, both domestic and foreign, were entirely dependent on MOD permission to bring in machinery, materials, and labor as well as food, water, and other supplies. This was especially true in high-value sectors such as oil and gas, which were almost entirely located in desert areas already allocated for military use or that could be designated as strategic.

An energy exploration company working in the Western Desert in the 2000s, for example, was compelled to contract the EAF to arrange stevedoring and customs clearance for its imports and to transport its heavy equipment, and to use the EAF’s civilian contractors as its own main suppliers of food, safety gear, and other equipment.¹⁶¹ An administrator in the company recalled that the EAF

controlled how many foreign staff we were allowed to bring in, but the liaison officer would add, say, 10 percent informally in return for under-the-table cash payments. But our big issue was low productivity of Egyptian labor, especially [during] Ramadan, so we always demanded permission for big increases in manpower—the army officer would say there was not enough labor locally, but offered his soldiers, who were far more disciplined and productive. The officer would get paid—I don’t know where the money went, but it was always in cash.¹⁶²

The same administrator had to deal with “a young lieutenant, who was more powerful than a brigadier because he was the son of a minister, who had a complete monopoly on the delivery

of any and all materials we needed for construction and so on. He was in effect a sub-sub-contractor.” Other EAF officers stationed in the area took advantage by running protection rackets, charging under-the-table fees to ensure that trucks and tankers bringing in food and water were not stopped or robbed by local clans, with whom they may have colluded.

MOD control over land use and direct access to inside information about zoning and development plans have led to other illicit practices. Officers and their families and friends have repeatedly profited from buying desert land at rock bottom prices in areas where mammoth infrastructural or residential developments are planned, and then selling once it became prime real estate. A civil servant recounted, “A military friend tried to get me to buy some land with him in the region near al-Sukhna highway known as the Fifth Grouping at 50 piastres a meter [in the early 2000s] because he knew where new roads and towns would be built,” adding “I declined, but later the value of the land rose enormously.”¹⁶³ The son of a former EAF officer was offered the opportunity to buy land in the same area “for only \$2,000 down payment; this eventually became part of a deluxe officer residential complex worth millions.”¹⁶⁴ Both Mubarak and the EAF command tolerated speculation as a means of ensuring loyalty.

“By Direct Order”: The MOD as Contractor

The award of increasingly large and ambitious public works contracts to EAF departments suggests that the armed forces has considerable capacity to design, implement, and service projects, and all to a high standard. The sheer quantity and growing diversity of projects entrusted to it or for which it claimed credit in the fifteen-odd years prior to 2013 seem to confirm this too. The EAF enjoys a very high media profile, which it promotes assiduously. But a more careful review shows that its capacity to implement this volume of public works is far more limited. Rather, it assumes the role of manager for most publicly funded projects, securing government contracts and then overseeing their implementation by private subcontractors. This is routinely justified on the grounds that the EAF assures punctual delivery and efficiency, but detailed data demonstrating cost-effectiveness has never been published. Indeed, while the EAF does deliver on time in many cases, this is mostly true of smaller projects; but several mammoth projects it manages have never been completed.

Subcontracting moreover undermines claims that the EAF delivers at substantially lower cost than domestic or foreign private sector companies, since it is generally the latter that do the actual work, for which they seek to charge market rates. The EAF has moreover only ensured punctuality by driving up costs, which it passes on to the state treasury or offsets by

The award of increasingly ambitious contracts to the armed forces suggests it has capacity to design, implement, and service projects. But a more careful review shows that its capacity is far more limited.

compelling Egyptian subcontractors (in contrast to foreign companies) to absorb losses or to work for free, even on large projects. The head of Amlaak Holdings, a medium-sized business with 500 employees, revealed the scale of this practice when he complained in August 2019 of being unable to reclaim EP220 million (\$13.3 million) from the MOD for construction work on a series of buildings including the presidential palace in New Alamein.¹⁶⁵ He also noted that his and other construction companies were not compensated for losses resulting from the devaluation of the Egyptian pound, which affected orders they had already placed to import equipment and materials, and that they had been compelled to build villas for Sisi and EAF commanders.

According to the EAF Engineering Authority, it implemented 473 strategic and service projects between 2012 and 2014.¹⁶⁶ But in the next two years up to June 2016, it reportedly undertook 1,737 projects, an increase of 367 percent.¹⁶⁷ However, of the projects that were not delivered by private subcontractors, a vast majority were small, including classrooms and clinics in rural areas or small water treatment plants and involving only basic design and execution.¹⁶⁸

More sizable projects requiring complex administrative capabilities and technical skills were assigned to private companies, accounting for the bulk of the EP7 billion (then \$1 billion) in contracts awarded to the EAF by the government in September–November 2013. This even included contracts to construct military facilities; for example, the EAF awarded the National Real Estate Bank for Development, which is headed by an EAF retiree, contracts worth EP209 million in 2012 and 2013.¹⁶⁹ Noha Bakr, assistant to the minister of international cooperation, later explained that “projects are implemented by civil subcontractors ... while the military as the main contractor has the role of monitoring and auditing the quality and time frame of the implementation.”¹⁷⁰ Then minister of local development Adel Labib confirmed this view when awarding an EP2 billion contract to the EAF to improve urban slums in Cairo, arguing this would “ensure they would be accomplished promptly and accurately.”¹⁷¹

Not surprisingly, EAF officers also regard military project management as superior. For example, Major General Mohammad Mukhtar Qandil, formerly head of the Ministry of Housing’s Central Construction Agency in Sinai, noted that government schemes in the region were typically planned hastily, with monitoring dispersed excessively among multiple ministries and governorates, and argued that management of complex schemes “should be like armies that have a command to coordinate combined services and mutual support.” He proposed that coordination “be merged into a single ministry of monitoring and follow-up as some European states do,” but it is easy to see why others view the EAF, rather than a government ministry, as the body naturally qualified for the role.¹⁷²

Even the short-lived administration of the Muslim Brotherhood bought into this discourse, at least outwardly. When the government of then prime minister Hesham Qandil allocated

EP4.4 billion to development in Sinai, it assigned responsibility to the EAF. This may simply have reflected pragmatic realization that the EAF would block any civilian program that did not go through it in a zone it claimed as its exclusive security domain, but in public the government cited its desire for speed and efficiency, claiming it sought implementation in six to nine months.¹⁷³

Again, the actual record is considerably more mixed. In the early 2000s, arguing that the EAF could deliver at half cost, then minister of defense Field Marshal Mohamed Hussein Tantawi wrested the contract to construct the Ain al-Sukhna highway from the Spanish company to which it had been awarded. But this reasoning overlooked the EAF's access to virtually free conscript labor, exemption from customs duties on imports, state subsidies on fuel and energy, and tax-free status.¹⁷⁴ The net savings to the public purse were unproven, and likely to be modest at best if not negative. Yet this argument has been made countless times since then to deflect inspection of military claims, let alone project books.

An Emerging Management Role

The sharp upswing in the scope and scale of contracts awarded to the MOD after July 2013 similarly disregarded real economics and performance. This was evident in the effort to tackle Egypt's acute housing crisis, for example, where between 15 and 50 percent of the population are estimated to live in *ashwaiyat*, informal housing including squatting on public or privately owned lands and unlawful urbanization of agricultural lands, without basic infrastructure or public services.¹⁷⁵ The housing shortage was estimated at 3.5 million units in 2014, and growing by 250,000 units every year.¹⁷⁶ According to the head of the EAF Engineering Authority in 2011, Major General Kamel al-Wazir, then SCAF head and acting president Tantawi ordered "all sixty civilian companies belonging to the EAF to implement housing projects" in recognition of the seriousness and extent of the problem. Kamel said that Tantawi reasoned that "since the EAF is not busy with the main task of waging war, it can devote itself to other things in peacetime... this additionally offers advanced, realistic, and practical training for the army's Engineering Authority that specializes in these tasks."¹⁷⁷

Political factors, not performance, determined awarding major contracts to the armed forces, which anchored the new regime. Sisi depended on them to deliver badly needed economic goals and underpin his policy initiatives.

The government's previous track record in delivering new housing was poor, but the MOD quickly found itself in a similar position. A mass housing scheme launched by Mubarak during his reelection campaign in 2005 delivered less than half its target of 1 million units over the following six years, for example.¹⁷⁸ In 2011, the Ministry of Housing's Central Construction Agency, which is heavily

dominated by retired EAF engineers, undertook to build 1 million social housing units in five years; the MOD committed to build 20,000 units, and announced a donation of EP2 billion (\$336 million) to the scheme from its own funds.¹⁷⁹ Noticeably, the EAF did more than commit to build housing; it additionally coordinated pricing with the Ministry of Housing.¹⁸⁰

Similar political calculations prompted Sisi to announce in March 2014 that the MOD would cooperate with the UAE's Arabtec construction company to build 1 million residential units—partly aimed at youth and low-income groups—at a cost of \$40 billion over five years.¹⁸¹ The official military spokesperson boasted that businessmen had “answered the call of the army” to invest, and the “whole budget was already covered.”¹⁸² The claim was specious, and these schemes again proved overly ambitious.¹⁸³ Arabtec withdrew due to disputes with the EAF over the proportion of housing for low- and middle-income groups and over profit-sharing. According to an insider business source, “Arabtec apparently balked at EAF demands to hire Egyptian labor and buy Egyptian materials.”¹⁸⁴ Arabtec was replaced by the Ministry of Housing, which lacked the funds to proceed. Meanwhile the EAF fell short on its smaller contracts. It was committed to build an additional 150,000 government-funded social housing units,¹⁸⁵ but by the start of 2015 had completed only 7,500 and started work on another 50,000 (with separate UAE funding), none of which had been delivered to intended beneficiaries.¹⁸⁶

Clearly the EAF would have been incapable of averaging the 200,000 units a year needed to meet the Arabtec project targets had it gone ahead or, if it had, of remaining within budget. But political factors, not performance, determined awarding major contracts to the EAF. The armed forces anchored the new regime that took form after July 2013, and Sisi depended on them more heavily than on any other state agency or element of his ruling coalition to deliver badly needed economic goals and underpin his policy initiatives in other domains.

Reflecting this overriding goal, the interim government of then prime minister Hazem el-Beblawi awarded contracts by direct order to the MOD worth over EP7 billion (\$1 billion) by November. The MOD also managed projects from nongovernment sources. The Federation of Egyptian Banks stated that its members had spent approximately EP1 billion on slum development between 2011 and 2014, and allocated a further EP300 million in 2014 for projects to be handled by the EAF Engineering Authority under the supervision of businessman Hussein Sabour (who had overseen U.S. foreign military funding to Egypt in the 1980s and 1990s).¹⁸⁷ The EAF also found itself managing projects funded at least in part by foreign aid agencies, replicating the pattern established in the 1980s; for example, the World Bank extended Egypt a \$500 million loan for social housing projects in 2015.¹⁸⁸

Further contracts followed in rapid succession. According to one account, by the end of 2014 these included over EP4.7 billion (\$660 million) for maintenance of roads and bridges, EP3.2 billion for development and housing in Sinai, EP2 billion for slum regeneration,

and some EP960 million for assorted building projects including hospitals, schools, bridges, traffic lights, bakeries, and administrative centers—nearly EP11 billion (\$1.53 billion) in total.¹⁸⁹ This was besides projects for national highways and roads in new cities—again awarded by direct order—with a total value of EP14.76 billion (then just over \$2 billion)—bringing the cumulative value of all public works contracts to the EAF to date since July 2013 to EP25.7 billion.¹⁹⁰ Amendments to Law 89 of 1998 on bids and tenders decreed by interim president Adly Mansour in June 2014 reinforced the trend by raising the threshold for government agencies to award contracts without open bidding, preventing third-party legal challenges to public contracts, and effectively releasing the MOD, AOI, and MOMP and their affiliated agencies, departments, and subsidiaries from any preset thresholds.

The Suez Canal: A New Economic Horizon

The amendment of Law 89 turned the MOD into a principal economic broker in its own right. This was demonstrated immediately when Sisi announced a plan to expand the Suez Canal in August. The expansion will be discussed in Chapter 6, but the canal zone had already long been a sinecure for the military, which has consistently used the national security argument to assert a deciding say in any civilian activity undertaken in a wide corridor on either side of the canal. Retired Navy admirals have for decades headed the Suez Canal Authority (SCA), and dominate its subsidiary agencies and companies and a majority of the forty-three ports along the 2,420 kilometers (1,512 miles) of Egypt's coastline.¹⁹¹ Service and support facilities for transit shipping moreover provide secure contracts for MOD-owned facilities such as the Alexandria shipyard, as well as for numerous private companies with military ties. Last but not least, the MOD is believed to levy an off-the-books percentage from the canal's income from international shipping fees, which averaged between \$400 million and nearly \$500 million a month in 2014–2019.¹⁹²

This is why the MOD objected vehemently when then president Morsi announced the launch of a Suez Economic Development Corridor project in March 2013, building on long-standing proposals to develop the zone and attract foreign investment. The fact that he had not consulted the ministry beforehand, coupled with the swiftness with which he initialed agreements with India to invest in the corridor and other sectors, alarmed the military.¹⁹³ His plan to expand the 193-kilometer-long zone to include the Gulf of Suez moreover prompted accusations that he intended to create an independent “Suez region” that would be attached to Sinai and eventually separated from Egypt.¹⁹⁴ This was pure fabrication, but Morsi's creation of a new authority attached to the presidency to oversee the whole enterprise credibly threatened to sideline the SCA and challenged the MOD's effective suzerainty in the canal zone.

The MOD's first response was to warn publicly that it would not permit the project to proceed without its review and approval, nor allow use of land designated for military purposes. Other land in the zone could be used (*intifa*), but not sold, if it did not affect national

security, and any contracts reached with foreign companies would have to exclusively come under Egyptian, not international law.¹⁹⁵ Ostensibly, the MOD was merely upholding the 1981 and 2001 presidential decrees on desert land and strategic areas, and acting “to ensure that the national security of the state is not harmed.”¹⁹⁶ But as political scientist Shana Marshall has noted, the EAF aspired to turn the canal zone into “a major logistics hub and center of heavy manufacturing” of its own, and to contract military companies to construct and equip industrial and energy-generating projects and provide services to shipping.¹⁹⁷

The EAF moved swiftly to protect its stake. It publicly reasserted its authority to determine policy and regulatory frameworks in the canal zone and then proposed draft implementation statutes for the law establishing a new Suez Canal Development Authority.¹⁹⁸ These limited permissible development to areas in which existing projects were already being implemented, required 55 percent Egyptian ownership in joint ventures operating in the zone, and made new projects subject to cabinet approval. The latter clause effectively enabled the MOD to veto anything that threatened what it deemed in the national—and therefore its own—interest.¹⁹⁹ The MOD also refuted the president’s power to designate use of state land within the proposed authority’s jurisdiction, while explicitly denying the latter control over “land in strategic areas that has military importance and land designated to or owned by the MOD and its agencies.” For good measure, the draft added the heads of the National Agency for Development of Sinai—headed by a former EAF general—and National Center for State Land Uses—by law, headed by a MOD appointee and therefore always a general—to the authority’s governing board.²⁰⁰

A partial retreat by the Morsi administration seemed to resolve the dispute, and in mid-May 2013, members of the Supreme Council of the Armed Forces declared that the revised development plan satisfied national security needs.²⁰¹ But the EAF had already reached the conclusion that it could not coexist with the Muslim Brotherhood in March, suggesting that in its view the dispute over the Suez Economic Development Corridor had been the last straw.²⁰² It ousted Morsi on July 3, and Sisi was elected president in May 2014; on August 5, he assigned management of the Suez Canal expansion project to the MOD.

MINISTRY OF DEFENSE: THE HEART OF MILITARY INC.

EAF operational departments and the NSPO are clearly more significant in terms of economic scope and scale, but other MOD agencies also serve an additional, if secondary, income-generating role. Much of their operation revolves around procurement of military needs—from food and gear to weapons and other combat equipment—an area identified by Transparency International’s Government Defense Anticorruption Index as being at “critical” risk of financial fraud.²⁰³ The MOD also owns a few companies that it has sought, somewhat inconsistently, to promote commercially, in addition to shares in a number of civilian companies. MOD agencies and companies moreover reveal the related role

of informal officer networks embedded in these agencies and in many of their public sector civilian counterparts, through which insider information is exchanged and private profits are assured.

Services Agencies

Then president Sadat signaled the economic function of MOD agencies by establishing a General Economic Company of the Armed Forces in 1977.²⁰⁴ However, it remained inactive until April 1981, when its workforce and assets were transferred to the newly created General Services Agency (GSA) that had the task of providing “all economic services at appropriate prices to EAF units and personnel and their families.”²⁰⁵ At some point in the 1990s, the GSA was designated as an “economic general authority” in accordance with Law 11 of 1979; this made its budget independent of both the general state budget and the defense budget, but most importantly allowed the GSA to cover its deficits and receive additional transfers directly from the state treasury.²⁰⁶

The GSA helps maintain the support of EAF personnel and their large social constituency for the incumbent administration. It runs consumer cooperatives (military commissaries) under the “Sun” label, comprising twenty malls, seventeen supermarkets, and six branches countrywide as of 2019 (EAF branches run an additional fifty-five).²⁰⁷ Active, reserve, retired, and honorary EAF personnel as well as conscripts and civilian employees of the defense sector may use discount vouchers to buy domestically produced and imported goods—the latter already subsidized by virtue of being exempt from customs duties.²⁰⁸ Its starting budget of EP45 million in 1982 passed the EP500 million mark in the 2010–2011 fiscal year.²⁰⁹ Reflecting its political importance, the GSA’s budget was increased by almost 50 percent following the military takeover in July 2013, going from EP679 million (\$98 million) in the 2013–2014 budget that had been approved by Morsi before his ouster to EP1 billion in 2014–2015.²¹⁰ As the Egyptian pound devalued over the next two years, the budget inflated to EP2 billion for 2016–2017.²¹¹

The Ministry of Defense’s Logistics and Supply Authority is involved in the purchase and distribution of basic commodities, especially food, mostly for the armed forces but also for civilian markets.

The MOD’s Logistics and Supply Authority is also involved in the purchase and distribution of basic commodities, especially food, mostly for the EAF but also for civilian markets. It fulfils EAF needs of food and bread, transport and fuel, uniforms and personal gear, publications, medical services, veterinary services, and firefighting and rescue services.²¹² Boundaries are blurred between the authority and the NSPO, as MOD officials and EAF commanders commonly credit both with the same activities. These include food production and packaging, as well as running military bakeries.²¹³ Both the General Services Agency

and the Logistics and Supply Authority have imported basic food commodities—such as meat and poultry, sugar, and rice—when hoarding by civilian traders and price rises have generated shortages in domestic markets.

The Logistics and Supply Authority has also expanded income-generating activities in its own right. Its Publications Department was expanded to launch commercial operations as early as 2001; in early 2016 it competed directly with local small businesses by opening a large modern printing press in Ismailiya.²¹⁴ It probably generates more lucrative income from the procurement and sale of food, equipment, and services such as handling and transport. It may also be the MOD agency in charge of the sale of meals and other needs to EAF personnel at canteens on military bases or from the food trucks that serve conscripts working on military farms and other sites and, occasionally, the workers of civilian contractors employed on EAF-managed public works projects.²¹⁵

Most notable in the public domain, however, is the MOD's Medical Services Department, which currently runs military hospitals in twenty governorates, ten cancer clinics around the country, and mobile clinics in the southern border region with Sudan. It claims to treat citizens at half the price of private hospitals, and in 2014–2015 boasted that it had provided medical care at reduced fees to 400,000 people and for free to 40,000 Sinai residents.²¹⁶ Given that medical tourism to Egypt has not been promoted actively, the main purpose is probably to maintain social support and cover the cost of the Medical Services Department, rather than to generate significant financial returns.²¹⁷

The role of the MOD's Mining Sector has also grown in recent years. Like the Logistics and Supply Authority, it overlaps considerably with the NSPO, which set up its own mining and quarrying company when it was established in 1979. MOD activity in this sector (mostly marble and granite) appears to have been subsumed under the NSPO until June 2015, at which time NSPO annual output was given as 1.4 million tons. The revised mining and quarries Law 198 of 2014 changed matters: Article 8 of the implementation statutes approved the following year stated that licenses to extract mineral wealth anywhere in Egypt, whether on state-owned or private land, could not be issued without MOD approval. Article 13 moreover awarded the ministry exclusive rights to the proceeds of extracting and processing raw materials from mines and quarries on military land.²¹⁸ This potentially includes any area designated as a military zone, which reportedly encompasses state land reclaimed by the EAF from encroachment by civilians.²¹⁹ The MOD Mining Sector moreover joins civilian authorities in these areas to adjudicate on the legal claims by local residents to land and minerals and to resolve environmental complaints.²²⁰ And by tying the MOD's jurisdiction to the activity, rather than limiting it to geographical zones designated for military use or as strategic, the revised law granted it authority over the sector everywhere in the country.

In a related move, Sisi designated a strip in Shalateen, on the southeastern border with Sudan, as a military zone in November 2014.²²¹ Significantly, the associated regulations severely restricted the right of civilian residency to the existing inhabitants, and prohibited any new civilian settlement in this or other areas of the Red Sea, Aswan, New Valley, and Marsa Matrouh Governorates in which the military has economic interests.²²² Nonetheless, the government put up 1.5 million feddans for sale to developers around several of the southern oases and land reclamation schemes in Maghara, Farafara, West Minya, and Toshka—the last of which is part of Nubian territory—in October 2016.²²³

Since the revised Law 198 of 2014 was issued, the New Valley Company for Mineral Resources and Oil Shale (Wadico)—in which the MOD is believed to have a stake—has joined a commercial consortium that exports minerals from the Shalateen area of southern Egypt.²²⁴ In parallel, EAF checkpoints, which already levied a fixed daily usage fee directly from vehicles exiting quarries, adopted a new fee structure—based on vehicles' laden weight and the number of trips—that reportedly tripled the fees and significantly increased MOD income.²²⁵

Potentially of even greater significance is the new foray by the MOD into gold prospecting, which currently accounts for 1 percent of Egyptian GDP.²²⁶ The MOD has a direct stake through the NSPO, which in 2016 held a 34 percent share of the Shalateen Company for Mineral Wealth. At that time, the company oversaw three apparently private companies prospecting for gold, with thirteen more due to start operation in 2017, and additionally bought gold from local prospectors at 20 percent of its market price.²²⁷ The MOD also had an indirect stake in the sector: Shalateen Company was headed by retired Major General Mohamed Gaballah Talkhan, while Red Sea Governor Major General Ahmed Abdullah and the head of investment in the governorate, Major General Salah al-Gamal, were involved in the July 2016 launch of what was billed as the first “Egyptian international city for gold and mining” at Marsa Alam.²²⁸

MOD Companies and Investments

The Maritime Industries and Services Agency is the most recent addition to the MOD's economic portfolio, having been established in 2003. Although a military department, it had the legal framework of a public sector holding company in all but name: it was empowered to form joint ventures with domestic and foreign companies, retain a percentage of the profits of its subsidiaries in return for its oversight and management, and raise loans against these assets or its equity in joint ventures.²²⁹ Its initial capital was secured by transferring the assets of the Egyptian Ship Building and Repair Company to it.

The record of the Maritime Industries and Services Agency reveals the questionable economic claims and commercial assumptions on which the sector is based. This was especially visible in the Alexandria shipyard (ASY), which was transferred to the agency's ownership

immediately upon its establishment.²³⁰ The shipyard was exempted from the remit of health and safety legislation issued in the same year (along with fifteen facilities belonging to the MOMP).²³¹ As Shana Marshall has noted, the ASY offered a means of securing technology transfer, constructing new facilities, importing capital equipment, and training personnel.²³² In 2011, the Egyptian navy renegotiated a \$13 million contract to build four patrol craft at the shipyard instead of purchasing them directly from U.S. firm Swiftships; Egyptian participation in assembly and production raised the cost to \$20 million. Three years later, the ASY won a similar co-production agreement to assemble three French Gowind-class corvettes.²³³

An expectation of commercial gain also motivated the MOD to acquire the shipyard. The ASY had incurred annual losses of some EP50 million (\$15 million) until 1997, but was expected to be worth around EP5 billion following an upgrade to prepare it for privatization. Officials hoped to make Alexandria the port of call for any of the 16,000 ships passing through the Suez Canal every year that required repair or maintenance.²³⁴ A decade later, Egyptian Navy commander Major General (Admiral) Osama al-Guindi gave a grand spin on the MOD's vision by calling for "the military and civilian sectors to unite, in cooperation with the maritime chamber and ... owners of ships and maritime agencies, to elevate this industry that can give a strong boost to the Egyptian economy and world trade."²³⁵

There was a definite commercial opportunism in the MOD's entry into the maritime sector. As political scientists Joshua Stacher and Shana Marshall noted, the Egyptian government's publication of a 2001–2017 master plan to liberalize the sector prompted an "investment stampede" that left the world's largest maritime conglomerates holding majority shares in Egyptian maritime companies, in which the MOD retained the minority.²³⁶ The Maritime Industries and Services Agency expanded in the meantime: the Egyptian Ship Building and Repair Company continued to operate as a distinct entity, but the Triumph Shipping Company was established in 2009 and the Nile General Company for River Transport was acquired from the public sector the following year.²³⁷

But none of these commercial aspirations were fulfilled, despite the boast that "the shipyard attained profitability for the first time in its history" while Admiral Hussein Ahmed Sennarah headed it in 2000–2007.²³⁸ Productivity remained especially low. According to the timeline on its own website, the Alexandria shipyard had built a lifetime total of twenty ships with a total capacity of 188,840 tons between 1972 and 2010 (besides forty smaller oil and water tankers, tugs, and river barges), although it also claimed to have built in excess of thirty-five commercial (goods) ships.²³⁹ Other sources put its output at 300,000 tons by late 2017, but even this barely exceeded the displacement of a single supertanker on the high seas. Along with the smaller Port Said shipyard, the ASY moreover spent nearly two, five, eight-and-a-half, and eleven times as many worker hours per ton of shipping steel as their counterparts in China, South Korea, Spain, and Japan respectively.²⁴⁰ Revealing its lack of work, the ASY manufactured steel tanks for a local sugar beet processing factory.²⁴¹

The ASY also appears to have underperformed even in relation to its defense output. In 2016 it faced looming penalties for failing to meet its delivery schedule for Gowind corvettes, prompting the MOD to draft military high school students to replace shipyard workers who had gone on strike. Two years later, the French Naval Group that had designed the Gowind entered talks to build further vessels in the UAE or Saudi Arabia, indicating that the ASY was not to be integrated into its production chain.²⁴² And in December 2018, the Naval Group inaugurated an Egyptian subsidiary—Alexandria Naval for Maintenance and Industry—to maintain the Gowind vessels in Egyptian Navy service—again a task the ASY should have been in a position to undertake.²⁴³ Possibly in recognition of these difficulties, the MOD’s maritime industries and services sector commissioned the Industrial Modernization Center, a quango funded jointly by the government and the European Union to promote public-private partnerships, to improve and modernize the ASY’s capabilities.²⁴⁴

The ASY was far from being “one of the largest castles of heavy industries and leader of the shipbuilding and repair industry in Egypt and the Middle East,” as it boasted.²⁴⁵ Indeed, given the chronic underperformance of these maritime companies, it is possible that the MOD acquired them as a means of writing off losses on its books, as much as of maintaining industrial capacity and Navy support capability. Buying public sector companies allowed the MOD to capture whatever revenues they made, while shifting their losses onto the state treasury, a ploy originally developed by public sector businessman and presidential crony Osman Ahmed Osman in the 1960s and 1970s.²⁴⁶

The MOD as Hub: Officer Networks

The murkiness of MOD accounts obscures both the full extent of the officer networks that straddle MOD agencies, other state bodies, and civilian companies (especially public, but also private) and the volume of illicit income they derive from their bureaucratic position and privileged access. This is most obvious in relation to licensing use or re-designation of state land, for which corrupt officers are known to solicit considerable under-the-table payments—from public sector companies and government ministries (such as Housing), as much as from private businesses. How much the MOD earned in official fees is not known, but a joint report published by the Administrative Monitoring Authority and the Central Accounting Organization (CAO) in 2015 estimated the cumulative cost of corruption, encroachment, and mismanagement or undervaluation of state land, to which EAF officers contributed, at EP440 billion.²⁴⁷

Procurement is the other principal source of illicit income within the military, as it covers an extremely wide range of spheres and activities. It also acts as a main locus connecting MOD-linked bodies, suppliers, and officer networks. For example, successive heads of the GSA have been delegate members on the Board of Directors of the state-owned Nasr Export and Import Company. Originally established by the General Intelligence Directorate as a front to counter Israeli intelligence activity in sub-Saharan Africa, Nasr became a major

trading company in its own right in the 1960s, but then closed most of its foreign branches in the decades following the 1979 peace treaty with Israel.²⁴⁸ It is not clear when MOD interest in Nasr revived, but it now trades in many of the commodities that are either required by the EAF or produced by the defense industry and that are also sold in civilian markets, both domestic and export.

Nasr reveals much about the intermeshing of military-affiliated entities and networks. One of its trade intermediaries, the Delta Sugar Company, is a major shareholder in the United Packaging Company, which was acquired by the MOD in 1995 and employs EAF conscripts in its work force.²⁴⁹ Nasr is moreover one of fourteen subsidiary companies belonging to the public sector Holding Company for Maritime and Land Transport that are headed by a former EAF officer; the holding company itself is headed by Admiral Mohamed Ibrahim Youssef.²⁵⁰ No less significant is that two heads of Nasr's Board of Directors in the past decade were both EAF retirees and former senior officials of the AMA, Egypt's most powerful audit agency.²⁵¹

The recycling of EAF officers—especially but not exclusively retirees—through various civilian posts is common (discussed in Chapter 4). Among Nasr's board members in 2016 was Major General Ayman Salem, who had spent the previous fifteen years as head of the Egyptian Company for Retail Trade, a subsidiary of the Holding Company for Food Industries that failed to make a profit until 2014–2015.²⁵² Salem was replaced in February 2016—along with the heads of twenty-seven other subsidiaries of the holding company—for “failing to reduce losses,” but he was immediately made head of the famous Omar Effendi retail company, in addition to joining Nasr.²⁵³ And when the minister of trade and industry formed the Higher Council for Logistics and Shipping to facilitate trade through

public-private partnerships in December 2017, he brought on five former EAF officers, including the new head of Nasr, Major General Fathi Jibreel.²⁵⁴

A consequence of this veritable game of musical chairs of EAF retirees has been to obscure serial poor performance.

A consequence of this veritable game of musical chairs of EAF retirees has been to obscure serial poor performance. A glowing

report on the performance of Nasr Export and Import Company in March 2015 boasted that it had achieved “an enormous surge in turnover exceeding EP1 billion,” but Jibreel, who took over as head in December 2016, admitted frankly that the company was “not in its best shape.”²⁵⁵ The company had previously done well when it won public sector contracts “by direct order,” he acknowledged, “but now we and the private sector compete equally for tenders, and regrettably we don't have the same flexibility as the private sector in taking action and pricing and so the competition is not fair.”²⁵⁶

Undeterred, the Holding Company for Maritime and Land Transport claimed that Nasr achieved 60 percent growth in 2016–2017 and another 68 percent in 2017–2018, but these results were only true when measured in Egyptian pounds; for a company dealing in external trade and therefore highly susceptible to exchange rates, the pound's loss of some two-thirds of its value meant that the company's net value was static or declining. Implicitly confirming this, Admiral Youssef revealed in September 2017 that Nasr was to be restructured.²⁵⁷ Two years later Nasr, along with the Egypt for Import and Export Company, which is also run by EAF retirees, were slated to play a role in a planned shipping line connecting Ain al-Sokhna to Kenya's Mombasa port.²⁵⁸ The promised restructuring of Nasr had not yet taken place, but its involvement reconfirmed the close intertwining of military interests in infrastructure projects, external trade, and military-headed civilian companies and government agencies.

What the case of Nasr also revealed is that MOD affiliates can hope to extract income from the activity of other firms while transferring their own costs and losses or those of their subsidiaries—which nominally remain civilian state-owned enterprises—to the state budget. An example is the Egyptian Navigation Company, which reached financial collapse in 2015 and had to be bailed out by the Holding Company for Maritime and Land Transport.²⁵⁹

However, corrupt procurement practices also occur on a large scale much closer to home. Not surprisingly, officer networks are especially active in arms procurement, reportedly clustering around key individuals such as former defense minister Tantawi or Minister of State for Military Production Mohamed al-Assar; cliques such as the graduates of the Military Technical College (spread out across the MOMP and EAF Armaments Authority); or bodies such as the Military Intelligence and Reconnaissance Administration or the military procurement office at the Egyptian embassy in Washington, DC.²⁶⁰ Networks may overlap, but they also compete; historically, those closest to the presidency have an obvious advantage, which is why several former commanders of the Republican Guard are believed to have been influential arms dealers. But the rise of Sisi has emboldened officers in Military Intelligence, which he headed until 2012, who are believed to be encroaching on their competitors. Furthermore, a new generation of MOD procurement officers has come to the fore since the 2013 takeover, and they are said to be “greedier” in the bribes they demand from commercial agents—themselves often EAF retirees—in return for the award of contracts.²⁶¹

The same patterns apply to all other aspects of procurement, such as those relating to food and undertaken by the GSA and Logistics and Supply Authority. But they also extend to ensuring that companies with which the military interacts use the same favored procurement agents and customs handlers as the MOD, if not the MOD itself, given its exemption from inspection at ports of entry; pay the transport department of the Logistics and Supply Authority to move heavy machinery; and hire labor brokered by state agencies with close military ties—such as Petrojet in the case of the oil and gas sector.²⁶²

The scale on which these practices occur lead unavoidably to the conclusion that they are conducted with the connivance of the MOD's financial administration, and therefore with the knowledge of senior commanders and officials. In a typical case, finance officers are asked to process invoices for shipping, labor, and material costs for EAF equipment that is purportedly sent abroad for maintenance, but never leaves the country and is either maintained by a local contractor or not at all.²⁶³ This may shed additional light on why the MOD has acquired companies or bought shares in others, especially foreign ones. An early instance was an investment in 1980 by the MOD's short-lived General Economic Agency in the National Company for Food Security, one of the large companies established under Law 43 of 1974 in partnership with the revived private sector.²⁶⁴ By 2011 the MOD had "an extraordinary range of investments in domestic firms and large-scale foreign partnerships," according to political scientist Shana Marshall.²⁶⁵

How, exactly, the MOD exercises ownership is unclear. Unlike the MOMP's shares in the Tharwa Petroleum Company, for example, which are held by the NAMP, the MOD's Financial Authority does not appear to directly own shares in its own ministry's companies.²⁶⁶ More importantly, the purpose of acquiring shares in both domestic and foreign civilian companies is also unclear. As noted in Chapter 2, Shana Marshall argued that this is intended as a means for securing technology transfer, but past practice in public sector companies suggests other possible purposes. Investment in shares absorbs budget surpluses that can be shown as expenditure in annual accounts and then written off as net losses to be borne by the state treasury. Parking funds offshore removes them further from potential oversight, while creating joint ventures from which military agencies and affiliated companies can import used equipment at inflated prices but claim in their accounts as new, using false certification supplied by corrupt customs officers.²⁶⁷

U.S. Military Assistance: A Business Opportunity

A crucial element of Egypt's defense economics is the annual U.S. foreign military financing (FMF) package that it has received since 1978. This is estimated to cover approximately 80 percent of the EAF's needs of major combat systems, enabling the MOD to spend its own disposable funds on other priorities such as acquiring shares in civilian companies and underwriting military interventions in the cement and steel sectors or other markets. Without U.S. FMF, the MOD would be very hard pressed to provided the EAF's real defense needs. But in reality, the MOD has been able to derive additional income from the relationship, whether from commercial exploitation of EAF equipment and MOD facilities funded under the FMF program for civilian purposes, rather than their original military ones, or from other areas of military cooperation with or services for U.S. forces in the region.

As importantly, the FMF package also offers EAF officers, both active and retired, particularly favorable business opportunities thanks to their privileged and often exclusive access to defense-related information and contracts. These opportunities derive from procurement

(of weapons and other equipment or materiel), support and service contracts associated with the delivery of the FMF, and other services and activities undertaken on behalf of or with the U.S. military. The involvement of former officers in commercial defense contracts is common worldwide, but in Egypt's case it more clearly takes the form of insider trading and profiteering from what in effect is the captive market of U.S. military assistance and defense ties.

U.S. FMF to Egypt has run at a steady level of \$1.3 billion a year since 1987. Additionally, in 1979 then president Jimmy Carter approved "cash flow financing" for Egypt, allowing it to pay for purchases of U.S. defense equipment in installments rather than all at once, an advantage it was to enjoy until 2018.²⁶⁸ This enabled it to place orders worth \$3.5 billion instead of \$1.5 billion by 1982, for example.²⁶⁹

A special provision for advance disbursement of the entire annual grant has also been in place since 2000, allowing Egypt to accumulate unspent assistance and accrue interest on it, which it can then spend on additional purchases.²⁷⁰ It had received a cumulative total of \$48 billion in FMF by 2017, besides receiving what the U.S. labels as "excess defense articles" not needed by its own armed forces worth hundreds of millions of dollars annually.²⁷¹ FMF moreover allowed Egypt to save significant amounts of foreign exchange, equaling about 8.5 percent of its earnings in 1984–2000.²⁷²

The fact that the amount of FMF is fixed has depreciated its purchasing power over time, capping the business opportunities it generates. Precise figures are not available; according to a 2006 U.S. Government Accountability Office report, even the Pentagon could not track FMF commitments against actual disbursement to Egypt prior to 1998. But U.S. agencies have estimated that approximately one-third of Egypt's FMF is allocated for the purchase of new weapons and equipment, one-third to upgrades, and the remaining one-third to various support contracts.²⁷³ The first two categories offer officers scope for taking commissions, but the latter offers additional commercial opportunities. Given the cumulative value of FMF over the years, potential income derived from it has been considerable.²⁷⁴

Acquisitions are governed by the Reciprocal Defense Procurement Memorandum of Understanding between the United States and Egypt. This suspends the latter's Law 89 of 1998 on bids and tenders, which allowed public bodies to prefer local contractors over foreign ones: in the case of MOD tenders, U.S. companies may bid on equal footing with Egyptian competitors.²⁷⁵ But because procurement in the defense sector is a closed process, an Egyptian representative is needed for U.S. (and non-U.S.) bidders.²⁷⁶ As in many

U.S. foreign military financing covers approximately 80 percent of the EAF's major combat systems, enabling the MOD to spend on other priorities such as acquiring shares in civilian companies.

countries, former officers play this role, although they must still bribe MOD procurement officers to be favored.²⁷⁷

Among the more successful businesses that supply the EAF with foreign defense equipment, training, and other services is the Triangle Group, which was founded in 1990 by Major General Abdul-Monem Tawil. A former Air Force officer, Tawil handled EAF procurement from the United States from 1985 until his retirement and the launch of his company, and he became a senior member of the American-Egyptian Chamber of Commerce.²⁷⁸ Within the larger group, Triangle Aerospace represents Western defense companies, such as Lockheed Martin, Raytheon, Northrop Grumman, Rheinmetall Defense, and others, and boasts a “team of handpicked consultants, all of which are retired high ranking officers who served in the MOD’s different units” in addition to “young highly skilled business development professionals.”²⁷⁹

Not all supplier and intermediary companies have a military background. An example is the Artoc Group, which is also one of the more significant companies representing numerous international firms in Egypt and providing the EAF with noncombat equipment—from aircraft ejector seats to fitness machines—while operating in numerous fields in which the EAF or retired officers are also active such as steel structures, petroleum, real estate, airport construction, services, and cargo, and the car industry.²⁸⁰ Another example is Pyravision for Trading and Consultancy, an Egyptian multinational that undertakes technology transfer to the Egyptian defense industry as well as supporting a slew of civilian sectors including heavy industry, cement and petrochemicals, shipbuilding, aviation and aviation services, automotive and spare parts, oil and gas, telecommunications, environment, and food processing.²⁸¹

Behind the legitimate side of doing military business in Egypt lie dealings that range from what Shana Marshall calls “legalized bribery” to the clearly illegal, as with most parts of the military economy.²⁸² Egypt, like a few other Arab states, requires all procurement contracts to specify that commercial fees paid to agents in order to secure sales of equipment or services are not charged to the government, but this formal provision is routinely sidestepped. As a Mubarak-era cabinet minister confided after his ouster, with regard to illicit profiteering by the EAF, “a big hidden issue is arms purchases from the United States—that is, anything that is secretive and involves a monopoly affords the biggest opportunities, whereas in something like cement it would become immediately known and embarrass the army.”²⁸³

Until 2011, much of the commission-taking centered on Mubarak who, in the words of opposition politician and one-time presidential candidate Ayman Nour, “ran procurement as a one-man show for thirty years, allowing great corruption.”²⁸⁴ Whether they actually engaged in corruption or not, top-ranking EAF officers and defense officials formed part of the rent-seeking elite and certainly had—and still have—the most lucrative opportunities.²⁸⁵ Especially well placed to take advantage are active-duty officers privileged to head the Egyptian MOD’s purchases office in Washington, DC, as well as defense attachés and

officers who take part in the bilateral mechanisms through which FMF is negotiated: the Communications Interoperability and Security Memorandum of Agreement, the Military Cooperation Committee, and the Defense Resourcing Conferences. These posts are normally filled by heads of the MOD Arms and Ammunition Department or senior commanders in the ground forces and serve as career stepping stones to hold senior positions in government agencies or public sector businesses upon retirement.

No less important a source of income is the large share of FMF allocated to support contracts, especially for transport of U.S.-supplied arms and equipment, both at time of sale and later for shipment of certain systems back to and from the United States for maintenance and upgrade. A special provision in the FMF program allowed up to 50 percent Egyptian ownership of the ships used to transport equipment, and so well-connected businessmen quickly set up U.S.-registered companies in order to win these contracts.²⁸⁶ According to political scientist Robert Springborg, then president Anwar Sadat's brother Esmat and several generals formed a company to ship a military consignment worth \$300 million from the United States, for which they reportedly charged \$56 million for shipment, despite Pentagon estimates that the cost should be around \$11 million.²⁸⁷ A similar case surfaced when a member of parliament for the Wafd Party, Elwy Hafez, demanded a formal debate on corruption in military contracts following press reports that businessman Hussein Salem, a Mubarak crony, and senior government officials had made improper gains totaling \$73 million from FMF contracts.²⁸⁸

Although fewer abuses have been exposed so publicly since then, the system appears to be unchanged. In fact, according to an antigovernment source, the member of the Supreme Council of the Armed Forces responsible for the handling of U.S. military assistance in 2011 pressed the United States to increase the proportion of FMF allocated to support contracts, which would have expanded business opportunities for EAF officers to earn lucrative profits through front companies.²⁸⁹

What is certain, in contrast, is that Egypt has failed to make use of the 15 percent of total FMF originally allocated for the EAF's own maintenance and logistics needs to bring business as well as technology and technical know-how to its defense industry. This has long been stated as a goal, and so Egyptian behavior is paradoxical. The Soviet Union had refused to grant licensed production or technology transfer to Egypt at the height of their military cooperation in the late 1960s—major combat equipment had to be returned to the Soviet Union for maintenance and repair—impeding development of Egyptian know-how and facilities and generating resentment.²⁹⁰ And yet the Egyptian defense industry has singularly failed to take advantage of far more generous U.S. provisions, which U.S. officials specifically see as a means of assisting Egypt to develop sustainable indigenous capabilities.²⁹¹ An example of the consequences is that when U.S. military aid was suspended from 2013 to 2015, U.S.-made Apache helicopters in EAF service fell into disrepair because the Egyptian contractors lacked the technical proficiency necessary.²⁹²

Indeed, by 2014 the Egyptian MOD was actually spending roughly half the annual U.S. aid package on maintenance and sustainment of its existing systems.²⁹³ Even at the lower rate of 15 percent, this provision was worth \$7.2 billion since FMF began. A U.S. technical services contract worth \$210 million to provide equipment, parts, training, and logistical support for six Egyptian Navy frigates and a separate package worth some \$750 million for the upgrade of 156 aircraft engines in 2009–2010 give a sense of the potential value of secondary contracts that were not taken up by the Egyptian defense industry.²⁹⁴ This failure contrasts sharply with hyperbolic assertions about the existing capabilities of the defense industry made by numerous MOD officials, especially since the early 2000s, and their claims that efforts to increase technology transfer and local content were being redoubled.²⁹⁵

For all the boasts of self-sufficiency, the Egyptian military and defense industry either lack the technical expertise and technology to undertake maintenance—which they leave to U.S. contractors—or else prefer to allow senior officers to extract easy rent from shipping contracts. This may help explain why the MOD sought (and got) an increase in the FMF share allocated to support contracts, and why it met U.S. proposals in 2014 to restructure the FMF program (eventually confirmed in 2015) with barely hidden dismay. Conversely, the practice noted above of submitting fraudulent invoices for maintenance and shipping that do not actually take place indicates a risk that the increase may also explain why the Egyptian MOD does not take advantage of the provision.

But the MOD also practices its own forms of rent-seeking from FMF. A former U.S. diplomat based in Egypt confirmed that the MOD insisted on using hotels it owns for conferences and joint meetings and military hospitals when U.S. peacekeepers in the Multinational Force and Observers in Sinai needed medical treatment—for which the United States had to pay.²⁹⁶ Major General Michael Collings, who in 2006–2008 headed the U.S. Office of Military Cooperation in Egypt, which handles FMF, similarly complained of price gouging by companies chosen by the MOD to provide equipment or services—from chairs and tables to bottled water for meetings.²⁹⁷

The MOD also earned millions from conducting joint military exercises, such as the biennial Bright Star maneuvers with the United States (which were suspended in 2011 but resumed in 2017, albeit in a reduced form), or the Coral exercises with Saudi Arabia.²⁹⁸ But most egregious in the view of some U.S. officials is commercial exploitation by the MOD and allied public agencies of facilities and equipment provided under the FMF package. A prime example is the “not for profit” 800-bed International Medical Center, which is intended exclusively for EAF use but proudly advertises its services to fee-paying private patients, both Egyptian and foreign. Adding insult to injury, the center’s website, does not acknowledge U.S. funding, merely noting that the center was “established by Egyptian & American expertise and cooperation.”²⁹⁹ Similarly, the U.S.-supplied Synchrolift device for lifting large ships out of the water for repair, which was installed at Ras el Tin Naval Base in Alexandria for Egyptian Navy use only, is hired out routinely for commercial use. The

senior U.S. officer in charge of the FMF program at the time relates that he remonstrated repeatedly to then Navy commander Admiral Mohab Mamish, who affirmed that “this will never happen again,” but on his next visit the same officer again found a commercial ship in the Synchrolift.³⁰⁰

Lastly, the military economy benefits indirectly from U.S. and other international assistance for civilian development projects. As political scientist John Waterbury has noted, significant U.S. aid has been invested since the 1970s in public infrastructure, such as power stations, storage facilities, housing, irrigation, and transport—all areas in which military agencies and the officers’ republic are heavily involved.³⁰¹ Enabling them to tap into assistance that in theory is earmarked to be channeled exclusively through the private sector is Law 43 of 1974, which qualifies state-owned enterprises as private if 20 percent of their share capital is offered to the public.³⁰² Other international agencies, such as the World Bank, have also used this loophole to fund large-scale projects implemented by military economic entities or managed by the MOD, especially since 2013.

CONCLUSION: DEAD CAPITAL, CASH COWS, AND SHELL GAMES

The MOD and its affiliated agencies now undertake an enormous volume and range of civilian projects, but the net value they add to the national economy is dubious, and in many instances negative. This is not measured simply in terms of the physical assets they produce or the incomes they generate, which can be considerable, but rather of the extent to which they enable sustainable growth, trigger economic diversification, or enhance the ability of civilians in the private and public sectors to exercise autonomous, market-based decision-making. Even in the case of undoubtedly useful contributions such as the construction of public infrastructure and housing, the actual cost-effectiveness of military-run projects is unproven, as much of the real cost of their factors of production is transferred to the public purse and obscured or understated.

As the military now plays a much greater role in managing public works, leading investment, and addressing supply needs in civilian markets, its attitudes and perspectives have come to bear more significantly than ever on the trajectory of the economy. Whether by training and temperament or as a core regime pillar, it shares both the technical gaze of civilian counterparts in Egypt’s state bureaucracy and the hierarchical and deeply paternalistic approach of successive state leaders to the design and implementation of policy in the economic and social spheres. This results in what political scientist John Waterbury labels “flight forward,” the tendency to avoid knotty problems such as changing the spatial distribution of Egypt’s population, by resorting to engineering fixes such as constructing desert cities or forcibly relocating small businesses to remote locations.³⁰³

At best, the military’s response to social and economic problems exemplifies the belief that “if you build it, they will come”—in a country where, to take just one simple indicator, extreme

The manner in which the military circulates budgets and surpluses, contracts, and investments forms an elaborate shell game that complicates, if not prevents, effective accounting and meaningful evaluation of performance and cost-effectiveness.

poverty increased from 26.5 percent of the population to 32.5 percent in the six years since the EAF took power.³⁰⁴ At worst, the military is wedded to activities that assure it of constant income streams despite glaring evidence of their nonfeasibility and appalling cost-effectiveness. There is little reason for this to change: the military has been able to extract varying levels of capital and economic opportunity from the public purse and foreign assistance for nearly seven decades, with little or no accountability for actual delivery. In addition to the state trea-

sury, the Soviet Union, the United States, and more recent investors such as Chinese companies involved in military-managed megaprojects constitute the military's cash cows. The manner in which the military circulates budgets and surpluses, contracts, and investments between various public and private sector counterparts, the treasury, foreign partners, and its own agencies moreover forms an elaborate shell game that complicates, if not prevents, effective accounting and meaningful evaluation of performance and cost-effectiveness.

NOTES

- 1 Tax exemption, article 47 of Law 91 of 2005, text at <https://bit.ly/2mdYeQx>. Customs exemption, Law 186 of 1986, text at <https://bit.ly/2m6l6Bs>.
- 2 On annual number of males reaching service age, “Egypt Military Strength,” Global Fire Power, <https://bit.ly/2skdcnF>, accessed on October 23, 2019.
- 3 On Sisi statement, Ahmed Gamal El-Din, “Egypt, 1 Million Conscripts Annually,” *al-Akhbar*, July 23, 2015, <https://bit.ly/2kOIELY>. Janes’ Sentinel, “North Africa, Egypt, Armed Forces,” updated December 8, 2016, cited in UK Home Office, “Country Policy and Information Note Egypt: Military Service,” version 1.0, March 2017, 8, <https://bit.ly/2kMtPIQ>; and “Chapter Seven: Middle East and North Africa,” *The Military Balance* 117, no. 1 (2017), <https://bit.ly/2minwNB>. As conscripts serve up to three years, their cumulative number at any one time would exceed the annual intake, but the EAF inducts less than this number.
- 4 Text of Presidential Decree at <https://bit.ly/2lYmMNH>.
- 5 The 1982–1983 budget was published in Law 78 of 1982. Text at <https://bit.ly/2kMunyo>. Nasr’s press conference cited in Wael Gamal, “The [Military] Council: Our Projects Are the Sweat [of the Brow] of the Defense Ministry, and We Will Not Permit the State to Interfere in Them,” *Shorouk News*, March 27, 2012, <http://bit.ly/2n7rlFP>.
- 6 On the composition of the board of directors, text of law of establishment at <https://bit.ly/2kjEhqZ>. On the role of the Financial Authority, Mohamed Hosni and Osama as-Sayyad, “The Infrastructure of the Army,” *Noon Post*, Gold Digging General series, January 27, 2017, <https://bit.ly/2kM2fvj>. The latter body has been headed since 2014 by Major General Mohamed Amin Nasr, not to be confused with Major General Mahmoud Nasr.
- 7 Robert Springborg, “The President and the Field Marshal: Civil-Military Relations in Egypt Today,” *MERIP Middle East Report*, no. 147 (July-August 1987): 14, <https://bit.ly/2me1Q53>.
- 8 Some detail of their organization and operation is provided in Ayman Emam, “Driving Development or Building an Empire of Corruption? Military Entrepreneurship and the Militarization of the Egyptian Economy,” master’s thesis, International Anti-Corruption Academy, October 2018, 56–57. An administrative officer of a foreign energy exploration company operating in Egypt in the last decade of Mubarak’s presidency confirms that use of this military labor was offered to them. Anonymized interview.
- 9 According to Hazem Kandil, *Soldiers, Spies, and Statesmen: Egypt’s Road to Revolt* (Brooklyn, NY: Verso Books, 2012), 182.
- 10 New investments by private businessmen noted by Samia Sa’id, *Who Owns Egypt?* (Cairo: Dar al-Mustaqbal al-Arabi, 1986), 200.
- 11 Robert Springborg, “The President and the Field Marshal: Civil-Military Relations in Egypt Today,” *MERIP Middle East Report*, No. 147, July-August, 1987, 14, <https://bit.ly/2me1Q53>. The committee was renamed the Higher Strategic Committee in early 1987.
- 12 “The President and the Field Marshall: Civil-Military Relations in Egypt Today,” *Middle East Report*, No. 147, Volume 17, July/August 1987, 14, <https://bit.ly/2me1Q53>. Safinaz El Tarouty, *Businessmen, Clientelism, and Authoritarianism in Egypt* (London: Palgrave Macmillan, 2015), 51.
- 13 Helen Chapin Metz, ed., “Egypt: A Country Study,” Area Handbook Series, Federal Research Division, Library of Congress, December 1990, 327, <https://bit.ly/2kjPibX>.
- 14 Robert Springborg, “The President and the Field Marshall: Civil-Military Relations in Egypt Today,” *Middle East Report*, No. 147, Volume 17, July/August 1987, 11, <https://bit.ly/2me1Q53>.

- 15 According to figures provided in 2012 by Major General Mahmoud Nasr, assistant minister of defense for financial affairs. Cited in Wael Gamal, “The [Military] Council: Our Projects Are the Sweat [of the Brow] of the Defense Ministry, and We Will Not Permit the State to Interfere in Them,” *Shorouk News*, March 27, 2012, <http://bit.ly/2n7rlFP>.
- 16 According to company profile on NSPO website, at <https://bit.ly/2MGzBHi>. Accessed October 23, 2019.
- 17 On sale of detergents by the chemical warfare branch, an investigative report in Aziz al-Efendi, “Compulsory Conscription in Egypt: Serving in Wedding Halls,” *al-Araby al-Jadeed*, March 30, 2015, <https://bit.ly/2P2QBXi>.
- 18 Medhat Youssef, speaking to the pro-government *Yom7* newspaper. Cited in “Petroleum Authority Officials Granted Arrest Powers,” *Mada Masr*, September 9, 2013, <https://bit.ly/2mkIQCh>.
- 19 On setting up dual-fuel charging stations, “Agreement Between Petroleum Sector and the National Service Projects Organization Concerning Supply and Funding Conversion of Vehicles to Dual-Fuel Use,” State Information Service, August 21, 2019, <https://bit.ly/31Jbwng>. The NSPO is rolling this facility out at 54 stations initially, with a target of 350 in six years. On charging stations for electric vehicles, Ahmed Awad, “National Service Projects Organization Assigns 4 Stations to Charge DFLZ Electric Cars,” *al-Mal*, June 6, 2018, <https://bit.ly/2p9yab7>.
- 20 List of these and other NSPO companies on the NSPO official website, accessed at <https://bit.ly/2koJmhW> accessed on September 16, 2019. Details on East Owaynat output from an Egyptian political economist, anonymized interview; and Mohamed Ahmed Tantawi, “The Armed Forces Support the State’s Plan for Comprehensive Development,” *Yom7*, May 29, 2015, <https://bit.ly/2lQ70Eq>. On leasing land, Zeinab Abul-Magd, *Militarizing the Nation: Army, Business, and Revolution in Egypt* (New York City: Columbia University Press, 2017), 21.
- 21 The possibility that aquifers may be nonrenewable is cited in “Water Mondial Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector-Challenges and Opportunities for the Dutch Private Sector,” Occidental Oriental Consult, 2011, 35, <https://bit.ly/2kuepJe>; and NASA, “Agriculture in Egypt’s Western Desert,” NASA, December 16, 2018, <https://go.nasa.gov/2kj1Jof>. On sales to the U.S. Central Command, Charles Clover and Roula Khalaf, “Egypt Military Uneasy Over Business Ties,” *Financial Times*, February 28, 2011, <https://on.ft.com/2khBNta>. The director of the NSPO’s Safi company boasted that its water was the favorite brand of the Multinational Force, interviewed in Nuha al-Alki, “Head of Safi Company: Our Aim in Establishing the Company in Siwa Is to Develop a Remote Border Region,” *Rose al-Youssef*, January 5, 2015, <https://bit.ly/32Q2bM1>.
- 22 From the company’s official website, accessed through Wayback Machine, <https://bit.ly/2kPh0xt>, last captured on August 18, 2017.
- 23 Cleopatra, headed by Mubarak crony Mohamed Aboul-Einein, and the Suez Cement Group withdrew their bids. It is not known if or how much the NSPO paid for the license. Nehal Mounir, “Ismail Discusses With the Economic Group the Rates of the New Cement Licenses,” *al-Borsa*, August 13, 2016, <https://bit.ly/2mfflBy>.
- 24 The NSPO’s English website describes it as a holding organization. This and details of its companies at <https://bit.ly/2koJmhW>.
- 25 NSPO closing financial statement for fiscal year 2012–2013 are cited in Ahmed Aboulenein, “Egypt’s Deep State Gets Back to Business,” *Global Post*, January 14, 2015, <https://bit.ly/153bcCB>. A year later its operating budget was still a modest EP1.63 billion (\$228 million at that time) with profits of EP63 million (\$8.8 million).

- 26 Aboulenein, "Egypt's Deep State Gets Back to Business."
- 27 Omar Said, "Companies Clash With Military Over Ad Rights Monday," *Mada Masr*, October 19, 2015, <https://bit.ly/2lVZzvU>.
- 28 On annual fee paid by the NSPO, Ahmad Morsy, "The Military Crowds Out Civilian Business in Egypt," Carnegie Endowment for International Peace, June 24, 2014, <https://bit.ly/2kmWjJ2>. Figure for annual income according to Hassan Lasheen, chairman of the Egyptian Road Authority, cited in Aboulenein, "Deep State Gets Back to Business"; and "By Direct Order: The Armed Forces Control Implementation of Government Projects and Usufruct of Roads," *Akher Khabar* (blog), April 3, 2014, <https://bit.ly/2mfgzNa>.
- 29 Legal responsibilities explained in law 84 of 1968, text at <https://bit.ly/2lVZQio>.
- 30 "By Direct Order: The Armed Forces Control Implementation of Government Projects and Usufruct of Roads," *Akher Khabar* (blog), April 3, 2014, <https://bit.ly/2mfgzNa>; and Safiaa Mounir, "Why Egypt Is Placing Its Pyramids Under Military Protection," *al-Monitor*, March 16, 2016, <https://bit.ly/2kmXEQ4>; also, Shaimaa al-Badawy, "National Construction Company Starts the Second Phase of Upgrading Matrouh University at a Cost of EGP 300 Million," *al-Borsa News*, July 23, 2016, <https://bit.ly/2me8cRX>.
- 31 Announced by the North Sinai governor, Major General Abdel Fattah Harhour, "Armed Forces to Establish North Sinai Development Company," *Egypt Independent*, July 28, 2015, <https://bit.ly/1D5Piin>.
- 32 According to agency head Major-General Mohammad Nasser, Mohamed Darwish, "Central Agency for Construction: We Ran Investments Worth EGP 5 Billion in the Past Year," *al-Borsa*, October 25, 2016, <https://bit.ly/2eQQ354/>.
- 33 The company's website, accessed at <https://bit.ly/2lSY8Oa>. Accessed on September 16, 2019.
- 34 Reported and compiled by *El Marsad*, "Officers' Business: Queen Service and Its Monopoly of the Service Sector in Egypt," Wayback Machine, April 13, 2014, <https://bit.ly/2lP2lm1>, last captured on May 9, 2017. On Arab investors' contract, Gehad Al-Tawil, "\$600 Million Worth of Joint Saudi-Emirati-Egyptian Investments to Recycle Agricultural Wastes," *al-Watan*, October 20, 2013, <https://bit.ly/2mkaWNS>. On the metro contract, Rehab Saber, "Metro Contracts With Queen Service for Services and Maintenance for EGP12 Million" *al-Borsa*, July 23, 2013, <https://bit.ly/2kODIW1>. Company chairman Major General Wasfi provided an overview of its work in Mahmoud Mohamed Ahmed Tantawy, "Major General Wasfi Mahmoud, chairman of El Nasr for Services," *Yum7*, January 5, 2015, <https://bit.ly/2lY3dog>.
- 35 Arafah quoted in Mahmoud Mohamed Ahmed Tantawy, "MG. Wasfy Mahmoud, Chairman of El Nasr for Services," *Yum7*, January 5, 2015, <https://bit.ly/2lY3dog>. Figure of 7,500 from *El Marsad*, "Officers' Business: Queen Service and Its Monopoly of the Service Sector in Egypt," Wayback Machine, April 13, 2014, <https://bit.ly/2lP2lm1>, last captured on May 9, 2017.
- 36 On Arish plant expansion, for example, al-Alki, "Achievements of Two and a Half Years," Rosa Al-Youssef, May 30, 2015, <https://bit.ly/2KK1n17>. On capacity of new plant at Beni Suef, for example, Patrick Werr, "Egypt's Tourah Cement Stops Production Due to Oversupply," Reuters, June 17, 2019, <https://www.reuters.com/article/egypt-cement/egypts-tourah-cement-stops-production-due-to-oversupply-idUSL8N23O37K>.
- 37 Company site at <https://bit.ly/2kCFCtm>.
- 38 Sanaa' A'llam, "Chemical and Fertilizers Export Council: \$4 Billion Worth of Exports Targeted by the End of This Year," *Amwal Al-Ghad*, December 9, 2017, <https://bit.ly/2kMOQ6c>.

- 39 Mohamed Ahmed Tantawy, “*Youm7* Inside the Army’s Complex for Chemical Industries in Fayoum,” *Youm7*, February 25, 2016, <https://bit.ly/2mhixg1>. Nasr Intermediate Chemicals claims to have twenty-four factories selling to thirty-four companies belonging to the MOMP, AOI, and Egyptian General Petroleum Corporation, as well as to export markets.
- 40 Yumna Kassim, Mai Mahmoud, Sikandra Kurdi, and Clemens Breisinger. “An Agricultural Policy Review of Egypt First Steps Towards a New Strategy,” IFPRI, Middle East and North Africa Regional Program, Working Paper 11, August 2018, 10 and 11, <https://bit.ly/2JemDOC>.
- 41 Company site at <https://bit.ly/2kMllkZ>.
- 42 “Management Board of Misr Sinai Investment Company in Partnership With Armed Forces Is Formed,” *Youm7*, August 27, 2014, <https://bit.ly/2kCH1A8>. According to Misr Sinai head Ibrahim al-‘Arjani, the company’s starting capital was EP3 billion, but it hoped to raise this to EP8 billion and employ 30,000 within two years. Abdelhalim Salem, “Misr Sinai: Cooperation Protocol With the NSPO to Build Factories in Sinai,” *Youm7*, December 13, 2014, <https://bit.ly/2lT6cyq>.
- 43 Al-Alki, “Achievements of Two and a Half Years.”
- 44 Company site at <https://bit.ly/2kmWQe3>.
- 45 On the joint venture with the NSPO, Aboul-Sa’oud Aboul-Futouh, “In Photographs... Misr Sinai Races the Clock to Complete the Marble and Granite Complex,” *Al-Bawaba*, March 18, 2017, <https://bit.ly/2mkiC2E>.
- 46 Jamal Boukhari, “Des conscrits au service du complexe militaro-industriel en Égypte,” *Orient XXI*, August 28, 2017, <https://bit.ly/2ivoVyn>.
- 47 Ayat Al Tawy, “Sisi Inaugurates Megaindustrial Complex in Upper Egypt’s Beni Suef,” August 15, 2018, <https://bit.ly/33UMVxb>.
- 48 According to geologist Yahya al-Qazaz at Helwan University, cited in Hossam Abdel-Baseer, “The President Praises the Constitutional State but Justice Lost Its Way,” *al-Quds*, May 25, 2017, <https://bit.ly/2miM0pZ>.
- 49 On establishment of new company, NSPO website at <https://bit.ly/2kfiK2C>. NSPO head Major General Mostafa Amin, cited in Samir Hosni, “NSPO Director: Ghalioun Farm Provides Fish for Egyptians, Especially Low-Income Egyptians,” *Youm7*, November 18, 2017, <https://bit.ly/2kjiAY3>.
- 50 On farm expansion, al-Alki, “Achievements of Two and a Half Years.” On establishment of new company, NSPO website at <https://bit.ly/2kpBtj4>.
- 51 Nada Arafat and Saker El Nour, “How Egypt’s Water Feeds the Gulf,” *Mada Masr*, May 15, 2019, <https://bit.ly/33X9TDW>.
- 52 Announced by EAF Commander in Chief and Defense Minister General Sedki Sobhi, cited in “Egypt: Army Donates Egp 1 Billion to Sisi’s Pro-Economy Fund,” *allAfrica* website, June 27, 2014, <https://bit.ly/2lTg9vX>.
- 53 For example, “Ambitious Men in Uniform,” *Economist*, August 3, 2013, <https://econ.st/2kCt4lL>.
- 54 Output from Mohamed Ibrahim, “EAF’s NSPO: 13 Companies to Serve Development in Egypt and Supplying the Army’s Needs,” *Sada el-Balad*, January 5, 2018, <https://bit.ly/2miMwnV>.
- 55 On actual output, al-Alki, “Achievements of Two and a Half Years.” On total capacity, Mohamed Ibrahim, “EAF’s NSPO: 13 Companies to Serve Development in Egypt and Supplying the Army’s Needs,” *Sada el-Balad*, January 5, 2018, <https://bit.ly/2miMwnV2>.

- 56 On olive products exports, "Egyptian Processed Food Sector Review, Final Report, for the Client: Industrial Modernisation Centre - Egypt," ECORYS-NEI, April 2005, "Table 4.21 Main Egyptian Producers of Olive Oil," 107. Olive products exports and says Safi among main bottled water cos, and army factories provide frozen foods for private companies. "ECORYS, Egyptian Processed Food Sector Review: Final Report," ECORYS, April 2005, <https://bit.ly/2kk9RoF>. On Wataniyyah's market share, Egyptian economic analyst Amr Adly cited by Doaa Farid, "Egyptian Army's Economic Empire: Unidentified Market Share Yet High Impact," *Daily News Egypt*, November 7, 2015, <https://bit.ly/2khXj0U>.
- 57 For example, claims in Ibrahim, "EAF's NSPO"; and al-Alki, "Achievements of Two and a Half Years."
- 58 According to Supply Minister Ali Moselhi, cited by the official information agency, "Sisi in Beni Suef to Open Development Projects," Egyptian State Information Service, January 21, 2018, <https://bit.ly/2lRGY3w>.
- 59 Dalia Othman, "Head of Armed Forces' National Service Products Organization: We Seek the Armed Forces' Self-Sufficiency in Various Fields," *Al-Masry al-Youm*, June 2, 2019, <https://bit.ly/2lTb1b0>.
- 60 Stated aim at its official website, accessed at <https://bit.ly/2koJmhW>. On producing food at half cost, Ibrahim, "EAF's NSPO." On meat imports, for example, NSPO website, accessed July 6, 2017 at <https://bit.ly/2kNTTmU>. On chicken imports, anonymized interview.
- 61 According to member of parliament Ahmad al-Oweidi who attended the meeting with Sobhi. "90 Minutes: For the Second Time...MoD Met Yesterday With 400 MPs," YouTube video, 5:25, posted by "Mehwar TV Channel," July 26, 2016, accessed on September 17, 2019, <https://bit.ly/2kq79y0>.
- 62 "President Sisi Instructs to Increase the Basic Commodities Outlets," *Dostor*, November 5, 2016, <https://bit.ly/2me3ROH>.
- 63 Cited in Mohamed Tawfik, "Egyptian Police Competes With the Army in Commodities Market," *al-Araby al-Jadeed*, December 14, 2015, <https://bit.ly/2kl0Tr8>.
- 64 Number of mobile outlets cited in Mohamed Ibrahim, "EAF: Arrival of 1,100 Head of Cattle From Spain in Preparation for Sale in Outlets," *Sada el-Balad*, February 10, 2016, <https://bit.ly/2mlv56c>. On existing capacity in 2015, Nasr Abdo, "National Service Projects Organization Combats High Prices," *Al-Bawaba*, December 4, 2015, <https://bit.ly/2kQIEtZ>. On use of conscripts to man food trucks, Aziz Al-Afandi, "Compulsory Conscript in Egypt, Service in Wedding Halls," *al-Araby al-Jadeed*, March 30, 2015, <https://bit.ly/2P2QBXi>.
- 65 Figures given by Brigadier General Hazem Mohamed Fakhry, cited in Noura Fakhry, "National Service Projects Organization Representative: 193 Fixed Outlets and 1,029 Mobile Ones to Sell Food Commodities," *Yum7*, July 6, 2019, <https://bit.ly/2pQprKT>.
- 66 Information for 2019 from Othman, "Head of Armed Forces' National Service Products Organization."
- 67 The three percent share is noted in Abdel-Fattah Barayez, "This Land Is Their Land," *Jadaliyya*, January 25, 2016, <https://bit.ly/2kNFgQx>.
- 68 National Company for Protective Cultivations website at <https://bit.ly/2kpBtJ4>.
- 69 Mohsen Samikah, Sisi at the Greenhouses Project: "We Will Not Side With Merchants Against the People," *al-Masry al-Youm*, August 17, 2019, <https://bit.ly/33O1nHs>.
- 70 Jamal Boukhari, "Des conscripts au service du complexe militaro-industriel en Égypte," *Orient XXI*, August 28, 2017, <https://bit.ly/2ivoVyn>.

- 71 Dalia Othman, "Engineering Authority Reveals the Details of New Ismailiya Project," *al-Masry al-Youm*, December 14, 2015, <https://bit.ly/2mec8SL>.
- 72 Sayyed Al-Shoura, "Fayoum Governor: New Projects in Coordination With NSPO," *al-Wafd*, January 4, 2016, <https://bit.ly/2kDZTyG>.
- 73 Mohamed Abdelaati, "Madbouly Follows Up on Several Service and Developmental Projects With the Chairman of NSPO," *Al-Masry al-Youm*, January 1, 2019, <https://bit.ly/2mlwZnm>.
- 74 The dynamics of this rivalry are superbly laid out in Kandil, *Soldiers, Spies, and Statesmen*.
- 75 Al-Masry al-Youm, "Defense Minister Exempts 574 Military Installations From Real Estate Tax," *Egypt Independent*, June 3, 2015, <https://bit.ly/2lUvwUV>. A list of forty-nine EAF clubs and hotels can be seen on the official website of the MOD, accessed at <https://bit.ly/2kQLz5V>. On the distribution of profits, a senior retired EAF major general, anonymized interview.
- 76 Metz, ed., "Egypt: A Country Study," 327.
- 77 Mohamed Al-Sheikh, "Daqahlyia Governor in the Line of Fire," *Veto Gate*, July 30, 2014, <https://bit.ly/2lXY7bG>.
- 78 John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 404.
- 79 This came from the United States, France, China, Soviet Union, Italy, United Kingdom, West Germany, and other unidentified sources. United States Department of Defense, "Country Data: Egypt: Foreign Military Assistance," Country Data, 1990, <https://bit.ly/2kQbLNR>.
- 80 On the moratorium, Nathaniel Harrison, "Sadat Cracks Down on Soviets Still in Egypt," *Christian Science Monitor*, February 15, 1980, <https://bit.ly/2kQN7gf>. Dominic Evans, "Egypt and Russia Agree to Debt Deal," *The Moscow Times*, November 11, 1994, accessed through Wayback Machine, <https://bit.ly/2lXufwo>. Last captured on May 23, 2014.
- 81 Metz, ed., "Egypt: A Country Study," 332.
- 82 Khalid Ikram, *The Egyptian Economy, 1952–2000: Performance, Policies, and Issues* (Abingdon, UK: Routledge, 2006), 68.
- 83 POMED, "Fact Sheet – U.S. Military Assistance to Egypt: Separating Fact From Fiction," POMED, January 2018, <https://bit.ly/2miCcfz>.
- 84 Waterbury, *The Egypt of Nasser and Sadat*. And Amy Hawthorne, "Rethinking U.S. Economic Aid to Egypt," Project on Middle East Democracy, October 2016, <https://bit.ly/2mefdSP>.
- 85 According to a representative of an international cement company. Interviewed by author in December 2016.
- 86 Presidential Decree 531 of 1981 was signed by Sadat a week before his assassination on October 6, 1981, <https://bit.ly/2m6kITw>.
- 87 Text of Presidential Decree 244/1990, signed May 10, 1990, and issued June 7, 1990, accessed at <https://bit.ly/2kOOADM>.
- 88 Robert Springborg, "The President and the Field Marshal: Civil-Military Relations in Egypt Today," *MERIP Middle East Report*, no. 147 (July-August 1987): 8; and anonymized interview.
- 89 W. J. Dorman, "Exclusion and Informality: The Praetorian Politics of Land Management in Cairo (Egypt)," *International Journal of Urban and Regional Research*, February 25, 2013, 13, <https://bit.ly/2kQcIpp>.
- 90 "Cairo: Informal Land Development and the Challenge for the Future," in Paul Baróss and J. J. van der Linden (eds.), *The Transformation of Land Supply Systems in Third World Cities* (Surrey, UK: Gower Publishing Company, 1990), 129–30. Cited in W. J. Dorman, "Exclusion and Informality," 13.

- 91 Philippe Droz-Vincent, "Le militaire et le politique en Egypte," *Maghreb Machrek*, no. 165 (1999): 28. Exchange rate from <https://bit.ly/2lRqtEL>.
- 92 Anonymized interview.
- 93 A feddan is 4,200 square meters, equal to 0.42 hectares or 1.038 acres.
- 94 Robert Springborg, "Patrimonialism and Policy Making in Egypt: Nasser and Sadat and the Tenure Policy for Reclaimed Lands," *Middle Eastern Studies* 15, no. 1 (1979): 49–69, <https://bit.ly/2lYcRau>.
- 95 Noted by Waterbury, *The Egypt of Nasser and Sadat*, 299; and Sarah P. Voll, "Egyptian Land Reclamation Since the Revolution," *Middle East Journal* 34, no. 2 (Spring, 1980): 138, <https://bit.ly/2kDYrG>.
- 96 On percentage of productive land, Waterbury, *The Egypt of Nasser and Sadat*, 299. On Western reluctance, "Land Reclamation and Loss," Country Studies, n.d., <https://bit.ly/2mdn8Qi>.
- 97 On problems of Nubariyyah project, Voll, "Egyptian Land Reclamation Since the Revolution," 138. Also a local investor interviewed by the author.
- 98 Robert Springborg, "Patrimonialism and Policy Making in Egypt: Nasser and Sadat and the Tenure Policy for Reclaimed Lands," *Middle Eastern Studies* 15, no. 1 (1979): 56 and 63, <https://bit.ly/2lYcRau>.
- 99 First quote from Waterbury, *The Egypt of Nasser and Sadat*, 298. Second quote from anonymized interview.
- 100 On population dispersal, Barbara Smith, "A Survey of Egypt: Making the Desert Bloom," *Economist*, March 18, 1999, <https://econ.st/2kQQYKf>. Waleed Hamza and Simon Mason, "Water Availability and Food Security Challenges in Egypt," paper presented at the International Forum on Food Security Under Water Scarcity in the Middle East: Problems and Solutions, Como, Italy, November 24–27, 2004, <https://bit.ly/2kQ1Ho2>.
- 101 Head of investors association cited in "Implementation of Industrial City of Marble and Salt in Sinai With Investments Worth EGP 1.2 Billion," *Shorouk News*, January 10, 2016, <https://bit.ly/2mdoryG>. On Toshka, "Egypt to Prioritize Toshka, Minya and Western Desert in Land Reclamation Project," *Al-Abram Online*, April 15, 2014, <https://bit.ly/2mkwKsK> and "Thinking Big—Another Egyptian Leader Falls for the False Promise of Grand Projects," *Economist*, March 21, 2015, <https://econ.st/1x83MLs>.
- 102 Official figures cited in "Land Reclamation and Loss," Country Studies, n.d., <https://bit.ly/2mdn8Qi>. The classification of five categories of reclaimable land, derived from the U.S. Bureau of Reclamation system, is based on land use and management options (cropping patterns, irrigation and drainage, and farm types). Described in Asit K. Biswas, "Land Resources for Sustainable Agricultural Development in Egypt," *Ambio* 22, no. 8 (December 1993).
- 103 Khalid Ikram, *The Political Economy of Reforms in Egypt: Issues and Policymaking Since 1952* (London: I. B. Tauris, 2018), 134.
- 104 David Sims, *Egypt's Desert Dreams: Development or Disaster?* (Cairo: American University in Cairo Press), 264.
- 105 Moharam Al-Gehiny, "MG. Magdy Amin, head of the General Authority for Development Projects and Agricultural Projects," *Masaya*, December 5, 2012. Accessed through Masress at <https://bit.ly/2kNw6U0>.
- 106 According to development expert David Sims, *Egypt's Desert Dreams*, 159 and 162.
- 107 "Abu Hadid: We Are Seeking Urgent Solutions to the Problems of the Holding Company for Land Reclamation," *Akhbarak*, April 7, 2014, <https://bit.ly/2kg108G>.

- 108 “Sisi Inaugurates 1st Phase of 1.5 Million Feddan Reclamation Project,” *Mada Masr*, December 31, 2015, <https://bit.ly/2m05G1x>.
- 109 On Toshka target, Patrick Werr, “Egypt’s Land Reclamation Plan Should Heed History Lesson,” *The National*, October 14, 2015, <https://bit.ly/2m070l1>.
- 110 Revised 2015 estimate from *ibid*.
- 111 Conference advertising brochure at <https://uscham.com/2mlHqHy>.
- 112 Mohamed Al-Qadi, “Council of Ministers: Minya Sugar Factory Provides Thousands of Job Opportunities,” *Mobtada*, January 22, 2018, <https://bit.ly/2kNRclj>.
- 113 Waterbury, *The Egypt of Nasser and Sadat*, 300.
- 114 Ibrahim al-Sahary, “Military Business Expands in Sisi’s Egypt,” *al-Araby al-Jadeed*, January 23, 2015, <https://bit.ly/2kQfvyV>.
- 115 “With Video, 5 Obstacles That Almost Postponed the Launch of Sisi’s 1.5 Million Feddan Project,” *Zeraa News*, December 30, 2015, <http://bit.ly/2mpCB00>. It is unclear if this was the same land that was said to have been reclaimed by the EAF’s engineering and water departments. See *al-Wafd* party newspaper, Abu Zeid Kamal Al-Din, “Major Contributions by the EAF in Support of the Infrastructure and Land Reclamation,” *al-Wafd*, November 25, 2015, <https://bit.ly/2kNSRHq>.
- 116 The new company’s website is at <https://bit.ly/2kQve0V>; and its Facebook page is at <https://bit.ly/2lZyR4N>.
- 117 Hisham Salah, “The 1.5m-Feddan Project: Challenges Postpone Implementing President’s Megaproject,” *Daily News Egypt*, May 17, 2017, <https://bit.ly/2mlZmSo>.
- 118 Ibrahim Ayyad, “We Publish Sisi’s Electoral Platform,” *Masrawy*, May 22, 2014, <https://bit.ly/2MIHY8m>; and “Sisi’s Economic Vision for Egypt: A Return to the Future,” *Al-Ayam*, May 30, 2014, <https://bit.ly/2ALEvi1>; also, “Sisi’s Map for Egypt’s Economic Future,” *Al-Quds*, May 23, 2014, <https://bit.ly/2mlZlII>. Shana Marshall, “The Egyptian Armed Forces and the Remaking of an Economic Empire,” Carnegie Endowment for International Peace, April 2015, 16, <https://bit.ly/2kh3C4O>.
- 119 W.J. Dorman, “Exclusion and Informality: The Praetorian Politics of Land Management in Cairo (Egypt),” *International Journal of Urban and Regional Research*, February 25, 2013, 6 and 8, <https://bit.ly/2kQcIpp>.
- 120 Text of Law 59 of 1979 establishing NUCA at <https://bit.ly/2kOzX3i>.
- 121 Sims, *Egypt’s Desert Dreams*, 53 and 130.
- 122 Sims, *Egypt’s Desert Dreams*, Table 3.
- 123 “NUCA Achievements,” NUCA, official website, accessed through Wayback Machine, <https://bit.ly/2lRUqob>, as captured on December 14, 2012. This source said the cost to the public purse was EP60 billion pounds, besides private sector and foreign investment, but it separately said that the first 27 cities had cost EP475 billion, of which EP400 billion came from the private sector. On the failure of Toshka to attain its population targets, Nada Arafat and Saker El Nour, “How Egypt’s Water Feeds the Gulf,” *Mada Masr*, May 15, 2019, <https://bit.ly/33X9TDW>.
- 124 NUCA population target for 2022 according to “NUCA Achievements,” NUCA, official website, accessed through Wayback Machine, <https://bit.ly/2lRUqob>, as captured on December 14, 2012. Assessment that the population target has not been met is confirmed by various sources, for example risk analysis consultancy Fitch Solutions, “Weak Viability Plagues Egypt’s Electric Railway and New City Plans,” January 25, 2019, <https://www.fitchsolutions.com/infrastructure-project-finance/weak-viability-plagues-egypts-electric-railway-and-new-city-plans-25-01-2019>.

- 125 Sims, *Egypt's Desert Dreams*, 3.
- 126 Tadamun, "Egypt's New Cities: Neither Just nor Efficient," December 2015, <https://bit.ly/2koVi3a>. A case study of the causes of failure in 6 October city is at Ibrahim Rizk Hegazy and Wael Seddik Moustafa, "Toward Revitalization of New Towns in Egypt Case Study: Sixth of October," *International Journal of Sustainable Built Environment* 2, no. 1 (June 2013): 10–18, <https://bit.ly/2lXXm2E>.
- 127 Sims made this assessment in a lecture cited in Leslie Cohen, "The Desert, a Resource Curse: Could Land Be Egypt's Dutch Disease?," *Cairo Review of Global Affairs* (Spring 2019).
- 128 "Analysis of the Costs of Corruption in Application to Some Sectors in Egypt," Central Accounting Organization, n.d. (2016), 11 and 16.
- 129 Sims, *Egypt's Desert Dreams*, 152.
- 130 View notices of past and future events on the company website at <https://bit.ly/2kEhvdP>.
- 131 Tamer Hafez, "Working on the Railroads," AmCham Egypt, November 2016, <https://bit.ly/2kRgoYb>.
- 132 "Water Mondiaal Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector- Challenges and Opportunities for the Dutch Private Sector."
- 133 Dahlia Kholaiif, "Egypt's New City: More Questions Than Answers," *Daily News Egypt*, April 1, 2015, <https://bit.ly/2mmPCHB>.
- 134 Ramy al-Masry, "Minister of Irrigation: 88 Percent of the 1.5 Million Feddan Project Depend on Underground Water," *Yom7*, December 31, 2015, <http://bit.ly/2ms6c8M>.
- 135 Werr, "Egypt's Land Reclamation Plan Should Heed History Lesson"; and Amr Bahar, "Al-Shorouk in The Heart of the Farafra Desert...Egypt's Future Starts Here," *Shorouk News*, August 25, 2015, <https://bit.ly/2kOeaJ3>. Miracle label from Saber Shawkat, "A miracle in Egypt's western desert," *Akhbar Al-Youm*, November 25, 2016, <https://bit.ly/2mj6grr>.
- 136 Pumping station cost cited in Bradley Hope, "Egypt's New Nile Valley: Grand Plan Gone Bad," *The National*, April 22, 2012, <https://bit.ly/2mkDmav>. Other costs cited in Werr, "Egypt's Land Reclamation Plan Should Heed History Lesson."
- 137 On earlier contract, Marwa Abdallah and Mohamed Magdy, "AOI: We Collaborate With Engineering Authority in Reclaiming Toshka Land," *al-Watan*, April 23, 2017, <https://bit.ly/2klXM2h>. The later import contract was partly funded by UAE through the al-Dhaheerah company (EP250 million) and Saudi Arabian Khoraiif (EP8-10 million).
- 138 Ikram, *The Political Economy of Reforms in Egypt*, 45.
- 139 Plaques stating this are visible to passers-by on structures such as bridges.
- 140 Anonymized interview.
- 141 "Military Source: Projects Implemented by Armed Forces Do Not Affect Their Combat Efficiency," *Egypt Independent*, February 9, 2015, <https://bit.ly/2lT0BIA>.
- 142 Eman al-Ammary, "Egyptian Company for Wholesale Trade Imports Sudanese Meat in Preparation for al-Adha Festival," *al-Bawaba*, July 26, 2016, <https://bit.ly/2lTQC5G>.
- 143 "MOD Purchases Parts of Alexandria Arsenal/Port," Mohamed Amin, "Major General Ibrahim Jaber al-Desouqi: Our Goal Is to Develop and Raise the Efficiency of Alexandria Shipyard," *October*, January 23, 2011, <https://bit.ly/2lZKwR7>. See list of production at the shipyard's official website, accessed at <https://bit.ly/2kqUhrq>.
- 144 Ibrahim al-Sahary, "Military Business Expands in Sisi's Egypt," *al-Araby al-Jadeed*, January 23, 2015, <https://bit.ly/2kQfvyV>.
- 145 Anonymized interview.

- 146 Yagil Henkin, "The Egyptian Military Buildup: An Enigma," Jerusalem Institute for Strategic Studies, January 7, 2018, <https://bit.ly/2mn00PH>.
- 147 Aboulenein, "Egypt's Deep State Gets Back to Business."
- 148 "Army to Build New Towns for Civilians in Sinai: Al-Sisi," *Daily News Egypt*, August 16, 2015, <https://bit.ly/2IV9ktP>.
On Saudi pledge: Ahmed Mohamed Abdelbaset, "Saudi Arabia and Egypt Sign an Agreement Worth \$1.5 Billion for the Development of North Sinai," *al-Watan*, March 20, 2016, <https://bit.ly/2kjOYd6>.
- 149 Text of Law 38 of 1977 at <https://bit.ly/2kwBFGb>.
- 150 Law 7 of 1991 assigned the power to designate new uses of desert land to the president. Text of Law 143/2001 at <https://bit.ly/2lMdVOM>. Text of Law 7 of 1991 at <https://bit.ly/2kx1gz8>.
- 151 Text of the Presidential Decree at <https://bit.ly/2kx2QRC>. Numerous sources erroneously relate these powers to a nonexistent presidential decree issued in 1997.
- 152 Laila Sawaf, "The Armed Forces and Egypt's Land," *Mada Masr*, April 26, 2016, <https://bit.ly/2m0BEL5>.
- 153 The World Bank, "Egypt Public Land Management Strategy Volume II: Background Notes on Access to Public Land by Investment Sector: Industry, Tourism, Agriculture, and Real Estate Development," draft, Finance, Private Sector and Infrastructure Group, Middle East and North Africa, Report No. 36520, June 15, 2006, 5.
- 154 2004 study cited in Ikram, *The Egyptian Economy, 1952–2000*, 288–9.
- 155 Anonymized interviews.
- 156 Antar Abdellatif, "Sawiris Abandoned His Employees to State Prosecution," *Sout al-Omma* (reposted by *Masress*), March 13, 2012, <https://bit.ly/2mjevDT>.
- 157 Mona Abaza, "Violence, Dramaturgical Repertoires and Neoliberal Imaginaries in Cairo," *Theory, Culture & Society*, 2–3, <http://bit.ly/2lmySjg>.
- 158 Mohamed Elshahed, "The Road to New Cairo," *Cairo Observer* (blog), November 29, 2011, <https://bit.ly/2kp7h0E>.
- 159 Cited in Heba Saleh, "Egyptian Army's Role Expands as It Gives Land for Homes," *Financial Times*, March 23, 2014, <https://on.ft.com/2lT5q4E>.
- 160 Aboulenein, "Egypt's Deep State Gets Back to Business."
- 161 Senior company official interviewed by the author, name withheld on request, June 10, 2014.
- 162 Ibid.
- 163 Interviewed by the author, name withheld on request, April 17, 2015.
- 164 Ibid.
- 165 Company owner Mohamed Ali posted his revelations in video clips after fleeing Egypt at <https://bit.ly/2mmfzad>. Highlights were presented in "Watch: Businessman Exposes Corruption Worth Billions in the Egyptian Army," *al-Jazeera Mubasher*, September 4, 2019, <https://bit.ly/2kOoGjv>.
- 166 Rania Rabeaa Elabd, "Will Egyptian Parliament Cut Into the Military's Profit Margin?," *Al-Monitor*, April 1, 2016, <https://bit.ly/2lVetlD>.
- 167 Wael Qandil, "Wataniyya and Aman: Zainab's Republic," *al-Araby al-Jadeed*, June 3, 2016, <https://bit.ly/28wmJHa>.
- 168 According to a detailed list published in Dalia Othman, "al-Masry al-Youm Publishes the Achievements of the Army in Support of Development in 30 Months," *al-Masry al-Youm*, May 29, 2015, <https://bit.ly/2kO4v5d>.

- 169 The stated value covered ten EAF contracts and one each from the Ministry of Interior and the Farag Real Estate Investment Company. The EAF retiree heading the bank was Major General Hesham Hamid Helmi Bilal. "EAF Assign Projects Worth 209 Million Pounds to the National Real Estate Bank for Development," *al-Borsa*, January 30, 2014, <https://bit.ly/2McDR2n>.
- 170 Interviewed by Aboulenein, "Egypt's Deep State Gets Back to Business."
- 171 Ibid.
- 172 Marwa Abdallah and Mohamed Magdy, "Former Chairman of Sinai Development Agency to al-Watan: Accountability in Egypt Is Scattered," *al-Watan*, July 15, 2016, <https://bit.ly/2kRsGjh>.
- 173 Raga Ezz el-Din, "Introduction to Civil-Military Relations in Egypt," *EIPSS*, January 15, 2015, <https://bit.ly/2kOqAAF>.
- 174 According to a cabinet colleague of Tantawi's at the time. Anonymized interview. And Major General (retired) Sameh Saif al-Yazal, speaking in a public Doha Debate panel in Cairo attended by the author, October 26, 2011. See "Egypt's Military Rulers Not Interested in Genuine Reform," Doha Debates, October 27, 2011, <https://bit.ly/31E5tQU>.
- 175 CAPMAS estimated that between 12 million and 20 million people lived in informal settlements in 2014. Cited in Bel Trew, "Multi-billion Dollar Project Will Not Solve Egypt's Housing Crisis," *Al-Monitor*, March 25, 2014, <https://bit.ly/2km09lz>. This figure had not changed much from the estimate by the Ministry of Local Administration in 2006 that 15.7 million Egyptians, or 22.3 percent of the population at that time, lived in 1,105 informal or squatter settlements. Cited in World Bank, "Egypt Public Land Management Strategy Volume II," 11. Former Minister of Urban Development Laila Iskandar later stated that about 40–50 percent of Egyptians live in "unplanned neighborhoods." Cited in "Cairo Slums Says Cairo Governor," *Cairo Post*, November 16, 2015, accessed through Wayback Machine, <https://bit.ly/2kldmen>, captured on November 18, 2015.
- 176 Shortage figure cited in Bel Trew, "Multi-billion Dollar Project Will Not Solve Egypt's Housing Crisis." Annual increase according to Al-Ahly Real Estate Development Chairman Hussein Sabbour, in "Major Gulf Investments in Egyptian Real Estate Market," *Daily News Egypt*, January 8, 2014, <https://bit.ly/2lSpfZU>.
- 177 Hiba Hossam El-Din, "EAF Builds 6,000 Social Housing Units in May 15 on an Area of 92 Feddan," *Yom7*, December 28, 2011, <https://bit.ly/2vZgSgs>.
- 178 Noted by Shawkat Isabel Esterman, "Egypt's Steep Learning Curve in National Housing Projects," *Mada Masr*, April 15, 2014, <https://bit.ly/2mmIsUQ>.
- 179 Details from the head of the Central Construction Agency Major General Mahmoud Maghawri, cited in El-Din, "EAF Builds 6,000 Social Housing Units in May 15 on an Area of 92 Feddans." Maghawri later headed the public sector Shams Company for Housing and Construction.
- 180 El-Din, "EAF Builds 6,000 Social Housing Units in May 15 on an Area of 92 Feddans."
- 181 Sara Aggour "Armed Forces Finalise Plans to Build 1m Youth Residential Units," *Daily News Egypt*, April 15, 2014, <https://bit.ly/2lSqIZQ>.
- 182 Cited in Bel Trew, "Multi-billion Dollar Project Will Not Solve Egypt's Housing Crisis." The same source quoted Arabtec stated that a mix of local and foreign banks would foot the bill.
- 183 Eric Knecht, Matt Smith and Hadeel Al Sayegh, "Egypt's Stalled \$35 Billion Housing Scheme - Big Dreams to Harsh Reality," Reuters, October 8, 2015, <https://reut.rs/2lSqYOJ>.
- 184 Anonymized interview.

- 185 “El-Sisi to Launch Low-Income Housing Project in Egypt,” *Abram Online*, March 9, 2014, <https://bit.ly/2P18ENm>.
- 186 “Statement: Armed Forces Contributed to Development Projects in Past 2.5 Years,” *Egypt Independent*, June 1, 2015, <https://bit.ly/2kPp2Gs>. On nondelivery of housing, Shawkat, cited in Esterman, “Egypt’s Steep Learning Curve in National Housing Projects.”
- 187 According to FEB President Hisham Ezz El Arab, cited in Abdel Razek Al-Shuwekhi, “Banks Spent EGP 1bn for Social Development Over Past 3 Years: FEB Chairman,” *Daily News Egypt*, September 23, 2014, <https://bit.ly/2kG6Vmy>.
- 188 “Cairo Slums Says Cairo Governor,” *Cairo Post*, November 16, 2015, accessed through Wayback Machine, <https://bit.ly/2kldmen>, captured on November 18, 2015.
- 189 Aboulenein, “Egypt’s Deep State Gets Back to Business.”
- 190 “Army to Finance Major Roadways Due to Lack of State Funding,” *Mada Masr*, January 20, 2014, <https://bit.ly/2lTqeJl>.
- 191 Figure from Salam Sade, “Egypt...Media Conceals the Military Rank of a General Convicted of Bribery,” *al-Araby al-Jadeed*, February 19, 2016, <https://bit.ly/29f18i6>.
- 192 Anonymized interviews.
- 193 On agreements, “Egypt President Mohamed Morsi Wants India to Join Suez Canal Corridor Project,” Indo-Asian News Service, March 19, 2013, <https://bit.ly/2lXd9P1>. According to Suez Canal Authority head, Admiral (retired) Mohab Mamish, neither the MOD nor the EAF were part of the ministerial committee that drafted the new Suez Canal zone development law. See Mohamed al-Bahrawy, “Mamish: The Army Objected to the Suez Canal Corridor to Preserve National Security,” *al-Masry al-Youm*, August 12, 2013, <https://bit.ly/2adBM3>.
- 194 This accusation was made, for example, by then Suez Canal Authority head, Admiral (retired) Mohab Mamish, speaking to MBC Egypt TV, “Mamish: Morsi Requested Confiscating the Army’s Land in the Suez Canal Development Project,” *al-Borsa*, September 8, 2014, <http://bit.ly/29RnmXE>.
- 195 An EAF source cited in Ahmed Abdul-Azim, “Military Source: The Army Informed Morsi Their Objection to the Privatization of Lands in the Gulf of Suez,” *al-Watan*, April 21, 2013, <https://bit.ly/2lV4FYK>.
- 196 Ibid.
- 197 Marshall, “The Egyptian Armed Forces and the Remaking of an Economic Empire,” 11.
- 198 According to a detailed report in the *al-Masry al-Youm* newspaper, Wafa’ Bakri and Kheir Ragheb, “Text of the Army’s Amendments to the Canal Region Draft,” *al-Masry al-Youm*, May 23, 2013, <https://bit.ly/2mnLdEg>.
- 199 According to Suez Canal Authority head, Admiral (retired) Mohab Mamish, the EAF initially demanded that the minimum share of Egyptian capital in any company be 60 percent. Cited in Mohamed al-Bahrawy, “Mamish: The Army Objected to the Suez Canal Corridor to Preserve National Security,” *al-Masry al-Youm*, August 12, 2013, <https://bit.ly/2adBM3H>.
- 200 Bakri and Ragheb, “Text of the Army’s Amendments to the Canal Region Draft.”
- 201 Mostafa Soliman, “Sisi: The Army’s Intervention in Politics Turns Egypt Into a New Somalia,” *al-Arabyia*, May 12, 2013, <http://bit.ly/2lIKKSS>.
- 202 The EAF view according to an analyst who attended a briefing by intelligence officers in March 2013. Anonymized interview.

- 203 Egypt scored 0/5 on 55 of 76 indicators and 1.4/5 on the remaining 21. Country Summary, Government Defence Anti-corruption Index 2015. Accessed August 20, 2017, <https://bit.ly/2kDyQDD>.
- 204 The company was established by Presidential Decree 778 in July 1976.
- 205 Presidential Decree 195 of 1981, full text at <https://bit.ly/2kT2rZN>.
- 206 As an economic general authority, the GSA budget is issued by the prime minister and ratified by parliament. Ahmed Ashour, "Economic General Authorities: Their Problems and Methods for Resolving Them, With a Case-Study of the Egyptian General Authority for Petroleum," Policies Papers, National Planning Institute, January 2016, 4–5, <https://bit.ly/2ks197U1>.
- 207 On Sun malls and markets, according to the MOD official website at <https://bit.ly/2lWR0k1>, accessed on August 11, 2019. EAF branches run an additional 55, according to the list appended to "Minister of Defense and Military Production Decree 68 of 2015 on Exempting Certain Units Belonging to the Armed Forces From the Tax on Built-Up Plots. Text at <https://bit.ly/2oXdYte>. The number of ninety-eight outlets was given by its director Major General Sabri Abdel-Latif in an interview with Dalia Othman, "Head of Armed Forces' National Service Products Organization: We Seek the Armed Forces' Self-Sufficiency in Various Fields," *al-Masry al-Youm*, June 2, 2019, <https://bit.ly/2lTb1b0>.
- 208 As an EAF agency it imports goods customs free that it then sells through its outlets. Civilians who are not affiliated to the EAF may also shop at these outlets, and affiliated personnel are known to acquire extra quantities of vouchers that they share with family and friends or resell.
- 209 Revised actual budget as declared in Law 114 of 1984. Text at <https://bit.ly/2lSG86B>. Projected budget for 2010/2011 as approved in Law 96 of 2011. Text at <https://bit.ly/2kGlZAC>.
- 210 2013–2014 budget in Law 65 of 2013, published at <https://bit.ly/2m1Dz1W>. 2014–2015 budget in Law 111 of 2014, published at <https://bit.ly/2lWRtCN>.
- 211 The projected budget for 2016–2017 approved in Law 54 issued in July 2016 was for EP1.2 billion. Text at <https://bit.ly/2mgpxd1>. But the final accounts reflected the sharp devaluation of the pound in November, taking the actual implemented budget up to EP2 billion. As approved in Law 81 of 2018, text at <https://bit.ly/2kHjU7x>.
- 212 Gamil Afifi, "Tantawy Witnesses the Celebrations of the EAF Logistics Authority's Day," *Al-Abram*, March 23, 2001, accessed through Wayback Machine, last captured on October 22, 2014, <https://bit.ly/2mj5Gde>.
- 213 See, for example reports in May 30, 2015. Al-Alki, "Achievements of Two and a Half Years"; and Zaki al-Qady, "Minister of Defense Opens a Number of New Production Units at the Logistics Authority," June 15, 2017, <https://bit.ly/2MGoDPD>.
- 214 On initial expansion, Afifi, "Tantawy Witnesses the Celebrations of the EAF Logistics Authority's Day." On printing press in Ismailiya, interview with Egyptian researchers, name withheld on request, October 2017.
- 215 Anonymized interviews.
- 216 Claims made by Major General Gamal al-Sayrafi, head of the Medical Services Department, Nagwa Youssef and Ahmed al-Dib, "Chairman of Medical Service Department: We Treat 40,000 Civilians Annually for Free," *Veto Gate*, August 19, 2014, <https://bit.ly/2kSm04e>; and Abu Zeid Kamal el-Din, "20 Military Hospitals to Serve Civilians in the Different Governorates," *al-Wafd*, February 13, 2015, <https://bit.ly/2OXPUye>.
- 217 Building social support is certainly the purpose of the MOD's Veterans and War Victims Association, whose members receive discounts at cinemas and museums and on national rail services and airlines, free travel on local public transport and exemption from tolls on national

- highways, tuition waivers at private schools and universities for their children, and subsidized pilgrimage to Mecca. The affiliated Loyalty and Hope Association, which was brought under the Veterans and War Victims Association in 2005, runs its prosthetics factory, physical therapy center, carpentry workshops, and special needs and retirement homes, which additionally accept civilians. The association has nine centers nationwide, <http://bit.ly/2n8FvX3>. For more detailed information: Zaki al-Qadi, “We Publish the Main Services of the Veterans Association and Its Addresses in the Governorates,” *Yum7*, February 4, 2017, <https://bit.ly/2MdGCR2>. The association’s official website can be accessed at <https://bit.ly/2m1rKsB>. On coming under the Veterans and War Victims Association in 2005, Mostafa al-Gamal, “Text of the Speech of the Chairman of the Veterans Association,” *Sout al-Oumma*, March 23, 2017, <https://bit.ly/2mnRLmk8>.
- 218 Text of law at <https://bit.ly/2lKzJdD>. Text of Implementation statutes at: <https://bit.ly/2m9Qcbn>. When MOD mining and quarrying activity is conducted with outside partners, it retains its share of income.
- 219 According to a Facebook post by geologist Professor Yahya al-Qazaz of Helwan University, who was a member of the National Committee for Geological Sciences, in which the head of the MOD Mining Sector is also a member. His Facebook page was deactivated in 2018, but he made similar accusations cited in Mostafa al-Moghrabi, “After Designating Desert Lands to the Ministry of Defense, Yahya al-Qazzaz Says: Sisi Seeks to Dismantle the State and Divide the People,” *Masr al-Arabia*, June 9, 2016, <https://bit.ly/2oV7o6t>.
- 220 As demonstrated by a news item posted on the website of the General Authority for Mineral Wealth on May 3, 2017, showing a meeting between the authority’s head, company officials, and clan representatives. “Chairman of the Authority Heads a Meeting With the Representatives of the Companies and the Tribes Working in Shalateen,” *EMRA*, <https://bit.ly/2kSrCeO>.
- 221 Presidential executive order 444/2014, issued on November 29, 2014. Text at <https://bit.ly/2knBltr>.
- 222 Associated regulations at <https://bit.ly/2mnVsbG>.
- 223 The original Nubian inhabitants were displaced by the building of the Aswan High Dam and creation of Lake Nasser in the 1960s and have sought redress, futilely, ever since. Khaled Mahmoud, “Dashing Nubians’ Hopes of Returning Home,” *Sada* (blog), Carnegie Endowment for International Peace, August 13, 2018, <https://bit.ly/2klxo8A>.
- 224 The “New Valley” and “Southern Valley” labels are used by military-affiliated companies. The shareholders of the New Valley Company for Mineral Resources and Oil Shale are: Ganope El Wadi Petroleum Holding Company (65 percent), Ganope Petrojet company (25 percent), Petrojet EL- Neel Petroleum Company (5 percent), and Elneel Egyptian Mineral Resources Authority. The first three have strong military links, <https://bit.ly/2kGiYjO>.
- 225 Anonymized interview with a field researcher. On the tripling of fees, Jamal Boukhari “Des conscripts au service du complexe militaro-industriel en Égypte,” *Orient XXI*, August 28, 2017, <https://bit.ly/2ivoVyn>.
- 226 The Observatory of Economic Complexity says gold represented 9.2 percent of Egyptian exports in 2017, worth \$2.78 billion. Egypt, The Observatory of Economic Complexity, MIT, <https://bit.ly/2m1y17D>, accessed on September 18, 2019.
- 227 Shalateen belongs to the General Authority for Mineral Wealth. Details from Ra’fat Ibrahim, “Shalateen for Mineral Resources,” *Yum7*, October 22, 2016, <https://bit.ly/2P1MSJw2>.
- 228 The city is supposed to comprise some 500 workshops and mini-factories, a gold refinery, and a training academy. A spokesperson for the city portrayed it as a “gateway to Africa.” “Egypt

- Builds the First Specialized City in Gold and Mining in the World,” *al-Arabyyya*, July 26, 2016, <https://bit.ly/2vyowiW>. The spokesperson also said that the city’s initial cost will be EP400 million. Gehan Mawhoob, “Inauguration of the Egyptian Gold and Mining City Early 2017,” *al-Wafd*, September 6, 2016, <https://bit.ly/2nxpRRX>; and Antony Kiganda, “Egypt Plans to Develop Gold Mining City in the Suez Canal,” *Construction Review*, April 27, 2017, <https://bit.ly/2m1Plta>. On the role of Major General Ahmed Abdullah and the head of investment in the governorate, Major General Salah al-Gamal, Abdelrahman al-Qurashi, “With More Than 90 Gold Mines...Construction of an International City for Gold in Marsa A’lam,” *Masrawy*, December 27, 2016, <https://bit.ly/2vBAO9B5>.
- 229 Presidential Decree 204 of 2003, text at <http://bit.ly/2lGwR1L>.
- 230 The shipyard was established in 1978 as a state-owned economic enterprise by ministerial decree 330, and transferred to the Holding Company for Maritime and Land Transport in 1993. It was supposed to be privatized in the early 2000s but was instead transferred to the MOD by Prime Ministerial Decree 982 of 2003. The transfer was completed in 2007. Official website at <https://bit.ly/2mmFler>.
- 231 ECESR, “Report: Workers of Alex Shipyard Between Starvation Policies and Military Trials,” Egyptian Center for Economic and Social Rights, October 18, 2016, <https://bit.ly/2kjcSp4>.
- 232 Marshall, “The Egyptian Armed Forces and the Remaking of an Economic Empire,” 16.
- 233 A fourth corvette was produced in France for immediate delivery. Giovanni de Briganti, “DCNS Confirms Sale of 10 Gowind Corvettes, Expects More,” *Defense-Aerospace*, October 31, 2014, <https://bit.ly/2moPjfv>.
- 234 “Putting Alex Shipyard Up for Sale,” *al-Bayan*, August 2, 2002, <https://bit.ly/2m1QfG4>.
- 235 Jaclyn Mounir, “Alexandria Chamber of Shipping Presents the Optimal Use of Ship Building Companies,” *Youm7*, October 28, 2013, <https://bit.ly/2MiiNa8>.
- 236 The plan introduced a “landlord model” in which private companies fulfil many port functions under the supervision of state-owned entities. Shana Marshall, Joshua Stacher “Egypt’s Generals and Transnational Capital,” *Middle East Report* 262 (Spring 2012), <https://bit.ly/2ksNehW>.
- 237 Details from Major General Ebrahim al-Dessouqi, head of the MOD’s maritime industry and services agency. Cited in Jaclyn Mounir, “Alexandria Chamber of Shipping Presents the Optimal Use of Ship Building Companies,” *Youm7*, October 28, 2013, <https://bit.ly/2MiiNa8>. In fact the Nile Company was transferred in March 2010 under Ministerial Decree 3 of 2010 issued by the defense minister, text at <https://bit.ly/2moR1xr>.
- 238 Claim made in his official bio on ASI website at <https://bit.ly/2mmFler>, accessed March 3, 2018.
- 239 According to the shipyard’s official website at <https://bit.ly/2mmWULs>, accessed 13 April 2018. On output of smaller vessels, <https://bit.ly/2mfSZ2O>. The website was functioning as of August 2019, but was under reconstruction in November.
- 240 Amany al-Azazi, “Experts: Suez Canal Economic Authority’s Training Center Is a Step to Enhance Ship Building,” *al-Mal*, September 7, 2017, <https://bit.ly/2Ou7J78>; and Ahmed al-Fayyed and Ahmed al-A’adly, “Dr. Ahmed Hosni: Egypt Does Not Have a Clear Strategy for Ship Building,” *al-Borsa*, September 13, 2015, <https://bit.ly/2kSFdmp>.
- 241 Confirmed on its website at <https://bit.ly/2knMsTb>.
- 242 “Naval Group Aims for Hat-Trick in Sunni Gulf,” *Intelligence Online*, Issue 812, August 29, 2018, <https://bit.ly/2lXHT2n>.
- 243 “Naval Group Launches a Subsidiary in Alexandria,” *Naval Group*, official website, December 5, 2018, <https://bit.ly/2kHzpML>.

- 244 On commission, Eslam Sa'ied, "Cooperation Agreement Between Industries Development Center and Maritime Industries and Services Sector," *Youm7*, February 1, 2018, <https://bit.ly/2knTW8R>. The IMC website is at <https://bit.ly/2ITUKmn>.
- 245 Boast at <https://bit.ly/2m1HcoB>.
- 246 I owe this insight to Clement Moore Henry. Email on August 9, 2018. Also discussed in his *Images of Development Egyptian Engineers in Search of Industry* (Cambridge, MA: MIT Press, 1980).
- 247 Mohamed al-Ashwal, "Presidency Receives Report on Looted Desert Lands at Cost of 440 Billion Pounds," *al-Watan*, September 9, 2015, <https://bit.ly/2kSG6LJ>. The period covered by this report was not stated, but CAO head Hesham Geneina stated in December 2015 that it covered the preceding six years. He stated that corruption and mismanagement of public assets had cost the state treasury EP600 billion (\$75 billion) in that time; his lawyer, Ali Taha later clarified that three-quarters of this amount related to mismanagement of state land.
- 248 Nasr was founded by Mohamed Ghanem of the General Intelligence Directorate; according to some accounts it was formed as a private company in 1958 and taken over by the directorate in 1961, when trade was nationalized. Abdellatif al-Meniawy, "From the Memory of the Economy and Intelligence, Nasr Export and Import," *al-Arabyyyia*, December 18, 2018, <https://bit.ly/2ISX1hv>; and Youssef Mostafa, "Nasr Export and Import...A Long History," *al-Borsa*, February 9, 2016, <https://bit.ly/2kPWhte>.
- 249 On relationship of Delta Sugar with Nasr, Nasr head MG Amin Yahya Zakariyya, cited in Nada Ismail, "Nasr Export and Import Revives Its Role in Africa," *al-Mal*, January 25, 2011, <https://bit.ly/2moWKmV>.
- 250 Only two subsidiaries belonging to the holding company are currently headed by civilians. Data compiled from the register of public business sector companies at <https://bit.ly/2kSEBgY>, accessed on 6 April 2018. Nasr reveals other military connections: the husband of its head of administration was also an EAF major general, Ahmed Mostafa Marzaban. "Obituary of MG. Ahmed Mostafa al-Marzaban," *Al-Ahram*, October 30, 2016, *Masress*, <https://bit.ly/2m0LnRA>. Note that the rank of admiral is equivalent to major general in other services, but the Egyptian Navy uses the term "naval major general" to describe admirals.
- 251 Major General Amin Yahya was formerly a *wakeel awwal* at the AMA, while Major General Salah Abu Hmeila was an assistant head. Information gleaned from obituaries at: <https://bit.ly/2kQpDYB> and <https://bit.ly/2mocTc9>.
- 252 According to then Minister of Supply Khaled al-Hanafi, the retail trade company made its first profit of EP80 million in 2014–2015. Hassan Abdelzاهر, "Hanafy: EGP80 Million in Profits Achieved by the Egyptian Company for Retail Trade for the First Time in the Past Fiscal Year," *Rosa al-Youssef*, October 25, 2015, <https://bit.ly/2M9pcVz>. Gehan Mawhoub, "Exclusive. *al-Wafd* Publishes the Full List of Changes in the Leadership of the Holding Company for Food Industry," *al-Wafd*, February 17, 2016, <https://bit.ly/2OqP5NC>. All three Nasr board members in 2016 were retired EAF major generals, including Salem. Official website of El-Nasr company, accessed at <https://bit.ly/2IVcbTy>. Accessed September 18, 2019.
- 253 Salem's removal and reappointment were ordered by then Minister of Supply Khaled al-Hanafi. Mawhob, "Exclusive...*al-Wafd* Publishes the Full List of Changes in the Leadership of the Holding Company for Food Industry." On Omar Effendi appointment: Dina Ezz el-Din, "Appointment of Ayman Salem as Chairman of Omar Effendi," *Veto Gate*, March 8, 2016, <https://bit.ly/2knO53g>.
- 254 The council comprised twelve members, five of whom were former EAF officers heading various general authorities or state-owned companies. Besides Gebreel, they included Admiral (Major

- General) Mohammad Ebrahim Youssef, head of the Holding Company for Maritime and Land Transport. “Official Lagazette Publishes the Decree Forming the Higher Council for Logistics and Shipping,” *Masrawy*, December 16, 2017, <https://bit.ly/2OYM0Fr>. On the aims of the council: Naglaa Abulsoud, “Logistics and Shipping Council Is Welcomed by the Companies to Overcome Exportation Challenges,” *al-Borsa*, December 5, 2017, <https://bit.ly/2kQOH1C>.
- 255 On surge in turnover, “El-Nasr for Export and Import Achieves an Enormous Leap in Its Turnover,” *al-Souk al-Arabyia*, March 15, 2015, <https://bit.ly/2w2HTzq>. Interview with Gebreel in: Hanan Othman, “MG. Fathy Gebreel: China, Turkey and Israel Took Advantage of Our Absence and Took Control of Africa,” *al-Wafd*, January 8, 2018, <https://bit.ly/2P2stEf>.
- 256 Othman, “MG. Fathy Gebreel.”
- 257 Admiral (Major General) Mohamed Ibrahim Youssef claimed that Nasr made EP2.4 billion in 2016–2017, up from EP 1.5 billion in the previous year. Abdelhalim Salem, “EGP2.4 Billion in Revenue by el-Nasr for Export and Import in 2016/2017,” *Youm7*, September 27, 2017, <https://bit.ly/2P1lHX>. Youssef’s claim of a 68 percent rise in income [*iradat*], from EP2.388 billion 2016–2017 to EP4.034 billion in 2017–2018, Hanan Othman, “El-Nasr Export Expects 4 Billion in Income This Fiscal Year,” *al-Wafd*, <https://bit.ly/2B4FMkw>. Youssef statement that Nasr would undergo restructuring in: Mahmoud al-Gamal, “Holding Company for Transport: Upgrading el-Nasr for Export Includes Human Cadres,” *al-Watan*, September 30, 2017, <https://bit.ly/2kqYlrf>.
- 258 Statement on the shipping line by Transport Minister Hesham Tawfiq, cited in Mohamed Almuhim, “Business Sector: Launching 100 Containers Weekly to Africa at Competitive Prices of 20 Percent Less,” *Shorouk News*, July 2, 2019, <https://bit.ly/2kGM1nm>.
- 259 According to company head Major General Nabil Lotfi, Reda Hobaisy, “Destruction of the Biggest Egyptian Navigation Company in the Middle East,” *Youm7*, July 10, 2015, <https://bit.ly/2Ou1Wyt>. Revealing the MOD’s direct interest, Lotfi was replaced by the former head of the Maritime Industries and Services Agency, Major General Ebrahim a-Dessouqi, who had also headed the Alexandria Shipyard and Egyptian Ship Building and Repair Company. Sara Ibrahim, “Dessouqi Appointed Chairman of the Egyptian Navigation Company,” *al-Borsa*, July 29, 2016, <https://bit.ly/2m0hNvS>.
- 260 According to Egyptian researcher Mohamed Hosni, draft paper, October 2017. Viewed with author’s permission.
- 261 Anonymized interview.
- 262 For example, the manager of a foreign oil/gas company operating in Egypt recalled having to hire labor. Anonymized interview.
- 263 Anonymized interview.
- 264 The investment was for EP200,000, representing 7 percent of the new company’s capital. Samia Sa’id, *Who Owns Egypt?* (Cairo: Dar al-Mustaqbal al-‘Arabi, 1986), 143.
- 265 Based on data collected from MOMP and AOI company and subsidiary profiles in the regional business database Zawya up to 2011. Investments included public sector companies like Tharwa Petroleum and Nilesat, and the Kuwaiti Kharafi Group. Many of these profiles were taken down sometime after 2012. Shana draft paper.
- 266 The MOMP holds a 5 percent share in Tharwa, according to the company’s website. Accessed September 18, 2019, <https://bit.ly/2mll4Wx>.
- 267 This was the practice of major presidential crony Osman Ahmed Osman, cited by Henry, *Images of Development*.

- 268 Cash flow financing comes under Section 23 of the Arms Export Control Act (22 U.S.C. §276354). It was ended by the Obama administration in 2015, with effect from FY2018.
- 269 Jeremy M. Sharp, “Ending Cash Flow Financing to Egypt: Issues for Congress,” Congressional Research Service, June 4, 2015, 1–3, <https://bit.ly/2kGIkhv>.
- 270 Jeremy M. Sharp, “Egypt: Background and U.S. Relations,” Congressional Research Service, June 27, 2013, 10–11, <https://bit.ly/2lXY9QX>.
- 271 Ibid. As a designated “major non-NATO ally,” Egypt is eligible to receive Excess Defense Articles under Section 516 of the Foreign Assistance Act and Section 23(a) of the Arms Export Control Act.
- 272 Ikram, *The Egyptian Economy, 1952–2000*, 118.
- 273 David Schenker, “Inside the Complex World of U.S. Military Assistance to Egypt,” Washington Institute, September 4, 2013, <https://bit.ly/1l14t1f>.
- 274 Amy Hawthorne, “Rethinking US Economic Aid to Egypt,” POMED, October 2016, Table 1, 35, <https://bit.ly/2m2d3FG>.
- 275 “Egypt - Selling to the Government,” Export.gov, July 28, 2017, <https://bit.ly/2kftiih>.
- 276 “Worldwide Naval Projections Report, Egypt, Rewritten - June 2010, Executive Summary,” 4. Accessed through Wayback Machine at <https://bit.ly/2lUchLd>, as captured on October 14, 2012.
- 277 According to a former defense company agent, anonymized interview.
- 278 “Doorknock March 2010: Delegates’ Profile,” American Chamber of Commerce in Egypt, n.d., accessed through Wayback Machine, captured on August 8, 2015, <https://bit.ly/2mgggBl>.
- 279 About, Triangle Group, <https://bit.ly/2kE5oxj>, accessed May 18, 2018.
- 280 Examples of products supplied to the EAF on the company’s official website, accessed at <https://bit.ly/2kSXCiX>. On overlapping areas of activity: “The Group at a Glance,” Artoc Group for Investment and Development, <https://bit.ly/2knqMGL>, accessed on May 18, 2018. On airport construction: Engineering and Technical Services Division. Artoc Group for Investment and Development, <https://bit.ly/2kQzcGZ>, accessed on May 18, 2018. Artoc Auto is the exclusive importer of Skoda cars in Egypt. Consumer Products Division, Artoc Group for Investment and Development, <https://bit.ly/2kQaeaH>, accessed on May 18, 2018.
- 281 “Pyravision for Trading & Consultancy,” Egyptian Businessmen’s Association, <https://bit.ly/2kHRAIt>, accessed on July 27, 2018. I am grateful to Shana Marshall for drawing my attention to this company.
- 282 Shana Marshall, unpublished manuscript, 72.
- 283 Anonymized interview.
- 284 Ayman Nour, “An Army for the Nation or a Nation for the Army,” *Youm7*, November 15, 2011, <https://bit.ly/2kSVw2y>.
- 285 I am grateful to George Joffe for this observation, made in relation to Egypt’s Algerian counterparts. Email to the author, December 21, 2015.
- 286 Confirmed by a senior retired EAF officer. Anonymized interview.
- 287 Robert Springborg, “The President and the Field Marshall: Civil-Military Relations in Egypt Today,” *Middle East Report* 17, no. 147 (July/August 1987): 8, <https://bit.ly/2me1Q53>. The case was tried in a special “court of ethics” so as to limit the scope of enquiries.
- 288 Nagwa Ibrahim, “Details of Alawi Hafez’s Investigations, Which Led to Refaat al-Mahgoub’s Death,” *Tahrir News*, April 13, 2015, <https://bit.ly/2mopFY8>.
- 289 A well-connected source to the Morsi administration. Anonymized interview.

- 290 Florence Gaub and Zoe Stanley-Lockman, “Defence Industries in Arab States: Players and Strategies,” Chaillot Papers 141, March 2017, 18, <https://bit.ly/2lMFKqk>.
- 291 Eric Schmitt, “Cairo Military Firmly Hooked to U.S. Lifeline,” *New York Times*, August 20, 2013, <https://nyti.ms/2kQViZW>.
- 292 According to a senior U.S. official overseeing the relationship. Anonymized interview.
- 293 Ibid.
- 294 According to notifications to the U.S. Congress. “Egypt – Follow-On Technical Support,” *Defense Security Cooperation Agency*, July 2, 2010, <https://bit.ly/2m0kIEQ>; and “Egypt – Service Life Extension Program for F-110-GE-100 Engines,” *Defense Security Cooperation Agency*, December 18, 2009, <https://bit.ly/2kREamS>.
- 295 Statements reviewed for this report by the heads of the MOD Armaments Authority and Department of Arms and Munitions, assistants to the ministers of defense and of military production, and the head of the AOI.
- 296 A former U.S. diplomat who served in Egypt, anonymized interview. The Multinational Force and Observers was set up in 1981 to supervise the implementation of the security aspects of the Egypt-Israel peace treaty.
- 297 Aram Roston and David Rohde, “Egyptian Army’s Business Side Blurs Lines of U.S. Military Aid,” *New York Times*, March 5, 2011, <https://nyti.ms/2m2Plcr>.
- 298 Ibid; and Egyptian economic analyst interviewed by the author in June 2014, anonymized interview.
- 299 Official website of the International Medical Center, accessed at <https://bit.ly/2mgh21A>, accessed August 13, 2018.
- 300 Anonymized interview.
- 301 Waterbury, *The Egypt of Nasser and Sadat*, 403.
- 302 Ibid., 131 and 403–4.
- 303 Ibid., 49.
- 304 Poverty rates issued by the Central Agency for Public Mobilization and Statistics (CAMPAS), cited in Ibrahim Alsahary, “CAPMAS: Poverty in Egypt Increases to 26.3% in 2012/2013,” *Egypt Independent*, October 16, 2014, <https://bit.ly/2kQeqqQ>; and “32.5% of Egyptians Live in Extreme Poverty: CAPMAS,” *Egypt Today*, August 1, 2019, <https://bit.ly/2kQetmw>.

CHAPTER 4

MAPPING THE INFORMAL MILITARY ECONOMY: THE OFFICERS' REPUBLIC

THE EAF'S POWERFUL POSITION within the state and as a final arbiter of Egyptian politics is the indispensable bedrock of the formal military economy, but also anchors the officers' republic of self-perpetuating networks of retired EAF officers embedded throughout the state apparatus.¹ Although they occupy positions in the official bureaucracy, they constitute a pillar of what may be labeled the informal wing of the military economy, since the bodies they head or influence and the resources they command do not belong formally to the military as an institution.

The core of this officers' republic comprises several hundred retired EAF officers who are chairmen, managing directors, or members of the boards of state agencies and public business sector companies that manage economic assets; undertake production, trade, and services or award contracts in these areas of activity; and control much of the policy and regulatory framework in which both the public and private sectors operate. A significant complement to the officers' republic are the thousands of EAF retirees in government ministries and agencies and throughout local government, itself a massive structure, many of them in senior positions. Others serve as cabinet secretaries and ministerial advisers. The officers' republic ensures income streams for many senior retirees that are far higher than those received during active service, and more modest supplementary postretirement incomes for many hundreds, if not thousands, of other retirees who permeate the lower ranks of state bodies.

The existence of the officers' republic does much to explain the widespread belief that the military accounts for anywhere between 25 and 60 percent of the national economy. But

The core of this officers' republic comprises several hundred retired EAF officers who are chairmen, managing directors, or members of the boards of state agencies and public business sector companies.

extensive penetration of the state apparatus by EAF retirees does not translate into direct military control, let alone ownership, of the financial and other assets of public economic authorities and enterprises. Certainly, it secures revenue for formally registered military companies and reinforces the economic utility derived from those factors of production that are substantially under military control, especially

land, but otherwise this rent-seeking behavior is just as typical of civilian actors, both public and private. Government agencies that are not headed by EAF retirees act in much the same way in securing or awarding contracts, civilian officials wield their bureaucratic powers over economic licensing and regulation to similar effect, and private companies readily take advantage through privileged connections and bribes.

Furthermore, with the total proportion of GDP originating in the public sector estimated at 31 percent in 2016, the military would have to control the entirety of public production of services and goods in Egypt in order to reach even the more modest claims made about its economic empire, and would remain far short of the more exaggerated ones.² Again, pinning down an exact value is not only impossible, but also a diversion from grasping the real import of the officers' republic for Egypt's political economy. Like their counterparts in the formal military economy, EAF retirees in the state apparatus routinely use legally sanctioned discretionary powers to award noncompetitive contracts to favored clients, obscure economic inefficiency (and mismanagement) of public funds, and both enable and protect insider trading and what at times amounts to plain racketeering. In brief, they are both an integral part and an outcome of the regime maintenance logic as it has evolved since 1952, and of how all actors currently engaged in the Egyptian economy and administration do business.

THE OFFICERS' REPUBLIC

Together, EAF retirees constitute the backbone of the informal military economy and underwrite the loyalty scheme that holds the officers' republic together. They are to be found across the state apparatus, but most significant for the military economy is their concentration in two broad areas of the public sector: first, the civilian administrative bureaucracy comprising so-called general and national authorities, other central agencies and regulatory bodies, and local government; and second, state-owned economic enterprises, including the large number that have been partially or fully privatized since 1991.

An Enduring Legacy

The officers' republic emerged as the result of several factors, but its roots lie in the Nasser-era practice of appointing EAF officers to key ministerial or civil service posts as a means of ensuring both technical competence and loyalty in a public sector that grew to 900,000 by 1960, and then expanded massively in the wake of the socialist decrees of July 1961 that led to nationalization of much of the economy.³ Reliance on EAF officers was additionally a function of the power play at the head of the state. On one side stood Nasser, who in the assessment of political scientist Robert Springborg "had to monitor personnel changes even at relatively low levels in the bureaucracy, military, and public sector of the economy, keeping a close eye lest one of his erstwhile supporters develop a 'power base' to which even Nasser would be vulnerable."⁴ On the other was his powerful defense minister Abdel Hakim Amer, who exploited the spurt of institutional expansion to extend his own military patronage networks.⁵

The Nasser era left a lasting legacy. Most importantly, it established the entry of EAF officers to civilian roles, but the rivalry with Amer ensured that this also came with numerous privileges and perks and embedded habits that undermined military professionalism—as was shown disastrously in the June 1967 war with Israel. In the graphic description of political economist Samia Sa'id, "Amer regarded the military establishment as a tribe in effect, of which he was the sheikh." He awarded his favorites soft military assignments and placed others in the state bureaucracy as company managers and governors or posted them to foreign countries with diplomatic benefits and allowances.⁶ Nasser tried to require officers to quit EAF service if they took civilian jobs, but failed. It was not until 1975, when Nasser's successor Anwar Sadat issued Social Security Law 79 of 1975 and the modified Law 90 of 1975 on Retirement, Social Security, and Pensions for the Armed Forces that salaries and pensions were suspended for officers who entered civilian service, whether they did so on secondment during active service or after retirement.

Today, the officers' republic ensures a flow of contracts and resources that helps sustain military enterprises, but does much more as well. It doubles as a loyalty scheme, tying senior EAF officers to the presidency and the governing political system and middle-ranking officers to their superiors, and as a reserve force of military bureaucrats who can be called on to staff civilian agencies. The benefits work both ways. Because retired EAF officers remain subject to the military judicial system, the MOD and affiliated agencies can use their influence in the state's audit bodies—such as the Administrative Monitoring Authority, which is always headed by a senior EAF officer and staffed by several hundred other active-duty and retired EAF officers—to initiate investigations and prosecutions to those who diverge from

Together, EAF retirees constitute the backbone of the informal military economy and underwrite the loyalty scheme that holds the officers' republic together.

the military's preferences. Former officers are acutely aware of the military's expectations and largely toe the line to avoid retaliation. The legislative decree issued by the Supreme Council of the Armed Forces (SCAF) in May 2011 giving MOD prosecutors the primary authority to determine whether EAF officers accused of making illicit gains while in service should be tried in military or civilian courts, even if they had retired in the meantime, offered protection but also held the threat of lifting it as a permanent Damocles' sword.

The Loyalty Scheme

What the late Egyptian political scientist Samer Soliman called a “loyalty allowance” is both an enduring feature of the officers' republic and integral to the informal military economy.⁷ Since the Nasser era, when EAF officers were appointed to upper ranks of the public sector, they have been entrenched in almost every sector and at all levels of Egypt's vast state apparatus. From an estimated 1,500 under Nasser, a random sample of the civil service noted in my “Above the State: The Officers' Republic in Egypt” paper from 2012 and additional surveys conducted for this report suggest that their number has increased several-fold. These officers import the connections made at officer school—the famous *duf'ah* (graduating class) and the resulting *shillah* (cliques)—that carry over into their subsequent service in the various EAF branches and affiliated agencies; as a 1985 CIA research paper noted, these “old-boy” networks are influential in shaping the behavior of the civilian agencies they join.⁸

Sadat's assertion of presidential power over the EAF and partial de-militarization of the state apparatus in the 1970s reversed the trend, but only briefly.⁹ It gained powerful new impetus under Field Marshal Mohamed Hussein Tantawi, who was defense minister from 1991 until Mubarak's ouster in 2011, and then for another year while he doubled as acting president. EAF officers had seen their purchasing power and official entitlements erode due to inflation and decline in comparison to the expanding private sector over the previous decade, but Tantawi brought welcome relief to many by trading loyalty during service for the prospect of additional postretirement incomes.¹⁰ The officers' republic grew massively in this period, assisted by the transformations wrought in the public sector by two waves of privatization in 1991–1997 and 2004–2009, the meteoric expansion of the real estate market and other forms of speculative activity, and growth in foreign investment and trade, all of which multiplied the opportunities for placing EAF retirees.

The loyalty scheme served so important a political purpose that a well-connected source sympathetic to the Morsi administration alleges that it increased the number of recent EAF retirees appointed in the state apparatus sharply, from 400–500 annually to an estimated 4,000 in the single year of Morsi's presidency.¹¹ Whether the figure is accurate or not, it reflects the enduring power of this informal scheme as much as the Muslim Brotherhood's eagerness to appease the military. The legacy endures, and indeed has been boosted by the military takeover in July 2013 and Sisi's reliance on the military to deliver economic results.

The loyalty scheme focuses in particular on senior officers, estimated by one retired general to represent about 15 percent of the EAF officer corps in 2012.¹² This is a high percentage by international standards, indicating a system designed to maintain the loyalty of officers by promoting them in numbers that exceed operational military requirements and extending their service past normal retirement ages. As noticeable is the unusually large number of retired major generals in Egypt. This is partly the result of the automatic promotion of brigadier generals to the rank of major general upon retirement, assuring them of increased statutory end-of-service pensions and benefits as well as improved postretirement prospects. These officers make up the backbone of the officers' republic, along with the smaller but significant number of fellow EAF officers who are seconded to the General Intelligence Directorate (GID) or other agencies, such as the Administrative Monitoring Authority, where they see out their active service.

Regarded as an entitlement, the loyalty scheme adds a relatively modest postcareer salary to the military pension for a majority of retirees. Under Law 31 of 1992, the pension awarded to any member of the armed forces (after factoring in all allowances) may not exceed their total basic pay on retirement, making re-employment necessary.¹³ Following the end of their normal pensionable employment, retirees may be reappointed on renewable six-month "call-up" contracts that permit them to remain in uniform and in (noncombat) service.¹⁴ In most cases, postretirement positions are held for a few years, after which they are vacated to make way for more recent retirees. But the contracts of retirees who play key roles in the officers' republic may be renewed for up to ten years as they rotate between a succession of new positions, and even longer in some cases. Other retirees are hired on consultancy contracts that are nominally for fixed terms, but which in practice are renewed at the discretion of the recruiting officials. All appointments moreover come with associated benefits, service allowances, and bonuses.

The loyalty scheme has been reinforced since Sisi became president in 2014. Two years later, parliament approved a draft law proposed by the MOD awarding the president the power to extend the service of select officers at the rank of major general, who normally retire at 58, by four years.¹⁵ In December 2017 it also approved an amendment to Law 90 that raised the retirement age for lieutenant generals by four years as well (to 64).¹⁶ These legislative moves extend the scope for seconding active-duty officers to select positions in state agencies. In doing so, they moreover shift the costs, as was made evident when the SCAF transferred four major generals to the Ministry of Housing, NUCA, and the National Authority for Potable Water and Sanitary Drainage (NAPWASD) in 2011, requiring the latter as the "benefiting party to cover all their military pay and compensations as well as all financial and administrative incentives issued to their families."¹⁷ Indeed, this

Today, the officers' republic ensures a flow of contracts and resources that helps sustain military enterprises, but does much more as well. It doubles as a loyalty scheme.

may be a factor incentivizing the appointment of active-service officers to civilian agencies; the Administrative Monitoring Authority alone employs many hundreds, and the GID possibly a few thousand.

Predictably, appointments are made on an informal gradated scale according to perceived loyalty, literally a pecking order.

Predictably, appointments are made on an informal gradated scale according to perceived loyalty, literally a pecking order. Officers reaching the EAF general staff or the service staffs of the four EAF branches (Army, Air Force, Navy, and Air Defense), central departments such as the

Engineering Authority, and special units such as the Republican Guard are ostensibly the most competent but have, by definition, demonstrated unwavering loyalty the longest. This top stratum is assured of appointment upon retirement to top managerial positions in the civilian bureaucracy and state-owned enterprises that offer salaries commensurate with commercial companies or opportunities for extra income generation and asset accumulation. Some head more than one company, act as designated or delegated members to the boards of subsidiaries, or are imposed on the boards of private firms.¹⁸ Generally, senior officers become heads or board members of public companies for a few years and then give way to the next in line; middle-ranking officers tolerate relatively modest pay and conditions in hope that their turn will come.

Military Sinecures

Appointment to civilian bureaucratic or commercial entities is not based on any legal requirement or entitlement—except in the case of a few specialized parastatals or companies such as Egypt Telecom, which is required to have the chief of staff of the EAF Signals Corps on its board—but rather reflects the influence of the EAF and the tentacular spread of the officers' republic. The trend intensified sharply after the launch of privatization in 1991, which rapidly widened the pay gap between the private and public sectors. By 2011, the most privileged EAF retirees were commonly earning salaries of EP100,000 to EP1 million (then \$16,670 to \$166,670), according to whistle-blowing officers, while hidden partnerships were believed to raise the annual incomes of the highest paid to between EP12 million and EP100 million (\$2–\$16.67 million).¹⁹

It has also become customary for officers on track to senior command positions to serve one or more tours of duty as defense attachés, as head of the military procurement office in Washington, DC, or as managers in military companies. They receive “task allowances” and an extra set of benefits and bonuses attached to each posting—including an additional housing unit, which they may rent or sell—whether or not they are rewarded with further promotions and eventual appointment to chair government agencies or companies.

Some of the much larger number of senior retirees who do not rise this high are awarded managerial positions in military clubs and hotels, with prime locations going to the better-connected officers and more remote ones to the less favored. Many more retirees are appointed in the state's sprawling civilian bureaucracy and the local government structure. Well-connected officers are assigned positions in control of functions such as licensing marble quarries or internationally funded development projects, which offer scope for racketeering and bribe-taking. Others are hired as advisers and consultants in government ministries and agencies or in state-owned companies, reportedly earning monthly salaries of EP6,000–EP28,000 (\$1,000–\$4,670) and allowances and bonuses worth an additional EP10,000 (\$1,667) a month in 2011—hardly princely amounts compared to employees of civilian companies with equivalent seniority and qualifications, but a significant boost for major generals whose official retirement package in the same year comprised a lump sum payment of up to EP40,000 (\$6,670) and monthly pension of up to EP3,000 (\$500).²⁰

Clearly, discretion rather than professional competence and merit lie at the heart of the loyalty scheme. For example, the minister of defense has the power to award officers lifetime use of beach chalets in desirable coastal resorts belonging to the military, but can also withdraw it, incentivizing loyalty and obedience.²¹ A tacit barrier moreover separates junior and middle-ranking officers from senior ranks. The former are given apartments, for which they pay monthly installments for three to five years, and loans from military funds to purchase cars, whereas the latter receive villas and cars, as well as being assigned drivers on retiring.²² Lower-ranking officers must normally educate their children at their own expense—a significant disadvantage given the poor state of Egypt's public education system, which prompts parents to pay for private tutors—but children of officers (and relatives up to the fourth degree, according to anecdotal evidence), now benefit from tuition subsidies to attend the handful of international schools run by or for the EAF.²³

At one level, the officers' republic simply secures the interests of a large constituency of former officers. The SCAF and the MOD's Organization and Administration Authority decide the appointment of retirees in military social facilities and companies (remaining in uniform and retaining the perquisites of rank), but this primarily serves the loyalty scheme rather than a clear strategic rationale. For most retirees, the process is more random. The Administrative Monitoring Authority routinely sends cabinet ministers the names and qualifications of EAF officers seeking postretirement placements.²⁴ The Organization and Administration Authority, which is responsible for administrative development and reform, headed by retired Major General Safwat al-Nahhas from 2004 to 2016, has performed a similar role.

A Military-Bureaucratic Reserve Force

But on another level, the distribution of EAF retirees has followed two main patterns that characterize the informal military economy. First, retirees from specific EAF branches are

systematically appointed to administrative or economic agencies within their general field of service. Originating in the 1950s, when EAF officers assigned to the state apparatus cultivated their own military networks in the public sector bodies they ran, these military-bureaucratic fiefdoms have assured officers from the same branches of service a sinecure and become a permanent feature of the officers' republic.

For example, former Air Force officers assume management of civil aviation authorities and companies; Navy officers do the same in the maritime sector and the Suez Canal; their Signal Corps counterparts move into the telecommunications and information technology sectors; and Army officers dominate construction, land transport, and public works. Officers

in charge of the Department of Armed Forces Clubs and Hotels have, predictably, moved into the tourism sector after retirement, while a former head of the EAF's Department of Morale Affairs became minister of information in 2011 and then head of the Egyptian Radio and Television

Discretion rather than professional competence and merit lie at the heart of the loyalty scheme.

Union. Similar patterns have emerged in more incongruous contexts: three of four heads of the Arab Organization for Industrialization have been former Republican Guard commanders, for example, and all heads of the Central Agency for Public Mobilization and Statistics since 1977 have come from EAF ground forces, in clear displays of the sinecure principle.

The second main pattern is the symbiosis that has gradually emerged between different arms of the informal and formal military economic sectors. Initially this was primarily the result of path dependency, as fiefdoms tended to concentrate in sectors regarded by successive presidents and governments as engines of the Egyptian economy, most notably major public infrastructure and associated services, select manufacturing and feeder industries, and related administrative and regulatory public agencies. The parallel expansion of the EAF's loyalty scheme and launch of the government's privatization program in 1991 accentuated the concentration of retirees in these sectors, but probably still reflected a legacy factor rather than a clear strategic rationale. A principal exception was the MOD policy of placing EAF officers in the civilian agencies responsible for planning the use of state land, although this appears to have been driven by national security concerns as well as an early attempt to generate rent.

Since 2013, however, a more coherent strategic purpose has driven the deepening of activity and investment in economic sectors in which military actors are already prominent, as well as expansion in others. The discernible pattern of public bodies (including state-owned

companies) that are headed by EAF retirees but have civilian deputies who are professional managers or specialized in the relevant fields may reflect a growing awareness of the need to ensure productivity and even profitability. This offers significant military influence, if not control, while leaving the business of actually running these bodies to competent individuals. But the result remains more a symbiosis between the formal military economy and the officers' republic than a synergy: advantageous to each but failing to produce a greater combined outcome. In this sense, the informal military economy is only marginally more than a facsimile of the rest of the public sector. Another sign of strategic management is the rotation of a cadre of politically reliable EAF officers between various government agencies and state-owned companies—often but not always within the same sector—and also to top bureaucratic positions within local government.

But rather than indicating the existence of a shadow economic board run by the military with effective oversight and extensive control, the revolving-door phenomenon more likely reflects converging but distinct factors: the MOD's employment of officer networks to secure its interests in specific sectors such as external trade and supply, on one hand, and on the other, the extension of presidential power through the governors who represent him while also complementing military economic activities. All serve the regime maintenance logic that has governed Egypt since the establishment of the republic in 1952.²⁵ Officer networks, and the loyalty scheme that binds them to the incumbent administration, will have to be dismantled if any Egyptian government is ever to exercise effective economic management and attain sustainable development.

A Military Managerial Elite, or Military Fiefdoms?

There are four major types of public institutions involved in economic activity in Egypt besides government ministries: local government productive enterprises, services general authorities, economic general authorities, and public sector companies, of which the last two are the principal economic actors. Public sector companies will be discussed later, but there are currently between fifty-one and sixty-one general authorities responsible for assets and operational budgets, regulatory frameworks, investment and development decisions, and implementation in the most important sectors of the economy, including the Suez Canal, petroleum, supply and trade, social and health insurance, public infrastructure and land reclamation, and others. To these should be added some of the roughly 120 services general authorities that affect economic activity or generate income in one way or another. The general authorities operate as semi-autonomous corporations under Law 11 of 1979, which separated their budgets from the general state budget.²⁶

● = No known military presence

[illegible]

EAF retirees occupy an important position in the general authorities that award government contracts in a wide range of areas including transport, housing, construction and land reclamation, public infrastructure and utilities, mining and quarrying, petroleum, tourism, media and telecommunications, energy (including nuclear), and religious endowments. Established by presidential decree, most come under the relevant ministries responsible for these sectors, with the exception of a few that are fully autonomous, such as the Suez Canal Authority. In 1995, additionally, Presidential Decree 281 established general authorities with a specific remit of planning, implementation, operation, and maintenance of works relating to potable water and sanitation in individual governorates.²⁷ On the eve of the 1991 privatization program, general authorities accounted for 23 percent of Egypt's total GDP. Their operating budgets are financed either through their own activities, the National Investment Bank, or foreign assistance channeled through the government—and most operate at a loss.²⁸

Of seventy-two general authorities surveyed for this report (mostly economic, but also including some services), EAF retirees were heads, deputy heads, or board members in

Of seventy-two general authorities surveyed for this report, EAF retirees were heads, deputy heads, or board members in forty.

forty (56 percent) in 2018. This does not include the ten subordinate authorities of the MOD, all headed and staffed by EAF officers. Retirees also occupy a similar proportion of positions in roughly two dozen government bodies that shape the economic sphere: so-called national authorities that oversee railways, insurance,

pensions, mail, and so on, which are established in separate laws and equal in status to ministries; national councils or centers that undertake planning or set policy in specific, narrow fields such as energy and land use; and central state agencies that provide oversight, regulation, and statistics and other information. Some general authorities moreover have regional or provincial branches that are often headed by retirees, a foremost example being the Ministry of Housing's Central Construction Agency, which is a major employer of former EAF engineers.

The sectoral distribution of EAF retirees reveals an especially marked concentration in transport infrastructure and associated services; certain utilities; housing and urban settlements; and land reclamation. They head or sit on the board of: fifteen out of sixteen general authorities for transport (land, including roads, bridges, and tunnels; maritime, including the main sea ports; and aviation) as well as the National Authorities for Tunnels and for Railways; two of three general authorities in housing and new urban communities; one of two land reclamation authorities; three of seven in the agricultural sector; and the NAPWASD.

Contracting and construction are clearly the common denominator, but control of land use is a key enabler: it lies at the basis for the military's business-oriented approach, and EAF retirees have headed the National Center for Planning State Land Uses for nearly two decades. Control over land use moreover underpins the extension of the officers' republic into the development and construction of tourist resorts in mainly coastal areas, many of which come under MOD jurisdiction as "strategic zones." EAF retirees head or sit on the board of seven of eleven general authorities for tourism. For the same reason they are heavily present in important regional agencies, most notably the Suez Canal, Suez Economic Development Corridor, and Sinai Development Authorities. EAF retirees additionally play important roles in government agencies linked to real estate, including educational buildings, religious endowments (which manage assets worth an estimated EP70 billion in 2016, or \$4.24 billion), and real estate management for national insurance.²⁹

The officers' republic naturally also extends into land reclamation and related large-scale agriculture projects, continuing a long line of involvement that has been uninterrupted since the Nasser era. As Robert Springborg noted in the late 1970s, "Neither Abdel Hakim Amer's nor Gamal Abdel Nasser's death terminated the presence of former military officers, most of whom had been Amer's clients, in those sections of the bureaucracy and public sector responsible for reclaiming and farming reclaimed land."³⁰ They were committed to the continuation of these activities, he added, believing them to be desirable and "because without such activity their respective state companies and organisations would be left with little or nothing to do."³¹ This emphasis persists, forty years later. The head of the General Authority for Reconstruction and Agricultural Development, an EAF retiree, sits on the board of the Egyptian Countryside Development Company that was formed to implement the reclamation of 1.5 million feddans of desert land on Sisi's orders in 2014, along with the head of the EAF Engineering Authority and an assistant to the minister of housing who is also a retired EAF officer. The land moreover lies in the area of past land reclamation projects in which the EAF has been invested for decades at Farafra, Toshka, West Minya, and al-Maghrah.³²

Control of land use is a key enabler: it lies at the basis for the military's business-oriented approach, and EAF retirees have headed the National Center for Planning State Land Uses for nearly two decades.

The officers' republic also encompasses six of nine general authorities under the Ministry of Trade and Industry, affecting the activity of both public and private enterprises. EAF retirees exert added influence through national bodies such as the Central Agency for Public Mobilization and Statistics—the sole agency authorized to issue official statistics, which has been headed by an EAF retiree since at least 1980—and the AMA. AMA officers moreover sit on some eighteen other government bodies such as the National Payment Council, the Supreme Council for Tourism, and the Supreme Council for Investment, extending

presidential power but also potentially serving the officers' republic. Retirees additionally have a significant presence in the Egyptian Radio and Television Union (commonly known as Maspero), while, as noted above, the sitting chief of staff of the EAF Signal Corps is a statutory member of the National Telecommunications Regulatory Authority (as well as of the main telephone company, Egypt Telecom).

The General Authority for Industrial Development illustrates both the extended reach that the officers' republic has when one of its own heads a government body that acts as a hub for others. The authority came under a retired EAF officer for the first time in 2011, since then it has always been headed by a former director of the EAF Engineering Authority or Water Department. The major general who assumed the position in 2016 sits on the boards of the AOI, the National Center for Planning State Land Uses, the Industrial Modernization Center, the Executive Agency for Industrial and Mining Projects, the Abu Kir Company for Fertilizers, the General Authority for Standards and Quality, the General Authority for Economic Zones, the Rural Electricity Authority, the Arab Organization for Industrial and Mining Development, the Nuclear Materials Authority, the Environmental Affairs Agency, and the Isotopes Research and Development Center.³³

The maritime sector offers an especially telling example of how the officers' republic has deepened and expanded. Most significant is its enduring grip on the Suez Canal Authority, one of Egypt's principal foreign currency earners: it has been headed continuously by EAF officers since 1964, and several former Navy commanders are currently also deputy heads. Former Navy officers have dominated twenty-nine of Egypt's forty-three ports

EAF retirees exert added influence through national bodies such as the Central Agency for Public Mobilization and Statistics—the sole agency authorized to issue official statistics.

and specialized terminals (for trade, mining, petroleum, tourism, and fishing) for decades, as well as many of the dedicated maritime services companies and dealerships that will be discussed in the next section. This position allowed horizontal extension into bodies such as the Arab Academy for Science, Technology and Maritime Transport, an Arab intergovernmental organization, and its Research and Consultation Center. Seventeen of the

twenty-eight members of the latter body's governing board are Navy retirees who head general authorities and maritime companies.³⁴ Separately, a Navy retiree heads the Union of Arab Navigation Chambers, established by the Arab League's Economic Unity Council. Yet management of Egypt's Maritime Transport Sector has been so poor that in 2010 the United Nations' International Maritime Organization blacklisted it, citing extensive corruption affecting safety inspections and maintenance of ships and ferries.³⁵

The presence of EAF retirees in leading positions within government agencies moreover correlates with the spread of the officers' republic more widely throughout the bureaucratic apparatuses they head. An incomplete media list of major generals in the Ministry of Transport in 2016, for example, included four advisers to the minister, head of the central administration of general personnel, head of protocol, head of the Maritime Transport Sector and a consultant, head of maritime safety, head and three members of the crisis center, head of the regional implementation sector, head of central administration, head and deputy head of the central department for administrative affairs, and assistant head for properties and advertising at the General Authority for Roads, Bridges, and Maritime Transport, head of the lighthouses sector at the Egyptian Authority for Maritime Safety, head of central administration for areas, head of mobility, and an adviser for ports and lighthouses affairs in the Maritime Transport Sector.³⁶ The ministry was itself headed in 2015–2016 by a retired EAF major general who had previously headed the General Authority for Roads, Bridges, and Maritime Transport in 2014–2015.

Militarizing Local Government

The patterns are similar in local government, which almost certainly contains the largest concentration of military-bureaucrats. They do not have exclusive control, as local government is also heavily staffed by former police and security officers, generating what Robert Springborg labels a duopoly of domination.³⁷ But the embedding of EAF retirees in local government is so extensive, nonetheless, that it imparts a powerful impression of military ubiquity throughout Egypt's public space. There are currently twenty-seven governorates, which in 2002 were subdivided into 166 centers and 200 metropolitan areas designated as cities, followed by hundreds of city boroughs and 4,617 villages (of which 920 were large enough to have their own municipal council). Since the 1960s, officials at all levels of local government have been appointed by executive order (governors by the president, heads of centers and cities by the prime minister, and so on down the line), making it an ideal sinecure for EAF retirees.³⁸

The number of governors with a military background reached an all-time low of some 20 percent toward the end of the Sadat presidency in 1980, but rose to between 50 and 80 percent consistently since the 1990s, with a sharp but temporary dip under the Morsi administration in 2012–2013. The pattern has intensified since the military takeover of July 2013, with seventeen of twenty-seven governors appointed in November coming from the EAF (besides two police generals). This was higher than the average during the Mubarak era, which was already high. Their number was maintained in the next main round of appointments announced in August 2018, dipping to sixteen by 2019.

Although important, the number of governors diverts attention from the more significant fact that military retirees hold an even larger proportion of subordinate posts in local government: deputy governor, director of the governor's office, secretary general and assistant

secretary general of the governorate-level local council, as well as assistants and advisers to the governor in a wide range of specialist areas. The pattern is replicated at the lower administrative levels of centers, cities, urban boroughs, and villages.³⁹ Each governorate and its subordinate centers and cities moreover have their own directors of planning, properties, finance, projects, as well as technical and engineering affairs who additionally run service departments, branches of utilities companies, and other government entities. These officials replicate or oversee the work of central government agencies in the areas of social, health, welfare, and educational services and development, often determining how the latter's bud-

The embedding of EAF retirees in local government is so extensive that it imparts a powerful impression of military ubiquity throughout Egypt's public space.

gets will be spent locally. EAF retirees also head central departments of the Ministry of Local Development, such as the agencies for the development of villages and of crafts.

The high profile of military retirees in the media encourages citizens to credit the EAF with services delivered by the local government. Less visible is the parallel

economy run by local heads of geological and environmental departments and other administrative services, who exploit their control over registration and licensing for businesses, nongovernmental organizations, quarries, mines, and the like to generate illicit income from bribes and racketeering. This accounts for reports showing corruption in state bodies is highest in local government.⁴⁰ These patterns are especially pronounced in governorates deemed to affect national security such as Sinai, which has a particular concentration of EAF retirees as well as mineral resources and government investments.

Local government demonstrates the overlapping of different parts of the informal military economy. The distribution of governorships follows a clear pattern: former military region commanders (drawn from the EAF ground forces) have usually assumed governorships in Cairo (or its four subdistricts), Suez, and the Sinai Governorates, for example; the Navy customarily takes mainland coastal governorates, and the ground forces or the Military Intelligence and Reconnaissance branch govern sensitive inland border regions such as Upper Egypt. The distribution correlates extensively with the map of economic and public works projects undertaken by formal military actors and their informal counterparts in government agencies. All moreover invest heavily in highways and associated infrastructure and services connecting these areas of concentration.

Governors are selected among EAF officers deemed particularly loyal and effective in serving presidential power, and for this reason rotate frequently between positions in the informal military economy. To take just two recent examples, Major General Amro Abdel-Monem directed the EAF's Arms and Ammunition Department and then its procurement office in Washington, DC, under Mubarak, became secretary general of the Council of

Ministers following the July 2013 military takeover, then became a deputy minister in 2014, and was finally made governor of Qalyubiyah in September 2016.⁴¹ Major General Atef Abdel-Hamid Mostafa, who became governor of Cairo in the same year, previously headed the EgyptAir Company for Maintenance and Technical Services and EgyptAir Holding Company from 2002 to 2008.⁴²

Then minister of local development Ahmed Zaki Badr justified the heavy reliance on officers in 2016 by arguing that “others don’t approach the position of governor or like it because it carries a heavy burden with no reward, and [competitive contenders] shy away from such posts.”⁴³ As if to prove his point, nineteen out of ninety-three top-ranking candidates in a competition to appoint “excellent leaders” in the ministry that July came from the EAF alone.⁴⁴ Ironically, Badr’s own replacement in the reshuffle of ministerial posts in February 2018 was EAF retiree Major General Abu Bakr al-Jundi, who had headed CAPMAS since 2005. One of Jundi’s first acts as minister was to set up a new body, the South Upper Egypt Development Authority; both the MOD and MOMP are required by law to be represented on its board of directors, and an EAF retiree heads its board of directors.⁴⁵

PENETRATING STATE-OWNED ENTERPRISES

The extension of the officers’ republic into state-owned economic enterprises forms a second principal component of the informal military economy. Like so many other aspects of the military economy, this has its roots in the Nasser era. But it was the launch of the Egyptian government’s Economic Reform and Structural Transformation Program in 1991 that offered EAF retirees the most significant commercial opportunities, which they were quick to seize. Privatization moreover coincided with the start of Tantawi’s tenure as defense minister, accelerating the loyalty scheme he oversaw. Predictably, the sectoral distribution of EAF retirees in the civilian administrative bureaucracy discussed in the previous section and in public sector companies has been very similar.

As political scientist Gamal Selim noted, the EAF officer corps has been “the primary pathway to senior government positions since the time of Nasser,” and that included heading public sector companies.⁴⁶ Political economist Samia Sa’id adds that the extension of Egypt’s security management to Syria during the short-lived union between the two countries (1958–1961) and the Egyptian military intervention in Yemen (1963–1967) boosted the military bureaucracy’s involvement in a wide range of commercial activity, as did Amer’s heading of the Higher Council for Public Enterprises of an Economic Character from April 1961 onward.⁴⁷

The high profile of military retirees in the media encourages citizens to credit the EAF with services delivered by the local government.

The gradual liberalization of the Egyptian economy from the mid-1970s widened the scope for employing retired EAF officers by allowing the creation of an estimated 240 joint ventures with domestic and foreign private sector companies.⁴⁸ As Robert Springborg and Clement Moore Henry argued, Sadat compensated the military for its “nominal loss of power and permit[ing] the rehabilitation of the civilian political system” with “patronage derived from quasi-privatized economic operations, many of which were placed under the military” and with the means of “establishing methods of remote control that ran through the political economy.”⁴⁹ A partial list compiled by Sa’id gives a sense of the diversity of companies and sectors in which military retirees held senior positions or stakes: the newly established Nile and Delta International Banks, tobacco imports, real estate investment, building supplies, printing and publishing, the Peugeot dealership, maritime navigation and shipping, granite and marble production, construction, stationery, footwear, and cultural preservation.⁵⁰ Major state-owned companies such as the Arab Contractors Company also employed “scores of generals at ten times their former salary,” and has consistently been a subcontractor for MOD-run projects ever since.⁵¹

The launch of privatization in 1991 provided a major fillip to this part of the informal military economy. The Economic Reform and Structural Transformation Program, which was designed with the help of the International Monetary Fund and the World Bank, grouped 314 state-owned enterprises in the industrial and trading sectors under twenty-seven holding companies and placed them under market-oriented management.⁵² At that time, public enterprises produced around 10 percent of GDP and employed about 6 percent of the labor force, and additionally dominated the banking and insurance sectors.⁵³ Public Enterprise Law 203 of 1991, which regulated the program, exempted these enterprises from following standard procedures for awarding procurement and works contracts required of government entities. It also empowered boards of directors to award employees—and themselves—competitive salaries, benefits, and pensions as well as discretionary bonuses, placing them on par with private sector firms. In short, it released Egypt’s public enterprises from the restrictions previously imposed on them as nominally joint stock companies formed under Law 97 of 1983, and now treated them the same as private enterprises in all respects unless specified otherwise.⁵⁴

Crucially, Law 203 applied not only to companies slated to be privatized but also to those remaining in public ownership. As Khalid Ikram, a former director of the World Bank’s Egypt department, observed, the law put public sector businesses on an “almost equal footing with private enterprises in terms of administrative, financial, and employment policies.”⁵⁵ This generated an unprecedented opportunity for their directors. A 1980 bill had already placed the budgets of public sector companies outside the state budget, although their net deficits would be financed by the state, but now they could privatize their profits while nationalizing losses.⁵⁶ This was no less true of the military economy.

Military Responses

Military responses to privatization were nonetheless contradictory. On one hand stood economic nationalists who opposed selling off what they regarded as successful state-owned enterprises. As one of his cabinet colleagues later recalled, Tantawi lobbied especially hard against the sale of the major Alexandria and Cairo banks during the second main wave of privatizations in 2002–2007, but was overruled by Mubarak.⁵⁷ According to a former general, public sector companies—including military ones—depended on borrowing from state-owned banks to pay their employees, building up bad debt.⁵⁸ As a leaked cable from 2008 showed, the U.S. embassy in Cairo also believed that the “military views the [government of Egypt’s] privatization efforts as a threat to [the military’s] economic position, and therefore generally opposes economic reforms.”⁵⁹

But the military also opposed privatization because buyers often simply wanted to strip former public sector companies of their assets, especially land, and threatened social and political stability by dismissing workers. The latter concern was justified, as employment declined in almost 75 percent of privatized companies.⁶⁰ Indeed, following Mubarak’s ouster, the SCAF pointed to its earlier opposition as proof that it had been defending the national interest even before it refused his orders to use force against protesters during the 2011 Arab Spring.

On the other hand, the officers’ republic benefited significantly from the Economic Reform and Structural Transformation Program, as EAF retirees enjoyed massive increases in income through appointment to public sector companies, whether or not they had been privatized. Based on his discussions with EAF officers in active service, a former cabinet minister confirmed in 2011 that the chiefs of staff and their deputies from the various EAF service branches could, upon retirement, typically look forward to earning monthly salaries of EP1 million (then \$168,000) for directing military-owned companies.⁶¹ Indeed, they might also sit on the board of one or more public sector companies while in service, receiving salaries of EP250,000–EP500,000 (\$42,000–\$84,000) from each.

A 1980 bill had placed the budgets of public sector companies outside the state budget, but after a 1991 law they could privatize their profits while nationalizing losses.

“Institutionalized corruption,” as the minister called it, was the epitome of the loyalty scheme. According to an avowed government opponent, the chief executives of fifty-five of the largest companies in Egypt, which collectively control as much as one-third of the economy, were EAF retirees in 2014.⁶² Both figures are exaggerated, but contain some truth. Retired officers were also well positioned to benefit from the sale of shares in select public sector companies by prior arrangement (rather than open auction); the MOD acquired a

75 percent stake in Nasr Company for Services and Maintenance, for example, with retirees holding the balance.⁶³

Political Connectivity and Crony State Capitalism

The pattern of penetrating recently privatized public companies depended heavily on political connections. It also revealed the extent to which state capitalism survived in Egypt, where the regime could have its cake and eat it too, as Robert Springborg and Clement Moore Henry noted, running a crony system while appearing to comply with the pro-free market Washington Consensus.⁶⁴

For nearly two decades, the lion's share of the fully or partially privatized part of the economy was captured by businessmen and politicians close to Mubarak or his eldest son Gamal, many of them also affiliated with the governing National Democratic Party. According to economists Daron Acemoglu, Tarek Hassan, and Ahmed Tahoun, there was no overlap between NDP-connected and military-connected firms, and NDP-connected firms were about ten times more valuable than military-connected ones.⁶⁵ But the shift of political fortunes after 2011 reversed the picture as companies quickly modified their boards "to include more representatives from the group currently in power during each phase of Egypt's Arab Spring," most pertinently the EAF. There was a "sharp drop in the profitability of military-connected firms" during the short-lived Morsi administration, followed by "a discernible increase in [the] number of officers on company boards after 2013."⁶⁶ Twelve public sector holding companies with EAF retirees on their boards moreover controlled or held stakes in thirty-three of 177 companies listed on the stock market in 2013, by the count of Acemoglu, Hassan, and Tahoun.⁶⁷

Notably, the sectoral distribution of military-connected public sector companies matches the rest of the military economy almost perfectly. Like the registered military companies and military-connected general authorities, these public sector companies are concentrated primarily in the maritime and aviation sectors (43 management, services, shipping and handling, and storage companies) and in infrastructure and transport (31 companies, all but two of them fully publicly owned). They are also prominent in chemicals- and petroleum-related manufacturing and in textiles (14 companies), food supply and storage (14), construction and contracting (11), tourism (9), energy (5, including related transportation and services), and real estate, cars, and trade (7). These figures are based on a survey undertaken for this report that showed 137 military-connected public sector companies in 2016; an updated survey revealed a slight decline, but EAF retirees still headed or sat on the boards of 128 of 374 companies, or 35 percent, with the ratio holding as true for those that have been privatized (fully or partially) as for those remaining in full public ownership in May 2018.⁶⁸

The advantages of market-oriented management, especially the shift to more liberal rules for the award of contracts and to commercial sector financial incentives for directors, prompted

a parallel response. General authorities had not been privatized under Law 203 of 1991, and thus remained subject to standard government civil service pay scales, but the managers of some sought to convert them into holding or subsidiary companies. This was approved in the case of the national airline (EgyptAir), the main national airport authorities, and almost all other authorities in the aviation sector, which actively lobbied for conversion. The maritime sector notably did not follow suit, however, possibly because of its poor commercial viability. An adviser to the World Bank, Sufyan Alissa, moreover noted that many public sector managers “used their access to public money and networks to establish their own private companies or purchase other [state-owned economic enterprises],” allowing expansion and diversification.⁶⁹

Penetration of state-owned economic enterprises offered the officers’ republic access to a very considerable slice of the national economy regardless of privatization. The process slowed to a trickle after 2008, but 382 companies had been privatized—about one-third of them fully—and a few dozen others liquidated by 2014. Public sector companies had contributed approximately 37 percent of GDP in the 1980s, accounting for some 55 percent of industrial output and controlling over 80 percent of external trade and some 90 percent of the banking and insurance sectors.⁷⁰ But even after divestment, what had been re-labeled the “public business sector” still dominated much of the economy, perpetuating and even magnifying the scope for cronyism. For example, a World Bank blog post observed that while the performance of fully privatized companies had improved, partially privatized ones showed no improvement, mainly because they had not undergone a change in management.⁷¹ In other words, privatization offered privileged actors such as the officers’ republic greatly increased salaries and benefits packages, while masking the continuation of bad business practices and inefficiencies.

As Egyptian researcher Mohamed Abdel-Salam argued in relation to the energy sector, the creation of new public sector companies whose mandates overlapped with those of existing general authorities made it extremely difficult to judge their economic performance, due to the subsidies they received from the latter. Favored middlemen bought products such as gas at subsidized prices to sell on to consumers at significant profits, while company officials engaged in “rampant graft in gas exploration and production contracts with foreign partners.”⁷² The pattern was similar in other sectors, where “sweetheart loans, below-market valuations of state assets, and other methods commonly used to reward regime cronies” applied, as Shana Marshall noted.⁷³ This helps explain why public sector holding companies that were originally created with the purpose of maintaining operations until they were privatized were instead expanding and buying into more businesses.⁷⁴

These perverse incentive structures shaped the behavior of all economic actors, and the officers’ republic was no different. Defense spokespeople routinely tout the superior management skills and relevant expertise of EAF officers to justify their penetration of the public business sector, but their track record speaks differently for the most part. Commonly, in

the words of one foreign consultant, “When you meet with company directors or board members they are retired generals who understand nothing about the sector they are in.”⁷⁵ Indeed, the research conducted for this report reveals a marked pattern of competent civilians appointed as deputies to military heads of company boards to ensure effective management, or of civilian-headed boards that co-opt EAF retirees as members simply to assure them of a sinecure, without assigning them serious responsibilities.

Military Commercial Fiefdoms

Sectoral fiefdoms similarly emerged in the public business sector. Former officers of the EAF Water Department dominate the twenty-four subsidiaries of the Holding Company for Water and Wastewater, for example, while Air Force retirees dominate aviation companies, as well as virtually all their branches, such as regional airports and associated services companies. An informal roster moreover shows retirees rotating constantly from one company board to another across the public business sector—and often the general and national authorities and governorships—perpetuating both the loyalty scheme and the military’s reach.

A random review of military-connected public sector companies confirms patterns of penetration similar to those found in general authorities. Access at management level moreover offers wide scope for employing EAF retirees at lower levels; in some cases the potential is massive, as with the Holding Company for Food Industry “consumer complexes” that have 4,000 cooperatives countrywide, or the Ministry of Housing’s Construction and Housing Cooperatives.⁷⁶ Major public sector construction company Hassan Allam gives a sense of the scale: according to an admittedly hostile Muslim Brotherhood media outlet, it was compelled to hire sixty retired major generals in 2016 alone.⁷⁷

Privatization offered privileged actors such as the officers’ republic greatly increased salaries and benefits packages, while masking the continuation of bad business practices and inefficiencies.

Military-connected public sector companies also closely resemble defense industry companies in their economic inefficiency and poor financial performance. This affects companies both large and small. The Cairo Ferries Company, headed since 2008 by an EAF major general, was found to have racked up debts of EP80 million (approximately \$5.2 million) by May 2016; all of its fifty employees were re-

portedly EAF retirees at the time.⁷⁸ A parliamentary committee revealed in the same year that the Alexandria Refrigeration Company, which had been slated for liquidation in 2002 with losses of EP15.7 million, was still in operation fourteen years later, while the Holding Company for Food Industry, to which it belonged, had failed to collect EP455 million in arrears from various contractors, including EP285 million from private firms, all of which

prompted suspicions of fraud.⁷⁹ Indeed, the holding company's head, a retired major general, was arrested on corruption charges in May 2018.⁸⁰

Clearly, the giants of the public business sector have fared no better. For example, the Central Accounting Organization estimated that the Holding Companies for EgyptAir (the national airline) and for Airports and Aviation and their subsidiaries—which are dominated by Air Force retirees—had lost EP7.5 billion (roughly \$1.19 billion) between the 2010–2011 and 2013–2014 fiscal years.⁸¹ In July 2015, the head of the National Navigation Company, a retired Navy admiral, revealed that only eight ships remained of its original fleet of seventy, and that it owed EP100 million for insurance, taxes, repairs, and spare parts.⁸² Hassan Allam delayed paying statutory workers' profits for seventeen months in 2015–2016 due to insufficient turnover from new projects, while employees accused its head, a retired EAF major general, of selling company vehicles and employing his relatives at high salaries.⁸³ Hassan Allam was only one of thirteen subsidiaries belonging to the Holding Company for Construction and Development deemed by the government to be in need of assistance in 2015; fellow construction giant Mukhtar Ibrahim was in debt by EP350 million.⁸⁴

As with their defense industry counterparts in the same period, companies in the public business sector were boasting dramatically improved results despite poor performance, thanks not to demonstrable increases in efficiency and productivity, but to the redirection of public funding. For example, the head of the Holding Company for Construction and Development, a retired EAF major general, admitted in 2014 that performance was weak, with only EP1 billion in turnover and EP40 million in profits in the preceding financial year, and proposed restructuring subsidiaries that were underperforming or in liquidation in a new asset management company that would work with the private sector.⁸⁵ Instead, turnover reportedly jumped in the following year to EP6 billion, with profits of EP480 million, as the holding company was awarded EP18 billion in government contracts to work with the EAF Engineering Authority on the Suez Canal expansion and national roads plan.⁸⁶

The head of the holding company moreover engineered a similar financial turnaround for a troubled subsidiary of his holding company, the Arab Company for Engineering Consultancies, by making it the exclusive consultancy firm for the holding company's other subsidiaries.⁸⁷ The fact that government daily *al-Ahram* described his decision to penalize the head of the Arab Company for Engineering Consultancies, another retired EAF major general, by transferring him to a smaller company as “banishment” revealed how clearly the loyalty scheme is commonly seen to function.⁸⁸ It also underlined the constant rotation between posts that is so characteristic of the officers' republic.

Rotation was graphically displayed by the musical chairs played out when the head of the Holding Company for Food Industry, a retired major general, was arrested for corruption in May 2018. Both his deputy and his replacement were also retired EAF major generals, one of whom had previously headed a subsidiary of the holding company, the General

Company for Wholesale Trade, and then the holding company itself in 2016.⁸⁹ Indeed, the Ministry of Supply and Internal Trade, to which the holding company belonged, has been headed by retired EAF Major Generals Ali Mseilihi and Mohamed Abu-Shadi in the past few years.

Similar patterns hold in sectors such as petroleum, in which a particularly high number of services companies operate. The new head of the Sinai Company for Petroleum and Minerals Services in June 2018, for example, was a former Republican Guard officer who had undertaken a stint as defense attaché in Kuwait before becoming an assistant to the head of the Ganoub al-Wadi Holding Company for Petroleum and then security officer at the major state-owned Egyptian Natural Gas Holding Company.⁹⁰ The officers' republic

clearly reproduces itself continually in these and other cases. For example, when the National Petroleum Company inaugurated its own hospital in 2016, it appointed a retired EAF major general to head it.⁹¹

In this period, companies in the public business sector were boasting dramatically improved results despite poor performance, thanks not to increases in efficiency and productivity, but to the redirection of public funding.

That public business sector companies have functioned as fiefdoms is especially well demonstrated by the example of al-Nahdah Cement Company, a subsidiary of the Chemical Industries Holding Company. In early 2016, Nahdah's executive director was a retired EAF major general

who had formerly been deputy governor of Qena, where the subsidiary is based, while its head of public relations was another retired major general, formerly a member of the ruling NDP's Policies Committee. Some years earlier local protesters had complained that 75 percent of Nahdah's staff came from the same local clan as its head of security, a police major general and also a former NDP member. The entire board of directors was dismissed for undisclosed reasons in 2016, and two military retirees (including a former head of the EAF Engineering Authority) were brought in to run the company in quick succession.⁹²

CONCLUSION: MUTUAL DEFENSE

The distribution of EAF retirees across the state's bureaucratic apparatus and publicly owned companies during the latter two decades of the Mubarak era reflected a mix of drivers. At one level, former officers responded to privatization by entering economic sectors that offered the best opportunities and incentives, much as civilian managers and private businessmen did. They moreover gravitated naturally toward sectors or individual government agencies or companies with which they had dealt during their active service, whether this was in one of the EAF's operational branches or in a military company or factory operating

in the same field. This partly explains the concentration of retirees in certain manufacturing or transport sectors, for example, or in construction. At another level, conversely, the growth of the officers' republic after 1991 also revealed strategic purpose and coordination, best shown by the positioning of EAF retirees in "nodal" government agencies that control land use, telecommunications, information and statistics, or auditing.

The massive expansion of the remit of formal military agencies in managing public works, generating revenue, and brokering supply to civilian markets since 2013 has impacted the officers' republic, albeit in subtle ways. Its role and distribution do not appear to have changed significantly: the proportion of EAF retirees in management positions in government agencies and publicly owned companies has not altered appreciably in most sectors. But there has been a general reconfiguration of influence and networks within the state bureaucracy in favor of the military. Most importantly, this has resulted in the displacement of competing networks in lucrative sectors such as media, oil, and natural gas that were previously the quasi-exclusive domain of the GID. Crucially, the rentier logic driving all participants in the informal military economy remains unchanged, and EAF retirees will seek new opportunities in the wake of the formal military agencies, so long as their role continues to expand. But the officers' republic is more than an opportunistic tailgater: lying at the end of a conveyor belt starting in the EAF senior officer corps, it both offers and is assured of defense against any future effort to restructure and rationalize, let alone dismantle, the military economy.

NOTES

- 1 Fully described in Yezid Sayigh, “Above the State: The Officers’ Republic in Egypt,” Carnegie Middle East Center, August 2012, <https://bit.ly/2moz5Tw>.
- 2 Figure from George Abed, Chun Jin, and Boban Markovic, “Egypt: Good Progress to Date, but Sustainability Requires Deep, Transformational Change,” Institute of International Finance, February 20, 2019, 4.
- 3 On the loyalty factor and size of the public sector, Clement Moore Henry, “Authoritarian Politics in Unincorporated Society: The Case of Nasser’s Egypt,” *Comparative Politics* 6, no. 2 (January 1974): 196 and 199, <https://bit.ly/2lYKpWh>. Samia Sa’id mapped the embedding of EAF officers in the public business sector and state bureaucracy that burgeoned in the wake of the 1961 nationalization, in her detailed empirical study of ownership and influence in the Egyptian political economy of the Nasser and Sadat eras, *Who Owns Egypt?* (Cairo: Dar al-Mustaqbal al-‘Arabi, 1986).
- 4 Quote from Robert Springborg, “Patrimonialism and Policy Making in Egypt: Nasser and Sadat and the Tenure Policy for Reclaimed Lands,” *Middle Eastern Studies*, 1979, 15:1, 49–69, <https://bit.ly/2lYcRau>.
- 5 Robert Springborg, “The President and the Field Marshall: Civil-Military Relations in Egypt Today,” *Middle East Report* 17, no. 147 (July/August 1987): 8.
- 6 Sa’id, *Who Owns Egypt?*, 90.
- 7 According to a retired major general. Anonymized interview.
- 8 “The Egyptian Arms Industry: A Research Paper (Declassified in Part),” Directorate of Intelligence, NES 85-10191, September 1985, iii, <https://bit.ly/2mgCgN7>.
- 9 Ably discussed in Imad Harb, “The Egyptian Military in Politics: Disengagement or Accommodation?,” *Middle East Journal* 57, no. 2 (Spring 2003): 269–90, <https://bit.ly/2m29hw4>.
- 10 W.J. Dorman notes the erosion of financial conditions for EAF officers in the early 1980s, but this was even truer of the second half of the decade, after the sharp decline in oil revenue, remittances, and foreign investment. “Exclusion and Informality: The Praetorian Politics of Land Management in Cairo (Egypt),” *International Journal of Urban and Regional Research*, February 25, 2013, 5.
- 11 According to a well-connected source to the Morsi administration. Anonymized interview.
- 12 Cited in Marwa Awad, “Special Report: In Egypt’s Military, a March for Change,” Reuters, April 10, 2012, <https://reut.rs/2mkW4yE>.
- 13 Text at <https://bit.ly/2WsNGvf>.
- 14 Information here and elsewhere in this section comes from retired senior EAF officers. Anonymized interviews.
- 15 Hiba Amin, “Parliament Agrees, in Principle, on the President’s Power to Extend the Retirement Age of Army Generals,” *al-Watan*, May 24, 2016, <https://bit.ly/2kSRAiu>.
- 16 Tahrir Institute for Middle East Policy, Egypt Parliament Watch, December 17–30, 2017, <https://bit.ly/2mjMxb3>. The rank of lieutenant general applies to the top two commanders of every EAF branch, including the presidential guard, and to the chief-of-staff and his assistants. Rana Mamdouh, “Parliament Decides Extending Retirement of Lieutenant Generals to 64 Years,” *Mada Masr*, December 19, 2017, <https://bit.ly/2lYLgWZ>.

- 17 Decree 73 of 2011, accessed at <https://bit.ly/2kIejOi>. Bodour Ibrahim, “Four Major Generals Occupy Leadership Positions in Ministry of Health and New Urban Communities Authority,” *al-Mal News*, June 13, 2011, <https://bit.ly/2w6B0NK>.
- 18 According to a retired major general, two businessmen and an academic. Anonymized interviews.
- 19 See Sayigh, “Above the State,” 5 and 19.
- 20 As discussed in Sayigh, “Above the State,” 5 and 19.
- 21 According to a researcher. Anonymized interview.
- 22 According to two retired major generals and a political economist. Anonymized interviews.
- 23 Eman Raslan, “The EAF and International Education,” *al-Masry al-Youm*, September 28, 2016, <https://bit.ly/2lYMSjv>; and Deanship of Admission and Registration, “Discounts and Scholarships,” Arab Academy for Science, Technology and Maritime Transport, n.d., <https://bit.ly/2mkYvBi>.
- 24 According to former cabinet minister. Anonymized interview.
- 25 Note here the belief that “a ‘shadow’ cabinet made up of security agencies in effect operates alongside the civilian government and weighs economic decisions according to the risks of popular unrest.” See Roula Khalaf, “Sisi’s Egypt: The March of the Security State,” *Financial Times*, December 19, 2016, <https://on.ft.com/2h6T0kM>.
- 26 This paragraph draws on Khalid Ikram, *The Political Economy of Reforms in Egypt: Issues and Policymaking Since 1952* (London: I. B.Tauris, 2018), 370; and Ahmed Ashour, “Economic General Authorities: Their Problems and Methods for Resolving Them, With a Case-Study of the Egyptian General Authority for Petroleum,” National Planning Institute, January 2016, 4, <https://bit.ly/2ks197U>.
- 27 Text at <https://bit.ly/2m1BPWQ>.
- 28 Khalid Ikram, *The Egyptian Economy, 1952–2000: Performance, Policies, and Issues* (Abingdon, UK: Routledge, 2006), 156. A more recent study estimates the share of GDP of economic general authorities in 2000 at 20 percent. Ahmed Ashour, “Economic General Authorities,” 4.
- 29 Estimate of real estate value held by the General Authority of Religious Endowments given by member of parliament and expert Abdul-Ghani Hindi, cited in Mohamed Basal and Khaled Moussa, “Presidential Decree to Form a Committee Under the Chairmanship of Mahleb,” *Shorouk News*, September 19, 2019, <https://bit.ly/2moKJhc>.
- 30 Springborg, “Patrimonialism and Policy Making in Egypt,” 53.
- 31 *Ibid.*, 63.
- 32 Board membership shown at <https://bit.ly/2kIobaO>.
- 33 This was Major General Ismail Jaber Mohamed Jaber. His CV is posted at <https://bit.ly/2m4hlwj>.
- 34 According to its official website at <https://bit.ly/2kUlqvs>, accessed July 28, 2018.
- 35 Salam Saada, “Egypt Media Hides the Rank of a General Charged With Bribery,” *al-Araby al-Jadeed*, February 19, 2016, <https://bit.ly/29f18i6>. The International Maritime Organization does not issue sanctions or ban shipping, but its rating affects the choice of companies and countries to use ports.
- 36 Sadeeq al-Isawy, “In Ministry of Transport, 100 Generals Earn 50 million,” *Tahrir News*, May 1, 2016, <https://bit.ly/29NC0hv>.
- 37 Robert Springborg, *Egypt* (Cambridge, UK: Polity Press, 2017), 75.

- 38 Elected “local popular councils” are a separate structure that provides a purely cosmetic democratic touch, as its unpaid members have no control over programs or budgets.
- 39 Sayigh, “Above the State.”
- 40 According to the HRDO Center to Support the Digital Expression, citing the Wiki Corruption initiative. “HRDO: Financial Corruption in July LE24.2 Billion,” *Egypt Independent*, August 14, 2015, <https://bit.ly/2m2kRY4>.
- 41 Ibrahim Salem, “5 Pieces of Information About Qalyoubiyyeh’s New Governor, Major General Amr Abdel-Monem,” *Parlmany*, September 7, 2016, <https://bit.ly/2lYOdqm>.
- 42 Amira al-Khouly, “Who Is Major General Atef Abdel-Hamid,” *Masr al-Arabia*, September 7, 2016, <https://bit.ly/2kplMI0>.
- 43 Mohsen al-Bediouy, “Zaki Badr Justifying Hs Preference of Officers in Administrative Positions: Many Refuse the Positions,” *Youm7*, April 5, 2016, <https://bit.ly/2kplQBg>.
- 44 Maged Timraz, “With Names...Winners in the Second Phase of Leadership Levels in Local Development,” *Youm7*, July 29, 2016, <https://bit.ly/2kJdRPR>.
- 45 On board composition, Law 157 of 2018, text at <https://bit.ly/2lYOJVk>. On appointment of retired EAF Major General Sami Hassan Mansour al-Shinnawi, Prime Ministerial Decree 376 of 2019, posted on cabinet website at <https://bit.ly/2m4jJDh>.
- 46 Gamal Selim, “The International Dimensions of Democratization in Egypt: The Limits of Externally-Induced Change,” Springer International Publishing, August 2015, 64, <https://bit.ly/2kUm5o2>.
- 47 Sa’id, *Who Owns Egypt?*, 90–91.
- 48 Ahmed Shehata, “Evaluation of the Egyptian Process of Changing Toward Privatization,” master of laws thesis, Robert H. McKinney School of Law, May 2014, 10, <https://bit.ly/2koWMKD>.
- 49 Robert Springborg and Clement Moore Henry, *Globalization and the Politics of Development in the Middle East*, 2nd ed. (Cambridge: UK, Cambridge University Press, 2010), 153.
- 50 Sa’id, *Who Owns Egypt?*, 107–14. The role of EAF (and police) officers in cultural preservation companies is noted by Springborg, *Egypt*, 79–80.
- 51 Springborg, “The President and the Field Marshall,” 15; and John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 182.
- 52 Ali al-Sawi, “Governors Without Governance: The Constitutional, Legal and Administrative Frameworks of Local Government in Egypt,” paper presented at the Regional Workshop and Policy Forum organized by The Lebanese Center for Policy Studies (LCPS) in preparation for the Fourth Mediterranean Development Forum (MDF4) on “Empowering Local Government Institutions in the MENA Region,” Beirut, Lebanon, 2002, 3. Also, *Privatization in Egypt Quarterly Review April–June 2002*, CARANA Corporation under the USAID Monitoring Services Project Contract # PCE-1-800-97-00014-00, Task Order 800, 8, <https://bit.ly/2lWT9fy>.
- 53 Ikram, *The Political Economy of Reforms in Egypt*, 370.
- 54 Anjali Kumar, “The State Holding Company: Issues and Options,” World Bank, 1992, <https://bit.ly/2moypxp>.
- 55 Ikram, *The Egyptian Economy, 1952–2000*, 54.
- 56 On the 1980 bill, see Waterbury, *The Egypt of Nasser and Sadat*, 120. The reference to privatizing profits while nationalizing losses is a paraphrasing from Hamza Hamouchene, “The Ouarzazate Solar Plant in Morocco: Triumphal ‘Green’ Capitalism and the Privatization of Nature,” *Jadaliyya*, March 23, 2016, <https://bit.ly/1Unumee>.

- 57 Anonymized interview.
- 58 Anonymized interview.
- 59 Cited in Nadine Marrousi, "Is the Military Council Leading Egypt Toward an Economic Crisis?," *Egypt Independent*, October 3, 2011, <https://bit.ly/2kuBKKQ/>; and "A Selection From the Cache of Diplomatic Dispatches- Cable: 08 CAIRO 2091," *New York Times*, June 19, 2011, <https://nyti.ms/2m4kGLR>; also, "A Selection From the Cache of Diplomatic Dispatches- Cable: 08 CAIRO 524," *New York Times*, June 19, 2011, <https://nyti.ms/2lVumIS>.
- 60 Karim Badr El-Din, "Privatization: A Key to Solving Egypt's Economic Woes," World Bank, March 11, 2014, <https://bit.ly/2mpTdVj>.
- 61 Based on discussions that a former cabinet minister had with EAF officers in active service. Anonymized interview.
- 62 Emad El-Din Shahin, "Brutality, Torture, Rape: Egypt's Crisis Will Continue Until Military Rule Is Dismantled," *Guardian*, March 6, 2014, <https://bit.ly/1hWwVhI>.
- 63 Mohammed Omran, "Privatization, State Ownership, and Bank Performance in Egypt," World Development, February 2007, <https://bit.ly/2lYPePc>. Shares in Nasr company according to the company's general manager, Major General Ahmed El-Banna, cited in Cam Simpson and Mariam Fam, "Egypt Generals Running Child Care Means Transition Profit Motive," *Bloomberg*, February 16, 2011, <https://bloom.bg/2ksJQDG>.
- 64 Springborg and Henry, *Globalization and the Politics of Development in the Middle East*, 161.
- 65 Daron Acemoglu, Tarek Hassan, and Ahmed Tahoun, "The Power of the Street: Evidence From Egypt's Arab Spring," *Review of Financial Studies* 31, no. 1 (August 2016): 9–10.
- 66 Ibid., 25.
- 67 Listed in Table 2, 46.
- 68 Information is lacking for seventy-three companies, so the number and percentage of companies with a military presence may be higher. Also, it is difficult to obtain accurate numbers or lists of privatized companies as reports issued by pertinent bodies are not always in agreement. But there is general agreement that 382 public sector companies were privatized or liquidated by 2009. See, for example, Heba Khalil, "El-Ganzouri and Privatization," Egyptian Center for Economic and Social Rights, December 2011, 3, <https://bit.ly/2lVHQR>.
- 69 Sufyan Alissa, "The Political Economy of Reform in Egypt: Understanding the Role of Institutions," Carnegie Middle East Center, October 2007, 8 and 9, <https://bit.ly/2kpndQq>.
- 70 *Privatization in Egypt Quarterly Review April–June 2002*, CARANA Corporation under the USAID Monitoring Services Project Contract # PCE-1-800-97-00014-00, Task Order 800, 8, <https://bit.ly/2lWT9fy>.
- 71 Karim Badr El-Din, "Privatization: A Key to Solving Egypt's Economic Woes," World Bank, March 11, 2014, <https://bit.ly/2mpTdVj>.
- 72 Mohamed Abdel Salam, "The Limits of Fighting Corruption in Egypt," *Sada* (blog), Carnegie Endowment for International Peace, October 13, 2016, <https://bit.ly/2lVRJ50>.
- 73 Shana Marshall, "The Egyptian Armed Forces and the Remaking of an Economic Empire," Carnegie Middle East Center, April 2015, 15, <https://bit.ly/2kh3C4O>.
- 74 Point made by Shana Marshall, email to author, June 5, 2015.
- 75 International mobile phone company representative. Anonymized interview.
- 76 On Consumer Complexes: Mohamed al-Saify, "Holding Company for Food Industry: Reducing the Prices of 62 Commodities," *al-Masry al-Youm*, December 2, 2015, <https://bit.ly/2moON0W>. On Housing Cooperatives, Ahmed Hassa, "Ahmed Zaki Abdeen, Chairman

- of the New Administrative Capital: I Visit the Project Daily,” *Youm 7*, August 13, 2017, <https://bit.ly/2kVfN7R>.
- 77 Example cited by a Muslim Brotherhood media, “The Militarization of Hassan Allam Construction Company With 60 Major Generals,” *Freedom and Justice Gate*, June 2, 2016, <https://bit.ly/2lZvvyT>.
 - 78 Al-Isawy, “In Ministry of Transport, 100 Generals Earn 50 Million.”
 - 79 Abdel-Latif Sobh, “Economic Commission Discusses the Central Accounting Organization’s Report,” *Youm 7*, May 9, 2016, <https://bit.ly/2w6ZgPN>.
 - 80 The head was Major General Alaa Fahmi. Ahmed Ghonaim, “al-Moselhy Assigns Magdy al-Shater to Caretake the Holding Company of Food Industry,” *al-Watan*, May 31, 2018, <https://bit.ly/2kVh52H>.
 - 81 Ahmed Abdelazim Amer, “Central Accountability Organization Exposes Aviation Violations,” *al-Ahram*, January 6, 2015, <https://bit.ly/2kUrg7s>.
 - 82 Reda Hubaishy, “Failure of the Biggest Egyptian Navigation Company in the Middle East,” *Youm 7*, July 10, 2015, <https://bit.ly/2BkV9Wj>; and Sara Ibrahim, “al-Dessouqi Heads the Egyptian Company for Navigation, Succeeding Lotfi,” *al-Borsa News*, July 29, 2016, <https://bit.ly/2m0hNvS>.
 - 83 “With Footage and Documents, Workers of Hassan Allam Company Expose Their Chairman and Demand His Departure,” *al-Fajr*, December 16, 2015, <https://bit.ly/2lYTIL8>.
 - 84 Hanan Othman, “Fissures in Public Construction Companies,” *al-Wafid*, August 14, 2015, <https://bit.ly/2kUvDPV>.
 - 85 Major General Mahmoud Hegazy, cited in Mohamed Ayyad, “National Construction Company Reconsiders Investments in Joint Ventures: CEO,” *Daily News Egypt*, October 14, 2014, <https://bit.ly/2klblii>.
 - 86 On jump in turnover and profits, Abdelhamil Salem, “Chairman of the Holding Company for Construction and Development: EP. 480 Million in the Company’s Profits This Year,” *Youm7*, December 6, 2014, <https://bit.ly/2MJYCil>. On government contracts, Dina Ezz Eldin, “HC for Construction: An Improvement in Public Construction Companies’ Performance,” *Veto Gate*, August 22, 2015, <https://bit.ly/2kpGdyd>.
 - 87 Mahmoud Idris, “National for Construction Targets EP.8 Billion Businesses,” *al-Mal News*, October 15, 2014, <https://bit.ly/2mmT2tL>.
 - 88 On the disagreement with company head Major General Galal Sayyid Ahl, “Removal of Sayyed al-Ahl from the Chairmanship of the Arab Bureau,” *al-Bawabah News*, March 13, 2015, <https://bit.ly/2kS5SzT>; and Ayman al-Sisi, “Vital Building Design Archive Is in Danger,” *al-Ahram*, December 21, 2015, <https://bit.ly/2B67m0G>.
 - 89 The deputy and successor were Major Generals Magdy Shater and Ahmed Hassanain respectively. Ahmed Ghonaim, “al-Moseilhi Assigns Magdy al-Shater as Caretaker Head of the Holding Company for Food Industry,” *al-Watan*, May 31, 2018, <https://bit.ly/2kVh52H>. On Hassanein’s previous appointments: Fadi Labib and Narimane Yanni, “Appointment of the Deputy Head of General Authority for Supply Commodities as New Chairman of the Holding Company for Food Industry,” *Wataniat*, June 29, 2016, <https://bit.ly/2Oyaqo8>; and “Appointment of Ahmed Hasanein as Chairman of the Holding Company for Food Industry,” *Tahrir News*, June 5, 2018, <https://bit.ly/2nBnIoD>.
 - 90 This was Major General Akram Badawi. Walid al-Bahnasawi, “MG. Akram Ibrahim, New Chairman of CISCO,” *Power News*, June 20, 2018, <https://bit.ly/2OzZA1b>.

- 91 This was Major General Mohammad Helmy. Salah Abdallah, “Red Sea Governor Inaugurates the General Petroleum Corporation’s Hospital in Ras Ghareb,” *el-Watan*, January 30, 2016, <https://bit.ly/2lZ53FL>.
- 92 On complaints about al-Nahdah, Zidan al-Qinaai, “Appointment of Islamist Movement Leaders in Nahda Cement Factory and Accusations Corruption Against the Governor and the Head of Petrogas,” *Donia al-Watan*, September 28, 2012, <https://bit.ly/2kuLLHW>. On dismissal and replacement, Abdel-Halim Salem, “Chemical Industries Holding Company Removes Nahda Cement’s Board of Directors and Appoints Others,” *Youm7*, April 1, 2016, <https://bit.ly/2KPzXal>.

CHAPTER 5

SOLDIERS AND BUSINESSMEN

WHAT IMPACT HAS THE MILITARY ECONOMY had on the private sector? Some unease over its growth was occasionally voiced in the final years of the Mubarak presidency, but fears that it might actually crowd out the private sector have only really come to the fore since it set on its new expansionary path in late 2013. Until then, the sum total of military production of civilian goods and services had remained small compared to the share of the private sector, whether of overall GDP or within any given sector of the economy. But the marked shift in the military's economic approach and its insertion into a more central role in public procurement under the Sisi administration has both magnified the scale of military interaction with the private sector and multiplied the scope of areas in which this happens. Fears of the military's economic activity have often exaggerated its market share and misrepresented its behavior as exceptional (compared to civilian counterparts), but are no longer groundless. The increasingly aggressive expansion of military economic activity is starting to undermine businesses and destabilize sectors in which the private sector has long been dominant.

The increasingly aggressive expansion of military economic activity is starting to undermine businesses and destabilize sectors in which the private sector has long been dominant.

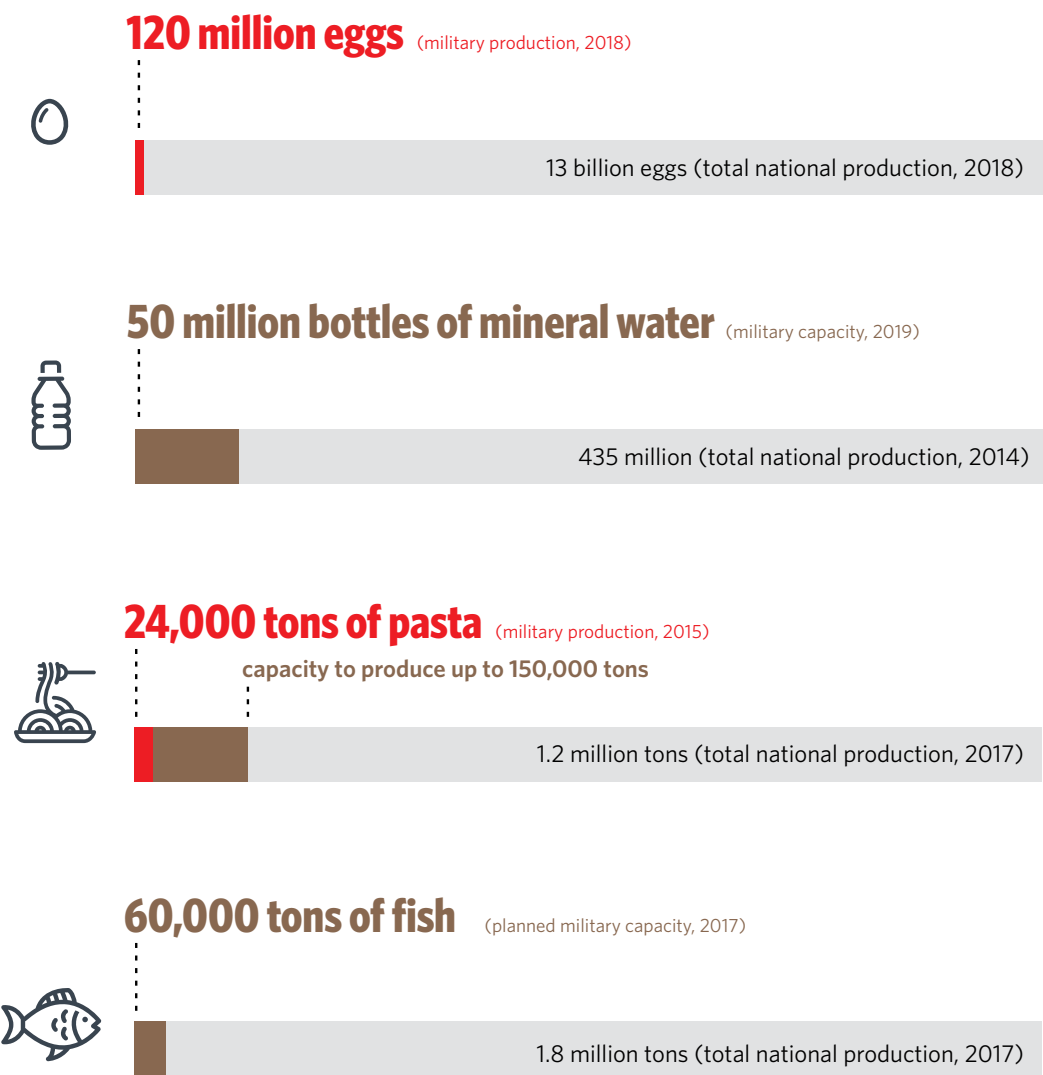
FIGURE 8

Military Market Share for Select Civilian Products¹

Select commodities, by volume or percentage

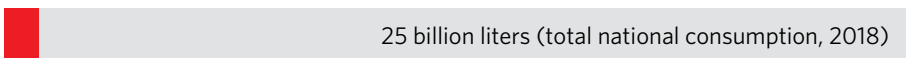
 = Military production  = Military capacity

FOOD



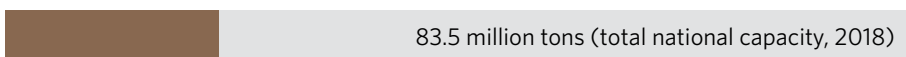
1 billion liters of gasoline

(military retail sales, 2014)



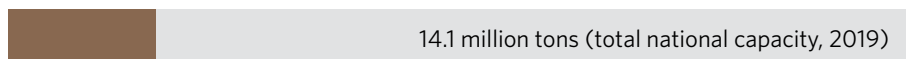
19.5 million tons of cement

(military production capacity, 2018)



2.3 million tons of steel reinforced bars

(military production capacity, 2019)



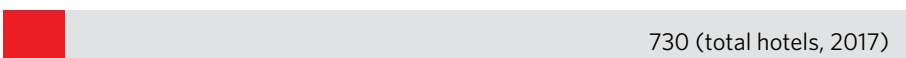
1.44 million tons of marble and granite

(military production capacity, 2018)



6.8% of hotels

(military ownership, 2019)



NOTE: Some figures above are approximations, based on extrapolating available information.

MILITARY AND PRIVATE ENTREPRENEURS IN A RENTIER ECONOMY

The relationship is complex. Contrary to the assumption that military economic activity is necessarily negative for the private sector, the relationship has mostly been mutually beneficial, as the military in fact steers a large volume of work toward the latter. But the relationship is also often parasitical, as military agencies offer favored private companies access to subsidized factors of production goods and materials or to public works contracts, generating income from these or extracting shares of equity from their civilian counterparts in return. And as the military economy accelerates, it is coming to impinge on the private sector in new ways.

The exact balance between genuine cooperation and positive synergies in the generation of economic value versus collusion in cozy arrangements generating higher financial costs and lower return varies significantly from sector to sector. This depends partly on whether the activity involved relates to manufacturing, public works, or supply and trade. It also depends especially on the level of capital, technical skills and know-how, equipment, and advanced technology needed, and if these can only be provided by private contractors (including foreign ones). These factors moreover determine whether the military's civilian counterpart is a big, medium, or small business (or foreign), a selection that is additionally influenced by the military's perceptions of each as a social, economic, and political ally or rival.

Contrary to the assumption that military economic activity is necessarily negative for the private sector, the relationship has mostly been mutually beneficial, as the military in fact steers a large volume of work toward the latter.

In each case the negotiating power of each party differs, as does the likely level of scrutiny by government (or international) agencies. But leverage is inherent in all cases. The military wields its control over permission to use state land and its ability to expedite (or delay) bureaucratic permits and award (or withhold) contracts, both in the present and in the future, and to varyingly coax or compel civilian contractors not only into accepting its terms,

but also into doing business with it in the first place. This power relationship lies at the heart of the multifaceted interactions between the military and the private sector, allowing rewards but also seriously distorting incentive structures and subverting market rationale.

The multifold expansion of the military's role in managing public investment and procurement of goods and services since 2013 has increased both the opportunity and the appetite to redefine relations with the private sector more fundamentally. There is strategic thinking behind the military's approach, but it also reveals confused economic thinking, poor grasp of market dynamics, and incoherence in harmonizing legal, regulatory, and developmental frameworks. The net effect is to extend the regime maintenance logic that has governed the

political economy of Egypt for decades and reproduce the basic patterns of how business is done between the public and private sectors. The main difference is that, while the military still does not set macroeconomic policy, its assumptions about what serves both the national interest and its own have come to shape the field within which the private sector operates more visibly.

Until 2013, much of the military's direct involvement in the private sector took place through EAF retirees who positioned themselves as fixers in bureaucratic interstices between the private and public sectors, as brokers in economic sectors that enjoyed high levels of trade protection such as the automotive industry, or as founders and managers of private security firms. Other EAF retirees have been shoehorned by military agencies onto the boards of private businesses in sectors where the military has little other presence, a trend that has intensified since 2013. At least as significant is the shifting pattern of the military's business alliances since 2013, and its expansion into several sectors in which private businesses have long been dominant—most notably in media, cement, and steel—undermining businesses and destabilizing markets. This environment is moreover expanding opportunities for military agencies and individual EAF officers (whether retired or still in service) to set up front companies to benefit from their insider knowledge and capture public contracts.

Military Fixers

Compelled to deal with labyrinthine bureaucracy in order to do business, numerous private companies hire retired officers to deal with government agencies responsible for issuing permits and regulating contracts. Often labeled “public relations” or “government affairs” directors, their task is to clear bureaucratic hurdles and increase the chances of winning contracts. Fixers often deal with fellow retirees embedded in the state agencies with which they work.² As one interviewee put it, “companies and agencies hire officers, for example as deputy heads of boards, so as to have a ‘hot line’ to officers in other agencies or in the military command and facilitate getting permissions.”³

The number of military fixers rose in the Sadat era as interactions grew between the public, private, and foreign enterprises sectors.⁴ They played a special role when MOD approval of land use was needed, even in large government-funded projects. Egypt researcher W.J. Dorman established that when the New Urban Communities Authority sought permission to launch the Obour desert city in 1982–1983, for example, the German development agency (GTZ) providing funding and its Egyptian government counterpart authority had to hire an EAF retiree to negotiate a resolution.⁵ Even nonprofit and nongovernmental organizations—as well as a significant number of public business sector companies—hired retired officers or brought them on board as partners or directors so as to “smooth all variety of business transactions, as companies often run up against the need for military permits or approvals.”⁶ Statistical surveys do not exist, but Egyptian analysts confirm that by 2011

“most private companies had an officer [on the payroll], maybe 10 to 15 percent of their employees have a security background—either retired or on ‘call up.’”⁷

For many officers, this kind of employment simply offers a means of supplementing modest retirement pensions. Hiring retirees or taking them on as board members or partners became a means for companies to secure contracts—for which the fixers might receive a percentage—or access to land.⁸ One Egyptian business analyst noted that “developers wishing to buy land often find it easier if they hire a construction company owned at least in part by a former officer.”⁹ Companies occasionally also asked then defense minister Tantawi for the loan of active-service officers, whether to acquire particular competences or gain business connections, a practice that has probably continued since then.¹⁰ In other

cases, as Egypt researcher Ayman Emam established, companies hire the children or other close relatives of EAF procurement officers (or register holiday villas in their names) as a means of securing contracts.¹¹

The increased scope for profit-making means that this kind of arrangement has not always been voluntary. In the last decade of Mubarak’s rule, private companies started to come under pressure to hire retired officers as “delegate members” on their boards of directors.¹² In some cases military affiliates or General Intelligence

Hiring military retirees is commonplace worldwide and does not necessarily lead to corrupt practices. But the Sisi administration’s resort to the military has gone hand in hand with circumventing legal and regulatory requirements.

Directorate front companies demanded this as recompense from private businesses that had successfully bid against them for contracts, but it was probably also an adaptation to a period in which private companies sought political favor from Mubarak rather than the military. This practice has taken a new dimension, as by 2019 military agencies were reportedly compelling start-ups to cede a share of their equity or appoint EAF officers to their boards.¹³

Procurement officers and purchasing managers in private companies are also often EAF retirees who can steer contracts toward military economic entities or win subcontracts for their companies from larger projects run by the military.¹⁴ That this relationship is often purely parasitical is obvious from an op-ed written by liberal politician Mohammed Nosseir in April 2015, in which he recounted meeting the director of a private hospital who was a retired general, kept a gun on his desk, and issued instructions for patient care despite his lack of medical training.¹⁵

Hiring military retirees is commonplace worldwide and does not necessarily lead to cronyism or corrupt practices. Egyptians are hardly alone in perceiving government bureaucracy as a hindrance, and in seeking ways of cutting through it in order to expedite business. But

the Sisi administration's resort to the military as a means of "getting things done" has gone hand in hand with granting it the power to circumvent, and not simply cut through, legal and regulatory requirements, making the role of military fixers even more attractive—or unavoidable—to civilian companies. Indeed, the latter may co-opt EAF retirees to leadership positions, as the International Company for Airports (owned by Egyptian multinational Cato Investment Group) did when it appointed Major General Hani Rashad 'Oqab to head its board of directors in 2014; 'Oqab subsequently joined the board of IMAC Holding Company for Investment, a subsidiary of Kuwaiti company Kharafi, which has a forty-year build-operate-transfer contract for Marsa 'Alam International Airport on the Red Sea.¹⁶

Gaining Entry

The officers' republic secures other kinds of footholds in the private sector. This is achieved in part through the membership of military-affiliated companies in relevant chambers of commerce. But retired officers enable additional, mutually beneficial relations between formally registered military companies, privatized and publicly owned state companies, and private firms. The automotive industry demonstrates this particularly clearly, given the "exceedingly high concentration of cronies" who occupied 95 percent of the related ISIC4 subsectors in 2016, according to political economists Ferdinand Eibl and Adeel Malik.¹⁷ Production, import, and licensing policies and de facto practices underpin what in effect remains a captive, rent-seeking market for all participants, both public and private. And so what could have been useful economic synergies function instead as self-serving symbiosis.

The military economy's first serious foray into the sector was spearheaded by Arab American Vehicles (AAV), a joint venture by the Arab Organization for Industrialization and Daimler-Chrysler in 1977.¹⁸ But this consisted mainly of assembling kits supplied from the United States and Korean, French, and Japanese cars in small numbers.¹⁹ Then defense minister Abdul-Halim Abu-Ghazalah sought to acquire a more direct military stake in the sector in the 1980s, with the result that Egypt was allowed to set up a production line assembling construction vehicles at the M1 tank plant established with General Dynamic for the domestic market after 1992.²⁰

Privatization changed the structure of the automotive industry considerably after 1991, but the expansion of the officers' republic has ensured a continuing and significant military presence. For example, Major General Hussein Mostafa, former head of the AAV, became executive director of the Egyptian Automobile Manufacturers Association, which groups private companies assembling or importing vehicles, as well as feeder companies, a position he held until February 2018.²¹ The association was headed by another EAF retiree, Major General Hasan Soliman, until his death in October 2018. Soliman was also a long-time board member of the General Union of Chambers of Commerce and head of its branch for automobile traders and dealers. He additionally headed the al-Amal Group for the Manufacture and Assembly of Cars, which was the distributor for the state-owned giant

Nasr Automotive Manufacturing Company in 1970–2001 and now claims to be the biggest importer and trader of cars in Egypt, with exclusive dealerships for several foreign car brands.²² Both Mostafa and Soliman were also founding members of the Egyptian Council for Cars, which was launched in June 2015 as an umbrella lobbying body for manufacturers, traders, feeder industry, and service and maintenance corporations.²³

The automotive industry illustrates the conveyor belt that takes EAF officers from military-affiliated bodies into the commercial sector. Retired EAF officers appear on company boards or in significant staff positions, especially in public business sector companies such as Engineering Automotive Manufacturing (EamcoEG), Misr Company for Car Trade, and Auto Manufacturing and Repair. As this shows, the automotive market remains heavily influenced by state agencies, nearly three decades since the start of privatization. The hold of EAF retirees on public business sector companies is such that, when the retired major general heading Misr Company for Car Trade head died in November 2016, he was immediately replaced by another.²⁴ This symbiosis of company management and the officers' republic may also explain why Misr and Nile companies remain separate despite a 2010 decree by the holding company merging them, suggesting that influential military interest groups may have seen the merger as a threat to their sinecures and resisted it. The Holding Company for Maritime and Land Transport, to which these public sector companies belong, is also headed by an EAF retiree. Other officers have headed the automobile branch of individual chambers of commerce or sat on their boards of directors, extending their influence in the sector.²⁵

Straddling by former EAF officers has moreover created an influence loop in which military actors are involved not only in automobile production and sales but also in planning and formulating strategic policy decisions for the sector. This was made evident when the Egyptian Auto Feeders Association in July 2016 announced an initiative to boost national production to 1 million cars annually.²⁶ This seemed fantastically ambitious, vastly exceeding current output or capacity, which has been variously estimated anywhere from 93,000 to 325,000 vehicles annually, with as few as 24,000 assembled in 2018. It would have meant increasing exports to between 700,000 and 900,000 vehicles a year, since local demand has never exceeded 300,000, and indeed was only 100,000 in 2017.²⁷ But the ambition reflects the mindset of industry leaders who wish to appear responsive to Sisi's directives, and who seek reductions in demand for foreign currencies and a parallel increase of local content in manufactured goods.

Senior serving and retired military officers were deeply engaged on both sides of the ensuing struggles over the strategic shaping of the industry, and over such thorny issues as the advisability of reviving the ailing former flagship, Nasr Automotive Manufacturing Company—struggles that brought out latent divergences over strategic and commercial goals between different sectors or interest groups within both the military economy on the one side and the public and private economic sectors on the other. When the Central Bank of Egypt

and Ministry of Investment formed a committee in December to reconcile divergent views on how to develop the sector, they appointed a retired EAF major general to head it and another as a board member.²⁸

Private Security

Large numbers of EAF officers went into early retirement following the 1973 war and 1979 peace treaty with Israel, generating a pool of expertise for the new breed of private security companies, which expanded with economic liberalization in following years.²⁹ But while genuinely private companies like the multinational Group 4 Securicor get most of their business from the Egyptian private sector, those affiliated to, or promoted by, the EAF (and Ministry of Interior) dominate public sector contracts.³⁰ The perception that they are powerfully connected moreover ensures they additionally win a significant share of contracts from private businesses.

The replication of rent-seeking patterns is clear in the case of Care Service, which was founded in 1979 to provide typical services ranging from security, protection, and money transfer to office cleaning. It has held on to its advantage ever since: in 2014 it was among the top three market leaders, with a 30 percent share, and boasted clients such as HSBC bank, British Airways, and KLM in addition to major government bodies.³¹ According to the company website, it had a workforce of 35,000—including “many generals” according to several sources—and enjoyed an annual turnover of EP500 million (\$84 million) in 2011.³² Its head, Major General Adel Amarah, stated more conservatively in 2015 that the company had over 25,000 employees (split evenly between security and cleaning and environmental services), but this may have excluded Care Service operations in Kuwait, the UAE, and Saudi Arabia. Amarah anticipated at the same time that company turnover would reach EP350 million (worth between \$32 million and \$49 million due to the pound’s devaluation) by the end of the year (supposedly following 100 percent growth in the private security sector since 2011).³³

Large numbers of EAF officers went into early retirement following the 1973 war and 1979 peace treaty with Israel, generating a pool of expertise for the new breed of private security companies.

Discrepancies in reported income and employment reflect the opacity of private companies like Care Service, which are not obliged to publish financial data. Indeed, the home page on its website giving its turnover in 2011 has not been updated since then, a good indicator of a company affiliated with sovereign bodies in Egypt such as the Ministries of Defense or Interior. More pertinently, the company head is a former military intelligence officer

who was assistant minister of defense and a member of the Supreme Council of the Armed Forces in 2011.³⁴ He additionally heads the private security companies' branch of the Cairo Chamber of Commerce, another EAF access route into the private sector.

Care Service has moreover been awarded no-bid contracts by direct order, typical of economic agencies affiliated with the EAF or GID. These contracts included one in April 2013 to service three government hospitals in Sinai, where economic investment and business contracts are tightly monitored and often controlled by the EAF; this may be why Care Service facilities in al-Arish came under attack by Islamist insurgents in January 2016.³⁵ The synergy was also apparent in the company's interest in securing services contracts for Egypt's megaprojects, which are managed by the MOD; in one example it reportedly received an EP43 million contract to build low-income housing funded by the UAE.

In 2015, the director general of the NSPO's security company, still known by its old name of Queen Service (rather than Nasr Company for Services and Maintenance), made the familiar claim that it provided many services at "one-third the cost of competing companies in the private sector."³⁶ The company's access to the virtually free labor of EAF conscripts should have made it considerably cheaper, but even so it faced growing competition from genuine private sector companies. By then, between 200 and 500 companies were estimated to have joined the private security sector, although as few as fifty were properly registered, with a combined workforce of between 70,000 and 120,000.³⁷

Predictably, some of these companies were set up by EAF retirees, such as Firewall Security Consultants, which was founded in 2012 by a former Special Forces officer.³⁸ In mid-2015, the deputy head of the Protection and Security Branch at the Ministry of Interior (MOI) expected the majority of independent private security firms to close, while new ones run by former EAF and police officers entered the market.³⁹ Illustrating their growing assertiveness, EAF-affiliated private security companies replaced existing civilian contractors for house-keeping and grounds cleaning services at the American University in Cairo in July 2017.⁴⁰

The most significant beneficiary of the growing private security market has been Falcon Group International. Established in 2006, various sources claim its workforce grew to 4,000 by 2011, and to between 6,000 and 12,000 by 2014. By then, it was reported to have a turnover of EP2 billion (approximately \$283 million, as the pound had devalued), representing 45 percent of the market; this cannot be confirmed, but the company claimed in 2015 to have acquired 54 percent of the private security market.⁴¹ What is certain is that it has picked up many of the new contracts generated by the intensified securitization of public spaces since the military takeover in July 2013 and Sisi's election to the presidency in May 2014. This trend greatly expanded demand for private security companies, which it has scrambled to fill. Falcon Group provided security at Sisi's electoral campaign headquarters, and subsequently won a slew of contracts to provide site security for the second Suez Canal and fifteen

state universities. In a new twist reflective of neoliberal policies, it has even been contracted by the Ministries of Interior and Defense to provide public security at sports events.⁴²

Falcon Group is the product of an unusual *mélange* of the public and private sectors. It was founded by the Commercial International Bank, itself a joint venture established in 1975 between the state-owned National Bank of Egypt and the Chase Manhattan Bank.⁴³ One of Egypt's biggest businessmen, Naguib Sawiris, joined its board in 2008. Although its executive director is a civilian, the company is widely seen as a front for military intelligence.⁴⁴ Reflecting its favored status, Falcon Group formed a joint venture with the Civil Aviation Ministry and other government agencies in August 2016 to complement security at Cairo International and Sharm el-Sheikh Airports, and in 2018 became the local certified biometric integrator for the German company equipping these airports with biometric gateways.⁴⁵ The new venture, the National Falcon Company, reportedly contracted a British firm to train 7,000 personnel, potentially taking the mother company's total workforce to nearly 20,000, and planned to sell training services to the private security sector in general.⁴⁶ In 2015, Falcon had also become the agent in Egypt for Westminster Group, a UK-based global specialist security and services company, which claimed that Falcon provided security for "more than 26 Banks as well as many diplomatic organizations such as the United Nations and Arabic Embassies ... [and] more than 1,250 facility sites."⁴⁷ A further sign of Falcon's commercial success, and of the influence of its officer networks, was that it won the contract to inspect electricity meters in August 2017 and displaced the NSPO's Queen Service company in supervising ticket barriers in Cairo's subway service in December 2018.⁴⁸

Possibly in response to lobbying by other agencies, Sisi issued a presidential decree in July 2015 allowing the Ministries of Defense and Interior to establish their own commercially oriented security companies to compete in the market.⁴⁹ In late 2018, the Central Bank of Egypt was reportedly in discussion with a number of major banks over establishing a money transfer company in partnership with a "sovereign body," a term used to indicate the MOD or MOI, and a few months later Banque Du Caire established a private security company in partnership with such a body.⁵⁰ This new proliferation may also explain the award of the contract to provide security at the African Cup of Nations games in April 2019 to a new security company called the African Company for Security Guard Services, which had no previous history, rather than to Falcon Group International, which already provided this service for the country's major football clubs such as Zamalek, al-Ahly, and al-Itihad.⁵¹ Ticketing for the African Cup of Nations games was also handled by a "sovereign body," and Egyptian Media for Marketing and Production, a GID front company, partially organized the cup itself.⁵²

But the sector so far remains a sinecure of Military Intelligence, as the profile of other companies confirms. Most prominent is the Egyptian subsidiary of multinational Group 4 Securicor, which has 6,000 personnel. Group 4 Securicor was headed by former Military

Intelligence officer Major General Sameh Saif al-Yazal, ensuring him membership of the American Chamber of Commerce in Egypt.⁵³ Yazal also headed the staunchly pro-Sisi For the Love of Egypt parliamentary bloc until his death in April 2016. Military Intelligence extended its reach in early 2018 when Falcon Group founded a new subsidiary, Tawasol for Public Relations, which has bought out, often under constraint, Egypt's remaining private media outlets and is set to overhaul management of state-owned television and radio stations.⁵⁴

Going Private

As the example of the media sector shows, evolving military–private sector relations and the heating up of the military economy have generated rapidly widening opportunities for EAF officers to launch their own commercial activities. In many cases these are legitimate enterprises established by retired officers capitalizing on their specialist skills and connections, but a gray area has also emerged in which retirees and colleagues who remain in active service form front companies in order to capture contracts. Once again, this derives from a pattern established in previous eras, when bogus private sector firms were registered in order to get allotments of subsidized commodities or imports, which they then sold on to legitimate ventures, and when public sector bodies abetted the practice by purchasing goods or services from bogus firms.⁵⁵

An example of retirees successfully branching out on their own is Maridive, a global company with four subsidiaries operating in the oil and maritime sectors that was founded by a former naval officer. But the Alexandria Stevedore Company presents the more common kind of success story: formed in 1984 by former EAF and port authority officers, it has been accused by the stevedores' labor union of illegally monopolizing warehouse facilities.⁵⁶ According to a former administrator in a foreign oil and gas company operating in Egypt, the Alexandria Stevedore Company was one of several bodies, including the port authority and customs department, that had to be bribed in order to clear imported machinery and supplies for which official fees had already been charged; EAF officers handled all transactions, both formal and informal, for an additional handling fee.⁵⁷

Military ties are more obscure in other cases. According to an Egyptian political economist, EAF personnel benefit from “private companies that they don't own. An example is courier services, where the profit per unit is low but volume is big, because everyone in the military sphere gets to use these same services, that is, military personnel, their relatives, and their friends. These are informal ties, rather than institutionalized ones, but of course they create jobs, helping people to employ sons or daughters.”⁵⁸ Another analyst notes that in Nasr City, the largely MOD-owned residential urban neighborhood of Cairo launched in 1958, minor works such as plumbing or electrics are contracted by direct order to designated subcontractors.⁵⁹

The General Intelligence Directorate offers further insight to the functioning of front companies, as it is closely intertwined with the EAF, which provides a majority of its officers. Analyst Abdel-Fattah Barayez asserts, for example, that “the company with around 70 percent of internet capacity in Egypt is somehow owned by [the GID],” which is also influential in the telecommunications regulation agency and owns an intermediary gas export company.⁶⁰ He also cites the testimony in court of a former head of the General Authority for Petroleum that the GID owned al-Sharq Company, which exported gas to Jordan.⁶¹ Some public business sector companies are also thought to be fronts, such as those under the Ganoub al-Wadi Holding Company label. Ahmed Ezzat, a former GID officer who turned whistle-blower following Mubarak’s ouster, moreover claimed in September 2011 that the profits of these companies were going to high-ranking officers in the service.⁶²

What remains unclear is whether the private companies winning subcontracts are merely founded by EAF officers in their personal capacity and for their private gain, or if some act as fronts on behalf of the MOD or other military agencies, using their funds and channeling income back to them, in the way that GID sets up its front companies. Generally, the evidence available suggests that the MOD does not operate venture capital in the same way, possibly because it has much greater opportunity and leverage, both legal and de facto, to enter major economic sectors and markets openly. And given the modest lump sum payments that even senior officers receive on retirement, it is unlikely that they are able to capitalize companies fully, even if they club together with fellow retirees—or with officers still in service.

EAF officers who act as intermediaries and clearing agents on behalf of private companies—both Egyptian and foreign—certainly receive off-the-books fees when dealing with public agencies or providing introductions. But EAF officers still in active service may well also be establishing small companies, registered in the names of family members, and using their direct connections and insider knowledge to win contracts (and possibly selling them on), thus securing lucrative income streams. Commanding officers in the EAF’s “civilian construction brigades” and their subordinate “platoons” and site engineers involved in military-managed construction projects have the discretion to award contracts for minor projects (or parts of larger ones), and may do so on the basis of personal relations or receipt of bribes to companies so small that, despite being registered, lack an office address, permanent staff, or the requisite skills and machinery, resulting in padded costs and the use of inferior materials.⁶³

SWIMMING WITH THE WHALES OF THE NILE: MILITARY RELATIONS WITH THE PRIVATE SECTOR

Access to state land for business use has been identified by numerous economists and financial institutions such as the International Monetary Fund as one of the most important impediments to private sector development in Egypt.⁶⁴ And because this is under the control

of the MOD, both directly through its veto power over licensing land use applications and indirectly through its role in the National Center for Planning State Land Uses, this constitutes the most obvious and significant example of military leverage over civilian actors (including government agencies). The military has also taken full advantage of the discretionary legal and regulatory frameworks and de facto practices that, while not primarily of its own making, have offered it significant leverage over other economic actors. So much so that the International Monetary Fund departed briefly from its normal public reticence to warn openly in September 2017 that private sector development and job creation “might be hindered by involvement of entities under the Ministry of Defense.”⁶⁵ Together, these factors have contributed to the severe distortion of market incentives and of the structure of the private sector.

At the level of individual private companies, however, mutual benefit has characterized relations with the military far more often than rivalry or antagonism, generating favoritism and cronyism. This is largely explained by the continuing reliance of private businesses on public procurement and works contracts, which accounted for approximately 27 percent of GDP in 2003 and 31 percent in 2016, and on state agencies for key resources such as access to land and import licenses for intermediate goods.⁶⁶ Furthermore, as Khalid Ikram notes,

government interventions through laws and regulations in many sectors remained so widespread that they virtually determined the level and composition of output, even though formally these sectors remained in the hands of private decision-makers. The “footprint” of the government in the Egyptian economy is much more extensive than might be inferred from traditional criteria, such as the ratio of government expenditure to GDP.⁶⁷

Consequently, the nature of the military’s relations with the private sector has been a function of the relative rise or decline of its political preeminence within the governing system and its level of penetration of the state apparatus in any given period. But a significant shift has been under way since 2013, as the military’s considerable economic, bureaucratic, and political autonomy allows it to reshape much of the context within which the private sector operates. Its accelerating expansion in a number of economic sectors that have long been dominated by private companies is turning it not only into a direct competitor but also into a disruptive market actor as its behavior is not conditioned by normal calculations of commercial cost-benefit. In parallel, the military has realigned its strategic relationships with big, medium, and small businesses.

An Enduring Relationship

The era of nationalization in the early 1960s laid a pattern of relations between the military and the private sector that endures today. Paradoxically, for decades its core was the mostly cozy arrangement in which ascendant military-bureaucratic strata and the private sector

extracted both licit and illicit incomes from the public sector and from import trade. Ironically, the 1961 socialist decrees had the perverse effects of simply transferring many private sector employees into the newly nationalized companies and of extending corruption from the military into the rapidly expanding civilian bureaucracy.⁶⁸ The discrediting of the EAF

in the 1967 defeat by Israel and the introduction of controlled liberalization and foreign investment under Sadat's *infitah* policy from 1974 onwards shifted the relative weight of each: space expanded for private economic actors to flourish in select sectors, leaving the military to following on their coattails opportunistically.

The historical trajectory confirms that interactions between the military and the private sector were a function of the latter's relationship with the Egyptian state more broadly. Political scientist John Waterbury observed of the Sadat era that "whatever segment of the private sector one looks at, its interpenetration with the public sector is striking."⁶⁹ He added that contracting and construction were especially "dependent upon the enormous volume of business dealt out by the state," and further noted that for their part public sector managers were mostly "willing to work with the private sector, particularly through subcontracting arrangements, with the comfortable assurance that the private sector was legally subordinate to and effectively prevented from competing with the public sector."⁷⁰ As the military economy commenced its growth path under Mubarak in the 1980s, Robert Springborg concluded that its "alliance with public and private sector enterprise and the proliferation of arms industries creates a class of military, and military dependent, *munfatihun* [commercial middlemen]."⁷¹ By 1990, a distinct segment of business people were being "awarded lucrative contracts from the military for a variety of goods and services," according to an area handbook published by the U.S. Library of Congress.⁷²

The privatization program launched in 1991 had a more far-reaching impact, by breaking the monopoly of the public sector on command of the economy and enabling the private sector to reemerge as a major economic actor. Businessmen allied to the Mubarak regime were further enriched over the next two decades as he consolidated his personal power, giving rise to their sobriquet of "whales of the Nile." Conversely, the military was marginalized politically as the president turned to the MOI as the chief agency for domestic repression; the MOI budget and manpower grew at faster rates than the MOD's throughout this period.⁷³ The military was compensated with the expansion of the officers' republic and increased statutory power over use of state land, which it used to extract income from the private sector. But control of the larger part of public funds and assets shifted to different hands, limiting the military's share of income streams and fueling its resentment of the crony businessmen clustered around Mubarak, his son Gamal, and the governing National

The era of nationalization in the early 1960s laid a pattern of relations between the military and the private sector that endures today.

Democratic Party. This legacy has shaped the military's evolving approach to dealing with private sector contractors since it was catapulted into a position of political primacy by the 2011 revolution and 2013 coup d'état.

Political Connectedness and Military Leverage

The two decades between the launch of privatization and the end of Mubarak's rule were marked by the emergence of many politically connected firms.⁷⁴ Cronyism intensified in parallel with the increasing concentration of legal authority over resources such as land in the MOD's purview, and with expanding penetration of official regulatory and economic agencies by the officers' republic. This laid the foundation for a similar parasitical relationship between the military economy and parts of the private sector, albeit also for growing tensions. Much of this rent-seeking behavior focused on powerful civilian actors: Mubarak; his son Gamal and the Policies Committee of the ruling NDP that Gamal headed; and wider NDP networks in parliament, chambers of commerce, and elsewhere. The more successful private companies in the 1991–2011 period were those that drew heavily on this group (rather than the military) for their board membership; penetration of the public sector offered the military leverage and the opportunity to extract income from relations with the private sector, but did not confer control.

The anchor of political connectedness, which makes it so necessary and rewarding in the context of the Egyptian economy, is what economists Ishac Diwan, Philip Keefer, and Marc Schiffbauer call the “mechanisms of privilege.” These include trade protection, energy subsidies, access to government land, and favorable regulatory enforcement, as well as better access to finance, tax advantages, preferential access to government contracts, and easier licensing requirements.⁷⁵ Both private and publicly owned companies that are politically connected enjoy multiple regulatory and fiscal advantages over possible competitors. The military enjoys all these privileges, but more important is that it can extend them to its favored private partners and subcontractors.

As a result, rent-seeking must have constituted a main form of military income generation throughout this period. In contrast, the number of formally registered military businesses and the volume of their output grew only modestly. Furthermore, much of their activity was also rentier: privileged businesses were given access to subsidized inputs of military factories to assemble goods such as electronics and enjoyed protection from possible competitors.⁷⁶

Gifts of land and housing moreover became a centerpiece of political patronage amid the rampant speculation in real estate that characterized this period. It became common for businessmen to buy large areas of land in or around Cairo and other main cities in order to gift parcels or sell them at below-market value to EAF commanders, as well as to governors and other high-level state officials.⁷⁷ These acted as sweeteners to secure the land cheaply or to win government contracts; recipients might receive many such gifts, which they then

sold on at full market prices. Politically connected businesses were also assured that their land would be supplied with electricity, telecommunication, and transport infrastructure at public expense, greatly increasing the land’s market value and enabling them to use it as collateral to raise bank loans.⁷⁸ The MOD additionally capitalized on its control of land use and its ability to provide infrastructure in order to generate significant commercial synergies for the military economy.

TABLE 3
Quid Pro Quo in Military Relationships With the Private Sector, by Category

	Military Seek	Private Sector Benefit	Private Sector Cost
Big business	Capital, technical skills/know-how, technology, access to foreign capital, and partnerships in higher tech or capital-intensive projects	Large contracts and political connections	Dependence on military goodwill in non-competitive markets, limited opportunities in sectors where military has their own interests or favored partners
Medium-sized business	Volume of output (delivery) in low-tech projects (e.g., construction of housing and highways)	Award of contracts on non-competitive basis and assurance of future contracts	Compelled to accept low profit margin, absorb losses (e.g., due to exchange rate fluctuations) or undertake work for free/delayed payment for work completed
Small business	Volume of output (delivery) in low-tech projects, and consolidation of social alliance. Illicit income (bribes) for military engineers and officers with discretionary power to award small contracts or approve sub-standard materials	Award of contracts on non-competitive basis, ability to win contracts through bribes or personal connections, and use of poor quality materials	Low value added, low development of technical capability and capital, poor prospect for future growth

The military's relationship with the private sector is particularly significant because the latter accounted for 75 percent of GDP in 2009 according to the World Bank. But significant economic activity has concentrated in only around 20,000 out of 2 million nonfarm establishments, as economists Ishac Diwan, Philip Keefer, and Marc Schiffbauer have shown.⁷⁹ They believe the formal military agencies have in effect become what they dub "a large crony market leader" for this 1 percent (the remaining 99 percent are too small to participate), at least in relation to projects in which they can award contracts.⁸⁰ A review of these over the past six years, especially, reveals that public business sector and private companies that are politically connected—this time with the officers' republic—receive bigger slices of the subcontracting market, with a much larger number of less productive "small firms that use vintage technologies to serve local market niches" making up the balance.⁸¹

Partnering With Big Business: An Ambivalent Relationship

The EAF's return to center stage in Egyptian politics in 2011 reinforced the importance of political connections even further, as private companies that had military connections found their bids for contracts and applications for licenses expedited by the SCAF and saw their profitability increase.⁸² But the stage was also set for a discernible shift pattern of military relations with the private sector.

Military ambivalence toward big business had intensified after the notably pro-business government of Ahmed Nazif was formed in 2004, prompting then minister of defense Tantawi to escalate his opposition to the privatization of certain state-owned companies and banks. Speaking in public three months after Mubarak's ouster, SCAF member Major General Mahmoud Nasr cited "the interference of big businessmen in political life" as one of the

causes of the "25 January revolution."⁸³ An example of those now targeted by the military was Mubarak crony Mohamed Aboul-Enein, whose Cleopatra Group, originally a manufacturer of ceramics, had partnered with the NSPO in its East 'Owaynat land reclamation scheme in the late 1990s.⁸⁴ Aboul-Enein was among several high-profile fugitives—such as steel magnate Ahmed Ezz and former arms and natural gas broker Hussein Salem—who were prosecuted and fled the country. All welcomed the military takeover of July 2013

The EAF's return to center stage in Egyptian politics in 2011 reinforced the importance of political connections even further, as private companies that had military connections found their bids for contracts and applications for licenses expedited.

and agreed favorable financial settlements for their outstanding court cases for corruption in return for being allowed back into the country, but none was granted full political and business rehabilitation. This may explain why Aboul-Enein later objected in public to the

growing economic role of the EAF, arguing that it “is unacceptable that the military gets something because of advantages more than the normal investors.”⁸⁵

Some relationships remained, nonetheless, although they also reveal ambivalence on the part of the military. Most prominent among the businessmen who survived the transition from the Mubarak era is Ahmad Haykal, second son of the famous former editor of *al-Ahram* newspaper Mohamed Hassanein Haykal. His Qalaa Holdings (formerly Citadel Capital) was one of a new breed of Egyptian companies that relied primarily on business markets and international partners for capital and thrived under the economic reforms of the 2000s, in contrast to the dependency of rent-seeking companies like the Cleopatra Group, on access to public contracts and resources. Qalaa’s partnership with the military became visible in 2009, when it purchased the National River Port Management Company from the MOD, making it the only private transport company operating along the Nile. The company was headed by a major general who had spent his last tour of EAF duty before retiring as chairman of a state-owned oil and gas company.⁸⁶ Possibly thanks to its political connections, Qalaa Holdings was able to secure a major loan backed by the U.S. government’s Overseas Private Investment Corporation at the height of Egypt’s upheaval in 2011.⁸⁷

But Qalaa Holdings also ran into difficulties. In 2010 it announced plans to build “an unparalleled river-transport network” to transport wheat, but was reported the following year to be struggling to get its fleet of barges operational.⁸⁸ Qalaa Holdings had already contracted with the MOD’s Alexandria Shipyard in 2009 to build thirty river barges, but few if any were delivered as the latter had produced only nineteen in total by 2019.⁸⁹ And although Qalaa Holdings’ fleet had expanded to forty-five by 2012, it faced competition from the MOD’s National Company for River Navigation, which claimed to have moved 2.5 million tons of cargo in 2018.⁹⁰ The Nile Valley Authority for River Transport, a joint Egyptian-Sudanese governmental entity set up in 1975 and headed by an EAF retiree, also competed for a share of the cross-border trade.⁹¹ But the main impediment has been the failure of successive governments over the past two decades to implement ambitious plans to resolve physical and regulatory bottlenecks and develop Egypt’s waterways, in sharp contrast to the massive investment in military-managed highway construction.⁹² River transport still accounted for less than 1 percent of the total volume of cargo shipped internally in Egypt in 2012, as a result, while a study commissioned by the Organization for Economic Cooperation and Development in 2014 found that private investors believed they were being asked to bear too much risk.⁹³

Nonetheless, Qalaa Holdings is positioned in sectors of primary interest to the military economy, acquiring stakes in firms “that have leading positions in the energy, cement and transportation sectors, among others” in 2015.⁹⁴ It has also invested heavily in agricultural land development, food export, and river transport in neighboring Sudan, in part through its subsidiary ASEC Engineering and Management, dovetailing closely with the

involvement of military agencies (and the GID) in the import of Sudanese crops and livestock for Egyptian markets. Qalaa Holdings also announced the expansion of transport infrastructure along the Nile and western Suez Gulf in 2015, which again coincides with similar investments previously undertaken by the MOD.⁹⁵

The MOD later selected Qalaa Holdings' subsidiary Mashreq Petroleum Company to take part in the East Port Said development megaproject, while Qalaa Holdings subcontracted the National Transport and Overseas Services Company (NOSCO), which is headed by a retired EAF major general, to provide heavy transport for the big petroleum refinery it was constructing in 2016 alongside the existing Mostorod complex (in operation since 1973) in Qalyubiyah Province.⁹⁶ The fact that the new Mostorod venture was part of an \$18 billion plan to build new refineries and modify existing plants, and only the second of eleven refineries in Egypt to be majority privately owned, indicates either Haykal's privileged position or the importance of the capital, expertise, and productive capacity Qalaa Holdings could bring to bear.⁹⁷ The involvement of the state-owned NOSCO moreover reconfirms the overlapping between publicly funded projects and the officers' republic.⁹⁸

The military has not sidelined big business completely. But it has eschewed an unambiguous alliance with those it regards as political or commercial competitors.

That said, the main significance of the relationship with Qalaa Holdings is not cronyism, but rather the military's shift toward partnering with companies that have both the technical expertise and the capital necessary to improve project success and delivery rates. This is evident in the MOD's partnering with long-standing economic giants in several megaprojects it

manages: Egyptian multinational Orascom Construction Limited, which won subcontracts for work in the Suez Economic Development Corridor and the new administrative capital in 2014 and 2015; Elsewedy Electric, the largest producer of electrical cables in Egypt and the Middle East; and the Arab Contractors Company, a former public sector company that is now globalized, which in 2015 was involved in the €2 billion Burullus port project in Kafr al-Sheikh Governorate (in which NOSCO was once again a subcontractor).⁹⁹ The MOD has also relied on Arab multinationals such as Dar al-Handasah, whose Egyptian subsidiary was contracted in 2014 to design the master plan for developing the entire Suez Canal zone, to draft terms of reference for the canal expansion and to lead on the East Port Said development.¹⁰⁰

As these examples show, the military has not sidelined big business completely. But it has eschewed an unambiguous alliance with those it regards as political or commercial competitors.¹⁰¹ Relations are especially uncomfortable with globalized businesses that have sought to put themselves beyond reach by moving the bulk of their operations and capital abroad as insurance against market fluctuations and political pressures in Egypt. Despite winning

a share of public contracts awarded by the military, those businesses are very aware of being marginalized in economic decisionmaking.¹⁰² Orascom CEO Naguib Sawiris repeatedly expressed this in public in 2014, using television appearances to oppose EAF involvement in the civilian economy and demand that it focus on “protecting the country and paying attention to the disasters taking place in Libya and Iraq.”¹⁰³ He pledged to invest \$500 million in infrastructure and energy projects during the Sharm al-Sheikh investment conference in March 2015, which led to a slew of MOD-managed megaprojects, but later admitted that none of this amount had been spent.¹⁰⁴

The military has apparently sought to circumvent the political complexities of dealing with these big businesses by turning to both foreign investors and a new breed of companies combining Egyptian and international capital. A clear focus has emerged on attracting major investments from Europe, China, and India that can offer technology and capital to the new industrial parks and commercial complexes being established under military management in the Suez Economic Zone, for example. This offers military agencies and the officers’ republic commercial leverage thanks to their control of land use and the necessary permits, and also facilitates their access to private credit, which previously was more narrowly channeled to politically connected firms in the Mubarak era.¹⁰⁵

Another example is Carbon Holdings, which undertakes extensive work in the Suez Economic Zone, and also in Ain al-Sukhna, which the military has turned since 2004 into a prime focus for massive investment in tourism, trade, and industry and their associated infrastructure. Founded and headed by Basil el-Baz, the son of one of Mubarak’s chief foreign policy advisers and a member on the board of Sisi’s Long Live Egypt Fund (discussed below), Carbon Holdings leverages connections with the national and international petroleum industry, counterparts in the UAE, Europe, and the United States, and international lending corporations to access investments and technology. Its board includes the co-founder and managing director of Qalaa Holdings, a former minister of petroleum and mineral resources, and chairmen of several Gulf businesses, reflecting a new nexus of politically connected domestic and foreign private capital with which the military prefers to deal.¹⁰⁶

Teaming Up With the Minnows: The Military’s Small and Medium Business Constituency

The pattern of military relations with big businesses reveals highly strategic motives, both economic and political. The same is true of the military’s effort to build a new constituency of small and medium enterprises, although in this case the objectives and calculations differ. For years, the MOD and affiliated agencies such as the EAF Engineering Authority have routinely outsourced work to small and medium-sized companies for projects that do not require advanced expertise and that are labor- rather than capital-intensive.¹⁰⁷ The pattern has intensified sharply as the sheer volume of military-managed construction projects ballooned after 2013. Ostensibly a means of generating job opportunities and increasing

economic growth rates, this has also led to a restructuring of rent-seeking and patronage networks.¹⁰⁸ And for private companies that are too small to capture contracts through political connections, hitching their fortunes to the military's wagon clearly constitutes a viable business strategy.

This is the backdrop to statements by military officials, such as those by the head of the EAF's Megaprojects Department Major General Karam Salem Mohamed, who claimed in December 2015 that his department had given work to 198 big, medium-sized, and small businesses in its New Ismailiya City project, through which it had provided direct employment for 80,000 people and another 2 million indirectly.¹⁰⁹ Two months later, the head of the EAF Engineering Authority, Major General Kamel al-Wazir, said that it had involved "1,000 civilian companies, 300 consultancy bureaus, and over a million workers and technicians" in 1,377 projects.¹¹⁰

Military agencies are responding once again to one of Sisi's drives, this time to invigorate small and medium-sized businesses. This resembles their efforts to increase revenue and also their much-publicized contribution to his pet Long Live Egypt Fund, after prominent businessmen failed signally to help reach its target endowment of EP100 billion (then \$5.4 billion) in 2014.¹¹¹ But although the military has not displaced patronage networks centered on the presidency or other state institutions, its management of megaprojects and the extensive—at times exclusive—economic usufruct it enjoys in designated strategic zones such as the Suez Canal have deepened its symbiotic relationship with favored medium-sized and small enterprises while reinforcing impediments to the rest of the private sector.

Contractors working in Egypt confirm that in most large projects managed by military agencies, the work is conducted by dozens of small subcontractors, each of which may undertake construction of only one or two residential buildings or a few kilometers of highway.¹¹² For example, the EAF's Engineering Authority initially subcontracted work on the New Ismailiya City to ninety small companies in June 2015.¹¹³ But the most significant instance of the trend was the allocation of subcontracts for the Suez Canal expansion: not only did consortiums led by Mubarak-era companies or even former MOD partners such as the Arab Contractors Company or the Arab Academy for Science, Technology, and Maritime Transport fail to win the main tender, but two-thirds of the eighty-odd companies that initially received subcontracts were either former MOD subcontractors or, in a majority of cases, relatively or completely unknown.¹¹⁴ The military has also emphasized awarding licenses to small businesses and low-tech startups in the Suez Economic Zone. Little wonder, as analyst Maged Atiyah reported in 2015, that a common concern in Egypt was that "soon all small and medium businesses will be Army subcontractors."¹¹⁵ Although this is an exaggeration, it reflects a growing trend behind which lies a clear incentive structure for both sides. In order to win the work or gain access, subcontractors routinely pay bribes.¹¹⁶ But there are other trade-offs. EAF conscripts with specialist skills report being sent to work for

companies, such as the Takmely Insurance Fund or the Delta Sugar Company, while private companies employ graduates of military technical schools or produce goods that military companies then market as their own.¹¹⁷

Military agencies and private partners both profit from the constant circulation of money through subcontracting and management fees. After winning massive government contracts to construct civilian housing in late 2013, for example, the MOD then subcontracted the National Banks' Real Estate Company in January 2014 to build military housing. Ten of the company's twelve contracts at the time were from the MOD (worth EP209 million in total—\$30 million), and in April 2016 the company revealed it had received a major real estate investment worth EP250 million from the MOD, was working on another MOD project worth EP100 million in Nasr City (a district in Cairo on land previously owned by the military), and expected to be assigned work for a megaproject managed by the MOD.¹¹⁸ Similarly, Engineering Design Consultants constructed 1,000 residential units for EAF officers in Salam City on behalf of Nile General Contracting Company, which had been awarded the contract, and the 6th of October Panorama, this time directly on behalf of the MOD's Military Works Department.

An Expanding Military Appetite?

Until 2015, military actors largely avoided economic sectors in which private firms made the principal contribution to GDP and job generation. Economic analyst Abdel-Fattah Barayez could still argue at the start of 2016 that the military was “virtually absent or retained a tiny share in a number of key economic sectors that grew considerably since the 1990s,” including “a wide array of manufacturing industries like cement, fertilizers, glass, ceramics, aluminum, and iron and steel, as well as key service sectors such as telecom and hospitality and tourism.”¹¹⁹ The military remained concentrated in nontradable sectors.

But hostile takeovers of Egyptian media since 2016 and military investments in producing tradable commodities in sectors previously dominated by private businesses point to a significant break with past practice. Already, by 2017 the Investment Climate Statement for Egypt produced by the U.S. Department of State noted that military-owned companies (in addition to state-owned enterprises generally) competed directly with private companies in many economic sectors.¹²⁰ A mix of political and economic considerations shapes behavior, as these developments are intended to serve the Sisi administration's efforts to control public space (in the case of media), provide public goods such as housing and affordable food to gain social support, achieve savings in megaprojects (as with steel and cement), and increase state revenues and exports. But military strategies have proved flawed in each, inflicting avoidable financial costs on both sides and political damage by alienating the private companies most directly affected.

Media: A Hostile Takeover

The MOD and allied agencies have acquired a commanding position in Egypt's public and private media since 2015, though with mixed consequences. Military involvement in the sector stretches back to the Nasser era when EAF officers had a prime role in government media councils and other opinion-shaping bodies.¹²¹ Demilitarization under Sadat reduced their direct role and influence, especially in print media, as did the rise of privately owned TV satellite channels from 2001 onward. But military and security agencies have exploited the Sisi administration's containment of the private media that proliferated after the 2011 revolution, for their own commercial gain. This has been facilitated by the continuing monopoly over radio and terrestrial television broadcasting held by the state-owned Egyptian Radio and Television Union, and its tight grip over private satellite broadcasters, who are only allowed to operate in designated "free zones."¹²²

The MOD demonstrated its interest in media soon after the SCAF assumed Mubarak's powers in 2011, donating \$58 million in budgetary assistance to the Egyptian Radio and Television Union (ERTU), which still had an EP19 billion (\$3.2 billion) deficit in 2012.¹²³ A retired EAF major general heads ERTU's major satellite company, Nilesat (in which the AOI also has a 1 percent share).¹²⁴ And when the government transformed ERTU into a general authority in December 2016, its new board included representatives of several bodies in which the MOD is represented.¹²⁵ More significant has been the acquisition—through blunt, hostile takeovers—of several of Egypt's most prominent private media companies. Others have been forced out of the market as military and security agencies gained control of media production companies and redirected their contracts to their newly acquired businesses.

Initially, the GID spearheaded the process, acquiring a swath of major news and entertainment, advertising, and production companies in 2015. Its investment vehicle was Eagle Capital for Financial Investments, a private equity fund that, according to investigative journalist Hossam Bahgat, manages all GID companies, including Black and White, which was commissioned by the ERTU to produce a patriotic daily television talk show.¹²⁶ Military Intelligence also entered the sector aggressively, working with military advisers in the presidency. In January 2017, al-Asimah television network came under the management of the Cheri Media company, whose deputy head is a former EAF spokesperson.¹²⁷ In August, *al-Asimah* and its subsidiaries were acquired by Falcon Group International, a front for Military Intelligence, which established Tawasol for Public Relations to handle its growing media portfolio.¹²⁸ Tawasol immediately purchased al-Hayat private television network outright, acquiring DRN Radio and Home Media management company.¹²⁹

Whether the push by Military Intelligence pointed to competition with the GID for income streams or consolidation of regime control over media is unclear. In 2016, a Military Intelligence officer joined the board of *Youn7* newspaper, which was owned by a staunch Sisi loyalist, businessman Ahmed Abu-Hashima. But his firm, Egyptian Media for Marketing

and Production, was forcibly bought out by the GID's Eagle Capital for Financial Investments in late 2017, as investigative journalist and activist Hossam Bahgat painstakingly detailed.¹³⁰ In addition to the newspaper, Eagle Capital acquired Abu-Hashima's associated news website DotEgypt (DotMasr) and OnTV, which had been purchased from independent businessman Naguib Sawiris in 2016. Under its new management, Egyptian Media for Marketing and Production also bought al-Hayat network in 2018, presumably from the military-sponsored Tawasol. Another of its subsidiaries is the *Sout al-Omma* newspaper (acquired before the GID buy-out).¹³¹

In any event, acquisition of private media enabled the military both to invest capital and to provide employment and extra pay for both active-duty and retired officers who are embedded in media outlets and monitor their content. It also served a political agenda: the EAF's Morale Affairs Department proudly announced in October 2017 that it had produced three feature movies "for the first time since the 1973 war."¹³² And it further reflected both the drive of military-affiliated agencies to do the president's bidding in generating new revenue streams and the "gold-rush" effect as officers (and bureaucrats) vied to enter a lucrative sector; this could reach absurd proportions, as demonstrated by the Nile National Navigation Company's foray into producing cinema movies, TV series, and musical clips.¹³³ But the emphasis on propaganda and the poor quality of much of the production of military-controlled commercial media has severely affected their viability; by late 2018 they were reportedly cutting staff to reduce costs and looking for buyers in order to exit the sector.

Market Stabilization or Predation?

Speaking in April 2016, the head of the EAF Engineering Authority Major General Kamel al-Wazir justified military interventions in the steel and cement sectors as intended to ensure the stability of supply and prices, prevent monopolies in "strategic" sectors and commodities, and support the EAF's work on the country's megaprojects.¹³⁴ The latter assertion was obviously true, since steel reinforced bars (rebars) account for 30 percent of construction costs and 10 to 25 percent of building costs in Egypt.¹³⁵ But the rest of Wazir's claims flew in the face of market realities. The steel and cement sectors are dominated by private firms, none of which enjoys a monopolistic position; furthermore, both sectors suffered from high rates of idle capacity even before military agencies increased their own capacity starting in 2016. Price and supply instability at that particular time were due to the coincidence of a severe shortage in national energy supply and dollar scarcity due to the sharp depreciation of the Egyptian pound, rather than to price-gouging by the private sector or to structural factors in those markets.

What military agencies have done is secure supply and prices for the megaprojects they manage, while insulating the production facilities they own from the challenges affecting the private sector. They are moreover able to reduce the most significant production costs compared to both private firms and to the last few public business sector companies still

operating in these sectors. These include raw materials (especially when imported) and probably energy and fuel, which together account for 60 percent of total production cost, since the military benefits from customs exemptions, favorable exchange rates, and discreet discounts; labor, since the NSPO can resort to conscripts; and transport, which contributes heavily to fuel costs, since the military can utilize EAF vehicles for free, subsume fuel consumption under the defense budget, and avoid paying tolls on highways operated by the MOD or its subordinate agencies. Military agencies are moreover exempt from the value-added tax applied in 2017 and, by being able to draw on their own funds, would not have been seriously affected when the Central Bank of Egypt increased interest rates by 7 percentage points between November 2016 and July 2017, raising the cost of borrowing for private companies.¹³⁶

As significantly, the military's investment in the steel and cement sectors is only feasible so long as it is guaranteed a return thanks to the massive demand generated by megaprojects.

These advantages have positioned military agencies to undercut prices in the rest of the market, and so their expansion into the steel and cement sectors appears predatory. Rather than break monopolies, they have generated a monopsony: as a large buyer they can dictate prices of commodities, while also producing them. But they are only competitive because the playing field is uneven. Forcing commodity prices

down under these conditions damages the private sector, with which Sisi seeks good relations in the hope of increasing investment and broadening the political base of his regime, and discourages new investors, which the government has sought since 2016.

As significantly, the military's investment in the steel and cement sectors is only feasible so long as it is guaranteed a return thanks to the massive demand generated by megaprojects. As that tails down, the military will either be stuck with dead capital and the permanent drain on its funds from maintaining its large cement plants, or else have to cover its sunk costs by competing aggressively for market share in the rest of the civilian economy, further damaging and alienating the private sector. The free availability of military-produced cement in civilian markets (rather than selling it directly and exclusively to military-run construction projects) suggests that this kind of competition is already happening.

Steel

The steel sector bears out these dynamics. Local production capacity has consistently exceeded consumption since 2000; total national output of rebars for construction was some 6.5 million tons annually by 2017, leaving up to 35 percent of capacity underutilized by conservative estimates.¹³⁷ Even after megaprojects increased demand, this was easily met by existing capacity; output reached 8 million tons in 2018, but overall capacity was estimated

at 12.8 to 13.5 million tons.¹³⁸ The rate of underutilization had increased to between 38 and 59 percent of capacity, depending on which source is consulted. When NSPO head Major General Mostafa Amin claimed in August 2018 that his agency had stepped into the steel sector to increase national production because overall supply was insufficient, this was patently false, and by a very wide margin.¹³⁹

For decades, the defense industry was fed by the huge steel factory launched by Nasser in 1954. Military production of steel was largely confined to a large rolling plant belonging to the MOMP's Abu Zaabal for Engineering Industries, which commenced production in 2010.¹⁴⁰ However, this was only a semi-integrated plant producing semifinished products, and it was not until the NSPO acquired the Suez Steel Company in 2016 that it finally gained the ability to produce finished steel products needed for construction.¹⁴¹ Suez Steel was the country's second-largest producer but had run up losses of EP1.48 billion by June 2015.¹⁴² The NSPO bought the 40 percent share of former owner Gamal al-Garhy for EP3.8 billion, paid off over EP5 billion in loans owed to local banks, and raised the company's total capital to EP13.9 billion (then \$1.138 billion).¹⁴³ This included EP2 billion in new investment, partly from banks; it is unclear if the NSPO provided the balance from its own funds, but it ended up with an 82 percent share of the company after its restructuring.

Having acquired a significant share of the sector, the NSPO reportedly planned to take Suez Steel's annual production to 1.4 million tons of rebars.¹⁴⁴ It may have been to finance this expansion that Suez Steel reportedly sought a further bank loan of EP1 billion in June 2017.¹⁴⁵ Ostensibly, the aim was to replace the 800,000 tons of capacity of Misr National Steel (Ataqah), a sister company of Suez Steel that remained in Garhy's ownership, but this simply meant adding further production capacity to an already oversaturated sector instead of utilizing existing private sector capacity more fully.

The MOD behaved in much the same way when it acquired a controlling stake in the Egyptian Steel company in November 2018. Only a year earlier, company CEO and co-founder Ahmed Abu-Hashimah had confidently predicted that it would have a 20–25 percent share of Egypt's market, with total production capacity of 2 million tons.¹⁴⁶ But the shortage of gas and electricity that struck industrial sectors severely in 2016 took Egyptian Steel into crisis and, like Suez Steel, it came under pressure to repay over EP3 billion in bank loans. (As noted above, Abu-Hashimah had previously acted as a front man for the GID in purchasing a swath of private media from 2014 onward, but was forced out after racking up significant losses, and so his buyout from Egyptian Steel may have reflected a similar behind-the-scenes dynamic.) In a restructuring deal reached in November 2018, EP1 billion of debt was paid off, Qatari co-founder Sheikh Mohamed bin Suhaim Al Thani was bought out (reputedly he held a 70 percent share), and the company's total capital was raised.¹⁴⁷ Major General Hisham al-Khatib, assistant for armaments to the minister of defense, was appointed head of Egyptian Steel, with Abu-Hashimah as deputy.

In the cases of both Suez Steel and Egyptian Steel, the military could claim that it was saving ailing companies. But this had little to do with breaking monopolies, stabilizing steel prices, or assisting the development of the wider steel sector. Rather, the NSPO and MOD insulated themselves from exposure to everything that makes steel a high-cost, high-risk venture for private companies in Egypt: competition from imported rebars, dollar and energy shortages, fluctuation of exchange rates and global market prices (including for raw materials that must be imported), and higher fuel consumption. The result is to create a bifurcated sector in which the structure of risk and opportunity differs significantly for the country's military and civilian (and mainly private) parts; the former moreover offers its products freely to civilian consumers, while creating market conditions that preclude a reverse flow. With total capacity of 1.55–2.3 million tons, military ownership in the sector has leapt to at least 12–16 percent; this should be revised to 27 percent if the planned expansions in Suez Steel and Egyptian Steel, which would take their combined capacity to 3.52 million tons, have been implemented.

The NSPO and MOD achieved this outcome, on the one hand, by acquiring the means to produce not only rebars but also the intermediate products from which they are made: billets, which smaller companies must import from abroad, making them vulnerable to exchange rate fluctuations, and sponge iron, a cheaper substitute for steel scrap, which is expensive in Egypt.¹⁴⁸ Reflecting their vulnerability, smaller rerollers of imported billet halted production and sales in response to the increase in customs duties in April 2019.¹⁴⁹ On the other hand, military-owned companies are assured of high demand from megaprojects and can therefore utilize capacity at higher rates even if this means stockpiling output, since they can draw it down to meet guaranteed future orders. These companies can also force commodity prices down by using their swing capacity to undersell private competitors in their own markets, in theory benefiting consumers, but only at the cost of forcing private companies either to sell below cost (absorbing significant losses), reduce sales (incurring costs of stockpiling), or cut production (increasing their ratio of idle capacity).

Cement

The pattern has been identical in the cement sector. It, too, is dominated by private companies, and suffers from considerable oversupply. Typically of economic data for Egypt, estimates of total production capacity vary widely, ranging from 68.5 million tons a year in 2015–2017 according to official figures submitted by the Egyptian foreign ministry to the Organization for Economic Cooperation and Development in May 2018, through 79 million tons estimated by industry sources, to 83.5 million tons according to the Cement Association of the Egyptian Federation of Industries.¹⁵⁰ Consumption has been relatively steady, even after the launch of the country's megaprojects: 50 million tons annually in 2013 and 2014, rising to 54–55 million tons in 2015–2018.¹⁵¹ Until 2018, internationally owned companies accounted for 52 percent of the market, Egyptian private companies for

around 40 percent, with the publicly owned National Cement Company and the NSPO's al-Arish Cement Company making up the balance.

As in the case of steel, military officials presented a distorted picture of capacity when justifying new investments in the cement sector. The NSPO inaugurated its first two production lines with a total capacity of 3.2 million tons in April 2012, accounting for 6 percent of national output in 2015.¹⁵² But in 2016 it made two major commitments: to double capacity of its al-Arish plant to 6.5 million tons annually by 2018, and to add nearly 12.5 million tons more in 2018 by building an entirely new plant in Beni Suef (which is also owned by al-Arish Cement Company) at a cost of \$1.12 billion.¹⁵³ NSPO head Major General Mostafa Amin explained that expansion was needed in order to meet predicted demand of 86 million tons by 2022, omitting the fact that this target could already be met almost fully by existing capacity.¹⁵⁴ Indeed, even with NSPO plants at full production, idle capacity in the sector as a whole is expected to run at 19 percent by 2020.¹⁵⁵

Once again, sanguine projections overlooked the adverse consequences to the private sector and to government plans for the cement sector—as well as the future financial risk to the military. Buffeted by energy and dollar shortages in 2016, which slowed demand for construction materials, as well as stiff competition in export markets from regional producers with lower input costs, most cement firms experienced mounting losses in 2017 and 2018.¹⁵⁶ According to a report by financial services company CI Capital, cement prices rose by 20 percent in 2017 while the cost of production increased by about 37 percent, but producers were unable to pass the increase on to consumers. Many economized by stockpiling clinker, the intermediate product in the manufacture of cement, rather than turn it into the final product, although this added to the strain on their capital. National inventory stood at 5.0–7.1 million tons by the first quarter of 2018, and may reach 15.7 million by 2022.¹⁵⁷

Faced with its own deep inefficiencies, the publicly owned National Cement Company suspended production in November 2017, and finally went under less than a year later.¹⁵⁸ As a Reuters special report also noted, Suez Cement and Alexandria Cement, majority owned by German and Greek companies respectively, saw their losses rise by 100 to 1,000 percent compared to 2017; the publicly owned al-Nahdah Cement, which had claimed a profit in 2017, was compelled to reduce production at the start of 2019 and to stockpile its clinker.¹⁵⁹ In August, a report by Egypt-based Pharos Investment Banking anticipated that market demand was inadequate to save smaller companies, which could be forced to close over the coming year.¹⁶⁰

Rather than secure the supply of cement and stabilize prices by helping the private sector to cope with marked volatility in 2016–2017—or by taking over the ailing National Cement Company and rehabilitating it, approximately as it did with Suez Steel and Egyptian Steel—the NSPO exploited its relative insulation from negative externalities to expand its own company. In doing so it completely disregarded the government's parallel effort to expand

the cement sector and undermined it. In 2016, the Industrial Development Authority had offered fourteen licenses to establish or expand cement plants but was only able to sell three by 2018 (adding an eventual 6 million tons of capacity annually).¹⁶¹ Both local and foreign companies were reluctant to invest in a sector with an estimated oversupply of 30 million tons a year.¹⁶² Under pressure from private cement companies, which claimed their sales had plummeted by 50 percent over the preceding few years, the government pledged in July 2019 to subsidize their production, meaning that the public purse would absorb the costs of the military's entry into the sector.¹⁶³

Pushing the NSPO's share of overall capacity to some 23 percent in an industry estimated to account for 10 percent of Egyptian manufacturing and 1 percent of GDP may have appeared tempting from a commercial perspective.¹⁶⁴ But attaining market viability has other requirements that the military has shown it neither grasps nor controls. In theory, military production can help correct markets and prices, much as governments do, but only if it is accompanied by extensive consultation, coordinated effectively with other policy instruments, and carefully calibrated. Instead, military interventions in the steel and cement sectors have been market-distorting and self-defeating, both financially and politically. According to a former company official cited by journalist Omaila Ismail in September 2019, the new Beni Suef factory was operating at just 40 percent of its capacity.¹⁶⁵ Some realization of this may explain why the NSPO has not yet followed up on statements by its director general and Sisi in August 2018 that the agency would put shares in its al-Arish Cement and Suez Steel Companies for sale on the stock market, a proposal repeated by Sisi in October 2019.¹⁶⁶

Distrust, Crowding, and Diversion

Military partnership with private companies in the production of public goods and services under its management has contributed to economic value added in terms of capital investment, but has also led to several consequences that have been almost as damaging for private sector development when in harmony with each other as when they are in conflict. The political connections that have secured business for many companies have contributed more generally to stifling normal market competition and innovation. Whether the result of deliberately favoring cronies or of a misguided economic approach, the military is closing select markets to rivals by resorting to noncompetitive methods to drive down prices and siphoning off investment capital, thereby additionally reducing employment prospects (despite claims to the contrary).¹⁶⁷ And even in an area that the military claims as a special interest such as the Suez Economic Zone, which could significantly boost national economic growth and industrial output, the military has neither resolved internal debates nor demonstrated the professional competence to develop the legal and regulatory frameworks for private (and primarily foreign) investment, despite six years of massive investment of both financial and political capital by both the president and government.

A problem for the military is that its objectives in working with the private sector are at cross-purposes. At one level, it seeks capital, expertise, and equipment that it lacks, whether for publicly funded megaprojects it manages or for investment areas and industrial clusters of special economic interest to it such as Ain al-Sukhna. At another, it ostensibly seeks to assist the development of small and medium-sized businesses, in line with declared priorities of the president and the urging of international financial institutions. But in both cases the military's

A problem for the military is that its objectives in working with the private sector are at cross-purposes.

primary aim is to generate revenue and growth to service the political needs of the country's ruling coalition, and secondarily to capture rent to serve clientelistic networks while building up its own capital and assets base. This was at least marginally compatible with private sector interests up to 2013, but the transformation of military economic activity since then has put the relationship on a different trajectory. The problem does not lie so much in the scale, because military management of massive public works has also benefited private companies, as it does in the scope, because military agencies have imposed cost-sharing on the latter and also entered tradable commodity sectors aggressively.

Commenting in 2015, Noha Bakr, an assistant to the minister of international cooperation, argued once again that the military's interventions were solely intended to protect the economy from market shortages and fluctuations, and that only surplus military output was sold to cover supply gaps in civilian markets, adding that "the products of the military factories have not disturbed the market or affected free market rules."¹⁶⁸ Minister of State for Military Production Mohamed al-Assar later underlined that 70 percent of MOMP projects were being undertaken in partnership with private companies; and sought once again in March 2019 to reassure the private sector that the ministry did not wish to take over or monopolize any industrial sector.¹⁶⁹

The validity of these claims was already dubious in 2015, as various military agencies geared up to expand their economic role, but they are certainly no longer true now. As its forays into the media, steel, and cement sectors show, the military is on an expansionary path of acquiring, and then defending, stakes that set it in direct competition with the private sector. This is additionally demonstrated by the massive expansion of NSPO capacity for the production of processed marble and granite (discussed previously), and by the launch in August 2019 of a phosphate and fertilizer factory complex managed by military-owned Nasr Company for Intermediate Chemicals. That company has an annual production capacity of 3.45 million tons, greater than the entirety of Egypt's expected total production of three million tons of chemical products by 2020.¹⁷⁰

Relations with the private sector are further complicated by an unmistakable shift in perceptions and tone since the establishment of a new administration in July 2013. Big businesses

that would normally regard autocratic rule as profitable and seek a special relationship have faced erratic behavior and contradictory statements from Sisi and senior military officials. An early instance of this was the president's launch of the Long Live Egypt (Tahya Misr) Fund in 2014.¹⁷¹ Sisi hoped to build this into a "generations sovereign fund" with a capital of EP100 billion through investment in export-generating and labor-intensive projects, commercial partnerships, and private sector donations.¹⁷² But as he acknowledged, the fund had raised only EP5–EP6 billion by January 2015 despite donations from familiar EAF business counterparts such as Arab Contractors Company, Nasr City Housing and Development, Etisalat, and Orascom Construction Limited. The total value of donations reached only EP7.7 billion by March 2018, but by that time the devaluation of the Egyptian pound had reduced the dollar value of its endowment to below its initial level.¹⁷³

In April 2015, then prime minister Ibrahim Mahlab appointed the head of the MOD's Financial Authority as treasurer of Tahya Misr and an EAF brigadier general as its financial director.¹⁷⁴ Whether as a result or not is unclear, but private businessmen have been pressured to donate to the fund, a practice that continues at present and one they resent, as interviews conducted for this report confirm. Indeed, even smaller businesses, such as hotels in popular tourist destinations, report being pressured to make monthly donations to Tahya Misr.¹⁷⁵ The fact that Sisi felt it necessary to reassure business leaders in December 2015 that donating to the Long Live Egypt Fund was voluntary—and that they did not run a risk of seeing their businesses nationalized or confiscated—was a telling measure of the concerns his administration was generating, its need for their capital, and their limited actual investment.¹⁷⁶ Yet when just a month later an official such as the governor for North Sinai (typically, a retired EAF major general) sought to explain the failure of development in the region, he blamed it on the private sector, accusing it of delivering less than 1 percent of projects when it was supposed to undertake 60 percent.¹⁷⁷

No less novel is the shift in the functioning of political connectedness. In the Mubarak era, as economists Adeel Malik and Ferdinand Eibl have shown, sector-wide trade protection benefited both cronies and non-cronies operating in the same sector, and civilian companies could receive preferential treatment by entering sectors in which the military was present. But developments in the steel, cement, and industrial chemicals sectors since 2016 show a reversal of this pattern, as new protectionist tariffs have had starkly differentiated impacts, hurting private producers while benefiting their military counterparts.

The pragmatism and opportunism that largely governed relations between the presidency, military, and private sector up to 2011 have not been replaced entirely, but are being corroded. As economists Ishac Diwan, Philip Keefer, and Marc Schiffbauer argue,

Sisi has taken the route of a reversal to a hard-autocratic rule, including through rebuilding state dominance. In such a situation, the state is unlikely to trust the private sector. At the same time, Sisi has taken its distance from several of Mubarak's

old cronies, developing instead his own personalized network now mostly managed directly by the army. But as long as political risk remains high, a risk inherent in the “restoration” efforts built on a violent divide-and-rule-strategy, it is likely that this new group of cronies would remain narrow, and growth low.¹⁷⁸

Besides reproducing the chronic distortion of market incentives, Sisi’s focus on megaprojects and the military’s expansion in established economic sectors intensifies the capital-dependent approach of the past, rather than encouraging the expansion and diversification of markets that private companies need in order to grow and of which they are a principal agent. Instead, they divert resources needed by the private sector in a manner reminiscent of the Nasser era. Then, the Aswan High Dam project significantly affected both public and private investment, leading to retrenchment in other sectors, and diverted them of needed building materials.¹⁷⁹ Ironically, although the military has considerably expanded productive capacity of cement since 2016, numerous private developers complain that military-managed construction has drained markets of steel, tiles, wire, and other materials and resulted in the slow-down or suspension of private sector projects.¹⁸⁰

CONCLUSION: PRIVATE OR MILITARY CAPITAL TO BUILD EGYPT?

The military’s behavior in the economic domain is not all predatory, nor even predominantly so—yet. Rather, it reflects the reality of how much of economic activity in Egypt is still driven by the state and top-down decisions by powerful political actors, whose investment criteria and methods of evaluating economic utility are extremely crude.¹⁸¹ As a joint venture business adviser notes, the official approach puts an

emphasis on targets: “we will produce X tons in the next six months,” but without checking what the market needs or can absorb. When the state tries to help companies, it focuses on one and encourages it with a big contract, and then moves on to the next company and does the same thing—but this results in surges of output that don’t match what the market needs or can absorb.¹⁸²

Khalid Ikram observed in 2006 that Egyptian economic performance and policies were shaped by “a narrow approach to project selection, in which the ability to produce a particular commodity could be all important, while the economic costs of producing it received only cursory attention.” His observation remains valid today, of an administration that understands the economy as no more than a collection of discrete projects and investments, and of the military that has been chosen as one of its principal tools.¹⁸³

This is also the context for the preference of both the Sisi administration and the military to seek strategic alliances with foreign investors, rather than with Egyptian businesses who might evolve as competing domestic political actors. But as with the Egyptian private sector, a new pattern is emerging in relation to foreign companies as well. Chinese, Russian,

Gulf, and some Western companies that feel politically protected or are not risk-averse (notably Italian, for example) have invested in economic development zones and in construction and industrial projects favored by the military. But as a Reuters special report in 2018 noted, other foreign investors continued to shy away from Egypt (despite a \$12 billion loan from the IMF that should have laid the ground for economic expansion), due to concerns over the military's tax and other advantages and the lack of credible arbitration in business disputes with it.¹⁸⁴ As a result, what the World Bank assessed in October 2019 as "sluggish" foreign direct investment has been mainly directed to the oil and gas sector, leaving Egypt's other productive sectors struggling with diminishing levels of private investment.¹⁸⁵

Western governments and international financial institutions abet this trend through a posture of nominal political neutrality that overlooks the real impacts of the Sisi administration's policies on private sector development.

The military is often no more than an instrument of presidential or governmental policy, but as it expands into producing tradables in significant volumes the likelihood increases that it will utilize its advantages to undersell the private sector and strive for greater market share in order to protect its investments and sunk costs. It is also likely to overinvest in quick-yielding activities as it becomes more embedded in the civilian economy, reinforcing

the speculative trend already evident since at least the early 1990s, although this would be detrimental to encouraging the kind of private sector development that Egypt needs. At an absolute minimum, the military will fall back on the enclave it has greatly expanded since 2013, as is evident in the major trade-tourism-industry complex that it is putting together along the Red Sea coast. Partnerships with select private companies are integral to this trajectory, as is the military's role in opening the door to foreign companies and government-supported agencies with even greater financial and technological resources to invest in strategic zones that are under near-total military control. Western governments and international financial institutions abet this trend through a posture of nominal political neutrality that overlooks the real impacts of the Sisi administration's policies on private sector development, which they formally endorse as the key to resolving Egypt's social and economic problems.

Even if the military ultimately refrains from overextending, the potential consequences of the present policy course for the Egyptian economy are portentous. The World Bank estimated in December 2018 that Egypt needs \$675 billion to cover infrastructure needs and financing gaps over the coming twenty years, but faces a shortfall of \$230 billion that only private investment or commercial financing can meet.¹⁸⁶ This is wholly dependent on creating an enabling environment, but highly unlikely on current trends. Sisi's award of control

of prime tourist real estate in dozens of Red Sea islands and at two main coastal locations to the MOD in August 2019 merely reinforced the message that private investors can only operate in one of the most lucrative sectors of the Egyptian economy if they work with, and through, the military.¹⁸⁷ For its part, the military remains wedded to the notion that it has gained a usufruct to state-owned assets and indeed to national resources generally; rather than relinquish it, it is far more likely to double down.¹⁸⁸ Whether consciously or not, Sisi and the military are gambling that private capital will go along and that, at worst, the momentum of capital generation by the military will suffice to make up for a shortfall of private investment.

NOTES

1 Eggs:

NSPO output from Mohamed Ibrahim, "The National Service Projects Organization: 13 Companies Serving Development in Egypt and Providing Army Needs," *Sada el-Balad*, January 5, 2018, <https://bit.ly/2MR58WY>.

National output according to cabinet Spokesman Nader Saad. Cited in "PM: EGP 64.5 bn in investments in poultry, broiler meat production," *State Information Service*, October 9, 2018, <https://bit.ly/2PscJwD>.

Bottled mineral water:

NSPO output percentage from Mohamed Ibrahim, "The National Service Projects Organization: 13 Companies Serving Development in Egypt and Providing Army Needs," *Sada el-Balad*, January 5, 2018, <https://bit.ly/2MR58WY>.

Pasta:

NSPO output according to Noha al-Alki, "Harvest of Two and a Half Years: Achievements of the Armed Forces Supporting Agricultural and Industrial Development," *Rose al-Youssef*, May 30, 2015, <https://bit.ly/2qR1Mux>.

NSPO capacity according to Mohamed Ibrahim, "The National Service Projects Organization: 13 Companies Serving Development in Egypt and Providing Army Needs," *Sada el-Balad*, January 5, 2018, <https://bit.ly/2MR58WY>.

National output according to former head of Chamber for Cereal cited in Ayat al-Mawafi, "Anani: 125 Thousand Tons Average Macaroni Consumption During Ramadan," *Vetogate*, June 5, 2017, <https://bit.ly/2oqdaN9>.

Fish:

NSPO output projected by Major General Hamdy Badeen, head of the National Company for Fishery and Agriculture, cited in Mohsen al-Bedeiwi, "Major General Badeen: National Company's Fish Production May Reach 60,000 tons," *Youn7*, November 18, 2017, <https://bit.ly/34LMC8k>.

National output in 2011 according to "Markets in the Middle East: Market, Trade and Consumption," Food and Agriculture Organization (FAO) is a specialized agency of the United Nations, n.d. (approximately 2009), <https://bit.ly/2JsKydb>; and for 2015 output Armed Forces Establish Holding Company with the Fishery Authority, *al-Borsa*, January 13, 2015, <https://bit.ly/32VnRpR>.

Petrol stations retail volume:

Percentage according to Egyptian economic analyst Amr Adly cited in Doaa Farid, "Egyptian Army's Economic Empire: Unidentified Market Share Yet High Impact," *Daily News Egypt*, November 7, 2015, <https://bit.ly/2pXUkgN>.

Cement:

NSPO capacity (by percentage) in 2015 according to Abdul-Fattah Barayez, "Forbidden to Approach or Photograph: The Army and the Economy in Egypt," *Jadaliyya*, January 25, 2016, <https://bit.ly/2JsTyz8>; and cited in Mohamed Ibrahim, "The National Service Projects Organization: 13 Companies Serving Development in Egypt and Providing Army Needs," *Sada el-Balad*, January 5, 2018, <https://bit.ly/2MR58WY>. Capacity in 2018 according to Patrick Werr and Amina Ismail, "Egypt's \$1.1 Billion Cement Plant in Beni Suef to Start Up in Days," *Reuters*, January 31, 2018, <https://reut.rs/2C0Zr2B>.

National capacity (lower estimate) according to Assistant Ministry of Foreign Affairs, “Profile of Cement Industry in Arab Republic of Egypt,” official report submitted to the D-8 Organization for Economic Development, May 22, 2018, <https://bit.ly/2MRiT0o>; medium estimate from Patrick Werr and Amina Ismail, “Egypt’s \$1.1 Billion Cement Plant in Beni Suef to Start Up in Days,” Reuters, January 31, 2018, <https://reut.rs/2q0oU9i>; and for higher estimate, Noha Bakr, Executive Director of the Cement Association of the Egyptian Federation of Industries, “Opinion: The Cement Industry in Egypt,” *Egypt Today*, Mar. 1, 2019, <https://bit.ly/31OEqJf>.

Steel:

Major General Mostafa Amin, director general of the National Service Projects Organization, cited in Maha Salem, “Details of President Sisi’s Inauguration of a Number of Service and Development Projects in Suez and in Central and South Sinai,” *al-Ahram*, November 5, 2019, <https://bit.ly/2WOARvh>.

Marble and granite:

NSPO capacity according to Ayat Al Tawy, “Sisi Inaugurates Mega Industrial Complex in Upper Egypt’s Beni Suef,” *al-Ahram Online*, August 15, 2018, <https://bit.ly/2p8hotb>.

National output according to Noha al-Alki, “Harvest of Two and a Half Years: Achievements of the Armed Forces Supporting Agricultural and Industrial Development,” *Rose al-Youssef*, May 30, 2015, <https://bit.ly/2qR1Mux>.

National capacity in 2017 according to Jamal Boukhari, “Des conscrits au service du complexe militaro-industriel en Égypte,” *Orient XXI*, August 28, 2017, <https://bit.ly/2WlNldJ>; in 2009 according to Farah Ahmed Fouad Abdel Meguid Haggag, “Economic and Financial Valuation of the Marble Industry in Egypt,” a thesis submitted to Department of Economics in partial fulfillment of the requirements for the degree of Master of Arts,” May 2012, 21–22.

Hotels:

Military-owned hotels listed in Tolip hotels main website at <https://bit.ly/2Wj1et7>. Last accessed on October 29, 2019; Masah hotels main website at <https://bit.ly/2paxgeM>; Minister of Defense and Military Production Decree 68 of 2015 on Exempting Certain Units Belonging to the Armed Forces from the Tax on Built-Up Plots, text at <https://bit.ly/2oXdYte>.

National total according to BMI Research, cited in Karim Khalife, “The Revival of Egypt’s Tourism Industry,” June 6, 2018, <https://bit.ly/2MRgnhW>.

- 2 Mohammed Nosseir, “Egypt Hurt by Being Completely Security-Driven,” *Daily News Egypt*, April 18, 2015, <https://bit.ly/2m2AIG4>.
- 3 Anonymized interview.
- 4 John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 430.
- 5 “Exclusion and Informality: The Praetorian Politics of Land Management in Cairo, Egypt,” *International Journal of Urban and Regional Research* 37, no. 5: 12, <https://bit.ly/2lMKcVU>.
- 6 International Crisis Group, “Popular Protest in North Africa and the Middle East (I): Egypt Victorious?,” Middle East/North Africa Report no. 101, February 24, 2011, 17, <http://bit.ly/2liVUrB>.
- 7 Anonymized interview.
- 8 Anonymized interview.
- 9 Anonymized interview.
- 10 According to a former Mubarak-era cabinet minister. Anonymized interview.

- 11 Ayman Emam, "Driving Development or Building an Empire of Corruption? Military Entrepreneurship and the Militarization of the Egyptian Economy," master's thesis, International Anti-Corruption Academy, October 2018, 63.
- 12 Anonymized interviews.
- 13 Anonymized interview.
- 14 Anonymized interview.
- 15 Examples include Kader for Advanced Industries, a subsidiary of the Arab Organization for Industrialization, whose head sits on the board of the Chamber of Engineering Industries, one of twenty such chambers in Egypt; and Major General Salah-el-Din Ahmed Abdul-Rahim, head of al-Abed Confectionary Company and board member of the Cairo Chamber of Commerce. A more prominent example is Major General Hussein Massoud, who became EgyptAir Holding Company head in 2009; in addition to also being CEO of Dassault Aviation subsidiary Mitrage, he was a member of the Canada Egypt Business Council, Club d'Affaires Franco-Egyptien, and the Cairo Engineering Syndicate.
- 16 On appointment to the International Company for Airports, Mohamed Tantawy, "Appointment of Major General Hani 'Oqab Head of International Company for Airports," *Yom7*, December 28, 2014, <https://bit.ly/2lX91yE>. On relationship with Kharafi, Mohamed Tantawy, "Appointment of Major General Hani Oqab Chairman of IMAC for Airport Management," *Yom7*, October 29, 2015, <https://bit.ly/2kuSSA8>.
- 17 Ferdinand Eibl and Adeel Malik, "The Politics of Partial Liberalization: Cronyism and Non-tariff Protection in Mubarak's Egypt," CSAE Working Paper 27, Department of Economics, University of Oxford, 2016, 16.
- 18 Arab American Vehicles company website, accessed on July 27, 2018, <https://bit.ly/2kgp4XP>. A previous attempt to design and produce an all-Egyptian passenger car, the Ramses, was launched and quickly terminated under Nasser. The Ramses was in fact merely the West German NSU Motorenwerke AG Prinz, only a few examples of which were assembled between 1958 or 1960 and 1962.
- 19 On civilian jeep models, <https://bit.ly/2mp3TUa>. On the J8 Jeep, David Elshoff and Ariel Gavilan, "Jeep J8 Production Begins at Arab American Vehicles Company," Fiat Chrysler Automobiles, November 13, 2008, <https://bit.ly/2lPjw2f>. According to the head of Arab American Vehicles company, Major General Mohammed Anis, the J8 has been supplied to the EAF and exported to U.S. peace-keeping forces and Border Guard, the Netherlands, and Portugal. Cited in Rania Ghoniaiem and Noha al-Naggar, "Chairman of the Arab-American Company for Vehicles Major General Mohamed Anis: 1,600 cc Cars at Surprising Prices Soon," *Akhbar al-Hawadith*, February 18, 2015, <https://bit.ly/2kBXMvc>. Details of production of civilian cars in, Graeme Roberts, "EGYPT: Toyota Fortuner SUV Assembly Starts," *Just Auto*, April 10, 2012, <https://bit.ly/2kiQ09d>.
- 20 Aram Roston and David Rohde, "Egyptian Army's Business Side Blurs Lines of U.S. Military Aid," *New York Times*, March 5, 2011, <https://nyti.ms/2leiC4>.
- 21 Egyptian private and international companies now account for some 75 percent of local assembly of vehicles and for the bulk of imports into Egypt. They are variously reported to number 17 or 26, and assemble some 68 brands of cars. The Egyptian Auto Feeders Association is variously reported to represent between 75 and 338 companies. All told, the sector employed an estimated 46,000 people in 2005 and 86,000 in 2017. Figures for companies from Radi Abdelbari and Mahmoud Maklad, "The Car Market in Egypt...Where To?," *Shorouk News*, April 3, 2016, <https://bit.ly/2lZerQ5>; and Sherif Yehya, "Automotive Industry in Egypt," Thai Trade Center, Cairo, 2013, 2, <https://bit.ly/2kDq4pd>. Figure for 2005 employment from

- “Strategic Study to Upgrade Egypt’s Automotive Sector,” International Trade Centre, Industrial Modernization Centre with EU, 2005, 26. Figure for 2017 from Minister of Trade Tarek Kabil, cited in, Hanan Mohamed, “Renault Studies to Assemble Its Cars in Egypt,” *Egypt Today*, March 14, 2018, <https://bit.ly/2kMp1TO>.
- 22 On election, Ibrahim Adil, “Hassan Soliman Chair for the Automobile Manufacturers Association and Farid al-Tobjy Vice Chair,” *Veto Gate*, December 7, 2015, <https://bit.ly/2kt09QU>. On al-Amal, “al-Amal Group,” *Waseet*, <https://bit.ly/2kTnI5A>, accessed on May 18, 2018. Soliman was succeeded as head of al-Amal by his son Amr, a civilian engineer. “Ahmed Mahfouz Interviews the Head of the Board of Directors of al-Amal Company for Car Trade and Assembly,” *al-Shoura News*, December 12, 2018, <https://bit.ly/2m2NjZQ>. A second son, Alaa, was a former brigadier general and deputy company head until his death. Obituary dated June 23, 2016, at <https://bit.ly/2mn8DJP>.
 - 23 Amani Samir, “Establishment of the Egyptian Council for Cars With the Chairmanship of Farid al-Tobji, Chairman of the Bavarian Group,” *Youm7*, June 14, 2015, <https://bit.ly/2moRUPB>.
 - 24 Major General Mohammad Amin Abdul-Ghani was replaced by Major General Kamal Mohammad Amin Khattab. Noted in “Obituary of Major General Mohamed Amin Abdel-Ghani,” *al-Ahram*, January 1, 2016, <https://bit.ly/2mn95Yxx>; and “Board of Directors,” *Misr Car Trading Company*, <https://bit.ly/2kSJ5ny>, accessed on May 18, 2018.
 - 25 For example, Major Generals Effat Abdul-Aati and Nour Darwish in Cairo. Mostafa Anbar, “Nour Darwish Potential Nominee for Head of the Automobile Branch of Individual Chambers of Commerce,” *Youm7*, June 29, 2010, <https://bit.ly/2lV0oVb>. Darwish was also a board member for the Public Branch for Vehicles of the Chamber of Engineering Industries. Hesham al Zeini, “The Egyptian Council for Cars Recommends Rethinking the Local Manufacturing Strategy,” *Auto Abram*, December 1, 2015, <https://bit.ly/2kuvoLs>.
 - 26 Ahmed Amer, “Auto Feeders Association Proposes Building a Car Factory in the East Port Said Area to the Presidency,” *al-Borsa*, July 19, 2016, <https://bit.ly/2WahNHu>.
 - 27 Lower output figure of 93,000 from Major General Hasan Soliman, cited in <http://www.gulfeyes.net/cars/1023881.html>. Highest figures of 300,000 cited in Mona El-Fiqi, “Mercedes Closes Assembly Lines,” *al-Ahram Weekly*, May 7–13, 2015, <http://weekly.ahram.org.eg/News/11216.aspx>; and of 325,000 given by Yehya, “Automotive Industry in Egypt,” 2. The minimum output figure of 24,000 cited in Al Monitor, “Upholding Car Import Customs Does Not Benefit Egypt’s Local Industry,” *Egypt Daily News*, January 26, 2018, <https://bit.ly/2Wc1fPj>. On local market volume in 2017, Hanan Mohamed, “Renault Studies to Assemble Its Cars in Egypt,” *Egypt Today*, March 14, 2018, <https://bit.ly/32L3bkM>. A country report by the Oxford Business Group, citing the Automotive Marketing Information Council in Egypt, gave the figures of local output of 145,000 cars annually and estimated the local market at 300,000, “Egypt’s Domestic Automotive Industry Shows Promise,” Oxford Business Group, 2016, <https://bit.ly/32OBMOs>.
 - 28 These were Major Generals Hussein Mostafa and Mohammed Anis. “Central Bank Forms a Committee to Develop the Car Manufacturing Industry and Attract Foreign Investments,” *Arab Finance*, December 21, 2016, <https://bit.ly/33VmlE8>.
 - 29 According to an interview conducted with Adel Amarah, head of one of the largest private security companies, Care Service, in “The Legal Framework of the Private Security Companies’ Business,” Egyptian Center for Public Policy Studies, October 22, 2014, <https://bit.ly/2iV7gPU>.
 - 30 Egyptian political economist. Anonymized interview.

- 31 On market share, Saleh Ibrahim, "With Names...the List of the Big 10 in the Private Security Market," *al-Watan News*, October 7, 2014, <https://bit.ly/1Sg9cNu>. Turnover and workforce figures from History and Facts, official website of Care Services, <https://bit.ly/2lW5lNF>, accessed on May 18, 2018. However, the last turnover on this site was in 2008, and so these figures are seriously out of date. Their "major client" list is at <http://192.254.170.54/~careserv/home.php>. Accessed on May 18, 2018.
- 32 On "many generals," a former U.S. diplomat who served in Egypt. Anonymized interview. And Sarah Topol, "In Egypt, the Military Means (Big) Business," *Bloomberg Businessweek*, March 13, 2014, <https://bloom.bg/2kG0O1z>.
- 33 Amarah cited in Mohamed Magdy and Omar Salim, "Care Services Seeks Achieving EP385 Million Worth of Business," *al-Mal News*, May 26, 2015, <https://bit.ly/2mndxXf>. A former U.S. ambassador estimates that Care Service employed a total of 40,000. Anonymized interview.
- 34 Company head Major General Adel Amarah was accused by hostile media of involvement in corrupt land sales, though this was not corroborated. "Major General Adel Amarah, Member of SCAF...the Man of Commissions and Bribes in Selling State Lands," *al-Shaab*, November 25, 2013, <http://tiny.cc/9500cz>.
- 35 The award of contracts by "direct order" confirmed by the Health Ministry director for Sinai, cited in Tareq Khater, "170 Million Pounds to Complete 3 Hospitals in Bir al-Abed, Nakhil and Rafah," *al-Mal News*, April 23, 2013, <https://bit.ly/2lXhYYM>. On insurgent attack, Eyad al-Sherif, "With Pictures: Details of the Destruction of the Care Services Garage in Arish and Burning of 40 Vehicles," *Masr al-Arrabya*, January 10, 2016, <https://bit.ly/2nCvW9J>.
- 36 Company director Major General Wasfi Mahmoud Arafeh, in interview with Mohamed Ahmed Tantawy, "Major General Mahmoud Wasfy, Chairman of el-Nasr Company for Services," *Youm7*, January 5, 2015, <https://bit.ly/2kjbdlj>.
- 37 The lower figure of 200 companies and low registration rate according to Major General Adel Amarah, head of one of the largest companies, Care Service, cited in Saleh Ibrahim, "With Names... a List of the Big 10 in the Private Security Market," *al-Watan News*, October 7, 2014, <https://bit.ly/1Sg9cNu>. One source estimated there to be 220 companies in Cairo alone in 2013, of which only 50 supposedly were licensed, cited in Azza Maghazi, Ola Abdallah, and Ayman Hassouna, "Private Security, Militias With Governmental Licenses," *al-Masry al-Youm*, March 23, 2013, <https://bit.ly/2mqZaRV>. The deputy head of the Protection and Security branch at the ministry of interior claimed there were 500 companies in 2015, cited in Rana Mamdouh, "Egypt: Security 'On Delivery' for Those With Money," *al-Akhbar*, July 23, 2015, <https://bit.ly/2kVCyZl>. Major General Adel Amarah gave the number of employees as 70,000, cited in Marwa Amarah and Marwa al-Wagih, "Surveillance Cameras in Public Squares Are 'Scarecrows' and a Condition for Granting Shop Licenses," *Rose al-Youssef*, Masress, October 31, 2016, <https://bit.ly/2lW8n4v>. But Amarah also estimated the workforce at 100,000–120,000, cited in Musa Abdallah, "al-Bawaba Exposes the Security and Protection Business in Egypt," *al-Bawaba News*, July 16, 2015, <https://bit.ly/2kUQq5V>. Also see "The Legal Framework of the Private Security Companies' Business," Egyptian Center for Public Policy Studies, October 22, 2014, <https://bit.ly/2iV7gPU>. The claim of 500 companies in the sector was made by the deputy head of the private security branch of the Cairo Chamber of Commerce, cited in Basma Tharwat and Emad Hamdy, "Security Department Discusses the Consequences of Allowing Ministries of Interior and Defense to Establish Companies," *al-Borsa*, July 21, 2015, <https://bit.ly/2lW9Nfl>.

- 38 Nadine Marroushi and Alaa Shahine, "Guarding Nile City Bringing Riches to Egyptian Commandos," *Bloomberg*, May 13, 2013, <https://bloom.bg/2kVEqBl>.
- 39 Cited in Rana Mamdouh, "Egypt: Security 'On Delivery' for Those With Money," *al-Akhbar*, July 23, 2015, <https://bit.ly/2kVCyZl>.
- 40 A university statement on the award of contracts is cited in Mostafa Mohie, "AUC Cleaners Strike Against Nonrenewal of Contracts" *Mada Masr*, July 19, 2017, <https://bit.ly/2kv4uTK>. A researcher at the university confirmed the EAF links of the new companies, although this could not be confirmed by a senior university official. Anonymized interviews.
- 41 "Falcon Secures 22 Banks, Acquires 54% of Egypt's Private Guard Service Market: Executive Director," *Daily News Egypt*, June 14, 2015, <https://bit.ly/2knXHLm>.
- 42 Figure of 12,000 employees from Musa Abdallah, "al-Bawaba Exposes the Security and Protection Business in Egypt," *al-Bawaba News*, July 16, 2015, <https://bit.ly/2kUQq5V>. Other details in this paragraph from the preceding and from "Private Firm Hired to Provide Security for Azhar and 15 State Universities," *Mada Masr*, October 6, 2014, <https://bit.ly/2mpcZAI>; and "Falcon: Meet Egypt's Most Famous Security Company," *Egypt Independent*, October 10, 2014, <https://bit.ly/2mkqp0d>.
- 43 On company founding, CIB website at <https://bit.ly/2kTyqsO>, accessed May 18, 2018. On Falcon, company website at <https://bit.ly/2lZqkz7>; and "Seven Questions Are All You Want to Know About Falcon Company," *Akhbarak*, October 11, 2014, <https://bit.ly/2kqdkC9>.
- 44 According to former EAF Major General Adel Soliman, cited in a Muslim Brotherhood outlet "Former Major General Reveals the Secrets of the Private Company in Charge of Sisi's Security," *Freedom and Justice Gate*, April 12, 2014, <https://bit.ly/2lWoEq6>; and "Will Falcon Replace the Police?," *al-Araby al-Jadeed*, October 18, 2014, <https://bit.ly/2lWoG1c>.
- 45 "ICT CAIRO 2018," Modi Vision for Identification, November 26, 2018, <https://bit.ly/2kVU9Ab>.
- 46 "Government to Establish Airport Security Company," *Egypt Independent*, February 16, 2016, <https://bit.ly/2lXa6Xh>; and Passant Rabie, "Are Private Firms the Answer to Egypt's Airport Security?," *Mada Masr*, August 2, 2016, <https://bit.ly/2kKNGZ5>.
- 47 Westminster Group website at <https://bit.ly/2mqdg62>, accessed August 21, 2019.
- 48 On electricity meters inspection contract: Wafaa Nour el-Din, "Details of the Ministry of Electricity's Contract With Falcon," *Sada al-Balad*, August 23, 2017, <https://bit.ly/2koZUpS>. On contract for underground entrance supervision: Ahmed Kassab, "Officially...Falcon Is in Assigned the Security of the Ticket Gates in Metro Stations," *Shorouk News*, December 1, 2018, <https://bit.ly/2mlwyJz>.
- 49 See text of Presidential Decree 86 of 2015 in Mohamed al-Ghali and Mohamed Attia, "Presidential Decree Allowing the Ministries of Interior and Defense to Form Money Transfer and Facilities Protection Companies," *Youm7*, July 12, 2015, <https://bit.ly/2kmzCVc>; and "Text of Resolution 126 of 2015 on the Amendment of the Law on the Provision of Guard Firms," *el-Masa Security*, March 16, 2016, <https://bit.ly/2kJRYzU>.
- 50 On CBE discussions: Mohamed Salem and Sayyed Badr, "Central Bank and Public Banks Establish a Money Transfer Company," *al-Mal News*, August 30, 2018, <https://bit.ly/2kH6XKV>. On Banque du Caire establishing a security company, Affaf Ammar, "Banque du Caire Agrees to Establish a Security Company With a Sovereign Body," *Shorouk News*, January 26, 2019, <https://bit.ly/2kqu6AX>.
- 51 On Falcon's contracts with major football clubs, "Falcon Signs a Contract to Secure the Facilities and Matches of el-Etihad Football Club," *Youm7*, March 19, 2018, <https://>

- bit.ly/2kvGIaa; and Mostafa Gewily, “Zamalek Contracts With Falcon,” *al-Wafd*, June 12, 2017, <https://bit.ly/2m3Uxgc>. On award of African Cup of Nations contract, Ahmed Tarek, “Aya Hossam, Human Resources Director at the African Company for Security,” *Youm7*, April 17, 2019, <https://bit.ly/2lXrg78>.
- 52 On ticketing: “Mohamed Fadl: A Sovereign Body Handles the Ticketing for the African Cup of Nations,” *Cairo 24*, April 8, 2019, <https://bit.ly/2ms61KT>. On the role of Egyptian media, Mohamed Rashad, “Fadl: Egyptian Media Is the Organizer of the Opening and Closing Ceremonies of the African Cup of Nations,” *Sada al-Balad*, March 6, 2019, <https://bit.ly/2VF0lJS>.
- 53 Azza Moghazi, “G4S...a Security State Within Egypt That Has 6,000 Employees,” *al-Masry al-Youm*, March 23, 2013, <https://bit.ly/2m0qA0C>. According to the British-Egyptian Business Association, Group 4 Securicor had more than 6,000 employees in Egypt in 2011, although the G4S website consulted at the same time (February 7, 2011) said that it had “over 5,200 employees across the country.” Yazal left G4S in 2014, two years before he died. “Egyptian MP Sameh Seif El-Yazel Dies After Cancer Battle,” *Ahram Online*, April 4, 2016, <https://bit.ly/2kKU2rp>.
- 54 “Egypt’s Sisi: President for Life?,” *al-Araby al-Jadeed*, April 13, 2018, <https://bit.ly/2lWcsFH>.
- 55 As described by Waterbury, *The Egypt of Nasser and Sadat*, 181–2.
- 56 Robert Springborg, “The President and the Field Marshall: Civil-Military Relations in Egypt Today,” *Middle East Report* 17, no. 147 (July/August 1987): 8, <https://bit.ly/2me1Q53>; and Shana Marshall and Joshua Stacher, “Egypt’s Generals and Transnational Capital,” *Middle East Research and Information Project*, no. 262 (2012): 12–18, <https://bit.ly/2msbS2P>.
- 57 Anonymized interview.
- 58 Egyptian political economist. Anonymized interview.
- 59 On Nasr City, Mohamed Elshahed, “Nasr City Was Once Egypt’s New Capital, but Things Went Wrong,” *Cairo Observer Blog*, posted March 23, 2015, <https://bit.ly/2kr0cfY>. On award of subcontracts, anonymized interview.
- 60 Abdel-Fattah Barayez, “About the Army and Its Economic Empire in Egypt,” *Jadaliyya*, October 24, 2013, <https://bit.ly/2mqeqOT>.
- 61 Ibid.
- 62 Ezzat started a Facebook page to publicize his allegations, but this has since closed. Post republished on “Coalition of Free Officers of the Egyptian Army” as Ahmed Ezzat, “Egyptian GID Corruption Under Mubarak and Omar Soliman and Later Murad Mwafy and Mustafa al-Behairy,” Free Officers-Facebook, September 6, 2011, <https://bit.ly/2mqggPN>, accessed on July 28, 2018.
- 63 Emam, “Driving Development or Building an Empire of Corruption?,” 64, and 72–74.
- 64 For example, “Arab Republic of Egypt: Fourth Review Under the Extended Arrangement Under the Extended Fund Facility,” Middle East and Central Asia Department, International Monetary Fund, Country Report No. 19/98, April 6, 2019, <https://bit.ly/2WaGhJL>.
- 65 “Arab Republic of Egypt: First Review Under the Extended Arrangement Under the Extended Fund Facility and Requests for Waivers for Nonobservance and Applicability of Performance Criteria,” Middle East and Central Asia Department, International Monetary Fund, Country Report No. 17/290, September 26, 2017, <https://bit.ly/2AbODPV>.
- 66 World Bank, “Arab Republic of Egypt: Country Procurement Assessment Report,” December 2003, 2, <https://bit.ly/2kKwliD>. Figure for 2016 from George Abed, Chun Jin, and Boban

- Markovic, "Egypt: Good Progress to Date, but Sustainability Requires Deep, Transformational Change," Institute of International Finance, February 20, 2019, 4, <https://bit.ly/2pRP2mE>.
- 67 Khalid Ikram, *The Political Economy of Reforms in Egypt: Issues and Policymaking Since 1952* (London: I. B. Tauris, 2018), 92–93.
- 68 Samia Sa'id, *Who Owns Egypt?* (Cairo: Dar al-Mustaqbal al-'Arabi, 1986), 102–3.
- 69 Waterbury, *The Egypt of Nasser and Sadat*, 188.
- 70 Ibid., 426.
- 71 Springborg, "The President and the Field Marshall."
- 72 Helen Chapin Metz, ed., "Egypt: A Country Study," Area Handbook Series, Federal Research Division, Library of Congress, December 1990, 327–8, <https://bit.ly/2kjPibX>.
- 73 See the excellent analysis of this trend in Samer Soliman, *The Autumn of Dictatorship: Fiscal Crisis and Political Change in Egypt Under Mubarak* (Stanford, CA: Stanford University Press, 2011).
- 74 Ishac Diwan, Philip Keefer, and Marc Schiffbauer, "Pyramid Capitalism: Cronyism, Regulation, and Firm Productivity in Egypt," September 16, 2016, 7. Draft, cited with author's permission, <https://bit.ly/2kUzlsO>.
- 75 Ibid., 1 and 4.
- 76 Robert Springborg and Clement Moore Henry, *Globalization and the Politics of Development in the Middle East*, 2nd edition (Cambridge, UK: Cambridge University Press, 2010), 151 and 154.
- 77 According to a client relaying conversation with a realtor. Anonymized interview.
- 78 Diwan, Keefer, and Schiffbauer, "Pyramid Capitalism," 9.
- 79 World Bank estimate cited in Amr Adly, "Too Big to Fail: Egypt's Large Enterprises After the 2011 Uprising," Carnegie Middle East Center, March 2, 2017, <https://bit.ly/2mIJKy5>; and Diwan, Keefer, and Schiffbauer, "Pyramid Capitalism," 13.
- 80 Diwan, Keefer, and Schiffbauer, "Pyramid Capitalism," 18.
- 81 Ibid.
- 82 Noted by Shana Marshall, "The Egyptian Armed Forces and the Remaking of an Economic Empire," Carnegie Middle East Center, April 2015, 8, <https://bit.ly/2kh3C4O>; and by Daron Acemoglu, Tarek A. Hassan, and Ahmed Tahoun, "The Power of the Street: Evidence From Egypt's Arab Spring," *Review of Financial Studies* 31, no. 1 (2018), <https://bit.ly/2moyZuZ>.
- 83 Nasr was also assistant defense minister for financial affairs. Dandarawi al-Hawari, "SCAF Member Major General Mahmoud Nasr: Businessmen's Interference in Shaping the Political Life Is Behind the Deterioration of the Economy and the Eruption of the January 25 Revolution," *Yum7*, May 16, 2011, <https://bit.ly/2OzI9gV>.
- 84 Aboul-Enein is said to have bought land in East Owaynat through crony relationships. Safinaz El Tarouty, *Businessmen, Clientelism, and Authoritarianism in Egypt* (London: Palgrave Macmillan, 2015), 78.
- 85 Sarah A. Topol, "In Egypt, the Military Means (Big) Business," *Bloomberg*, March 13, 2014, <https://buswk.co/1fvf90q>.
- 86 According to the official biography of Major General Maged Farrag on the company website, Subsidiary Management, Qalaa Holdings, <https://bit.ly/2kHh6Hv>, accessed July 28, 2018.
- 87 Shana Marshall, "The Egyptian Armed Forces and the Remaking of an Economic Empire," 8.

- 88 Company plans described in “NRPMC Inaugurates Its River Port in Tanash With Strategic Shipments of Wheat,” press release, Citadel Capital, February 23, 2010, <https://bit.ly/2m3lp08>. On difficulties, “Water Mondiaal Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector-Challenges and Opportunities for the Dutch Private Sector,” Occidental Oriental Consult, 2011, 32, <https://bit.ly/2mk0ZQx>.
- 89 On construction contracts: Sabah Hamamou, “Private Sector Invests Heavily in River Transportation,” *Daily News Egypt*, September 13, 2009, <https://bit.ly/2lWishH>. On total ASY production of river barges, company website accessed on August 31, 2019, at <https://bit.ly/2mfSZ2O>.
- 90 According to the company website, accessed on August 31, 2019, at <https://bit.ly/2kWhrpD>.
- 91 Nada Selim, “Egypt and Sudan, One Hand,” *Youn7*, March 28, 2019, <https://bit.ly/2kqFrkv>.
- 92 On government plans and persisting bottlenecks, World Bank, “Egypt: Enabling Private Investment and Commercial Financing in Infrastructure,” 2018, 36–37, <https://bit.ly/2FRRfWf>.
- 93 Investment Security in the Mediterranean (ISMED) Support Programme, “Egypt Assessment Report: Promoting Nile River Transport, Executive Summary,” OECD, with EU financial support, no date (2014), <https://bit.ly/2mq598q>.
- 94 “Egypt’s Qalaa to Sell Off Non-core Assets in Deals With FHI,” Reuters, June 23, 2015, <https://reut.rs/2m5c5Zj>.
- 95 Sara Aggour, “Qalaa Holding to Expand Nile Transportation Project to Adabiya, Damietta Ports,” *Daily News Egypt*, September 10, 2015, <https://bit.ly/2m0ypn0/>.
- 96 On East Port Said, “SCA Signs Settlement With Mashreq Petroleum to Withdraw Concession Lands,” *Daily News Egypt*, November 28, 2015, <https://bit.ly/2m1aaFh>. On the Mostorod refinery, “Nosco Competes for 10 Big Transportation Projects,” *Shorouk News*, January 3, 2016, <https://bit.ly/2kWWc7h>.
- 97 The other privately owned refinery is MIDOR Refinery in Alexandria. The remaining nine refineries are all operated by the state-owned Egyptian General Petroleum Corporation (EGPC). Lily Leach, “Overview of Egypt’s Oil Refineries,” *Egypt Oil & Gas*, December 31, 2014, <https://bit.ly/2kL1Vgv>.
- 98 “NOSCO Competes for 10 Big Transportation Projects,” *Shorouk News*, January 3, 2016, <https://bit.ly/2kWWc7h>.
- 99 On NOSCO involvement, Mai Mohamed, “With Pictures. Upgrading Burullus Port in Kafr al-Sheikh at a Cost of €2 Billion,” *Veto Gate*, September 16, 2015, <https://bit.ly/2m45EWs>. On Elsewedy, Amr Adly, “Too Big to Fail.”
- 100 Yahya Zaki, the director of operations at Dar Al-Handasah, interviewed by Sara Agur, “Investment Opportunities in Suez Canal Project Are Endless: Dar Al-Handasah Director of Operations,” *Daily News Egypt*, September 16, 2014, <https://bit.ly/2kJY6br>.
- 101 Amr Adly interview, in Michael Young, “In an Interview, Amr Adly Discusses His Recent Carnegie Paper on Egypt’s Large Private Enterprises,” *Diwan* (blog), Carnegie Middle East Center, March 28, 2017, <https://bit.ly/2nciaht>.
- 102 See, for example, the complaint by Tamer Badreddine, chairman of El Badr Plastic, a packaging company, cited in “Sisi Walks Fine Line Between Egypt’s Tycoons and Generals,” Reuters, October 16, 2015, <https://bit.ly/2lWkE8V>.
- 103 In television appearances in February and September 2014, cited in “The Economic Empire of the Army: Influence of the Ruling Authority Threatens Private Sector Power,” *Mada Masr*, December 24, 2014, <https://bit.ly/2hoqOvv>.

- 104 “Sisi Walks Fine Line Between Egypt’s Tycoons and Generals,” Reuters.
- 105 Ishac Diwan, Philip Keefer, and Marc Schiffbauer note the importance of access to industrial parks and to credit. “Pyramid Capitalism,” 29–30, 31, and 32–33.
- 106 Company board accessed on August 31, 2019, at <https://bit.ly/2mLrLX>.
- 107 Amr Adly, “The Army’s Economy and the Future of the Private Sector in Egypt,” *Shorouk News*, September 6, 2014, <https://bit.ly/2mkcbMT>.
- 108 As Egyptian political economist Amr Adly wrote in “Too Big to Fail.”
- 109 Dalia Othman, “Engineering Authority Reveals the Details of the New Ismailiya Project,” *al-Masry al-Youm*, December 14, 2015, <https://bit.ly/2mec8SL>.
- 110 Mohamed Hasan, “EAF Engineering Authority Is in a Race Against Time to Accomplish Megaprojects,” *al-Ahram*, February 7, 2016, <https://bit.ly/1TLZiCR>.
- 111 The fund had raised only EP6 billion (\$324 million) by the end of 2016. Amr Adly, “Too Big to Fail,” 18.
- 112 Contractor for a major company working in Egypt. Anonymized interview.
- 113 Asmaa Khalil, “With Video and Pictures...Veto in the Site of the (New Ismailiya City) Project,” *Veto Gate*, March 23, 2015, <https://bit.ly/2kJZgDP>. Mention of 198 companies in Mohamed Mahmoud Radwan, “New Ismailiya: An Urban Community on Fairouz Land,” *al-Masry al-Youm*, April 23, 2016, <https://bit.ly/2kmNNto>; and Gamal Haraji, “With Pictures...Get to Know New Ismailiya City,” *Yom7*, October 14, 2017, <https://bit.ly/2Mj16YU>.
- 114 Bidding consortiums listed in Zahraa Magdy, “Meet the Company That Won the Planning Contract for the Suez Canal Axis,” *Sasa Post*, August 21, 2014, <https://bit.ly/2m5dMpD>. Statistical data compiled for this paper based on published lists of subcontractors. The Arab Academy for Maritime Transport failed to win the tender despite partnering with the Sabour Bureau, whose head had played a key role in channeling U.S. FMF to Egypt in the 1980s.
- 115 Maged Atiya, “The Army’s Nation,” Atlantic Council, May 8, 2015, <https://bit.ly/2msjfHx>.
- 116 Confirmed by a contractor for a major company working in Egypt. Anonymized interview. And by interviews conducted by Ayman Emam in “Driving Development or Building an Empire of Corruption?,” 64, and 72–74.
- 117 Reported by numerous conscripts. Various anonymized sources.
- 118 Data on 2014 from “The Armed Forces Subcontracts Projects Worth EP209 Million to the National Banks’ Real Estate Company,” *al-Borsa*, January 30, 2014, <https://bit.ly/2kvTwxg>. New projects in 2016 according to the head of National Banks’ Real Estate Company, Mukhtar Dahshouri in Saad al Shafie, “He Overcame the Difficulties and Transformed the Banks’ Real Estate Company Into a Pioneer,” *al-Sabah*, April 2, 2016, <https://bit.ly/2m5qswI>.
- 119 Abdel-Fattah Barayez, “‘This Land Is Their Land’: Egypt’s Military and the Economy,” January 25, 2016, <https://bit.ly/2kNFgQx>.
- 120 “2017 Investment Climate Statements: Egypt,” U.S. State Department, June 29, 2017. The report derives its information from the State Department’s Office of Investment Affairs.
- 121 According to political economist Samia Sa’id, *Who Owns Egypt?*, 88.
- 122 For detail, Gamal El Shaer, “Mapping Egypt’s Media: State Influence in a Transforming Landscape,” *Arab Media Society*, February 15, 2015, <https://bit.ly/2kWYKCn>; and Rasha Abdulla, “Egypt’s Media in the Midst of Revolution,” Carnegie Endowment for International Peace, July 16, 2014, <https://bit.ly/2kWYW4z>. A review of media freedom and technical development is provided by Toby Mendel, Yasser Abdel Aziz, Rasha Nabil Allam, Fatima Al-Zahraa Abdel Fattah, and Hany Ibrahim Mahmoud, “UNESCO Assessment of Media

- Development in Egypt Based on UNESCO's Media Development Indicators," International Program for the Development of Communication, UNESCO, 2013, <https://bit.ly/2lZebKo>.
- 123 Abdulla, "Egypt's Media in the Midst of Revolution."
 - 124 On the donation to Maspero, Marshall, "The Egyptian Armed Forces and the Remaking of an Economic Empire," 8. "Secrets and Surprises About the Corrupt Nile Sat," *al-Masryoon*, November 3, 2015, <https://bit.ly/2kr8WCO>.
 - 125 On the AOI's share, "Investors Relations," Nile Sat, official website, <https://bit.ly/2krwSWN>. On Nile Sat's chairman Major General Ahmed Anis, Dina al-Husseiny, "Nilesat Chairman: Unlicensed Channels Broadcast via the French Satellite Operator Eutelsat," *Youm7*, November 30, 2018, <https://bit.ly/2kmPt6a>. The bodies represented on the new ERTU board with an MOD connection were the State Information Service, National Agency for Telecom Regulation, and Central Agency for Organization and Administration. For full detail on Maspero's history, law of establishment, and so on, Amer al-Wakil, "The Maspero Republic," ANHRI, December 2016, <https://bit.ly/2kL4bV1>.
 - 126 On Black and White, Hossam Bahgat, "Looking Into the Latest Acquisition of Egyptian Media Companies by General Intelligence," *Mada Masr*, December 25, 2017, <https://bit.ly/2krxewB>. This was Brigadier General Mohamed Samir. Hossam Bahgat, "Anatomy of an Election," *Mada Masr*, March 14, 2016, <https://bit.ly/2krxhsh>. On Black and White's talk show for ERTU, Engy Lotfi, "Maspero Commissions Black and White to Produce the Biggest Talk Show," ONA, December 8, 2015, <https://bit.ly/2mLn1xn>.
 - 127 Mostafa al-Shenawy, "Former EAF Spokesperson Heads the Board of Directors of al-Asamah Channel," *Masrawy*, January 15, 2017, <https://bit.ly/2kxQeI7>. Officially, Cheri Media is owned by businessman Ihab Talat, whose father-in-law was an EAF officer. On Cheri Media's ownership, see Doaa Abdelmaksud, "Cheri Media Gets Close to Becoming the Advertising Agent for al-Hayah," *Dostor*, April 23, 2018, <https://bit.ly/2mrEl8U>. On Talat's father in-law, Mohamed Zakariya, "Funeral of Major General Farouk Salem, Sherin Wagdy's Father, at the Armed Forces Mosque in Madinat Nasr," *Youm7*, May 4, 2016, <https://bit.ly/2m62j9l>.
 - 128 Robert Springborg, "Égypte: L'élection présidentielle et la consolidation du pouvoir de Sissi," *Huffington Post*, April 11, 2018, <https://bit.ly/2lZ3jfA>. Tawasol supposedly has ninety shareholders. Mohamed Fathy, "Ninety Shareholders Represent the Ownership Structure of Tawasol for Public Relations," *al-Mal News*, September 20, 2017, <https://bit.ly/2m62Ckv>. Tawasol's board members listed in Rim Hamada, "Get to Know the Members of the Tawasol Company's Board of Directors," *al-Bawaba News*, September 19, 2017, <https://bit.ly/2mqwmJg>.
 - 129 On purchase of al-Hayah and DRN, Saber al-Araby, "Falcon's Tawasol Buys al-Hayah Channels," *Tahrir News*, September 12, 2017, <https://bit.ly/2mmW7tO>. On Home Media, Mohamed Fathy, "Get to Know Tawasol, the New Owner of al-Hayah Channels," *al-Mal News*, September 12, 2017, <https://bit.ly/2kTP2Rb>.
 - 130 Hossam Bahgat, "Looking Into the Latest Acquisition of Egyptian Media Companies by General Intelligence," *Mada Masr*, December 25, 2017, <https://bit.ly/2krxewB>. For a full list of ownership list by Egyptian Media Group, see diagram in "Egyptian Media Group," Reporters Without Borders, last updated January 25, 2019, <https://bit.ly/2LoQUNy>.
 - 131 Egyptian Media's subsidiaries listed at <https://bit.ly/2kufsJ9>. On the acquisition of *Sout al-Omma*, Mohamed Taha and Mohamed Abdelaqaty, "Abu Hashima Announces His Acquisition of ONTV and Sout al-Omma," *al-Masry al-Youm*, May 15, 2016, <https://bit.ly/2kK9LXI>.
 - 132 According to its head, Major General Mohsen Abdel-Nabi, cited in "Army Produces Three Feature Movies: Kabreet, al-Rifa'i, and Gabal al-Halal," *al-Masry al-Youm*, October 5, 2017, <https://bit.ly/2m4moge>.

- 133 According to Bishoy, "The Legislative Framework Governing the Army's Economy in Egypt," draft chapter, no date (after July 2016). (In Arabic.)
- 134 Cited in Hani Abdelrahman, "Kamel al-Wazir: The President Instructed Us to Build a Steel Factory to Prevent a Monopoly," *al-Masry al-Youm*, April 9, 2016, <https://bit.ly/2kHo9jk>.
- 135 Tarek H. Selim, "Monopoly: The Case of Egyptian Steel," *Journal of Business Case Studies* 2, no. 3 (2006): 89, <https://bit.ly/2N9VFJi>. NSPO head Major General Mostafa Amin said steel came to 12 percent of building costs, cited in Zaki al-Qadi, "Details of the President's Opening of Development Projects in Beni Suef," *Yom7*, August 15, 2018, <https://bit.ly/2kUeo1i>.
- 136 Othman el-Sharnoubi, "The Ups and Downs of Egypt's Interest Rates: What Does the Central Bank Want?," *Mada Masr*, March 29, 2018, <https://bit.ly/2mlOCdn>. The central bank subsequently cut the rate by 2 percent in 2018 and a further 1 percent in the first quarter of 2019. Hanan Mohamed, "Central Bank of Egypt Keeps Interest Rates at 16.75%, 17.75% in December," *Egypt Today*, December 27, 2018, <https://bit.ly/2kUeIx2>; and Sami Aboudi and Patrick Werr, "Egypt Central Bank Cuts Key Interest Rates After Inflation Eases," *Business Report*, February 15, 2019, <https://bit.ly/2m5ghbv>.
- 137 On capacity versus consumption since 2000, Selim, "Monopoly: The Case of Egyptian Steel," 88. Figures for 2017 are from "Sector Study: Steel Industry in Egypt," Flanders Investment & Trade, December 11, 2017, <https://bit.ly/2kHobYB>. These figures are significantly lower than those reported by industry officials and others (see next endnote).
- 138 Figure of 12.8 million tons capacity in 2016 given by Gamal al-Garhy, head of the major Garhy Group. Interviewed in Samira Said, "al-Garhy Steel Intends to Invest EP2 Billion in Iron and Chemicals," *al-Borsa News*, November 21, 2016, <https://bit.ly/2msokjb>. Higher capacity figure of 13.5 million tons given in Serife Durmus, "Egyptian Producers Disagree on Billet Duties, Rebar Imports," *Metal Bulletin*, November 23, 2018, <https://bit.ly/2krnT7T>.
- 139 The NSPO director general, Major General Mostafa Amin, gave national output as 8 million tons, describing it as insufficient. Cited in al-Qadi, "Details of the President's Opening of Development Projects in Beni Suef."
- 140 As stated on the company page in the MOMP website, <http://fact100.momp.gov.eg/Ar/History.aspx>
- 141 The limitations of Factory 100 are noted by Zeinab Abul-Magd, *Militarizing the Nation: The Army, Business, and Revolution in Egypt* (New York: Columbia University Press, 2018), 132.
- 142 On the ranking of Suez Steel, according to the profile provided by Mowafa Taib, "The Mineral Industry of Egypt," *U.S. Geological Survey Yearbook* (2014), U.S. Department of the Interior, December 2017, 3, <https://on.doi.gov/2kUUT8S>. Company losses according to its owner Gamal al-Garhy, interviewed in Selim Ali, "Chairman of Suez Steel: The Company's Losses Reached EP 1.48 Billion in Three Years," *Yom7*, June 27, 2015, <https://bit.ly/2kro3Mx>. Suez Steel was commonly also known as Misr Steel (Solb Misr), and as Hadidna.
- 143 NSPO payment of EP3.8 billion to Gamal al-Garhi cited in "Suez Steel Denies Requesting an EP1 Billion Loan," *Shorouk News*, November 12, 2017, <https://bit.ly/2kmSTWy>. Total deal value of EP13.9 billion was cited in Salah al-Saadani, "The Deal of the Year, Selling of Egypt Steel Group for EP13.9 Billion," *al-Wafd*, November 10, 2016 <https://bit.ly/2kK2UgZ>. There is some discrepancy between the dollar value reported in the media for total company capital after restructuring and the value arrived at by applying the exchange rate valid at that time, which would have been between EP15 and EP18 to the U.S. dollar. Using a rate of EP15 indicates total capital worth \$927 million.
- 144 The NSPO sought to achieve this by adding a new factory to Suez Steel's line-up. "Al-Garhy Steel Plans to Invest EP2 Billion in Iron and Chemicals," *al-Borsa*, November 22, 2016, <https://bit.ly/2msokjb>.

- 145 “Suez Steel Contacts Banks to Borrow EP1 Billion,” Arab Finance, June 11, 2017, <https://bit.ly/2m0U8eJ>.
- 146 On market share, Ahmed Abou Hashima interview with Tamara Pupic, “Ask the Exec: Ahmed Abou Hashima, CEO and Chairman, Egyptian Steel, Egyptian Cement, and Egyptian Media,” *Entrepreneur Middle East*, July 26, 2017, <https://bit.ly/2kuinBB>. On total projected production capacity, Shadia Nasralla, “Egyptian Steel Eyes Leap in Capacity, IPO,” Reuters, <https://reut.rs/2BRQzvK>.
- 147 Details in “Egyptian Steel Pays Loan Dues After Changing the Shareholders Structure and the Exit of the Qatari Partner,” *Shorouk News*, November 24, 2018, <https://bit.ly/2kHoOBr>.
- 148 The raw and intermediate materials needed to manufacture rebars are imported because Egyptian iron ore is of low quality, and only market giants have the capacity to use it. Suez Steel moreover saves on fuel costs because it is equipped to produce and use sponge iron, which does not require melting to provide feedstock material for rebars. At the time of its restructuring, Suez Steel had the capacity to produce 1 million tons of rebars, 2.2 million tons of billets, and 2 million tons of sponge iron annually. According to owner Gamal al-Garhy, interviewed in “Garhy Steel Intends to Invest 2 Million Pounds in Iron and Chemicals,” *al-Borsa*, November 21, 2016, <https://alborsaaneews.com/2016/11/21/931881>. Samira Said, “Al-Garhy Steel Plans to Invest EP2 Billion in Iron and Chemicals,” *al-Borsa*, November 22, 2016, <https://bit.ly/2msokjb>.
- 149 Mohamed Saied, “Egypt’s Iron Tariffs Threaten Some of Its Own Companies,” *Al-Monitor*, May 3, 2019, <https://bit.ly/2lZ5hfY>.
- 150 Ministry of Foreign Affairs figures presented in an official report submitted to the D-8 Organization for economic development in May 2018, which excluded the NSPO’s Arish Company from the list of producers it provided. Assistant Ministry of Foreign Affairs, “Profile of Cement Industry in Arab Republic of Egypt,” D-8 Organization for Economic Development, May 22, 2018, <https://bit.ly/2m0EfEW>. Industry figure cited in Patrick Werr and Amina Ismail, “Egypt’s \$1.1 Billion Cement Plant in Beni Suef to Start Up in Days,” Reuters, January 31, 2018, <https://reut.rs/2m4nRTM>. Figure from the Cement Association of the Egyptian Federation of Industries given by its executive director Noha Bakr in Noha Bakr, “Opinion: The Cement Industry in Egypt,” *Egypt Today*, March 1, 2019, <https://bit.ly/2SEFLYa>. The U.S. Geological Survey gave the figure of 82 million tons annually in 2014, which seems excessive. Taib, “The Mineral Industry of Egypt,” 3.
- 151 “Cement Production in Egypt Between 2013 and 2018 (in Million Metric Tons),” Statista, <http://bit.ly/2kKdULg>, accessed April 9, 2019.
- 152 Figure of 6 percent cited in Abdul-Fattah Barayez, “‘This Land Is Their Land’: Egypt’s Military and the Economy,” January 25, 2016, <https://bit.ly/2kNFgQx>. Figure for total capacity cited in Mohamed Ibrahim, “NSPO...13 Companies to Serve Development in Egypt,” *Sada al-Balad*, January 5, 2018, <http://bit.ly/2m0GCYm>.
- 153 The new plant at Beni Suef cost 900 million euros (\$1.12 billion) according to an official of the Chinese firm responsible for mechanical works. Cited in Werr and Ismail, “Egypt’s \$1.1 Billion Cement Plant in Beni Suef to Start Up in Days.”
- 154 Cited al-Qadi, “Details of the President’s Opening of Development Projects in Beni Suef.”
- 155 According to report by CI Capital, cited in Ahmed Zikrallah, “Egypt’s Cement Crisis and Military Dominance,” Egyptian Institute for Studies, March 17, 2018, <http://bit.ly/2kwuYEo>.
- 156 Profit margins of cement companies were “shocking” in the first half of 2018, and were expected to decline by 7–10 percent in the second half of the year according to cement analyst Mark Adeeb at Pharos Investment Bank. Cited in “Egypt’s Cement Companies Are Bracing for

- More Losses in 2H of 2018,” *Arab Finance (al-Mal News)*, October 1, 2018, <http://bit.ly/2msrC61>.
- 157 According to report by CI Capital, cited in Ahmed Zikrallah, “Egypt’s Cement Crisis and Military Dominance,” Egyptian Institute for Studies, March 17, 2018, <http://bit.ly/2kwuYEo>.
 - 158 Samar El-Swaify, “Last National Cement Company Collapses After 62 Years in Operation,” *Egypt Today*, September 10, 2018, <http://bit.ly/2lZ8YSS>; and Abdelhalim Salem, “The End of the National Company for Cement After 62 Years of Operation,” *Youm7*, September 10, 2018, <http://bit.ly/2m67kib>.
 - 159 On losses by Suez Cement and Alexandria Cement, Janet McBride, and Michael Georgy (eds), “Special Report: From War Room to Boardroom. Military Firms Flourish in Sisi’s Egypt,” Reuters, May 16, 2018, <https://www.reuters.com/article/us-egypt-military-economy-specialreport/special-report-from-war-room-to-boardroom-military-firms-flourish-in-sisis-egypt-idUSKCN1IH185>. On Nahda Cement slowdown of production, Sherif Omar, “Nahda Cement Partially Ceases Production,” *al-Mal*, July 8, 2019, <https://bit.ly/363tDaQ>. On 2017 profits, Abdel-Halim Salem, “Holding Company for Chemicals Appoints Ahmed Hassanein as Head of Nahda Cement,” *Youm7*, January 20, 2017, <https://bit.ly/2vJNaN1>.
 - 160 Mostafa Talaat, “Pharos: Cement Sector in Egypt Faces Bankruptcy,” *al-Mal*, August 21, 2019, <https://bit.ly/2pJLrap>.
 - 161 Three licenses were sold to South Valley Company (Ganope El Wadi), Elsewedy Cement, and Egyptian Cement. The government re-offered the remaining licenses in mid-2017 but failed to generate new bids. “Cement Production Tender Period Extended,” *Egypt Today*, July 1, 2017, <http://bit.ly/2m67mGP>. “Companies Reluctant to Invest in Egyptian Cement Industry,” Global Cement, January 18, 2018, <http://bit.ly/2m3wWws>.
 - 162 “Companies Reluctant to Invest in Egyptian Cement Industry,” Global Cement.
 - 163 Salah al-Saadani, “Cement Factories Welcome Government Support to Limit Losses and Work to Full Productive Capacity,” *al-Wafd*, July 23, 2019, <http://bit.ly/2m3wXAw>.
 - 164 Figures for cement industry from Noha Bakr, “Opinion: The Cement Industry in Egypt,” *Egypt Today*, March 1, 2019, <https://bit.ly/2SEFLYa>.
 - 165 Omaima Ismail, “Egypt’s Cement Industry Disrupted by Entry of Military as Major New Market Player,” *Mada Masr*, September 18, 2019, <https://bit.ly/2kT8jC6>.
 - 166 The NSPO director general, Major General Mostafa Amin, was cited in al-Qadi, “Details of the President’s Opening of Development Projects in Beni Suef.” Sisi was cited in “Egypt to Offer Shares in New Cement Plant on Stock Market – President,” August 15, 2018, <http://bit.ly/2m0XtKN>. Sisi’s renewed proposal cited in Nermeen Afifi, “Sisi: Armed Forces Companies Must Join Stock Market,” *el-Watan*, October 31, 2019, <https://bit.ly/33MGVY1>.
 - 167 This paraphrases Lahcen Achy’s analysis of cronyism in Algeria, “The Price of Stability in Algeria,” Carnegie Middle East Center, April 2013, 15, <http://bit.ly/2kuvkLG>. 168 Ahmed Aboulenein, “Egypt’s Deep State Gets Back to Business,” *GlobalPost*, January 14, 2015, <https://bit.ly/2PhSFgG>.
 - 169 Assar cited in “Egypt’s Ministry of Military Production Companies Do Not Aim to Compete With Private Sector: Minister,” *Abram Online*, May 22, 2018, <https://bit.ly/31G5G65>; and in Mahmoud Jawish, “Assar: Ministry of Military Production Seeks to Develop Industries to Attract Investment,” *al-Masry al-Youm*, March 11, 2019, <https://bit.ly/2JlAJOp>.
 - 170 On Nasr Company’s new complex, “Sisi Inaugurates Largest Fertilizers Complex in Middle East at Ain al-Sukhna,” *al-Masry al-Youm*, August 7, 2019, <https://bit.ly/2BCeQpM>. Total annual production capacity comprises 570,000 tons of sulfuric acid, 180,000 tons of phosphoric acid, 90,000 tons of Ammonium Dihydrogen Phosphate, 360,000 tons of

- Ammonium Phosphate Monobasic Dibasic, 2.25 million tons of triple superphosphate. On total national production, Sanaa Allam, "Chemical Exports Council: \$4 Billion Worth of Exports Target for Sector by the End of This Year, Expect Number of Exporting Companies to Reach 1,000 by 2018," *Amwal al-Ghad*, December 9, 2017, <https://bit.ly/2WfzoxF>.
- 171 Sisi's announcement cited in "Sisi Hails Egyptian People's Support to Long Live Egypt Fund," State Information Service, January 27, 2019, <http://bit.ly/2mkkvw7>.
 - 172 According to the fund's executive director Mohamed Ashmawy, "Presidency Seeks to Convert Long Live Egypt Fund to EP 100 Billion Fund," *Daily News Egypt*, October 3, 2015, <http://bit.ly/2kUXLma>.
 - 173 According to the fund's financial and administrative director Tamer Abdel Fattah, cited in "Long Live Egypt' Fund Receives LE 292M Over Two Months," *Egypt Today*, March 12, 2018, <http://bit.ly/2kKfFYS>. Abdel-Fattah also claimed that interest alone reached EP2 billion, an extraordinary figure that does not seem credible and may in fact refer to other kinds of income.
 - 174 Hind Mokhtar, "Mehleb Appoints Major General Mohamed Nasr as Treasurer of the Long Live Egypt Fund," *Youm7*, April 17, 2015, <http://bit.ly/2mkkMPF>.
 - 175 Independent field researcher. Anonymized interview.
 - 176 Amirah Jad, ed., "Six Letters of Reassurance From Sisi to Businessmen, Most Importantly Reforming Fiscal Policy," *Tabrir News*, December 3, 2015, <http://bit.ly/2mqB8GG>.
 - 177 Major General Abdul-Fattah Harhour cited in "Implementation of Marble and Salt Industrial City in Sinai With an EP1.2 Billion Investment," *Shorouk News*, January 10, 2016, <http://bit.ly/2kWiupx>.
 - 178 Ishac Diwan, Philip Keefer, and Marc Schiffbauer, "The Mechanics, Growth Implications, and Political Economy of Crony Capitalism in Egypt," in Ishac Diwan, Adeel Malik, and Izak Atiyas, eds., *Crony Capitalism in the Middle East: Business and Politics From Liberalization to the Arab Spring* (Oxford: Oxford University Press, 2019).
 - 179 Argument made by Khalid Ikram, *The Political Economy of Reforms in Egypt*, 152 and 153.
 - 180 Anonymized sources.
 - 181 This paraphrases a reference to Nasser era economic management made in Khalid Ikram, *The Political Economy of Reforms in Egypt*, 191.
 - 182 Anonymized interview.
 - 183 Khalid Ikram, *The Egyptian Economy, 1952–2000: Performance, Policies, and Issues* (Abingdon, UK: Routledge, 2006), 45.
 - 184 Edited by Janet McBride and Michael Georgy, "Special Report: From War Room to Boardroom. Military Firms Flourish in Sisi's Egypt," Reuters, May 16, 2018, <https://reut.rs/31PWvjB>.
 - 185 "Egypt Overview," World Bank Group, last updated October 1, 2019, <https://bit.ly/2piD8m5>.
 - 186 The World Bank, "Egypt: Enabling Private Investment and Commercial Financing in Infrastructure," 2018, 1–2, <https://bit.ly/2FRRfWf>.
 - 187 Presidential Decree 380 of 2019, text at <https://bit.ly/36boNIU>. And Presidential Decree 378 of 2019, text at <https://bit.ly/2MVBbVn>.
 - 188 "The Economic Empire of the Army: The Ruling Authority's Influence Threatens Private Sector Power," *Mada Masr*, December 24, 2014, <https://bit.ly/2hoqOvv>.

CHAPTER 6

A MILITARY UNBOUND: TRANSFORMATION IN THE SISI ERA

THE EAF'S TAKEOVER OF POWER in July 2013 did more than remove any remaining restraints on the military economy. Whether by design or accident of Sisi, who provides active political encouragement and enabling legislation, the military is spearheading Egypt's transition into a new phase of state-led capitalism that recreates major aspects of public ownership or control of the economy even while partnering with private domestic and foreign capital and claiming faithfulness to the free market line of Western governments and international lenders. Senior EAF officers already believe that their managerial skills and inherent superiority to civilians position them uniquely to lead economic growth and modernization. However, the record of the past six years instead suggests that the more likely outcome will be growing disruption of markets and adverse impacts on the private sector, rising (if still mainly hidden) opportunity costs for the economy as a whole, and an increasing military appetite for profit-making and policy-setting.

For now, the bonanza of economic opportunity that opened up after 2013 has sharply enhanced the military's gate-keeping role and rent-seeking activities. The most important consequence has been the increasingly central role Sisi has assigned to the defense establishment to manage a massive surge in government-funded megaprojects, concentrating on construction of public infrastructure and housing. But military agencies have also expanded aggressively in a widening range of other economic activities and sectors: intervening in domestic supply chains and import markets, for example, and foraying into lucrative sectors such as mobile telephones and internet provision, media broadcasting and production, and quarrying and mining. Even if the initial post-2013 surge in massive construction projects

continues to abate, the military is highly unlikely to relinquish other economic footholds it has acquired. At the very least, it will double down on the zones of special economic interest it has carved out, intensifying the siloing and fragmentation of the broader economy.

Officially, the military seeks greater efficiency, whether by generating higher revenue and reducing costs through improved efficiency and punctuality, or by curtailing losses due to corruption and waste. Novel coordination between EAF agencies and the AMA since the end of 2015 may actually have contributed to achieving these goals in relation to the public works they undertake or manage on behalf of the government, though possibly without reducing cronyism and profiteering on the big volume of smaller subcontracts of which large projects are often composed. The assignment of a widening range of tasks to the MOD and other military agencies has moreover acted as a fulcrum for growing integration between different parts of the military economy. But it has also prompted growing fears of direct competition with the private sector, while heating up rent-seeking competition and realignment between disparate military interest groups and their counterparts in the security agencies, state bureaucracy, and private sector. Thus the military economy becomes entrenched without increasing productivity or growing the rest of the economy.

POLITICS, PROFIT, AND PREDATION

Assessments of the motivations, implications, and even extent of the military's accelerated economic activism since 2013 have varied. Political scientist Zeinab Abul-Magd and journalists Mohamed Hosni and Osama as-Sayyad, for example, perceive a dominant predatory purpose behind what appears to be a coordinated capture of resources and opportunities.¹ But analyst Abdul-Fattah Barayez argues, conversely, that the military is doing more than merely "use its political privileges to make money and easy profits." Rather, in his view, the defense establishment seeks to legitimize the Sisi administration and underpin the new political status quo by investing heavily in "national economic recovery plans (however poorly conceived these plans may be)." Driving these is "the need both to attract foreign capital and to appeal to middle-income groups, a politically significant constituency for Sisi."²

There is truth in both views, as developments in the military economy appear to be driven by multiple logics. The president's overarching wish to demonstrate his administration's credibility to foreign governments and international markets explains the urgency with which he has launched high-visibility megaprojects. Generating growth and jobs is also an important objective, as is suppressing price rises in key commodities and services to mitigate the effects of reducing food and energy subsidies on low-income groups. But this requires capital, which explains Sisi's drive both to increase revenue and to make savings by containing the corruption that pervades much of the public and private sector. A paradoxical consequence has been to heat up the military economy, whether because of competition and duplication of effort between military agencies or to ever greater rent-seeking

and competition among special interest groups, including informal officer networks, in response to the emphasis on state-led initiatives and public funding.

Sisi's public statements present a clear rationale that only the EAF can spearhead this effort. He relies on it to shore up what he has frankly described as a "pseudo-state" lacking respect for institutions and the law and to compensate for the visible incapacity of the government and its ministries and other civilian agencies to deliver critical public works and services at reasonable cost.³ There is an objective basis for this perception: by one account the Egyptian state's "core capacities" declined by half between 2011 and 2014.⁴ Furthermore, it is evident that once Sisi trusts a military or affiliated agency to get the job done, he relies on it to deliver additional tasks beyond its normal remit. In November 2018, for example, he instructed the Suez Canal Authority (SCA) to take part in developing the Arish port in northern Sinai and in clearing the full length of the Nile River navigation channel from Aswan to the Nile delta.⁵

But although this overarching logic has some coherence, it generates contradictory dynamics and consequences at lower levels. Most importantly, by drawing scarce capital away from other parts of the economy—rather than increasing Egypt's overall finances—megaprojects and new commercial schemes have accelerated competitive rent-seeking. This can be inferred from apparent realignments between specific military economic actors and private businesses or other interest groups (represented in the internal security services, media, and parliament). Newly empowered military contenders have moreover dislodged previous rent-holders, replacing favored business partners or supplanting incumbent EAF retirees in certain sectors. Lower-level actors implementing the overarching approach pursued by Sisi and the military establishment have naturally adapted to it dynamically, seizing opportunities for profiteering and predation. From his perspective, their competition may also serve a coup-proofing function, which he complements by frequently reshuffling senior EAF commands.

These various logics are symbiotic rather than synergistic, feeding on each other rather than adding to an economic sum that is greater than its constituent parts. They appear to do as much to shape and direct the military economy as does the strategic leadership that some assume exists. Certainly, the evidence suggests extensive coordination and consultation between different officials and agencies, reflected for example in the rotation of EAF officers between bureaucratic and economic assignments. And the MOD's efforts to enter higher-value economic sectors could not take place without command-level commitment of military funds and enabling legislation. But while individuals such as Minister of State for Military Production Mohamed al-Assar, Head of the MOD Financial Authority Major

The president's overarching wish to demonstrate his administration's credibility to foreign governments and international markets explains the urgency with which he has launched high-visibility megaprojects.

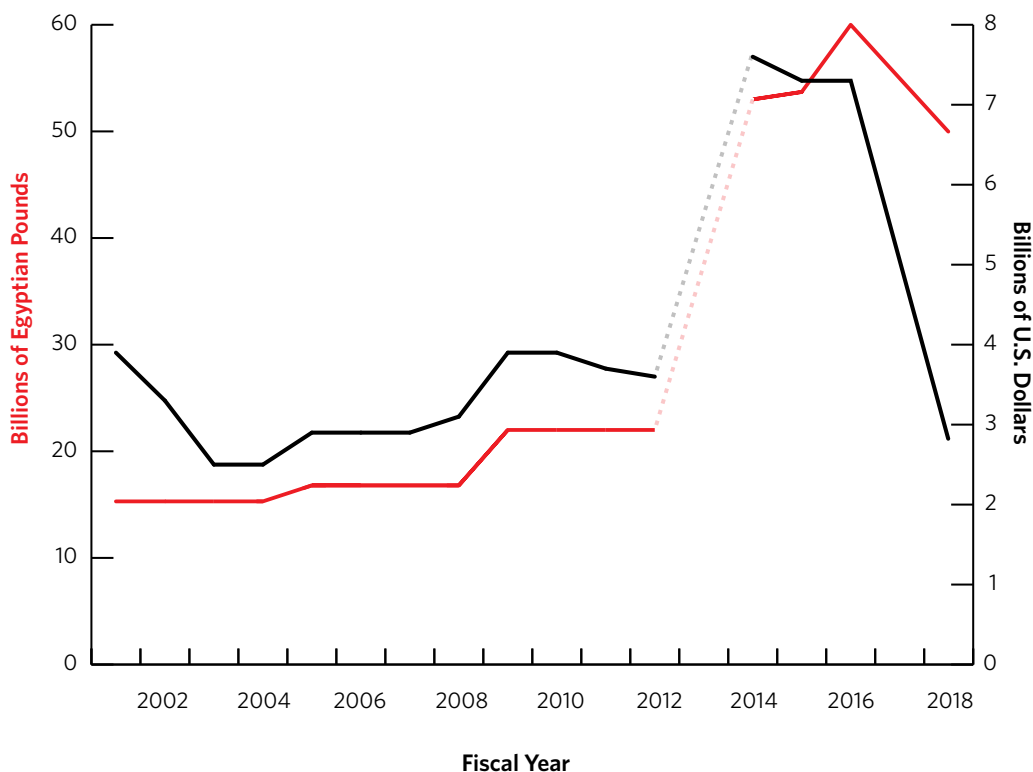
General Mohamed Amin Nasr, and Director of the EAF Engineering Authority Major General Kamel al-Wazir (who was appointed Minister of Transport in March 2019) are highly influential, they do not orchestrate the military economy as a whole.⁶ Rather, they are among numerous defense officials, military agencies, and officer networks and cliques responding to presidential directives. Collectively, their responses constitute the military economy; but because it is siloed into parallel lines of communication and loyalty it lacks policy coherence and generates contradictory and self-defeating outcomes.

THE BIG PUSH

The succession of megaprojects since Sisi assumed the presidency in 2014 is emblematic of the drive to demonstrate the credibility of the post-2013 administration. Sisi gave a sense of the scale of investment by stating in June 2016 that the cost of “national projects” in the preceding two years had exceeded EP1 trillion; Prime Minister Mostafa Madbouly stated in December 2018 that this figure had risen to EP1.56 trillion spent on completing 8,278 projects in 2014–2018 (roughly \$87 billion at the 2018 exchange rate).⁷ More detailed breakdowns provided by senior civilian and military officials suggest a considerable increase in average annual investment in public infrastructure when compared to the last decade of the Mubarak era (see Table 1). But these figures also show that infrastructure did not, in fact, consume the bulk of public investments, which averaged around EP312 billion annually in this period, suggesting that housing probably accounted for the lion’s share. Nonetheless, pride of place has been taken by grandiose, high-profile megaprojects, demonstrating the edifice complex that Sisi shares with several of his predecessors.⁸

The most grandiose megaproject is Sisi’s plan to build an entirely new administrative capital for Egypt, to be managed by the EAF. Other edifice projects include the Suez Canal expansion, relaunch of the Sheikh Mohammed bin Zayed “new urban community,” and construction of three new “smart” cities (so-called because they use digital technology to improve energy efficiency) and at least four conventional desert cities. As these examples show, the Sisi administration remains as doggedly attached as all its predecessors since 1952 to a top-down, state-led development model and as resistant to alternative approaches proposed by the private sector, independent experts, and international agencies. The haste with which the administration dusted off and implemented the plans for expansion of the Suez Canal, which the Mubarak administration had shelved at least twice, dramatically demonstrated that attachment.

FIGURE 9

Average Annual Public Spending on Infrastructure⁹

NOTES: All figures are for Egyptian fiscal years, which start on July 1 and end on June 30 each year.

These figures exclude public spending on housing and slum development.

Dotted lines indicate time periods for which data is unavailable.

The Second Suez Canal

In August 2014, three months after his election as president, Sisi assigned to the EAF management of a project to construct a 37-kilometer (23-mile) bypass parallel to the Suez Canal and widen the existing canal along nearly the same length to allow two-way shipping. Former Navy commander Admiral Mohab Mamish had promoted the canal expansion heavily since becoming head of the Suez Canal Authority in August 2012. The project benefited the MOD and favored private sector companies, though its benefit to the national

economy was dubious. Sisi's demand that it be completed within one year rather than the three years it was estimated to require compelled the MOD to hire two foreign consortiums to undertake the dredging at a cost of over \$2 billion, contributing to more than doubling the initial price tag of \$4 billion to \$8.5 billion.¹⁰

But as Sisi and EAF commanders regularly reminded domestic audiences, the entire cost was to be raised from Egyptian sources: government bonds worth EP64 billion were sold in a mere two weeks, to approximately 1.1 million Egyptian investors.¹¹ Banking on nationalism proved costly. The expansion project was launched on the assumption that the Suez Canal would double earnings from transit fees to \$13.5 billion by 2023, but these have actually declined due to the long-term downward trend in global trade and the availability of cheaper alternative routes.¹² The SCA, which borrowed a total of \$1.4 billion Egyptian banks toward the cost of digging the canal expansion, bore financial responsibility, rather than the state treasury, and was lumbered with EP7.7 billion in annual interest payments.¹³ It fell into arrears from late 2017, compelling the Ministry of Finance to step in by paying off \$600 million in overdue loan repayments in March 2019, leaving the SCA to pay another \$300 million it owed foreign banks operating in Egypt.¹⁴ The lack of return on investment moreover underlined the fact that the canal expansion had absorbed around EP32 billion of domestic capital deposited in banks, which could have been invested in other sectors of the economy.¹⁵

The Suez Canal project nonetheless increased MOD earnings from management fees. It contracted the bulk of the work to 112 Egyptian companies, many of which had previously worked with the ministry or had other military connections, such as Dar al-Handasah, in which the MOD is believed to be a silent partner.¹⁶ Some contractors were completely unknown, not appearing in the business register and even lacking websites, let alone possessing the heavy plant and track record to undertake excavation work, suggesting they were front companies set up with the knowledge of the MOD—possibly by EAF officers or their close relatives, as investigate journalists Hosni and Sayyad claim—purely to win lucrative subcontracts or to profit from selling them on.¹⁷ SCA head Mamish claimed that a consortium selected by “an impartial French company” had won the expansion contract, whose terms had been approved by World Bank experts, but this obscured the fact that the MOD subsequently awarded the work contracts by direct order.¹⁸

“The Most Important Economic Project in Egypt”

The canal expansion was moreover only the first phase of a broader plan to turn an area of 76,000 square kilometers (29,000 square miles)—encompassing three governorates bordering the canal and including the cities of Port Said, Ismailiya, and Suez—into an international industrial, logistics, and transport hub.¹⁹ Ironically, this proposal replicated the Morsi administration's plans for the canal zone (discussed in Chapter 3), an unsurprising development since both originated in the same concept devised in 2002. Planning to

Suez Canal Economic Zone



- MAJOR CITIES
- CANAL
- SUEZ ECONOMIC ZONE
- NEW CITIES
- "NEW" CITIES
- 4TH GENERATION CITIES
- PLANNED 4TH GENERATION CITIES

MILITARY PRODUCTION SITES

- 1 CEMENT FACTORIES
- 2 FARMS
- 3 FISHERIES
- 4 MARBLE PROCESSING
- 5 MILITARY AIRPORTS
- 6 DEFENSE INDUSTRY FACTORY
- 7 OTHER MINING & MINERALS
- 8 PASTA PLANTS
- 10 STEEL COMPANY

ROADS

- MAJOR ROADS
- MILITARY-BUILT ROADS
- MOD CONTROLLED ROADS

0 30 Miles
0 30 Kilometers

develop the zone resumed in the immediate aftermath of the military takeover in July 2013, with Mamish now calling it “an industrial citadel as well as a maritime passage” and the “most important economic project in Egypt.”²⁰ Reflecting this view, the EAF Engineering Authority started work in August 2015 on a new north–south highway linking the length of the Suez Economic Development Corridor at an estimated cost of EP4 billion.²¹

Sisi launched the next stage of the new megaproject in November 2015, again closely following the development plan that the MOD had imposed on the Morsi administration in May 2013. Focusing on the area east of Port Said at the northern end of the canal, it envisaged a new seaport, industrial area, logistics hub, and 10,000 housing units, as well as a fish farm and tunnels running under the Suez Canal.²² The area was envisaged as an industrial and logistical hub that would attract some \$40 billion in international investment, with then minister of investment Ashraf Salman expecting it eventually to account for one-third of Egypt’s economy.²³ By December 2018, Mamish claimed that \$30 billion had been invested since 2015 in what he proudly described as a “genius site on the global investment map,” 75 percent of which came from foreign investors led by China.²⁴ (Chinese companies may be attracted by Egypt’s free-trade agreement with the United States, which offers them a means of exporting their goods from qualifying industrial zones to the United States under a “made in Egypt” label.²⁵)

As always, authoritative statements about the financial worth of projects and investments often confuse contract value with actual disbursement or output. Only seven months after Mamish’s boast, prime minister Madbouly pressed the heads of the SCA’s seven subsidiary companies to “attain profits, and avoid imposing new burdens on the budget of the [Suez Canal] Authority or the state.”²⁶

Authoritative statements about the financial worth of projects and investments often confuse contract value with actual disbursement or output.

Previous grand plans for the zone have proved problematic. In 2011, several Mubarak-era cabinet ministers and retired EAF officers—two of whom had headed the Maritime Department of the Ministry of Transport—were accused of gross mismanagement of previous projects launched in Port Said in 2001, resulting in cumulative losses of EP1.75 billion

(\$295 million). Infrastructure costs for the first phase of the Suez Economic Development Corridor, which is scheduled to end in 2030, are estimated at \$15 billion; the second phase is supposed to last until 2050.²⁷ With an expected price-tag of \$50–\$60 billion, the Port Said megaproject launched in 2015 could generate new white elephant schemes on an even larger scale.²⁸

Assigning a major management role to the MOD is supposed to mitigate such risks. In November 2015, Sisi went a step further by instructing the AMA to team up with the EAF

Engineering Authority and the MOD's Military Technical College in order to review the terms of reference for projects, approve bids, clear administrative hurdles, and monitor expenditure.²⁹ AMA head Major General Mohamed Erfan claimed in May 2017 that a committee of 312 EAF engineers and 221 AMA officers had reviewed 1,705 "national and mega" projects costing EP285 billion undertaken in the preceding fifteen months.³⁰ He later stated that the joint committee had grown to 800 officers—468 from the EAF and 332 from the AMA—divided into 198 subcommittees that had reviewed 2,542 projects by January 2018.³¹ The significance of these numbers additionally lies in the proportion they represent of AMA personnel. In 2012, then AMA head Major General Mohammed Omar Heibah said it had 420 officers but needed 1,500; a year later he said it had the budget to build up to a staff of 800, though actual strength stood at 430.³²

This was potentially a significant shift. If it proves successful, it should help military agencies undertake the huge volume of work and achieve economies of scale, while curbing the scope for profiteering, price-gouging, and outright corruption by officers and private contractors alike. But the emphasis on terms of reference and administrative process are unlikely to impact implementation on the ground, where much of the corruption by site managers or engineers happens. Nonetheless, the continuing opacity of contracts, their award by direct order, and the "strategic" location of the development zone still left the MOD with near-total discretion. In August 2013, a communications officer for the development project had in fact denied the EAF would be involved in the project at all, but a few months later Mamish invoked "national security" as a factor in awarding contracts for work in the zone.³³ And favored companies continued to receive contracts for projects implemented by the EAF.

The continuing risk was demonstrated by the General Authority for the Suez Economic Development Corridor, which was established to manage the overall development plan. Ahmed Darwish, a competent civilian, initially led the department, but he was dismissed in April 2017 after being accused of terminating contracts and licenses issued to some of the many canal zone companies that are headed and heavily staffed by EAF retirees, without referring to his deputy, Major General Abdul-Qader Darwish (no relation).³⁴ Mamish took over as head of the new authority, while remaining head of the SCA. The board of directors of the General Authority for the Suez Economic Development Corridor also included an MOD representative and two retired officers—the head of the Port Said Port Authority and the Suez governor—and the head of the EAF Engineering Authority was added in December 2018.³⁵ MOD influence is supplemented by its informal hold over lesser state bodies operating in the zone, such as the Red Sea Ports Authority, also headed by a retired Navy admiral.

The MOD has achieved a complete reversal of fortunes since Morsi's proposal threatened its economic stake in the Suez Canal zone in 2013. Far from being overshadowed by the new development authority that Morsi had proposed, the SCA—the MOD's main economic

vehicle in the zone—instead extended its effective suzerainty over all development and related public works in the country’s most important economic growth region. This additionally reinforces the MOD’s de facto hold on much of Egypt’s energy sector, since a majority of oil and gas resources and infrastructure lie in or go through the Suez Canal corridor. The potential gains to be made were boosted considerably by the start of production at the massive Zohr offshore gas field at the end of 2017. And even if all public works undertaken as part of these mammoth schemes are completed with minimal corruption or waste, they ensure decades of project management fees for the MOD.

Bright Lights, Big City

Speaking at the highly publicized Egyptian Economic Development Conference in Sharm el-Sheikh in March 2015, then housing minister Mostafa Madbouly announced the launch of what he described as a “giant project,” the construction of a new administrative capital east of Cairo. Presented as a “Smart City [that] will take advantage of the sustainable technologies of today as well as be adaptable to future technologies,” it promises to provide 1.1 million housing units for a population of 5 million, allow the transfer of “the entire state administrative apparatus” (except for some ministries) and foreign embassies from Cairo, and alleviate congestion and overpopulation in the old capital over the next forty years.³⁶

Madbouly moreover claimed that the new capital, which he boasted would compare with New York and Barcelona, would not cost the Egyptian state “a single *millim*,” as construction would be funded commercially in partnership with the private sector and foreign investors. And yet the government was almost immediately compelled to allocate EP5 billion (\$639 million) to the project, which had to borrow an additional EP1 billion in September.³⁷ Estimates of the overall cost fluctuated wildly: the housing minister initially set it at \$45 billion over five to seven years, while Mohammed al-Abbar, CEO of the main private contractor involved, doubled the estimate to \$80–\$90 billion (then EP500 billion) and minister of investment Ashraf Salman extended the anticipated timeline to over twelve years.³⁸ Actual spending on the new capital’s infrastructure reached EP140 billion by March 2019, according to the official spokesperson for the project.³⁹

Fluctuating cost estimates and overruns so early in the project were partly the result of Sisi’s insistence that the first phase of the new capital be completed within two years, by the end of 2018.⁴⁰ Urgency again influenced his choice of the EAF to manage the project, ensuring it a long-term income stream from management fees, partnerships with major foreign companies, and massive new scope to cement ties with favored subcontractors. These included clan leaders from South Sinai, who are being compensated for their loss of income from tourism due to the EAF’s ongoing counterinsurgency campaign and co-opted into supporting the government.⁴¹

Also involved were familiar public business and private sector companies Arab Contractors, Hassan Allam, Taalaat Mostafa Group, Palm Hills, Petrojet, and the Holding Company for Construction and Development.⁴² Behind the scenes, several of the bigger private companies had balked at investing in the capital, but were intensely pressured to do so.⁴³ Speculators and real estate developers have nonetheless responded to the high political premium placed on the new capital by flocking to it while reducing their investment in previously attractive areas around Cairo, sharply driving up the market value of the MOD's extensive land holdings between the existing capital and the Red Sea as a consequence. At the same time, the umbrella company set up to manage the new administrative capital project (51 percent owned by the MOD) was granted ownership of government buildings in Cairo that would be vacated following the transfer of ministries and other agencies, granting it prime real estate in central parts of the old capital.⁴⁴

The new administrative capital demonstrates that the MOD now occupies a position once held by big businessman Osman Ahmed Osman under Nasser and Sadat, who was allowed to run the publicly owned Arab Contractors Company as a quasi-private firm. The MOD is similarly assured of a very long lease of management fees and of construction and follow-on maintenance contracts, and has advance knowledge of new megaprojects, allowing it to orient its activities and investments accordingly. So not only was the MOD ready to start work on the new administrative capital as soon as Sisi had approved the plan in mid-June 2015, but it had already started construction of the connecting road network earlier.⁴⁵

Another important development was the appearance of a new military economic actor. On November 29, 2015, Sisi issued Presidential Decree 446 amending the powers of the EAF's Land Projects Agency, which was set up by presidential decree in 1981 to manage the sale of real estate no longer in use by the armed forces. The agency was now authorized to engage in commercial activity and "develop its resources, for which purpose it may form companies in all their guises, whether on its own or jointly with national and foreign capital."⁴⁶ Sisi followed up on February 8, 2016, with Presidential Decree 57 instructing the Land Projects Agency, NUCA, and NSPO to form a public limited company to undertake planning, construction, and later development of the administrative capital and Sheikh Mohammed bin Zayed City.

The Administrative Capital Urban Development Company (ACUD) was duly formed under Law 8 of 1997 on Investment Guarantees and Incentives, which was designed to attract foreign investors to Egypt with the offer of tax and customs exemptions and nontax incentives such as reduced energy prices and government subsidization of social security charges for labor. The MOD and NUCA shared ACUD's startup capital of EP6 billion, although ACUD spokesperson Major General Khaled el-Husseiny revealed in May 2018 that the MOD and Ministry of Housing had injected EP204 billion (approximately \$11.4 billion at that time) into the project, leaving the MOD with 51 percent ownership and NUCA (nominally representing the Ministry of Housing) with 49 percent.⁴⁷ The MOD and

NUCA held five and three seats, respectively, on the company's thirteen-member board.⁴⁸ Initially a civilian was made nonexecutive chairman, but EAF retiree Major General Ahmed Zaky Abdeen replaced him with full executive powers in August 2017. Presidential Decree 57 additionally allocated a total of 16,645 feddans (over 17,000 acres) around Cairo to

the NSPO for construction of the administrative capital, with the value of the land constituting the NSPO's share of equity in the project.⁴⁹

A legal framework to govern relations between military and civilian investors has not yet been devised, but being able to use land as commercial equity gives the former permanent leverage over private sector partners.

As the establishment of ACUD showed, by allowing the MOD to use state land as its share of capital in joint ventures, Presidential Decree 57 effectively locked such land into military control to an unprecedented degree. The MOD already

controlled use of state land under existing laws, as it repeatedly reminded the public, for example when assuaging fears that foreign companies would acquire national territory under the guise of joint ventures in the Suez Economic Development Corridor and elsewhere. A legal framework to govern relations between military and civilian investors has not yet been devised, but being able to use land as commercial equity gives the former permanent leverage over private sector partners, whether domestic or foreign. This includes limiting recourse to civilian courts in the event of disputes, since military partners are subject only to the jurisdiction of military courts. The same jurisdiction will presumably apply to the Air Force's al-Qatameyya and Cairo West bases, which were opened to civil aviation in May 2015 in order to serve the new administrative capital and receive traffic overflow from Cairo International Airport.⁵⁰

Smart Utopias for the Affluent, Desert Cities for Workers

These patterns also apply to the three other smart cities (in addition to the new administrative capital) under construction by the EAF's Engineering Authority and Megaprojects Department as of early 2019: al-Galalah International City, New Alamein, and New Alexandria. The "smart" label denotes a new marketing approach following the serial failures of the first three generations of desert cities, now with an emphasis on high-end urban projects offering luxury housing and facilities and natural advantages such as beach fronts or elevated views intended to attract upper-middle-class customers and investors. Predictably, it also reflects the central role of information technology, whether in managing infrastructure in the new cities or enabling surveillance of their inhabitants. The new administrative capital will include a separate smart city designed by the MOD's Information Technology

Department for the Ministry of Interior, for example, which will allow the police to monitor the rest of the capital.⁵¹

According to Madbouly, the aim of both New Alamein and New Alexandria is to “transform northern coastal areas into residential cities instead of summer resorts that work only one or two months a year.”⁵² The former has a target population of 4 million, and may be designated as a summer capital.⁵³ Serving this objective, the EAF Engineering Authority is building additional trunk roads—officially labeled “national roads” to distinguish them from other roads—connecting Cairo to the northern coast at Alamein and Dabaa, where the MOD is involved in building a city around Egypt’s nuclear plant project.⁵⁴ Notably, the New Alamein project received technical assistance from the United Nations Human Settlements Program (UN-Habitat) and funding for demining (paid to the MOD) from the United Nations Development Program and the European Union.⁵⁵

New East Port Said, conversely, is another “1-million” city designed to attract industry, services, white collar and skilled workers, and youth entrepreneurs.⁵⁶ The city of New Mansoura that the NUCA is also building in the Nile delta again reflects the corporatist perspective of government and military bureaucrats, in which neighborhoods or entire cities are designated for specific social strata. Boasting a Dubai-style, artificially created palm frond waterfront, it is intended specifically for middle-class families that cannot afford housing in the superior smart cities, along with social housing for lower income groups, with a target population of 1.5 million.⁵⁷

Al-Galalah International City combines all these functions. Lying at the heart of the emerging special interest zone of the military, it is presented as a “complete and comprehensive city comprising all facilities and governmental and service centers such as hospitals... with multilevel residential areas for all classes,” it will eventually boast the King Abdullah University, an Olympic village, and a massive tourist complex.⁵⁸ The region, which also contains mines and marble quarries, forms a link between the new administrative capital and Ain al-Sukhna, which has emerged since 1998 as a linchpin of multiple military interests, with its deep-sea port, tourist complexes, airport, industrial zone, and NSPO fishery. The industrial zone is moreover touted as part of a grand scheme, along with a “technology valley” in Ismailiya, to generate 1 million direct job opportunities.⁵⁹ And in late 2015, the EAF Engineering Authority also commenced construction of what it bills as an Egypt-Africa highway paralleling the existing highway from Port Said to the border with Sudan, which will run through al-Galalah and Ain al-Sukhna, along with connecting and lateral roads totaling 3,000 kilometers.

In anticipation of this massive construction surge, the government approved a 100 percent increase in the NUCA budget in February 2015, reaching EP28 billion (\$3.68 billion). In stark contrast, the Slum Development Fund was allocated a mere EP500 million, or less than 2 percent as much as the new cities.⁶⁰ Ignoring the dismal track record of desert

and satellite cities, the EAF and NUCA announced planning or construction for four new towns in northern Sinai, with the stated aim of generating development in the region.⁶¹ Work also commenced on building New Ismailiya on the east bank of the Suez Canal, which the state information service described as a “multi-service residential city” intended to house the workforce of the Suez Economic Development Corridor and to “realize one of the national security objectives of the reconstruction of Sinai.”⁶²

However, the goal of providing up-market middle-class housing and gated communities clearly drives much of the new urban development. The complex inaugurated by the MOD’s Department of Armed Forces Clubs and Hotels in Alexandria in February 2017, which included a yacht marina, exclusive restaurants, and a skipper training school, exemplified the growing investment in luxury leisure projects.⁶³ Reflecting the true target audience, residences in smart cities have moreover been marketed through a traveling “Egypt Property Show” that has so far targeted Egyptian expatriate communities in Abu Dhabi, Dubai, and London. Organizing the show is Tawasol, the media company established by Falcon Group International that has fronted several acquisitions by Military Intelligence.⁶⁴ Indeed, during his initial presidential election campaign in 2014 Sisi specifically stated his hope that Egyptians living abroad would provide \$120 billion of the \$140 billion cost of his grandiose “Map of the Future” plan for effecting “a quantum leap in the Egyptian economy.”⁶⁵

The increasing involvement of MOD agencies in high-profile educational ventures with international partners further confirms the upward class mobility sought by the EAF senior officer corps. In January 2018, the head of the EAF’s Megaprojects Department said it was overseeing construction of six new “international universities” in the new administrative capital.⁶⁶ He added that the department was delivering four new universities in other areas—King Salman in South Sinai, al-Galalah in al-Galalah International City, Egypt-Japan University of Science and Technology in Borg al-Arab (Alexandria), and Egypt National Project for Scientific Renaissance in 6 October city—and facilities at nine other universities.⁶⁷

That the military is consciously positioning itself as part of Egypt’s globalized “new middle class” is also evident in the Badr International School in Salam City, which was built by the MOD and teaches what it describes as a U.S. curriculum. It is overseen by the Third Army, which almost certainly subsidizes the enrollment of the children of its officers, who could not otherwise afford the annual fees of EP20,000–EP40,000.⁶⁸ This class bias dovetails with social screening to exclude applicants from low-status backgrounds from entering military (and police or judicial) academies—a discriminatory practice known as *kashf al-hay’ah* that evolved in the Mubarak era and is now used across the board.

The emphasis on creating prime real estate was also reflected in the amendment of NUCA’s mandate in early 2018 to include constructing “new communities” in re-planning zones within existing cities and villages, rather than in desert land.⁶⁹ A prominent example is the Nile River island of Warraq in the center of Cairo, which was placed under the authority

of NUCA in December 2018 with the intention of creating an upmarket neighborhood of high-rise buildings and a marina. This built on a pattern established at least since 2001, when Mubarak awarded Qursaya, another mid-Cairo island, to the MOD, which approved a tourism development there in 2007 and attempted to evict its inhabitants by force in the wake of the July 2013 coup.⁷⁰ As with other luxury urban redevelopments in Cairo, such as Maspero Triangle, formerly home to 41,000 working class residents, Warraq's 90,000 inhabitants were told they could receive replacement housing in desert cities.⁷¹

Anecdotal evidence indicates that the new luxury high rises remain empty, as they target a social stratum that no longer has the capital to invest. The drive to generate revenue through one of the state's most important and abundant assets, land, is proving counterproductive even as it triggers competition between military and civilian economic actors to invest even more in real estate ventures. Yet Sisi and the government, with the active aid and abetting of the military, have launched or decreed seventeen new cities and towns since 2016 by one count, although the population of existing new urban communities accounted for only 3.8 percent of Egypt's total population increase annually.⁷²

Military Social Benevolence and Paternalism

The new cities have been lauded by government media for their "comprehensiveness and breadth, and their spread all over the country." A glowing survey of new projects in the official information service argued they would contribute "in one way or another to achieving the economic balance, and establishing bases of social justice in its large concept and therefore reducing unemployment and poverty," and to "re-distribution of the population over a number of new cities in all regions of the Republic, including Sinai and the northern coast and surrounding areas."⁷³

However, lower-income groups such as the former inhabitants of Maspero Triangle and Warraq Island are not moving to the desert and satellite cities being constructed by NUCA and military agencies. Instead, they relocate to substandard housing unconnected to public services in other parts of Cairo. As urban development expert David Sims notes, virtually all areas that have been designated for the relocation of small industries are in remote zones or new towns that impose heavy transport costs on owners and workers and crowd out more effective industrial policies for boosting employment and manufacturing.⁷⁴

Ignoring the failure of these top-down approaches to assigning the spatial distribution of social housing and workplaces, the EAF's Megaprojects Department announced in January 2018 that it was working on 124 projects to build facilities for 424,000 social housing units for rural and Bedouin communities, and on at least two "model villages" for university graduates east and west of the Suez Canal.⁷⁵ Madbouly estimated total planned investment in megaprojects in Sinai at EP150 billion by late 2017, besides projects tendered by NUCA to build 340,532 "social housing units" (apartments for low-income residents) in

twenty-two new cities at a cost of EP37 billion.⁷⁶ The timetable for attaining these targets was unclear: AMA head Mohamed Erfan claimed that the overall delivery rate had risen from 48,000 housing units annually before 2014 to 81,000 in 2017, and so completion was

While the construction of social housing is certainly needed, it comes as part of an overall approach to urban development that has done little to alter stark socioeconomic realities.

unlikely for at least a decade. But the latest housing projects were in addition to others already under way, and so were certain to face serious delays.⁷⁷

While the construction of social housing is certainly needed, it comes as part of an overall approach to urban development that has done little to alter stark socioeconomic realities: the top 5 percent of land-owners owned 57 percent of agricultural

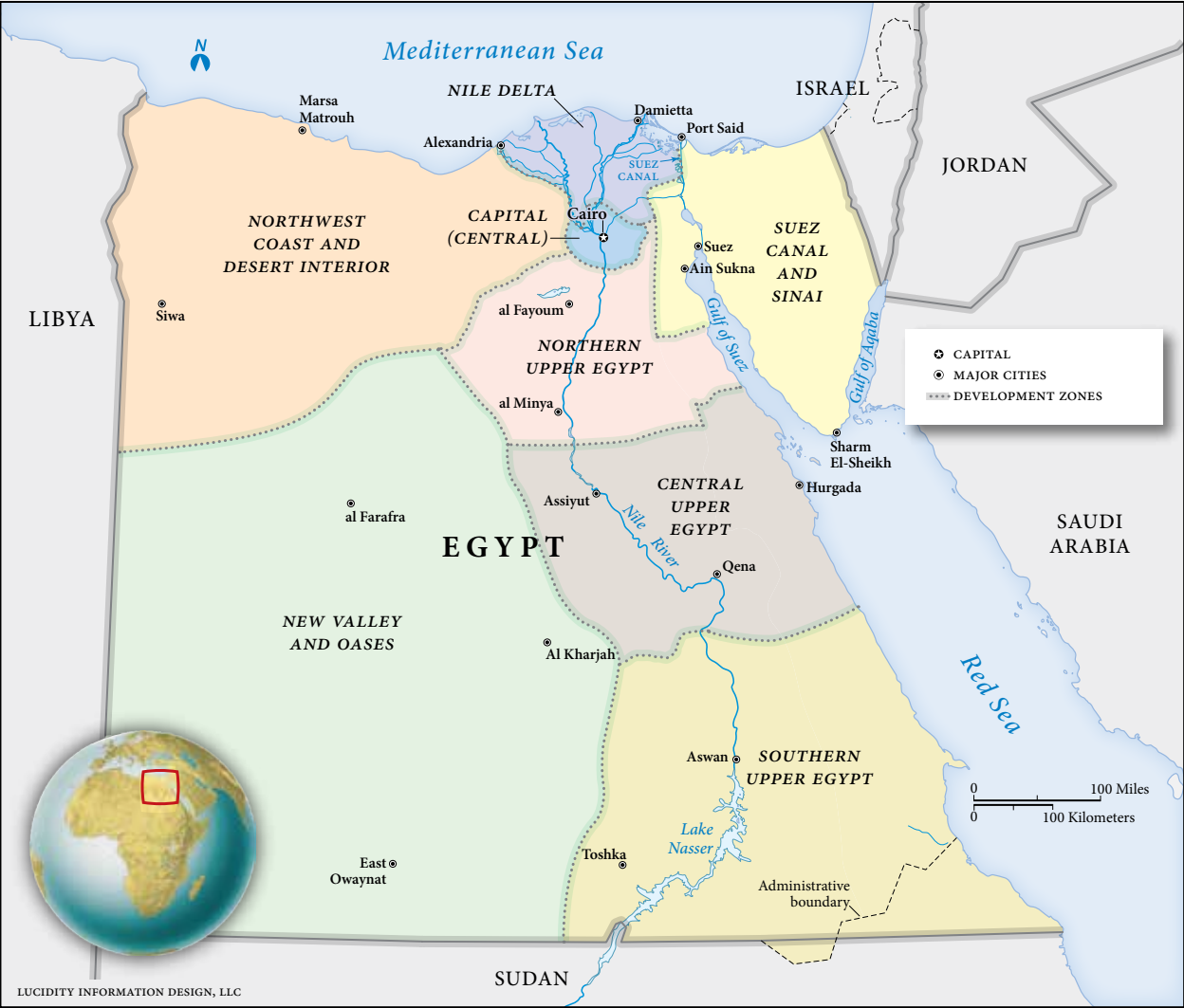
land, while the bottom 43 percent owned less than 1 percent in 2015, even when reclaimed areas are taken into account; the number of Egyptians living in abject poverty had risen to 32.5 percent by 2019, at which time illiteracy stood at 25.8 percent.⁷⁸ The military approach to social and economic development moreover reflects the marked paternalism of the Sisi administration, as is evident from the military's involvement in his Long Live Egypt Fund. In June 2014, the MOD placed EP1 billion (then \$141 million) of the NSPO's funds at the fund's disposal; one of its senior officials later revealed that it was kicked off with EP4.7 billion from the military.⁷⁹

Since then, the military has contributed to projects funded by Long Live Egypt such as providing prevention and treatment of eye impairment at military hospitals, under an EP1 billion grant awarded to the Nour al-Hayat charity.⁸⁰ In another example of this approach, the EAF chief of staff and minister of military production provided 600,000 food packages as a religious donation to the intended residents of eighteen "development communities" under construction by the EAF Engineering Authority in north and south Sinai in January 2019. The new homes were additionally to be furnished and equipped with electric appliances donated with the help of the Misr al-Kheir charity, another of several programs launched at Sisi's prompting.⁸¹ But the primary objective of this approach is to prevent social protest and political instability, as demonstrated when the EAF offered reduced fares on its own buses following the sharp increase in fuel prices in July 2014, or when it supplied markets with 8 million food boxes at cheap prices following the 48 percent devaluation of the Egyptian pound in November 2016.⁸²

Infrastructural Synergies

Military agencies have inevitably been heavily involved in building associated infrastructure and service facilities for the new cities, significantly expanding both the scale and the scope of their economic activity. This included three new airports: Capital International

Development Zones



Airport serving the new administrative capital, Sphinx International serving the 6 October and Sheikh Mohammed bin Zayed Cities and surrounding governorates, and Melleez International Airport at Bir Gifgafa (Rephidim) in Sinai, which is claimed to have a capacity of 1.7 million passengers annually.⁸³ The EAF Engineering Authority advertised Melleez as improving access to the NSPO's major cement factory and to local marble quarries and agricultural and hunting zones.⁸⁴ The authority similarly claimed that its work on Highway 6 in Sinai served both a new technology hotspot and the NSPO cement factory at Arish, "which is supposed to increase output in the coming period to seven million tons annually to reduce monopolies and bring down market prices."⁸⁵

Melleez was in fact one of two airports being built by the EAF in Sinai, effectively its economic backyard. The MOD and several other ministries and state agencies commenced planning for an airport at Ras Sedr in late December 2015, which was proposed as a joint venture between the MOD and private investors on a build-operate-transfer basis, with a seventy-year franchise.⁸⁶ Typically, those lobbying for the airport resembled an EAF roll call: the South Sinai governor, assistant secretary general of the governorate council, head of Ras Sedr City, and assistant director of the Projects Department of South Sinai were all retired EAF major generals.⁸⁷ Most telling of the military stake, however, was that the terms of reference for the airport contract were issued by Lieutenant General Osama Askar, Commander of East of Canal Forces for Combating Terrorism.⁸⁸

Water and wastewater infrastructure is another important sector affected by the big push. The government committed to increase capacity by up to 50 percent by early 2018 and awarded the lead role to the National Authority for Potable Water and Sanitary Drainage, which has been headed by a retired EAF major general since 2011. Previously NAPWASD had "a reputation for delays and cost overruns, low quality delivery and limited transparency" and

was relatively inactive. But in mid-2016 it claimed to have received nearly \$1 billion in World Bank and European Union loans for planned new projects.⁸⁹ Other major assignments followed, including development of infrastructure for the new administrative capital, and the authority's budget rose from \$562 million in 2015–2016 to \$999 million (EP8.87 billion) the following year.⁹⁰

Military agencies have inevitably been heavily involved in building associated infrastructure and service facilities for new cities, significantly expanding both the scale and the scope of their economic activity.

These projects also notably benefited the military directly. As a consultancy study in 2011 noted, the MOD and MOMP are large consumers of water and active in constructing and operating water and wastewater treatment plants, both for their own use and as general contractors to the civilian sector.⁹¹ Their role has increased exponentially with the massive construction surge since 2013. The EAF Engineering Authority has undertaken projects to

build canals and tunnels to transfer irrigation and drinking water under the Suez Canal and its secondary branch, to farms on the eastern bank and to 100,000 feddans of the projected 420,000-feddan land reclamation scheme in Sinai.⁹² It issued the tender for water desalination plants that will provide 150,000 cubic meters a day for al-Galalah International City it is constructing at elevations of 700–1,200 meters above the Suez Gulf, at a total cost of \$500 million. The authority also undertook work to supply the mammoth new NSPO fishery in northern Sinai with the massive volume of fresh water it will require.⁹³

The most important instance of synergy, however, is arguably the massive complex centered on the Red Sea port of Ain al-Sukhna that has emerged in the course of the past two decades. Launched in mid-1999 with a twenty-five-year concession from the government and operational since 2002, al-Sukhna was the first fully private port in Egypt (and still only one of two). In 2004, the MOD completed a new highway connecting Cairo to Ain al-Sukhna, and started to lease land on which the EAF barracks and other facilities stood to tourist developers. The MOD has made the area a nodal point of infrastructure, industry, trade, tourism, and upper-middle-class housing since 2013, and a magnet for foreign investment and public-private partnerships. Its deepwater facility now serves the new administrative capital as well as Cairo and, as importantly, land reclamation, agricultural, and mining ventures owned or managed by the military in inland governorates such as New Valley, which the military has connected with publicly funded highways. There is a similar synergy between the Abu Tartour mining complex, which is undergoing major expansion, and the NSPO, which owns the Nasr phosphate factory in Ain al-Sukhna and has a 20 percent share in the joint stock Egyptian Marketing Company for Phosphate and Fertilizers that was established in October 2018 as the exclusive commercial agent of all phosphate producers in Egypt.⁹⁴

In part, Ain al-Sukhna reflects the approach adopted by the government of grouping related industries and services in geographical clusters to enhance synergies and net value. The MOD was involved in the creation of the first cluster in Robiky, moving leather tanneries from central Cairo and setting up a production and maintenance facility (to be built by the MOMP).⁹⁵

Ain al-Sukhna is moreover developing as a linchpin for infrastructure and economic sectors in which the military also has vested interests along the Red Sea littoral stretching over 1,000 kilometers (675 miles) from the southern end of the Suez Canal to the border with Sudan. Unsurprisingly, EAF retirees head all governorates and relevant government agencies such as port and development authorities within the region. Ain al-Sukhna's proximity to the South Suez Economic Zone ties it to shipping and services through all ports up to Port Said at the northern end of the Suez Canal and to Arish on the northern Sinai coast. This includes reception, production, storage, and export facilities for petroleum, natural gas, and their derivatives; in 2018 alone contracts worth \$10.9 billion were signed for what is expected to be the largest naphtha cracker plant in the world, the Tahrir Petrochemical Complex.⁹⁶ The military is meanwhile also investing in expanding ports farther south such

as Safaga, partly on land leased by the MOD, which will allow exports from ventures in the New Valley.⁹⁷ This and other developments are part of a government plan adopted in 2016 for the “golden triangle” in southern Egypt, another major focus for the military, with the aim of building up mining, tourism, and other economic interests on the Red Sea coast.⁹⁸

Ain al-Sukhna and its region also reflect the Sisi administration’s social and political alliances. Al-Galalah International City is developing as a military-managed extension of the upper-middle-class resorts and residences of Ain al-Sukhna, along with significant investment in manufacturing and extractive industry. And in August 2019, Sisi transferred 75,000 feddans around the major tourist destination of Hurghada to the MOD, along with control of forty-seven Red Sea islands used by tour operators to offer snorkeling and safaris, which he declared “strategic zones of military importance.”⁹⁹ Ain al-Sukhna also embodies the alliance with the UAE: Dubai Ports World acquired a 90 percent stake in the port in 2008, and Emirati capital is invested in the Tahrir Petrochemical Complex.¹⁰⁰

Haste Makes Waste

Sisi’s deployment of the military to undertake megaprojects imparted a tangible sense of urgency that was backed by repeated promises to deliver on accelerated schedules. The EAF’s Megaprojects Department started designing New Ismailiya in January 2014 with the aim of delivering a city for 314,000 people by the end of 2016, for example, while in May 2015 Sisi promised that 1 million feddans of land would be reclaimed in “no longer than two years,” a target that remained far from completion as 2020 approached. These statements were accompanied by inflated claims of how many jobs could be generated—New Ismailiya would supposedly employ 80,000 people permanently and another 2 million indirectly—and of record delivery times—such as the boast that three new international airports “were completed in no more than a year,” instead of the scheduled two years.¹⁰¹

To deliver swift results, the MOD had to hire inexperienced companies and agencies. State-owned petroleum services company Petrojet found itself building housing and roads in the New East Port Said city project, for example, as well as digging tunnels under the Suez Canal.¹⁰² It lacked the labor and relevant expertise, but subcontracted smaller companies, assigning quotas of housing units or different stretches of road to each, which they built under military supervision.¹⁰³ The EAF Megaprojects Department did the same, employing thirty private sector firms to work on 219 kilometers of Highway 6 in Sinai.¹⁰⁴

Yet the politically motivated drive to show swift results also raised costs: to attract sufficient workers to al-Galalah, for example, the EAF Engineering Authority offered above-average wages. It offset other costs by persuading some firms to undertake work for free, such as digging tunnels under the Suez Canal, which they accepted in the hope of securing future contracts.¹⁰⁵ Even when they were paid, these firms may have received below-market rates—in contrast to foreign contractors—and made to absorb the losses. But the MOD

was also willing to incur costs itself for the sake of speedy delivery where it was expedient; for example, the EAF Engineering Authority financed U.S. company General Electric to expedite installation of twelve turbines in Asiut and West Damietta rather than wait for state funding.¹⁰⁶

As egregious is the extraordinary draw of virtually all military-run megaprojects on Egypt's water resources. These are under severe pressure, with the country already below the threshold of water poverty and heading toward absolute water scarcity by 2025. Yet the new administrative capital is expected to consume over 500 million cubic meters of water annually on completion; plans to siphon some 200,000 cubic meters of water a day from nearby satellite cities again demonstrate how political considerations trump cost-benefit analysis and resource scarcity.¹⁰⁷

As this case shows, the military tends to respond to a challenge with simple engineering fixes that do not resolve the main problem. Indeed they may aggravate it: desalination of seawater to supply new cities and megaprojects on the northern Mediterranean shore or around Ain al-Sukhna on the Red Sea is fuel-intensive. So is pumping water from the Nile or underground aquifers to higher terrain or through cross-country canals or tunnels under the Suez Canal to water-hungry land reclamation schemes and agricultural projects. Wastewater canals moreover carry toxic industrial and agricultural waste, affecting downstream areas such as Kafr el-Sheikh, home to a significant part of Egypt's fish stocks.¹⁰⁸ And yet the NSPO is rapidly expanding fish farming there and in northern Sinai to increase food supply (discussed below), magnifying both the demand for fresh water and the generation of waste that flows back into canals and the sea. These projects are moreover concentrated in areas most threatened by the potential rise of sea levels due to global warming, putting them at risk.

Indeed, environmental impacts of military projects generally are impossible to verify or evaluate since any technical studies or documentation relating to them are kept under wraps. For example, the NSPO's major farming projects in East Owaynat draw on a deep groundwater aquifer believed to be nonrenewable.¹⁰⁹ No less importantly, the NSPO has launched a major new fishery in Lake Burullus, which is one of several Nile delta lakes found in 2008 to have concentrations of heavy metals above internationally permissible limits including iron, zinc, copper, manganese, cadmium, and lead. These lakes had moreover shrunk due to land reclamation, conversion into fish farms, and overgrowth of aquatic vegetation and suffered from industrial and agricultural discharge as well as petrol combustion from boats and automobiles, resulting in an overall contraction of their share of national output of fish from 40 percent to 12 percent.¹¹⁰ The government has moreover warned about rising salinity in the Delta, where most of the country's rice is grown, and restricted rice cultivation in response, and yet the NSPO's new fisheries are major consumers of fresh water.¹¹¹

In theory, the NSPO or other military agencies could actually be applying the international standards and best practices they (and civilian counterparts) claim for virtually everything they do. But none of the many such pronouncements reviewed for this report mention specific environmental safety measures or initiatives, suggesting that the greater premium is placed on maximizing output at minimum cost. Nor has the military identified countering environmental damage among its priorities in the civilian domain; Egypt was identified in June 2019 as the biggest contributor to mismanaged plastic waste in the entire Mediterranean basin, accounting for 42.5 percent of the 6.6 million ton total, and generally mismanages 93 percent of its plastic waste streams, to take just one example of a sector in which the NSPO and military factories are active.¹¹²

Similarly, according to the Egyptian cabinet's own Information and Decision Support Center, around 80 percent of the entire country's annual industrial effluent was being discharged untreated into the Nile and its waterways in 2007.¹¹³ And yet the EAF intervened to suppress local inhabitants protesting the potential environmental effects of expanding a (civilian) petrochemical plant in Damietta in November 2011, for example, while protesters campaigning against three similar factories that were inaugurated in Fayoum a month later were told nothing could be done since the factories were owned by the MOMP.¹¹⁴

As a study published by the International Food Policy Research Institute in 2018 noted of megaprojects launched in Egypt over the past several decades, they have been “large-scale, with broad visions (usually accompanied with political dimensions), multiple objectives, and extremely high costs. Their impact is often large enough to be irreversible.”¹¹⁵ The continuous expansion of military-managed construction and industrial projects and of its new extractive projects for heavy metals (such as the NSPO's black sand factories discussed below) in heavily inhabited and agricultural areas has the potential to raise the environmental costs very considerably, precisely because they escape external monitoring and control despite relating to civilian purposes.

A STRATEGIC GOLD RUSH

Much of the military's expanding economic role since 2013 has taken place in geographical zones long designated as strategic—the Suez Canal and its development corridor, Sinai and the rest of the Red Sea coast, and other border areas—and in sectors deemed of strategic value to the national interest and well-being—such as social housing and land reclamation. The military is deemed—by itself as much as by others—the only state institution capable of spearheading national projects on this scale and of providing the capital needed—especially human, and occasionally financial. But the military has also exploited its effective suzerainty over strategic zones to intensify its commercial exploitation and pursue spin-off activities that lie in, or pass through, those zones. In doing so, the military has displaced

civilian economic actors—both public and private—in sectors such as the fish industry, transport infrastructure and operations, and agribusiness and imports.

Utilitarian Zoning

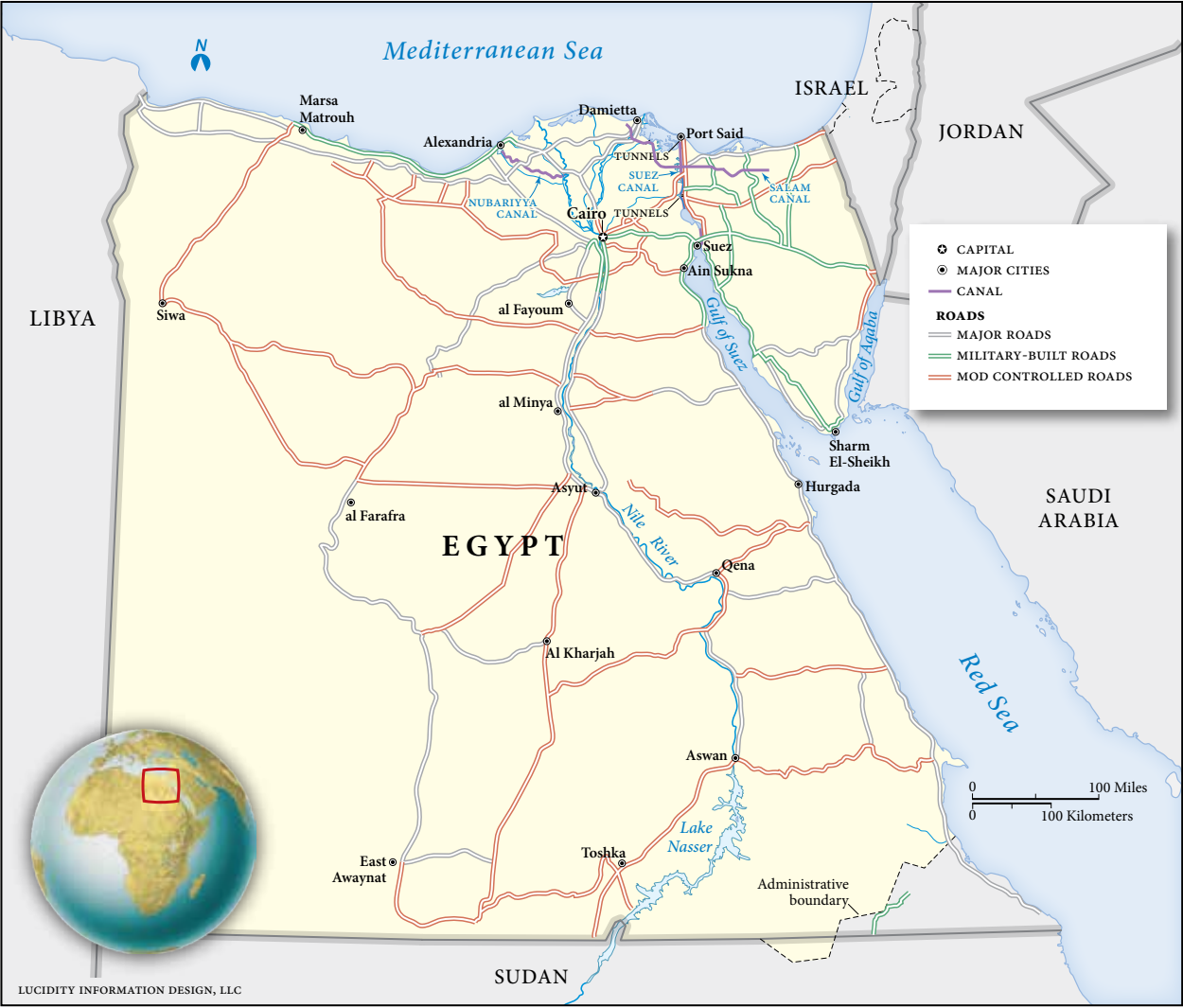
As noted in Chapter 3, Sisi gave an early demonstration of the commercial utility of strategic zoning by designating the southern Shalateen border area a military zone in November 2014, enabling the MOD and NSPO to develop extensive mining and quarrying interests (including gold prospecting).¹¹⁶ He again demonstrated the utility with Presidential Decree 233 of 2016, which designated twenty-one national roads as “strategic zones of military importance.”¹¹⁷ Several of these roads connected areas of military economic activity, such as the land reclamation project in Farafra in the New Valley and New East Port Said. But many connected popular tourist resorts and main cargo and passenger terminals in Sinai (Port Said to Sharm al-Sheikh, Nuweibe, and Taba), the Western Desert (Siwa and the Western Desert Oases), and the Cairo–Red Sea hub (at Ain al-Sukhna). The EAF patrols these highways, dealing with traffic accidents, levying fines, and referring cases to military courts.¹¹⁸ In May 2017, Major General Sayyed al-Shahed, assistant for financial affairs to the minister of health, additionally revealed that Sisi had entrusted the EAF with setting up first-responder posts on highways.¹¹⁹

Decree 233 moreover placed land to a depth of 2 kilometers on either side of national roads under the control of the MOD, effectively granting it a significant commercial franchise. Cabling for internet and telecommunications, a sector the MOD has sought to enter aggressively, will almost certainly be laid in this strip of land. Indeed Egypt Telecom, which owns this sector’s infrastructure and retains a de facto monopoly in it, had previously announced that it would replace the outdated copper cable network with fiber optic cables with the target of reaching 4 million customers by the end of 2015.¹²⁰ Furthermore, under its existing powers, the MOD may confer its standard exemptions for income tax, property tax, and customs duties to companies it awards franchises in these highway zones. The prospective diversion of revenue from the public purse compounds the allocation of usage tolls on the highways to the MOD. And by instructing the EAF to remove encroachments on state land encompassed by all roads designated as “national,” not just “strategic,” Presidential Decree 233 gave the military effective control of the intercity network as a whole.¹²¹

Member of Parliament Mohamed Anwar Sadat was one of the few to openly argue that any income from the highways should accrue to the treasury as they had been built with state funds. Others were more compliant.

MAP 7

National Roads Built or Controlled by the Military



Member of Parliament Mohamed Anwar Sadat was one of the few to openly question Presidential Decree 233, arguing in a public release that any income from the highways should accrue to the treasury as they had been built with state funds in order to help economic development.¹²² Others were more compliant. Hisham Ibrahim, professor of finance and investment at Cairo University, countered that the EAF was entitled to benefit commercially “since the roads were built on its land and it has the right to compensation.”¹²³ But subsequent decrees consolidated the MOD’s advantage. On February 28, 2017, Presidential Decree 77 transferred 60,000 feddans of arable land in the “green belt” belonging to 6 October city to the Sheikh Mohammed bin Zayed City. This turned agricultural land into high-value residential real estate in areas adjacent to the Rod al-Farag road complex, which connects central Cairo to outlying suburbs and satellite cities, and to nearby highways now under MOD control.¹²⁴ Similarly, Presidential Decree 101 issued on the same day awarded the MOD 14,596 feddans in the vicinity of the Dabaa nuclear complex on the northern coast, again connecting ultimately to the Rod al-Farag road complex, which has emerged as a magnet for overinvestment of public funds.¹²⁵

In parallel, the MOD planned expansions in more traditional areas of activity. A prime example was the launch of a project to build an “airport city” near Cairo International Airport in August 2014, shortly after the announcement of the second Suez Canal scheme. Designed as a mixed services, tourism, entertainment, and sports complex with an initial cost varyingly estimated at between EP60 billion and EP100 billion, those responsible claimed it would generate 100,000–120,000 jobs and EP422 billion in income between its intended completion date in 2020 and 2040.¹²⁶ In this instance, retired EAF major generals were the prime movers, including two successive heads of the Cairo International Airport, the head of the Civil Aviation Authority, and the Giza governor.

Displacement 1: Feeding Egypt Fish

The MOD also consolidated its interests in the Sinai Peninsula, the neighboring Suez Canal zone, and the Nile delta, most notably with a major foray into fish production. In January 2015, the NSPO announced the establishment of a new venture, the National Company for Fishery and Aquaculture; its initial cost was announced as EP1 billion (then \$100 million), revised to EP1.7 billion by its inauguration in November 2017.¹²⁷ Heading it was Major General Hamdy Badeen, the former head of Military Police who had been accused of ordering excessive violence against demonstrators and coerced virginity tests on female detainees in 2011.¹²⁸

The establishment of the National Company for Fishery and Aquaculture revealed two significant trends. First, in contrast to other sectors involving public funding and economic output in which military-affiliated agencies partner or share sectors with civilian government counterparts, the new company has almost completely displaced the General Authority for Fish Resources Development (part of the Ministry of Agriculture), which saw

its budget slashed by 75 percent cumulatively in 2014–2016.¹²⁹ By fall 2015, the NSPO's National Company for Fishery and Aquaculture had assumed management of fisheries in Lakes Bardawil, Burullus, and Nasser and in feeder basins along 120 kilometers of the Suez Canal expansion.¹³⁰ These areas had previously come under the general authority, which lost control of an additional 123,500 feddans of land for fish farming in New East Port Said, Berket Ghalioun (which produces 200,000 tons of fish annually), and Ain al-Sukhna by August 2016, on Sisi's orders.¹³¹ In February 2017, Sisi assigned Badeen to oversee all government agencies involved in increasing fish production from Lake Nasser and to set up four new plants to process crocodile products.¹³² And in November the president inaugurated a "fishing industrial city" at Lake Ghalioun, comprising factories for fish feed ("the largest in the Middle East"), ice, and foam containers, and he approved plans to build similar facilities at Lake Bardawil.¹³³

Second, the National Company for Fishery and Aquaculture has become an additional means of inserting the MOD into the country's external trade links. In fact, the Egyptian military had been accused of illegal seabed trawling in Yemeni territorial waters in the Red Sea as early as 2003, using civilian boats. But now it sought to enter this market formally. According to Central Bank Governor Tarek Amer, Egypt imported fish worth \$800 million in 2016; press reports on the company's activities frequently emphasized the aim of increasing local output to meet domestic demand.¹³⁴ Underlining the importance attached to the enterprise, the Kafr el-Sheikh and Port Said governors—both retired EAF major generals—toured the new fish farms with Badeen in April and September 2016.¹³⁵

Badeen's announcement in August that the company had obtained its first export license for a joint fish farming venture with a Chinese company also revealed a clear profit motive.¹³⁶ This was followed in November by a joint venture with a Cypriot company that aimed to produce 50,000 tons of fish annually for export to Russian, French, and British markets. Significantly, the National Company for Fishery and Aquaculture hoped to access foreign loans of €400 million through its Cypriot partner, confirming the pattern of using joint ventures as means for securing funding and technology.¹³⁷ Paradoxically, Badeen visited Mauritania to secure fishing rights for Egyptian vessels in March 2017 and visited Eritrea the following month to sign deals to import fish, whether in a bid to secure Egypt's needs until local output had built up or to capture the price differential between imported Red Sea and Atlantic fish and exported Egyptian fish.¹³⁸ Either way, this was another instance of the MOD inserting itself into the country's supply chains.

Displacement 2: Cities of Marble, Salt, and Black Sand

By a twist of fate, much of Egypt's mineral wealth lies in the extensive strategic zones controlled by its military. The MOD's foray into gold prospecting in the Shalateen border area with Sudan was noted in Chapter 3, but since 2013 the ministry has also established quasi-monopolies over marble quarrying, salt production, and commercial exploitation of sand.

The NSPO has been its principal vehicle for these ventures, which mainly concentrate in the Sinai Peninsula and Lake Burullus in the Nile delta.

In mid-2014, the NSPO's Mining Sector launched Misr Sinai for Industrial Development and Investment, with which it then agreed to cooperate in building a cement factory and marble and glass production facilities in central Sinai.¹³⁹ The MOD reportedly held a 51 percent share in the new company, which declared a startup capital of EP3 billion; the remaining 49 percent stake was supposedly held by thirty-six Sinai clan elders.¹⁴⁰ In January 2016, the NSPO and Misr Sinai announced they would construct a "marble and salt city" comprising ten marble factories and five salt factories for an investment of EP1.2 billion, which they claimed would employ 13,000 people within the year.¹⁴¹ But in May, the NSPO transformed Misr Sinai into a new subsidiary, the National Company for Marble and Granite, which announced plans to construct the "largest" marble complex in the Middle East and North Africa at a cost of EP800 million.¹⁴²

Egypt was exporting 68 percent of its marble output in raw form and losing the opportunity to add value, according to NSPO Director General Major General Mostafa Amin. To rectify this, the NSPO was ready to muscle aside civilian counterparts and competitors, whether in the public or private sector. The fact that it now had the authority to award exploration and exploitation licenses to companies in the mining sector revealed the extent to which it had displaced government agencies in controlling natural resources in strategic zones.¹⁴³ But it went significantly further in April 2017, when it informed stunned members of the Federation of Egyptian Industries' Chamber of Quarries and Marble Industry that it was expanding its capacity from three to seven marble processing facilities with the target of supplying 80 percent of Egypt's total production.¹⁴⁴ By August 2018, the NSPO marble and granite complex in Beni Suef had seven factories, with five more planned in other rich quarrying areas under MOD control in Sinai, Ain al-Sukhna, and Aswan by mid-2019.¹⁴⁵

Potentially more profitable still is the NSPO's parallel investment in the extraction of heavy metals and rare earth elements from alluvial sand deposits in Lake Burullus on the Nile delta coast. In mid-2016, it established Egyptian Black Sand as a public limited company, in which it holds a 61 percent share, with the stated aim of meeting local needs and acquiring a 30 percent share in export markets.¹⁴⁶ The stakes are high: the NSPO controls the sole black sands site in Egypt, with estimated deposits of 250–285 million tons, and expects to produce 3–5 percent of the world's total supply of titanium and zirconium within the coming decade.¹⁴⁷

Volatility in the supply of basic commodities in domestic markets after 2013 has provided both stimulus and pretext for the military economy to expand even further into commerce.

According to the head of Kafr el-Sheikh Governorate, which is a stakeholder in the Egyptian Black Sand Company, the venture is expected to bring \$176 million in annual revenue to the state treasury once in full production.¹⁴⁸ Not surprisingly, it has attracted foreign investment: a deal with an Australian extraction company in May 2018 was immediately followed by the formation of a joint Egyptian-Chinese company to build a second extraction plant.¹⁴⁹ In January 2019, parliament approved the Egyptian Black Sand Company Agreement Law authorizing it (along with the Nuclear Materials Authority) to explore, extract, and process black sand minerals and derivatives throughout Egypt, effectively granting a largely military-owned company a commercial monopoly.¹⁵⁰

IMPORT CHAINS AND SUPPLY CRISES

Much of the preceding highlights the growing insertion of military agencies and affiliates into Egypt's external trade system. Volatility in the supply of basic commodities in domestic markets after 2013, affected by the sharp depreciation of the Egyptian pound against foreign currencies and by the subsequent major shortage of dollars and price inflation in 2015, has provided both stimulus and pretext for the military economy to expand even further into commerce.

Meat and Poultry

As noted in previous chapters, much of the military's external trade activity has clustered around the import, transport, and sale of livestock and meat from neighboring Sudan. This is a major business sector, both due to the size of the Egyptian market and rising proportion of meat in the national diet since the liberalization of imports under Sadat in the 1970s, as well as the presence of large, guaranteed customers like the EAF and the massive state bureaucracy. And because trade with Sudan involves the Nile River, Red Sea coast, and a foreign government with which Egypt has complex political relations—all deemed to affect national security—the MOD and GID are extensively involved behind the scenes in facilitating access and deals.

Private sector companies undertake much if not all of the real commercial investment, such as building slaughterhouses and growing fodder in Sudan, while the MOD and affiliated agencies mainly engage in procurement and retail. But the two are interwoven. A prominent example is the familiar private partner of the MOD, Qalaa Holdings, which has invested heavily in trade-related transport. Its Care Marine subsidiary owns two river ports in Sudan, from which it delivers industrial and agricultural products to Egypt.¹⁵¹ In 2010, the retired EAF major general who heads Qalaa's Holding Company for Transport Means, which owns four subsidiaries geared toward trade with southern Egypt and Sudan, negotiated the purchase of three ports on the southern Nile River from the General Authority for River Transport, headed by a fellow EAF retiree.¹⁵²

Worsening economic and social conditions helped justify the trend. In August 2016, Sisi commended the MOD for “reducing prices through the relevant departments that import livestock, frozen meat and poultry without middle men and at lower prices.”¹⁵³ The NSPO was already publicly involved in importing meat for the domestic market, while the MOD supply department probably did the same under the guise of procurement for the armed forces.¹⁵⁴ Indeed, the MOD already had secondary income streams from building a network of slaughterhouses offering meat at discounted prices to the public, while the GID has set up front companies trading in meat.¹⁵⁵ The appointment in September 2016 of the former head of the EAF’s Logistics and Provision Authority, Major General Mohammed Ali al-Sheikh Mseilhi, as minister of supply and internal trade probably helped integrate military agencies and the GID into the civilian supply system even further.

Consequences for domestic markets have been mixed, at best. Earlier in 2016, the NSPO and other military agencies had exploited the sudden removal of all tariffs on imported chicken and chicken parts to dump large quantities of imported chicken in domestic markets, undercutting private businesses.¹⁵⁶ Responding to their protests, the Ministry of Supply and Internal Trade stated that it had asked “sovereign bodies,” which it later identified as MOD importing agencies, to import chicken to meet local demand ahead of Ramadan in June 2017.¹⁵⁷ But the imports resulted in a glut that drove prices down for the rest of the year, triggering further protests from the Egyptian Poultry Producers Association.¹⁵⁸

The manner in which military agencies had come to the country’s rescue revealed the complex interplay of politics and business and the contradictory considerations shaping trade and economic policy. It also generated lucrative opportunities for individual EAF officers and middlemen to profit. Writing in early 2017, investigative journalists Mohamed Hosni and Osama as-Sayyad claimed that private importers of poultry and meat found their shipments delayed in ports on health and safety grounds unless they paid off the relevant EAF officers, or else brought the shipments in at military-controlled ports in Sinai without going through customs.¹⁵⁹

Entering the Wheat System

A crisis in wheat supply in 2016 offered the most graphic demonstration of the military’s growing role in economic management and the resulting new dynamics. The sector, which is governed by a plethora of government agencies and complex rules, was already characterized by extensive penetration by retired officers, multifaceted corruption, and mafia-like competition between rival cliques, revolving around imports, domestic procurement and supply, and storage.¹⁶⁰ The stakes are very high. Egypt is the world’s largest importer of wheat, bringing in 12 million tons in the twelve months up to July 2017 and 12.5 million tons up to July 2018, representing about 4 percent of the country’s total imports.¹⁶¹ To encourage Egyptian farmers to plant wheat, the government has always procured it at a fixed price far above international prices: \$84 more per ton for domestically produced wheat in 2014, and

A crisis in wheat supply in 2016 offered the most graphic demonstration of the military's growing role in economic management and the resulting new dynamics.

\$180 more in 2016.¹⁶² The government is also the only major purchaser of domestic wheat, as well as operating all large-scale inland storage and much of storage capacity at main seaports.

Not surprisingly, large volumes of flour and wheat are believed to be resold on the black market, as a review of the sector by the Food and Agricultural Organization

of the United Nations noted in 2015.¹⁶³ A parliamentary investigation in 2016 confirmed that officials and private wheat traders mixed cheaper imported grain with subsidized domestic grain and pocketed the difference in price.¹⁶⁴ This illicit practice may have contributed to the dramatic shift in the ratio of imported to domestically produced wheat, from 1:1 in 2002 to 3:1 by 2017.¹⁶⁵ Reuters correspondent Eric Knecht reportedly estimated that this practice “accounted for roughly 2 million tonnes of supplies bought by the government last year [2015], equating to a loss of nearly 2 billion Egyptian pounds” (then \$225 million).¹⁶⁶ To cover up, officials falsified quantities in storage and exaggerated losses due to rot, rodents, and theft. The parliamentary investigators said they had uncovered EP119 million in fraud in the first two storage facilities they inspected; a separate press report claimed that “gifts” (*ikramiyyah*) of up to EP700,000 had been given by heads of storage companies to senior officials in the General Organization for Exports and Imports Control and in the Ministries of Supply, Agriculture, and Health.¹⁶⁷

With so much at stake, the MOD has played an increasingly visible and assertive role in the sector since 2013. Initially, retired officers were mainly involved. In February 2014, the new minister of supply and internal trade Major General (police) Mohamed Abu-Shadi dismissed the entire board of directors of the Holding Company for Storage and Silos (the second-most important state body undertaking import and storage of wheat) for failing to achieve targets and incurring losses of EP89 million, and appointed an EAF major general as the new company head.¹⁶⁸ Abu-Shadi was himself removed in a cabinet reshuffle shortly thereafter, reportedly after his chef de cabinet was arrested for corruption; the dismissed holding company head was restored to his post and yet another EAF major general was made his deputy.¹⁶⁹ This unfolded against the backdrop of a pledge by the UAE to fund construction of 25 wheat silos with a storage capacity of 1.5 million tons; in March it complained that a tender to build four silos had been inflated by 300 percent and demanded that it be reissued and monitored by the MOD.¹⁷⁰ Whether the holding company or the Ministry of Investment, which owned it, was at fault was unclear, but in June the AOI was contracted to build the remaining silos funded by the UAE, and the General Company for Silos and Storage (a subsidiary of the Holding Company for Silos and Storage headed by a former EAF major general), was selected to operate them.¹⁷¹

Matters came to a head in mid-2016, when the Ministry of Supply and Internal Trade declared that its procurement of domestic wheat had jumped to nearly 5 million tons, from an annual average of 3.0–3.5 million tons over the past decade.¹⁷² Ostensibly, suspicion that the data had been manipulated to commit massive fraud is what prompted parliament to launch an investigation; Reuters cited claims that over 2 million tons of the total may have existed only on paper.¹⁷³ But parliamentary involvement also suggested that competing security and military interest groups and the parliamentary factions representing them were taking their rivalry into the open. In any case, the MOD was immediately involved. Unusually, a senior EAF officer accompanied the parliamentary inspection, whether because retired officers were implicated or signaling the MOD's wish to enter the sector more directly;¹⁷⁴ the officer, Major General Sharif Adel Basili, had previously overseen construction of UAE-funded silos on behalf of the EAF Engineering Authority, and following the investigation was appointed to head the Holding Company for Silos and Storage, part of the Ministry of Supply.¹⁷⁵

As significantly, the MOD became directly involved in fixing Egypt's antiquated storage system, which relies extensively on *shounas*—open-air holding bays exposed to contamination, humidity, and birds and rodents—leading to the loss of anywhere between 10 and 50 percent of locally produced wheat.¹⁷⁶ In fact, the EAF claimed to have already built forty-seven modern grain silos from 2013 to 2015 (with UAE funding), and in March 2014 assumed management of the construction of four more.¹⁷⁷ In late July 2016, it took over negotiations with U.S. food security company Blumberg Grain to construct 300 warehouses capable of storing 2.35 million tons of grain, at a cost of \$250 million (to be funded by a U.S. government grant).¹⁷⁸ The company had originally entered the Egyptian market in mid-2014, reportedly agreeing with Sisi to have 164 new storage facilities in place by the 2015 harvest season, in a deal worth \$350 million.¹⁷⁹ Blumberg Grain expected to handle Egypt's entire crop by 2018, by which time the project would reduce waste by \$550 million a year and cut imports, saving another \$8 billion over five years in hard currency.¹⁸⁰

The wheat crisis revealed the MOD's growing assertiveness in economic affairs, but also that it remained constrained by other powerful bureaucratic and private interests.

But these hopes ran aground due to the resistance of the Ministry of Supply, whose companies owned the silos and barns in which all wheat procured by the state had to be stored.¹⁸¹ Blumberg Grain finally installed ninety-three steel storage sheds with a total capacity of 744,000 tons in time for the 2016 harvest—a year late—but even these could not be brought into use because the ministry's Holding Company for Silos and Storage failed to provide them with electricity, in another example of bureaucratic pushback by other interest groups in the wheat sector.¹⁸² The MOD's decision to deal directly with Blumberg Grain in late July brought the behind-the-scenes struggle into the open. When Blumberg warned

that it would exit the Egyptian market unless second phase construction was brought under the supervision of the EAF Engineering Authority, the Ministry of Supply refused to continue the project.¹⁸³ Then supply minister Khaled Hanafi resigned abruptly a few weeks later, and was replaced in September by Mseilhi.¹⁸⁴

The EAF had won, partially. The government brought procurement prices for domestic wheat in line with imported wheat in January 2017, reducing the scope for profiteering from price differentials, but a final solution to the storage problem was deferred.¹⁸⁵ The EAF's Engineering Authority now had charge of determining storage solutions, along with the government's Agricultural Research Center and the MOMP, which was contracted in October 2017 to supply and maintain machinery and surveillance equipment at storage facilities.¹⁸⁶ Blumberg Grain finally completed the first phase of the project with the delivery of 105 silos in August, and announced it was moving into a second phase of building 300 modernized *shounas* at a cost of \$150 million, in a joint venture with the EAF Engineering Authority, which was at least partly funded by the Long Live Egypt Fund.¹⁸⁷ But Blumberg Grain and its U.S. subcontractors revealed in August 2018 that the Egyptian government had failed to make contract payments over the previous twenty-two months and had yet to reimburse the costs of air-freighting three buildings and systems to Egypt in 2015. Worse, they claimed that Egyptian government officials had "illegally provided their design and engineering documents to companies from other countries," including Russia.¹⁸⁸

Multiplying Supply Crises

The wheat crisis revealed the MOD's growing assertiveness in economic affairs, but also that it remained constrained by other powerful bureaucratic and private interests. Whether its main intention was to muscle in on a lucrative sector or to resolve a critical flaw in public supply and finances, intervention also offered it a commercial advantage.¹⁸⁹ The health sector, conversely, demonstrates the result of convergence between the military and civilian counterparts, albeit mixing the goal of resolving a supply problem and achieving savings with attaining commercial gain.

As Egypt researcher Ayman Emam has detailed, the MOD won the exclusive right from the Ministry of Health in 2016 to procure medical supplies—including imports—on behalf of the government in what was known as the "Berlin deals."¹⁹⁰ This may have built on Presidential Decree 82 of 2013 that relieved the ministry completely of observing the previous thresholds for contracts awarded by direct order when purchasing medical supplies of a "strategic nature," which were taken to include vaccines, intravenous drips, medications, and even baby formula. Originating in a trade negotiation involving various commercial suppliers held in the German capital in 2015, the Berlin deals gave rise to a Unified Procurement Committee headed by an EAF major general and including several others, which expanded its remit from catering to military medical facilities to the public health system a year later. Making the MOD especially attractive as a middleman is the exemption

of its imports from customs duties and its ability to clear or circumvent government red tape. Its power to award contracts by direct order offers an additional advantage by enabling health agencies to expedite spending down their remaining budgets at the end of the fiscal year—contracts that can no longer be challenged by third parties under legislation passed in 2014.

The military's formal entry into the civilian health sector was spearheaded by responding to yet another supply crisis, this time of baby formula. On September 20, 2015, the state-owned Egyptian Company for Trade in Pharmaceuticals took out a paid newspaper ad to complain that the Ministry of Health had transferred its license to import and distribute medicines to a "sovereign body," and appealed to Sisi to step in to protect the jobs of its 5,000 employees. The MOD confirmed it had replaced the company in response to price-gouging by private dealers, and announced the resumption of baby formula sales at half the recent price.¹⁹¹ Assar next stated that the military would produce formula locally, but instead it merely took over importing it. Critics noted that it could still make a profit despite selling at a discount as it did not pay customs duties on imports, and claimed that the Ministry of Health had stopped open bidding for baby formula import licenses, effectively granting the MOD a monopoly for the whole market. Whatever the truth of these claims, baby formula was being sold at a 28 percent markup by February 2019, at which time it was being marketed under the label of the Long Live Egypt Fund.¹⁹²

The MOD expanded its involvement in medical imports and production rapidly over the following year as various media and officials sensationalized alleged shortages of medical supplies as further crises. The first of these followed a report by a regime-affiliated media outlet in January 2016 that accused private sector "mafias" and "emperors" of inflating the price of stents used in heart surgery and "suitcase traders" of importing low-quality stents that often proved defective.¹⁹³ This was a prelude for the announcement in June by the EAF that it would unify procurement of stents, valves, and catheters in a single international auction, displacing the three firms alleged to control the entire market and supplying all public hospitals at significantly reduced cost in the new financial year starting on July 1.¹⁹⁴ On August 26, the assistant for financial affairs to the minister of health, a retired EAF major general, confirmed that all imports of medical supplies and equipment would henceforth be undertaken by the EAF Medical Services Department and the national armaments authority alone, and that this would pass 50 percent savings on to local clients and patients.¹⁹⁵

The trend continued with the announcement in October by the Holding Company for Drips and Vaccines that it had signed an EP140 million contract with the MOMP and the Arab Company for Drug Industry and Medical Appliances to produce medical solvents. Despite claiming this was aimed at filling a shortfall in domestic supply, it announced that it would also export them.¹⁹⁶ At the same time, Sisi instructed the EAF to produce blood derivative drugs used to treat cancer and liver disease by intravenous infusion on behalf of the Egyptian Company for Blood Transport Services, again due to a supposed shortage in the

Egyptian market.¹⁹⁷ According to an anonymous member of the Chamber of Engineering Industries, the MOD was even importing cotton wool for hospitals. Whether in response to the supposed crisis in medical supplies or to enter a profitable sector, the National Authority for Military Production sought government permission to establish the Egyptian National Company for Pharmaceuticals as a public limited company in January 2017.¹⁹⁸

The MOD's pursuit of a major stake in lucrative sectors such as mobile telephony and internet service provision after 2013 indicated it was also actively going after "low-hanging fruit."

In the meantime, the MOD Medical Services Department won a growing number of exclusive contracts from state-run universities to supply their needs, and by September 2016 had increased the number of military hospitals and clinics serving the general public by 50 percent, from thirty in 2013 to forty-five, reportedly providing healthcare to 500,000 people.¹⁹⁹ The EAF Engineering Authority also claimed that it had been contracted to build nearly forty

civilian hospitals and medical centers across Egypt in 2013–2015, that it had built five new hospitals and upgraded three, and that it had started work on an additional fifty-four medical facilities in Upper Egypt in 2018.²⁰⁰

Military agencies have competed to enter this lucrative field. The NSPO has marketed medical and maintenance services aggressively, and also offered financing arrangements, for commissions ranging from 8 to 15 percent.²⁰¹ In July 2017, for example, it won contracts to provide comprehensive service packages for hospitals worth \$600 million for the Arab Investors Union and to build a specialist hospital from Benha University.²⁰² The MOMP also joined, receiving a contract to oversee construction of three hospitals for the lawyers' association in October 2018.²⁰³ Two months later, the General Authority for Social Insurance contracted with the EAF's Medical Services Department to allow its members to receive healthcare at any military hospital.²⁰⁴ And in February 2019, the MOMP approached Emirati investors with a plan to set up a medical waste disposal plant.²⁰⁵

REACHING FOR LOW-HANGING FRUIT

These interventions in import and domestic supply chains inevitably generated complaints that the military was crowding out the private sector. In some instances, reliance on military agencies seemed unavoidable given the deepening decrepitude of state institutions and incompetence or corruption (or both) of the civilian bureaucracy. But the MOD's pursuit of a major stake in lucrative sectors such as mobile telephony and internet service provision after 2013 indicated it was also actively going after "low-hanging fruit," as an industry insider termed it.²⁰⁶ Predictably, this is presented in the name of national security, but along

with the expanding role of military actors in the religious sector—real estate endowments, organizing pilgrimage, and related tourism—it similarly mixes the drive to generate revenue at Sisi's behest with commercial opportunism.

The Mobile Market

For many years, the MOD's known involvement in telecommunications was limited to membership of the board of directors of Egypt Telecom, which was converted into a joint stock company in 1998, replacing the Arabic Republic of Egypt National Telecommunications Organization. Egypt Telecom retained its monopoly on fixed-line telephones, but two (later three) private sector firms held the mobile market.²⁰⁷ Starting then, if not earlier, every incoming chief of staff of the EAF Signal Corps automatically joined the board of Egypt Telecom. EAF retirees have additionally sat on the board or held other senior posts in the company.²⁰⁸ With that exception, however, *Financial Times* journalists Charles Clover and Roula Khalaf were correct in stating in 2011 that "the military has no presence in some of the commanding heights of the Egyptian economy, such as telecoms or oil and natural gas."²⁰⁹

This held true until the 2013 military takeover, but the MOD then made a direct bid to assume this commanding height. In October 2014, then minister of communications and information technology Atef Helmy confirmed that the MOD would play a central part in forming a National Company for Communications Infrastructure, along with other state agencies and communications operators. He denied that the MOD would have a controlling stake, but this was later publicly reversed by Gamal el-Sadat, CEO of mobile operator Etisalat Egypt.²¹⁰ A press report at the time set the MOD's share at EP255 million, or 51 percent of a total startup capital of EP500 million (approximately \$70 million at the time). An EAF major general would head the company board, which would additionally include representatives of the Ministry of Interior and individual security agencies, and military companies would lay fiber optic cables nationwide, over which the MOD would have oversight and monitoring rights.²¹¹ Under the new structure, the three existing mobile companies (Orange, Vodafone, and Etisalat) would end their rental contracts with Egypt Telecom worth EP1 billion annually, and instead pay EP300 million each to the new infrastructure company.²¹²

In May 2015, the Ministries of Defense, Communications and Information Technology, Finance, Electricity, and Transport were reported to be finalizing plans to invest EP3.8 billion in the venture, which one study estimated would generate overall revenue of EP30 billion over fifteen years.²¹³ Egypt Telecom had already objected to the scheme in mid-2014, in part because it sought to enter the market as a mobile operator.²¹⁴ Resistance from various quarters built up amid unconfirmed reports that the MOD was demanding 60 percent of the proposed company's capital.²¹⁵ In June 2015, the Ministry of Communications and Information Technology pulled out, announcing that Egypt Telecom would instead rent out its infrastructure (at a discount) and receive a 4G mobile license of its own.

This presented a commercial opportunity for the MOD. In order to become an operator, Egypt Telecom would have had to sell its 45 percent stake in Vodafone Egypt; according to one well-placed industry insider the intended buyer was the MOD, potentially making it a partner of Vodafone UK, which held the remaining 55 percent share.²¹⁶ But its competitors objected strenuously. In August 2016, the government allowed Egypt Telecom to set up its own mobile company without first divesting from Vodafone Egypt, promising to resolve the potential conflict of interest in the future.²¹⁷ The MOD is not known to have acquired shares, but it retained the power to determine the 4G frequencies to be given out to mobile operators.²¹⁸

Making Religion Pay

Where formal military economic actors lead, the officers' republic follows. But in contrast to the communications or media markets, which require major institutional investments, EAF retirees have sought commercial opportunity in the religious sector, which offers more modest, but dependable, returns. This is enabled by their penetration of transport authorities and hubs, especially in strategic zones through which tourism and pilgrimage routes pass, and of government tourism authorities and companies. Field research confirms that government rest houses used by Muslim pilgrims en route to Mecca are run by EAF officers. So, too, are ports such as Hurdaga, which is the point of departure for many of Egypt's "labor pilgrims," workers who obtain a combined pilgrimage and three-month work visa to Saudi Arabia.²¹⁹

Military agencies have also become formally involved in the religious sector. Starting in 2017, the government took control of all pilgrimage visas issued in Egypt, and then assigned the EAF to manage the lottery through which the visas are awarded. The AOI has tapped into the religious tourism market by providing equipped tents for Christian pilgrims taking the Ministry of Tourism's "Flight Into Egypt" trail, which follows the journey made by the holy family's flight from Sinai to Asyut in Upper Egypt.²²⁰ Only accredited tourist agencies may organize pilgrimages, enabling the EAF retirees who head the General Authority for Tourism and several public sector tourism companies to steer contracts in their direction.

The greater financial opportunity, however, lies in religious endowments (*awqaf*). Retired EAF officers head the General Authority for Religious Endowments, which manages urban real estate, farmland, and commercial enterprises estimated to be worth EP70 billion (\$3.9–\$4.6 billion) in 2016.²²¹ (The general authority nominally comes under the Ministry for Religious Endowments, but is effectively autonomous thanks to the influence of the EAF retirees heading it.) As part of Sisi's drive to increase state revenue, which one expert optimistically claimed could be taken to EP10–EP15 billion annually, he assigned the EAF Engineering Authority to join a new committee tasked with inventorying and recovering endowment assets and increasing their economic return. In what has become a familiar pattern, the MOMP next stepped in, concluding a formal agreement with the Ministry of

Religious Endowments to help it upgrade its assets and investments, improve efficiency in its ventures, and train its personnel in June 2018.²²²

Military involvement is equally long-standing in the closely related sectors of culture and education—especially in relation to historical buildings and antiquities. Political scientist Robert Springborg, who worked in Egypt in the 1970s, notes that the military, security, and presidency all had “at least indirect pecuniary interests in preserving the nation’s cultural heritage, typically in the form of competing companies controlled by their colleagues or favourites.”²²³ Decades later, researchers Jeremy Hodge and Nizar Manek observed that the Supreme Council of Antiquities, which hired at least eighty-eight retired major generals under Mubarak, was notorious for awarding contracts at inflated values to military-affiliated companies. The focus on prime government-owned real estate is mirrored in the education sector where, as in the cases of tourism and religious endowments, EAF retirees have continuously headed the General Authority for Education Buildings.²²⁴

MILITARY INTEREST GROUPS

The award of commercial franchises to multiple military (and security) agencies serves Sisi’s main purposes of securing their political buy-in and attempting to solve Egypt’s massive economic problems. But his approach has the paradoxical consequences of enabling and legitimizing the narrow pursuit of profits by interest groups within these sectors, strengthening them while further impeding the development of unified, coherent responses by the institutions to which they belong. These interests have evolved since 2013, but they often overlap or at least do not come into direct conflict so long as the commercial and economic opportunities continue to expand.

Sisi’s dependency on governing coalition partners extends even to relations with the EAF. As analyst Marina Ottaway noted, for example, the start of construction of the new administrative capital was delayed by the MOD’s refusal to cede land for free, because its “interest in maximizing returns from the land it controlled trumped al-Sisi’s interest in seeing the new capital built, suggesting al-Sisi does not have total control over the military’s affairs.”²²⁵ He has the means to manipulate the various military interest groups and play them off against each other, but must also award them economic resources and opportunities. This most directly affects formal military agencies, but also extends indirectly to the advantage of competing officer networks.

Duplication

Competition among formal military agencies has so far mainly taken the form of inefficient duplication of specific economic activities. This became especially visible in May 2015, when the MOMP established its own contracting and construction conglomerate,

MP for Engineering Projects, Consultancy, and Public Procurement. The new company is supposed to undertake projects on behalf of the EAF and civilian and commercial customers in a wide range of fields: urban development, housing, real estate investment, sports facilities, schools, hospitals, factories, hotels and tourist resorts, and public relations and advertising.²²⁶ Launched with startup capital of EP100 million (then \$13.1 million) and completely owned by the National Authority for Military Production, MP was moreover authorized to enter into mergers, acquisition, and partnerships with domestic and foreign companies.²²⁷ The MOMP had previously undertaken projects of the same kinds as those by various EAF departments or the NSPO, such as its contracts in 2011–2012 to develop sanitation and a wholesale market in Giza.²²⁸ But MP duplicated a broader range of activities than the MOMP had previously, with the ambition to do so on a much larger scale; indeed Assar claimed it had racked up EP15 billion worth of contracts by June 2019.²²⁹ Indeed, with such a premium on contracting, even the MOD's General Services Agency, which normally runs military commissaries, has taken on construction contracts despite being a minor economic actor and lacking relevant capacity.

Much the same kind of duplication has emerged in other fields. In 2016, for example, the NSPO established the National Company for Protective Agriculture to expand greenhouse cultivation in cooperation with Spanish and Chinese companies. But the AOI and MOMP have also launched similar ventures of their own, working with South Korean, Dutch, and Belarusian partners. Since 2016 the NSPO has also established a new subsidiary for petroleum exploration and development (a field in which numerous state companies already operate), a second for mining and mineral extraction (parallel to the MOD's own Mining Sector), and an elevator company (parallel to the elevator company formed jointly by the MOMP and a Saudi firm). Similarly, the NSPO reported that it had supplied pharmacies with 23 million units of baby formula in response to the sudden shortage in 2017, even though the MOMP had already announced it was taking measures to meet the need through imports or taking on production itself.²³⁰

These military agencies are responding in similar ways to common circumstances: they all seek entry to economic sectors that offer secure returns, and pursue foreign partnerships as a source of know-how and capital. They moreover situate their behavior in both instances within Sisi's agenda of increasing income and cementing political alliances with foreign countries. But they do so separately from each other, as private businesses competing in an open market would do, suggesting that they perceive their interests as distinct rather than mutual and revealing the poor integration of this sector of the military economy. As significantly, the marked political empowerment of the military since 2013 has enabled both formal and informal military actors to displace rival agencies and networks, including those affiliated to the GID. Hosni and Sayyad claimed in early 2017, for example, that the MOMP was replacing two GID companies that previously had exclusive contracts for supplying public hospitals, in favor of its own new pharmaceutical company and of other

companies with informal military affiliations—including one run by the brother-in-law of retired Admiral Mohab Mamish, head of the Suez Canal Authority.²³¹

The same is true of other sectors such as food supply to civilian markets, which has increased in direct response to Sisi's political directives. The sale of bread, meat, poultry, and other commodities through the MOD's network of bakeries, butchers and slaughterhouses, and outlets of its Sun supermarket chain has already been described. But the NSPO also expanded its own sales capacity by 400 percent in 2016, and announced that it was doing its bit to combat inflation by providing 250 tons of meat and commodities daily at reduced prices through 700 outlets nationwide.²³² The NSPO director general later claimed that it had provided local markets in 2017 with 300,000 tons of meat, poultry, cooking oil, and other consumables (possibly including imports) through its own and Ministry of Supply outlets, as well as 210,000 tons of locally grown wheat.²³³

The GID reportedly also used its trading companies to increase food supply to markets, as did the Ministry of Interior, which in late 2015 started selling meat, poultry, pulses, and the like through its own newly established outlets (labeled Aman)—starting with 120 and building up to a claimed 1,000 by mid-2018.²³⁴

The absence of firm rules means that conflicts of interest are often resolved through direct contestation.

Behind each of these supply chains lay the separate procurement agencies or companies of each agency or ministry, raising the possibility that each was competing for market share while purportedly pursuing the president's political objective. But even if competition was not a primary factor, the fact that a significant portion of the food sold by these various agencies consisted of cheap imports raises serious doubts about the economic sense and financial sustainability of their approach. As one commentator observed in an op-ed sarcastically titled "The Security Authorities' Potatoes," it could neither guarantee that prices would stay low nor provide more than passing relief for low-income families in the absence of a comprehensive system to monitor markets and coordinate production.²³⁵

Clash of Networks

The absence of firm rules means that conflicts of interest are often resolved through direct contestation. This has been especially evident in the responses by both EAF retiree networks and well-connected civilian lobbies based in the state bureaucracy who pushed back when military agencies aggressively moved into import and supply markets, threatening to dislodge them. At the same time, the military has been the main beneficiary of the dissolution of the crony networks tied to Mubarak until 2011; the general reconfiguration of networks of privilege within the civilian bureaucracy has enabled the military to displace, if not altogether eclipse, powerful competitors such as the GID, which has been compelled

to cede ground across the board, including in the all-important oil and gas sectors that had previously been an almost exclusive GID domain.

An intense dispute affecting wheat supply in late 2015 demonstrates the dynamic. The central state buyer of wheat, the General Authority for Supply Commodities, changed the allowable level of the common fungus ergot in imported wheat to zero, rather than the global phytosanitary standard of 0.05 percent. This was a classic case of using quality controls as a nontariff barrier to direct markets toward narrowly targeted enterprises or away from their competitors.²³⁶ It disrupted imports from France and Canada, but more serious was the suspension of a huge deal to import 6 million tons of Russian wheat, straining diplomatic relations and prompting a (short-lived) Russian ban on importing Egyptian citrus in September 2016.²³⁷ One of the largest affected shipments was eventually sent back to Russia after sitting in Damietta Port for two months, according to researcher Shana Marshall. The shipment had belonged to Medsoft, an energetic privately owned company whose expansion into river transport made it a competitor to military-affiliated interests in the sector.²³⁸

The accelerating expansion of the military economy since 2013 reveals greater levels of strategic planning, direction, and coordination within the military economy.

Notably, the board of the General Authority for Supply Commodities included several EAF retirees who headed the General Company for Silos and Storage; Holding Company for Food Industries, Mills, and Threshers; Holding Company for Food Industry; and Holding Company for Ground and Maritime Transport.²³⁹ The dismissal of the head of

the General Authority for Supply Commodities in March 2016 and then of his successor in January 2017 reinforced the common perception that rivalry between powerful traders and bureaucrats was driving the wheat crisis.²⁴⁰

In January the government also transferred most of the responsibility for inspecting wheat and other agricultural imports to the General Organization for Exports and Imports Control, which has been headed continuously by EAF retirees since at least 2005.²⁴¹ The dispute then moved to the state's administrative court, which restored the jurisdiction of the General Authority for Supply Commodities in mid-June 2017.²⁴² Further reshuffles in the sector saw the departure of the heads of boards of ten subsidiaries of the Holding Company for Food Industries in March–April 2018—mostly connected with mills and bakeries—followed closely by the arrest of the retired EAF major general heading the company and several senior officials on corruption charges in May.²⁴³

Hosni and Sayyad explained the entire episode as an instance of competition between rival import “mafias” associated with the EAF on the one hand, or with the GID, three import

companies fronting for it, and allied state bureaucrats on the other hand. These rivalries moreover played out visibly in the People's Assembly, as the launch of a parliamentary investigation into the wheat crisis in July 2016 demonstrated. Virtually all members of parliament elected in late 2015 were government loyalists, but as investigative reporter and human rights activist Hossam Bahgat has chronicled, various interest groups coalesced around competing factions backed on one side by the National Security Agency, which comes under the Ministry of Interior, and on the other by the General Intelligence Directorate and Military Intelligence.²⁴⁴

CONCLUSION: HEATING UP

The accelerating expansion of the military economy since 2013 reveals greater levels of strategic planning, direction, and coordination within the military economy. This is evident in the choice of economic sectors and geographic regions to invest in and, albeit to a lesser extent, in the differentiated approach to partnering with big, medium, and small private sector enterprises. But that does not mean that these expansion and investment decisions make good economic sense or are compatible with each other. As importantly, with expansion has come a redoubling of predatory and rentier behavior, and with it new forms of competition and displacement that are disrupting the informal arrangements and understandings that previously regulated the distribution of income-making sinecures. These trends are overheating the military economy and starting to crowd the private sector more directly, increasing friction and transaction costs. As importantly, they signal incipient, strategic shifts within the governing coalition and the wider political economy of Egypt.

Mapping the military's economic activity since 2013 shows that its extent, patterns, and financial returns vary considerably from one sector to another. The military clearly derives the main part by far of its income from its control of land and from public contracts, where it has very considerable leverage—and where the private sector is most held hostage. Access to this captive market compensates for the military's weakness in most areas of manufacturing, where it has proven unable to overcome its inability to add value and cannot compete with the private sector in any genuinely open market. But its ability to assert an overt role in external trade, whether as supplier or as broker, bears on private competitors in other, no less significant ways. And since 2016 it has also been expanding from its traditional focus on largely nontradable goods to include tradables in protected sectors related to its public works such as cement and steel, with the private sector bearing the brunt of market disruption.

The military is also visibly positioning itself to gain a significant share of the production and sale of natural resources, even though this, too, must be shared with private companies (both domestic and foreign) that retain leverage and market share through their command of needed technology and access to export markets. The presence of important foreign

companies in lucrative sectors such as mobile telephony compels the military to be circumspect, but it already appears to compensate by extracting income from the domestic companies entering these and other sectors.

These variations reflect differing opportunity structures and costs and shape competition between interest groups, military and otherwise. The manner in which both formal and informal military actors have responded since 2013 is reinforcing tendencies to siloing and fragmentation in the economy, and contributing to increasingly divergent outcomes for market participants. What enables all this is a combination of the “delegative authoritarianism” constructed by the Sisi administration—in which participants in the governing coalition are constrained only by power balances between them, with minimal constitutional or legal limitations—and the permissive, when not actively supportive, attitude of foreign governments and international agencies eager to respond to the message tirelessly repeated by the Sisi administration that Egypt is “open for business.”

The military is on a trajectory that, if left unchecked, will institutionalize its involvement in the civilian economy, transforming the senior officer corps from being merely a special interest group (albeit a large and powerful one) into a market-setter, if not a policymaker. But because it functions through a mix of old-fashioned étatist notions about the economy and crony public-private partnerships, on one hand, and on the other hand wields the power to disregard market dynamics and signals (except when needed to accommodate contending members of the governing coalition and state bureaucracy), its more likely impact will be to impart a greater sense of inconsistency and unpredictability to the course of the Egyptian economy.

NOTES

- 1 This is the thrust of several studies by Zeinab Abul-Magd, for example *Militarizing the Nation: The Army, Business, and Revolution in Egypt* (New York City: Columbia University Press, 2018). Mohamed Hosni and Osama as-Sayyad in their series of articles titled “Gold-Digging Generals” published by *Noon Post* in January and February 2017.
- 2 Abdel-Fattah Barayez, “More Than Money on Their Minds: The Generals and the Economy in Egypt,” *Jadaliyya*, July 2, 2015, <http://bit.ly/2kLtC8X>.
- 3 “Sisi to ‘the Evil Powers’: I Am Fearless...and We Are Not in a True State,” CNN, June 5, 2016, <https://cnn.it/2mslwBp>.
- 4 Robert Springborg, *Egypt* (Cambridge, UK: Polity Press, 2018), 20–21.
- 5 Mohamed al-Jali, “Sisi Instructs Upgrade of Suez Canal to Enhance Its Capabilities and Revenue,” *Yom7*, November 14, 2018, <http://bit.ly/2kWD1dB>.
- 6 Nasr was deemed to be the most senior officer handling the military’s economic interests in Heba Saleh, “Egyptian Army’s Role Expands as It Gives Land for Homes,” *Financial Times*, March 23, 2014, <https://on.ft.com/2msN8HP>.
- 7 “Sisi to ‘the Evil Powers,’” CNN, June 5, 2016, <https://cnn.it/2mslwBp>. Madbouly’s statement cited in Hind Mokhtar, Mohsen al-Bediwi, and Mohamed al-Sharqawi, “Prime Minister During the Inauguration of Several Service Projects: We Accomplished 8,278 Projects,” *Yom7*, December 15, 2018, <http://bit.ly/2mjPyYW>. Curiously, an official statement from the Cabinet Office posted on November 15, 2018, gave the higher total value of EP1.6 trillion for a smaller number of 7,777 projects completed in 2014–2018. “Infographic on National Projects Between 2014 and 2018,” Official Facebook Page, Egyptian Cabinet, November 15, 2018, <http://bit.ly/2kpGJME>.
- 8 John Waterbury applied the term “edifice complex” coined by Ichman to Nasser and Aziz Sidqi, prime minister in 1972–1973, who was nicknamed the “father of Egyptian industry.” John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 81.
- 9 Heba Mahmoud al-Baz, “Measuring the Efficiency of Public Spending in Egypt and Proposals for Raising It,” National Planning Institute, December 2014, Table 2, 43, <https://bit.ly/2WIWuTB>. The State General Budget official website, accessed January 1, 2019, <https://bit.ly/2MQmVxn>. For 2013–2014, Kamal Amin al-Wassal, *The Egyptian Economy Between Hammer and Anvil: The Crises of Public Debt and Deficit in the General Budget, the Search for an Exit* (Cairo: Dar Ibn Rushd), 129. For 2014–2015 (U.S. dollar values from source), “Egypt Addresses Major Transport Infrastructure Projects,” Oxford Business Group, 2016, <https://bit.ly/2MU3Lqs>. For 2015–2016, Mohamed Ali, “Egypt Fortifies Itself Through Government Investment to Compensate for Private Sector Contraction,” *al-Ain al-Akhbariyyah*, June 16, 2016, <https://bit.ly/366mXsJ>.
- 10 “Suez Canal Authority to Borrow US\$450 mn in Short-Term Loan,” *Mada Masr*, March 16, 2015, <http://bit.ly/2kWDpZA>. The Egyptian government hired one-third of the worldwide inventory of dredgers in order to complete on time. This included a similar proportion of dredgers owned by the UAE, which was heavily invested in the political and financial stability of the Sisi administration. According to a contractor and to a foreign adviser. Anonymized interview.
- 11 “Suez Canal Authority to Borrow US\$450 mn in Short-Term Loan,” *Mada Masr*. On number of purchasers of bonds, “Four Banks Commence Repaying Dues of Suez Canal Certificates Tomorrow,” *al-Masry al-Youm*, September 4, 2019, <http://bit.ly/2kpHnK4>.

- 12 Prediction of income from the Suez Canal Authority website, which boasted that this increase of 259 percent in annual revenue “shall positively contribute to Egypt’s national income of hard currencies. “New Suez Canal,” Suez Canal Authority official website, <http://bit.ly/2kKCNGG>. Accessed on March 3, 2019.
- 13 Tamer Hafez, “In Depth: Choppy Waters for New Suez Canal,” *Business Monthly*, American Chamber of Commerce in Egypt, July 2016, <http://bit.ly/2msKGkv>.
- 14 ‘Afaf ‘Ammar, “Suez Canal [Authority] Reaches Agreement With [Ministry of] Finance to Settle Its Dues to Creditor Banks,” *Shorouk News*, March 24, 2019, <http://bit.ly/2ms5nNq>.
- 15 According to FEB President Hisham Ezz El Arab, cited in Abdel-Razeq Al-Shuweikhi, “Banks Spent EP 1bn for Social Development Over Past 3 Years: FEB Chairman,” *Daily News Egypt*, September 23, 2014, <http://bit.ly/2kKsvX7>.
- 16 Ayah Aman, “Questions Remain on Egypt’s Suez Canal Project,” *Al-Monitor*, August 26, 2014, <http://bit.ly/2m4OM1M>. On the relationship between Dar Egypt and the EAF, Shana Marshall, “The Egyptian Armed Forces and the Remaking of an Economic Empire,” Carnegie Middle East Center, April 2015, 15, <http://bit.ly/2kWOxWp>.
- 17 Claim made by Hosni and Sayyad in “Gold-Digging Generals (Part 9): National Projects,” *Noon Post*, January 29, 2017, <http://bit.ly/2m3Ts8s>.
- 18 Speaking to MBC Egypt TV, “Mamish: Morsi Requested the Seizure of the Army’s Land in the Suez Canal Region Development Project,” *al-Borsa*, September 8, 2014, <http://bit.ly/2mkIxaj>.
- 19 “Egypt Reaches \$8.5 bln Funding Goal for Suez Canal Expansion: Official,” Reuters, September 16, 2014, <http://bit.ly/2mp6VaR>.
- 20 Mohamed al-Bahrawi, “Mamish: The Army Objected to the Suez Canal Axis to Maintain National Security (Part 2),” *al-Masry al-Youm*, August 12, 2013, <http://bit.ly/2kWEIYu>.
- 21 “Army Starts Constructing Highway Between East Port Said and Sukhna Ports,” *Egypt Independent*, August 17, 2015, <http://bit.ly/2kpIDNi>.
- 22 According to the head of the EAF Engineering Authority Major General Kamel el-Wazir, cited in “Engineering Authority: Commencement of the East Port Said Zone Project Within Days,” *al-Abram*, November 27, 2015, <http://bit.ly/2krRUEB>.
- 23 “President Sisi Establishes Economic Zone Around Egypt’s Suez Canal: MENA,” Reuters, August 12, 2015, <https://reut.rs/2kuT7Lu>.
- 24 Cited in Fatimah Nash’at, “Mohab Mamish: \$30 Billion Total Investments in Canal Economic Zone,” *al-Watan*, December 23, 2018, <http://bit.ly/2lWS6w1>.
- 25 For details of Egyptian QIZs and a map of their location, the official website at <https://bit.ly/2BMGmAU>.
- 26 Hind Mokhtar, “Mabdouly to Suez Canal Affiliates: We Will Not Allow Loss of Any Company,” *Youm7*, July 29, 2019, <http://bit.ly/2m5V3KA>.
- 27 Tamer Hafez, “Awaiting the Promise of the Suez Canal Zone,” *Business Monthly*, American Chamber of Commerce in Egypt, May 2017, <http://bit.ly/2krePzR>; and Hafez, “In Depth: Choppy Waters for New Suez Canal.”
- 28 Later estimate from Mamish, cited in Sara Aggour, “Mamish: 31 Investment Requests Submitted to Suez Canal Authority,” *Daily News Egypt*, October 19, 2015, <http://bit.ly/2kVke2u>.
- 29 Hamada Ismail, Mohamed Darwish and Badawi Shalaby, “Administrative Control Authority and the Army Are Assigned to Review the Sanitation Projects Before Their Delivery Worries the Contractors,” *al-Borsa News*, November 8, 2015, <http://bit.ly/2kKvSgJ>.

- 30 Ahmed Farahat, "Administrative Monitoring Authority: We Have Completed Reviewing 1,705 Projects Costing EP285 Billion," *al-Borsa*, May 23, 2017, <http://bit.ly/2knm0sO>.
- 31 "Administrative Monitoring Authority: The Authority's Committees Followed Up on the Phases of the National Projects," *Tahrir News*, January 8, 2018, <http://bit.ly/2kTTRtJ>.
- 32 Tahani Ibrahim, "Major General Mohamed Omar Heibah, Chairman of the Administrative Monitoring Authority, in an Important Interview," *Akhbar al-Youm*, September 21, 2012, reposted in *Masress*, <http://bit.ly/2kTZKHe>. His later statement cited in Samir Hosni, "Talk Shows: Chairman of the Administrative Monitoring Authority: Beltagy Visited the Authority Only Once," *Youm7*, May 3, 2017, <http://bit.ly/2m17zLw>.
- 33 Denial from Mahmoud Rizk, quoted in "Egypt Stocks Boosted by Suez Canal Megaproject News," *Abram Online*, August 14, 2014, <http://bit.ly/2kWHuWt>. On EAF supervision, Mohamed al-Galy, Abdelwahab al-Gendy, Ahmed Abdelrahman, Rofaida Awadein, and Mohsen al-Bediwi, "Sisi Launches Suez Canal Project," *Youm7*, August 5, 2014, <http://bit.ly/2kHT1Al>.
- 34 Unnamed government sources claimed that Darwish had favored foreign companies over Egyptian ones in awarding contracts. Mohamed al-Saadai, Mahmoud al-Gamal and Mohamed al-Daeda, "AMA's Report Leads to the Removal of Darwish From the Canal Economic Region," *el-Watan*, May 2, 2017, <http://bit.ly/2lXWv1V>.
- 35 Sahar Zahran, "Formation of the Suez Canal Zone's Board of Directors," *al-Abram*, December 16, 2015, <http://bit.ly/2m17Qy2>.
- 36 Appointment of Mamish reported in Ahmed Samy Metwaly, "Mamish Appointed Head of the Suez Canal Zone," *al-Abram*, May 1, 2017, <http://bit.ly/2kUluMt>. On composition of the board of directors, Abdel-Rahim Abu Shameh, "Suez Canal Zone Board of Directors Reshuffled," *al-Wafd*, December 18, 2018, <http://bit.ly/2kKAmUA>.
The "smart city" label is presented on the official website, accessed through Wayback Machine, <http://bit.ly/2kuMpVR>. Captured on April 25, 2018. And, "Egypt's New Capital City Revealed," *Egyptian Streets*, March 13, 2015, <http://bit.ly/2m18nQy>. For details of the project, "Egypt Unveils Plans to Build New Capital East of Cairo," BBC, March 13, 2015, <https://bbc.in/2krFwEC>. Transfer of state agencies confirmed by Major General Mohamed Abdul-Latif, head of the new Administrative Capital Company that was established to undertake the project. Cited in Amer Mostafa, "Head of the New Administrative Capital Company: Transfer of Some Ministries to the New Capital Will Be Delayed," *Youm7*, August 19, 2016, <http://bit.ly/2kwVFc4>.
- 37 Madbouly's statement cited in Ayman Hamza, "Minister of Housing: The New Administrative Capital Will Not Cost the State a Single Mellim," *al-Masry al-Youm*, September 29, 2014, <http://bit.ly/2m5WfO4>. Ayman Hamza, "New Urban Communities Authority Allocates 5 Billion Pounds for the Administrative Capital in the New Budget," *al-Masry al-Youm*, July 6, 2015, <http://bit.ly/2kHTzWV>. "Administrative Capital Borrows EP1 Billion," *al-Masreyyoon*, September 18, 2016, <http://bit.ly/2mns6dm>.
- 38 Madbouly cited in "Egypt Unveils Plans to Build New Capital East of Cairo," BBC. Salman cited in "Egypt Unveils Blueprints for New \$45bn Capital City," RT, March 16, 2015, <http://bit.ly/2mkN24H>. Abbar's estimate cited in "Reports Conflicting on the Financier of Egypt's New Capital," *Egypt Independent*, March 15, 2015, <http://bit.ly/2msahtO>.
- 39 Spokesperson Brigadier General Khaled al-Husseiny, cited in Marwa Hamdan, "Administrative Capital: EP140 Billion Is the Cost of Infrastructure and a Halt to New Sales of Land Till 2020," *al-Watan*, March 17, 2019, <http://bit.ly/2m1nSfT2>.

- 40 “Four Firms to Start on 1st Phase of Egyptian New Admin Capital Saturday: Housing Minister,” *Abram Online*, March 31, 2016, <http://bit.ly/2kKwG5f>.
- 41 According to a field research worker interviewed by the author. Anonymized interview.
- 42 “Construction of Egypt’s New Capital City Kicks Off,” *Egyptian Streets*, April 2, 2016, <http://bit.ly/2m4HWJG>; and “Establishment of Administrative Capital for Urban Development Company With 6 Billion Pounds Capital,” *al-Borsa*, May 9, 2016, <http://bit.ly/2kU2QuQ/>.
- 43 Egyptian economist interviewed by the author. Anonymized.
- 44 Confirmed by the spokesman for the project, Major General Khaled el-Husseiny, cited by Ruth Michaelson, “‘Cairo Has Started to Become Ugly’: Why Egypt Is Building a New Capital City,” *Guardian*, May 8, 2018, <http://bit.ly/2mmkVC9>.
- 45 Samy Maged and Ibrahim Ayyad, “The Design of Egypt’s New Capital Challenges Dubai,” *Masrawy*, March 14, 2015, <http://bit.ly/2krGl0a>.
- 46 Text of decree at <http://bit.ly/2kLA6oj>.
- 47 Husseiny cited in Michaelson, “‘Cairo Has Started to Become Ugly.’”
- 48 On board composition, “Establishment of Administrative Capital for Urban Development Company,” *al-Borsa*, May 9, 2016, <http://bit.ly/2mkNsbh>. On Abdel-Latif, Karim Sa’id, “Housing: Appointing Mohamed Abdel-Latif as Chairman of the Administrative Capital,” *al-Abram al-Iqtisadi*, July 13, 2016, <http://bit.ly/2kVmhnc>.
- 49 Text of decree at <http://bit.ly/2kWSuud8>.
- 50 According to minister of civil aviation Hossam Kamal, cited in “Egypt to Open Two Military Airports for Civil Flights,” *Abram Online*, May 17, 2015, <http://bit.ly/2kKC7RG>.
- 51 Hiba Hossam, “Zaki Abdin: 60 Embassies Requested Lands in the Administrative Capital, and a Smart City for the Ministry of Interior,” *Youm7*, December 9, 2018, <http://bit.ly/2lZbEju>.
- 52 Madbouly cited in Mahmoud Mohamed, “Madbouly: Comprehensive Plan to Turn North Coast Into Integrated Residential Complexes,” *Iskan Misr*, May 12, 2015, accessed through Wayback Machine, captured on August 25, 2017, <http://bit.ly/2kKM8hI>; and Fathia al-Dakhakhni, “New Alamein City Prepares to Receive Visitors Next Summer,” *al-Sharq al-Awsat*, February 13, 2019, <http://bit.ly/2m5ZSUc>.
- 53 Madbouly on population target, cited in “An Opera House, a Museum and a University, 11 Messages From Madbouly,” *Masrawy*, July 24, 2019, <http://bit.ly/2kWMoKj>. On using New Alamein as a second capital, Madbouly cited in “The Prime Minister: New Alamein City Will Become the Second Capital of the State in the Future,” *al-Gomhouria*, July 24, 2019, <http://bit.ly/2kWWdHL>.
- 54 “Minister of Housing: New Alamein Is the Kick Off of Western North Coast Development,” New Urban Communities Authority, October 25, 2014, <http://bit.ly/2krk9mP>.
- 55 On UN-Habitat assistance, “Egypt Documents: Al-Alamein New City,” UN-Habitat, n.d., <http://bit.ly/2kWLLjU>. On UNDP and EU funding, “EU, UNDP and GoE Work Together Towards Mine Clearance and Development,” press release, European Union External Action Service delegation in Egypt, October 23, 2017, <http://bit.ly/2mr3TD5>.
- 56 Madbouly cited in Abdel-Monem Shaaban, “In Detail: Map of Developmental Projects in Sinai,” *Rose al-Youssef*, December 2, 2017, accessed through Wayback Machine, captured on October 23, 2018, <http://bit.ly/2m4OtUI>.
- 57 Details from “Everything You Need to Know About the New Mansoura City,” *Property Finder*, March 25, 2019, <http://bit.ly/2mnw7hW>; and “Twenty Features of New Mansoura City,” *Egypt Today*, August 12, 2017, <http://bit.ly/2kVr5Jgy>.

- 58 Mohamed Salah, "al-Galalah Mountain, a Dream Being Achieved in Egypt," *al-Wafd*, November 21, 2016, <http://bit.ly/2m4Y91s>.
- 59 Ahmad Abu El Hassan Zarad, "The Mega National Projects, a Locomotive of Development," State Information Service, April 3, 2016, <http://bit.ly/2kLET9h>.
- 60 Dahlia Kholaiif, "Egypt's New City: More Questions Than Answers," *Daily News Egypt*, April 1, 2015, <http://bit.ly/2mr8PrE>.
- 61 Mohamed al-Galy, Hind Mokhtar, Mohamed Hossein, and Ahmed Marei, "We Publish the Main Features of the State Project to Reconstruct Bir el-Abd in North Sinai," *Yom7*, November 29, 2017, <http://bit.ly/2lY4fB1>.
- 62 Sisi decreed the establishment of the new city on November 6, 2014. Zarad, "The Mega National Projects."
- 63 "Announcement of the Largest Touristic Project in Alexandria," *Tahrir News*, February 26, 2017, <http://bit.ly/2mmsGbf>.
- 64 Details from Samah Hassan, "El-Sisi Directs Completion of Work at New El Alamein on Schedule," *el-Watan*, November 14, 2018, <http://bit.ly/2lX0BHR>. On the role of Tawasol, Egypt Property Show, Dubai World Trade Center, <http://bit.ly/2msZUpL>, accessed on September 20, 2019.
- 65 Quoted by Stephen Kalin, "Sisi's Economic Vision for Egypt: Back to the Future," Reuters, May 22, 2014, <https://reut.rs/2mk3Toe>.
- 66 Major General Isam al-Khouli, cited in Mohamed Shaalan and Ibrahim Hassan, "Head of the Armed Forces' Projects: We Supervise the Establishment of 6 International Universities in the Administrative Capital," *Yom7*, January 15, 2018, <http://bit.ly/2mkTw3x>.
- 67 Taher Mohamed, "Head of Armed Forces' Projects Directorate: 11 Colleges in King Salman University for 20,000 Students," *al-Watan*, January 15, 2018, <http://bit.ly/2kKQKEy>.
- 68 Heba Afify, "The International School of Egypt's Military," *Mada Masr*, September 15, 2016, <http://bit.ly/2kv4dQE>. Tuition fees cited range from kindergarten to secondary level. And a senior Egyptian political analyst and researcher. Anonymized interview.
- 69 "President Sisi Signs the Amendments on NUCA Establishment Law," *Shorouk News*, January 15, 2018, <http://bit.ly/2lX2q7f>.
- 70 Courts ruled that Mubarak's decree was void because it deemed Qursaya to be desert land, whereas in fact it was under cultivation and had moreover been declared a protectorate in 1998. The MOD had tried to argue that the Nile River banks constituted part of Egypt's coast and therefore lay within its legal remit. "Court Rules Military Should Leave Qursaya Island," *Mada Masr*, August 22, 2013, <http://bit.ly/2ksljMp>; and "Egypt: Forced Eviction by Military Leaves One Dead, Ongoing Military Trials a Challenge to Civilian Control," Human Rights Watch, November 21, 2012, <http://bit.ly/2mpjIKp>.
- 71 The Warraq island project was part of the Cairo 2050 urban transformation plan developed under Hosni Mubarak. Ruth Michaelson, "Island v Megacity: The Cairo Islanders Fighting Violent State Evictions," *Guardian*, July 21, 2017, <http://bit.ly/2kUaNQI>.
- 72 Leslie Cohen, "The Desert, a Resource Curse: Could Land Be Egypt's Dutch Disease?," *Cairo Review of Global Affairs*, Spring 2019, <http://bit.ly/2kwArem>.
- 73 Zarad, "The Mega National Projects."
- 74 Cohen, "The Desert, a Resource Curse."
- 75 According to the agency head Major General Esam al-Khouli, Taher Mohamed, "An Official in the Armed Forces Engineering Authority: The Authority Is Delivering 424,000 Residential Units," *el-Watan News*, January 8, 2018, <http://bit.ly/2kLI2WD>. On model villages, Hisham

- Ismail, "Get to Know al-Amal Village, One of the Megaprojects East of Ismailiya," *al-Fajr*, April 25, 2017, <http://bit.ly/2krOIJ8>. The second model village is being constructed by Ismailiya governorate, <http://bit.ly/2m51GwK8>.
- 76 Estimate for Sinai projects cited in Shaaban, "In Detail: Map of Developmental Projects in Sinai." Social housing projects cited in Abdel-Hadi Mohamed, "We Publish the Map of the Housing Projects in the New Cities in 2017," *al-Nabaa*, January 26, 2017, <http://bit.ly/2m1SgCj>.
 - 77 "Sisi Inaugurates Several Projects in 10 Ramadan City," *Egypt Today*, January 8, 2018, <http://bit.ly/2kWQsdx>.
 - 78 Land ownership figures from an official report issued by the Ministry of Agriculture, cited in "Report: 5% of Egyptians Own 57% of Agricultural Land," *Egypt Independent*, May 3, 2015, <http://bit.ly/2kVvNqq>. Poverty rates cited in "32.5% of Egyptians Live in Extreme Poverty: CAPMAS," *Egypt Today*, August 1, 2019, <http://bit.ly/2k1374d>. Illiteracy rates cited in "Egypt's Illiteracy Rates Stand at 25.8% in 2017: CAPMAS," *Egypt Independent*, September 8, 2018, <http://bit.ly/2mpkdnL>.
 - 79 The official was speaking anonymously. Cited in Beesan Kassab, "Tahya Masr: How Sisi Bypassed Auditing a Multi-Billion-Pound Fund," *MadaMasr*, April 6, 2016, <http://bit.ly/2kKSdL4>.
 - 80 Mohamed Hassan, "Al-Ahram in a Tour in Suez Military Hospital," *al-Ahram*, Masress, March 12, 2019, <http://bit.ly/2kKMzZq>.
 - 81 Hazem Abu Douma, "The Army Protects and Builds," *al-Ahram*, January 29, 2019, accessed through Wayback Machine, captured on February 3, 2019, <http://bit.ly/2lY88pB>.
 - 82 "Army Offers Food, Transportation Alternatives to Combat High Prices," *Ahram Online*, Monday 7 July 2014, <http://bit.ly/2m1kywK>; and Zeinab Abul-Magd, "Feeding Social Stability in Egypt," *Sada*, June 8, 2017, <http://bit.ly/2mray03>.
 - 83 Melleez capacity claimed by the head of the EAF Engineering Authority, Major General Kamel al-Wazir, cited in Samar Salama, "From Melleez Airport to New Alexandria, the President's Decisions at the Youth Conference," *Yum7*, April 27, 2017, <http://bit.ly/2kVYdp0>.
 - 84 Statement by Authority head Major General Kamel al-Wazir, cited in "Major General Kamel al-Wazir: Bardawil International Airport Has Been Built in Mid-Sinai," YouTube video, October 11, 2017, <http://bit.ly/2msY5cj>.
 - 85 According to the head of EAF Megaprojects Department Major General Karam Salem Mohamed, cited in "Head of Megaprojects Department in the EAF Engineering Authority Reveals the Details of the New Ismailia City Project," *al-Masdar*, December 14, 2015, <http://bit.ly/2ksbKQd>.
 - 86 "Egypt to Issue Ras Sedr Airport Project," *Business Monthly*, American Chamber of Commerce in Egypt, December 29, 2015, <http://bit.ly/2m55HkO>. The head of the Ras Sedr Investors Association, Ali Sharbani, described the proposal for a joint venture, in Hani al-Houti, "The Head of the Ras Sedr Investors Association Announces a Surprise," *Yum7*, August 19, 2016, <http://bit.ly/2m4WTvi>.
 - 87 Faiza Mersal, "South Sinai Governor Criticizes the Delay of Ras Sedr Airport Construction," *Yum7*, May 17, 2015, <http://bit.ly/2lZqsly>; and Hani al-Asmar, "Commencing the Work on King Salman University in Sharm el-Sheikh at a Cost of \$300 Million," *al-Ahram*, August 1, 2016, accessed through Wayback Machine, captured on January 8, 2017, <http://bit.ly/2lYoHSi>.
 - 88 "Bidding Guidelines for Ras Sedr Airport Will Be Available for Investors Next October," *Tahrir News*, August 4, 2016, <http://bit.ly/2ks8FiZ>.

- 89 NAPWASD's reputation noted in "Water Mondiaal Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector-Challenges and Opportunities for the Dutch Private Sector," Occidental Oriental Consult, 2011, 21, <https://bit.ly/2kuepJe21>. On international loans, Mamdouh Raslan, "Chairman of the Holding Company: Gradual Increases in Water Rates Within 5 Years," *al-Mal News*, April 11, 2016, <http://bit.ly/2ks8NyZ>.
- 90 According to Minister of Housing Moustafa Madbouly, cited in Mahmoud Mousallam and Ahmed Mostafa, "Housing Minister: Cost of Administrative Capital Is Not From the Public Budget," *al-Watan*, August 25, 2016, <http://bit.ly/2ks8R1H>.
- 91 "Water Mondiaal Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector-Challenges and Opportunities for the Dutch Private Sector," 21.
- 92 Zarad, "The Mega National Projects."
- 93 "Army to Contract Out Suez Desalination Project," *al-Masry al-Youm* August 24, 2015, <http://bit.ly/2lZrAlO>. A letter of intent was signed with the Singaporean Hyflux Limited Company on March 8, 2016, to build the power and desalination plants. Zarad, "The Mega National Projects."
- 94 According to the company website at <http://bit.ly/2mnGAtK>, accessed on September 9, 2019.
- 95 On government approach, Minister for Investment Dalia Khorshid, cited in Steve Lutes, "The 2016 U.S. Business Mission to Egypt," November 2016, <https://bit.ly/36aiSU8>. On MOMP contract to set up facility, "Cooperation Between Ministries of Industry and Military Production to Deepen Local Manufacture in Electrical Appliances and Leathers," Industrial Modernisation Centre, February 19, 2018, <https://bit.ly/2BN95po>.
- 96 Details in "Contractors to Start Work on Carbon Holdings' Tahrir Petrochemicals Complex," *Energy Egypt*, July 27, 2019, <http://bit.ly/2kv53gj>.
- 97 MOD role in expanding Safaga port noted in Imad Arafa, "Major General Kamer al-Wazir Checks the Development of Safaga Port," *Youm7*, July 24, 2016, <http://bit.ly/2mt7dOd>. Leasing of military land noted in "Details of Safaga Port Upgrades," *al-Masry al-Youm*, January 5, 2017, <http://bit.ly/2mspFGA>.
- 98 Zarad, "The Mega National Projects."
- 99 Text of Presidential Decree 378 of 2019 at <http://bit.ly/2kLOT2j>. Text of Presidential Decree 380 of 2019 at <http://bit.ly/2mt7DnL>.
- 100 The establishment of DP World Sokhna noted on the company website at <http://bit.ly/2ksg2qN>.
- 101 On New Ismailiya, Megaprojects Department head Major General Karam Salem Mohamed, cited in "Head of Megaprojects Department in the EAF Engineering Authority Reveals the Details of the New Ismailiya City Project," *al-Masdar*. "Sinai Locals Step Up to Fight Against Terrorism Alongside Army: Egypt's Sisi," *Ahram Online*, May 12, 2015, <http://bit.ly/2mqmQ8R>. On airports, Amr Galal, "Three New Airports Are to Be Inaugurated by President Sisi Soon," *Akhbar al-Youm*, September 16, 2017, <http://bit.ly/2kVumIx>.
- 102 On housing, Minister of Housing cited in Abdel-Hadi Mohamed, "Map of Residential Projects in the New Cities in 2017," *al-Nabaa*, January 26, 2017, <http://bit.ly/2m1SgCj>. On tunnels, "Suez Canal Tunnels Reveal the Miracle of Their Achievements," *al-Ahram*, October 22, 2018, <http://bit.ly/2m7E6zt>.
- 103 According to a field researcher, in discussion with author, anonymized interview.
- 104 "Head of Megaprojects Department in the EAF Engineering Authority Reveals the Details of the New Ismailiya City Project," *al-Masdar*.

- 105 EAF Engineering Authority Kamel al-Wazir announced monthly pay scales of EP12,000 for grader drivers, EP3,000–EP4,000 for digger drivers, and EP5,000 for loader drivers. Marwa Abdallah, “Galala Mountain Project Includes the Construction of a Residential City, an Olympic Village, a University and Roads,” *el-Watan*, December 11, 2015, <http://bit.ly/2msddXL>. On firms working for free, according to a field researcher, in discussion with author, anonymized interview.
- 106 The EAF moreover handed management of the new plants to the Ministry of Electricity, ceding the right to a share of their revenue. Barayez, “More Than Money on Their Minds: The Generals and the Economy in Egypt.”
- 107 Figures based on Michaelson, “Cairo Has Started to Become Ugly.”
- 108 Mohamed Ezz and Nada Arafat, “Water Shortages Bring Suffering to Egypt’s Countryside,” *Mada Masr*, July 29, 2015, <http://bit.ly/2m0UyBG>.
- 109 “Water Mondiaal Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector-Challenges and Opportunities for the Dutch Private Sector,” 35.
- 110 Samir M. Saeed and Ibrahim M. Shaker, “Assessment of Heavy Metals Pollution in Water and Sediments and Their Effect on *Oreochromis Niloticus* in the Northern Delta Lakes, Egypt,” 8th International Symposium on Tilapia in Aquaculture, 2008, 479, <http://bit.ly/2m5SDf2>.
- 111 Yumna Kassim, Mai Mahmoud, Sikandra Kurdi, and Clemens Breisinger, “An Agricultural Policy Review of Egypt First Steps Towards a New Strategy,” International Food Policy Research Institute, Working Paper 11, August 2018, 15, <https://bit.ly/2Jne97O>.
- 112 “Stop the Flood of Plastic: How Mediterranean Countries Can Save Their Sea,” World Wide Fund for Nature, June 2019, 8 and 20, <https://bit.ly/2PmdZSg>.
- 113 Report cited in “Water Mondiaal Egypt Study, Quick Scan and Market Analysis of the Egyptian Water Sector-Challenges and Opportunities for the Dutch Private Sector,” footnote 20, 15.
- 114 On Damietta protests, Ahmed Feteiha, “Five Years On, Damietta’s Agrium Controversy Reignites,” *Abram Online*, November 14, 2011, <http://bit.ly/2lZiV2O>. On Fayoum protests, Ahmed Zaki Osman, “Military-Owned Factories Threaten Farmers’ Livelihoods in Fayoum,” *al-Masry al-Youm*, December 19, 2011, <http://bit.ly/2kY2mnv>.
- 115 Kassim, Mahmoud, Kurdi, and Breisinger, “An Agricultural Policy Review of Egypt First Steps Towards a New Strategy.”
- 116 Presidential Decree 444 of 2014, issued on November 29, 2014. Text at <http://bit.ly/2kvXWUT>.
- 117 Text of the decree and a list of the 21 roads at <https://bit.ly/345neKG>. A map showing their location is in Slide 49, at <https://bit.ly/2WedvPg>.
- 118 Egyptian development expert and political economist. Anonymized interview.
- 119 Yara al-Sheikh, “Al-Shahed: Sisi’s Request to Have Service Units Present on Roads Was Directed to the Armed Forces,” *Sada el-Balad*, May 23, 2017, <http://bit.ly/2lZ8JY7>.
- 120 Egypt Telecom was supposed to have relinquished its monopoly by 2006. U.S. Department of State, “2014 Investment Climate Statement [Egypt],” June 2014, <http://bit.ly/2moBTQo>. On the company’s plans, Tamer Hafez, “Egypt to Get 4G - Eventually,” *Business Monthly*, American Chamber of Commerce in Egypt, July 2016, <http://bit.ly/2m0UUZ2>.
- 121 Faiza Mirsal, “Implementing Presidential Decision...the Army Removes Encroachments From 700 Feddan in Tur, Sinai,” *Youm7*, June 9, 2016, <http://bit.ly/2lZ8psn>.
- 122 “Sadat: The Decree Designating the Land Around New Roads to the Army Is Not Understandable,” Sadat official website, June 9, 2016, <http://bit.ly/2lZ8Rqz>.

- 123 Sadat and Ibrahim cited in Mohamed Hegazy, "Lands of a Military Nature...the Egyptian Army's Economy Keeps Growing," *Huffington Post* (Wayback Machine), June 11, 2016, <http://bit.ly/2lZ8sV5>.
- 124 "New Presidential Decree," *el-Badil* (Wayback Machine), February 21, 2017, <http://bit.ly/2m637uS>.
- 125 Mohamed al-Jaly, "Presidential Decree to Reassign 14,596 Feddans West of Dabaa to the Armed Forces," *Youm7*, February 28, 2017, <http://bit.ly/2kLB0Bf>.
- 126 Hussein al-Zanaty, "Airport City Is Cairo's Eastern Gate: It Will Bring Revenue of 422 Billion Pounds and Create 120,000 Jobs," *al-Ahram*, September 2, 2014, <http://bit.ly/2kLAzqB>. Cost projections from Yousef al-'Aumi, "Cairo Airport: End of First Phase of Airport City Project Studies," *al-Masry al-Youm*, March 20, 2014, <http://bit.ly/2mscmpE>; and "New Company to Develop the Airport City Project," *al-Masry al-Youm*, June 25, 2015, <http://bit.ly/2kxECXk>.
- 127 "Egypt Opens Middle East's Largest Fish Farm as It Seeks Food Self-Sufficiency," *The Arab Weekly*, November 26, 2017, <http://bit.ly/2m2SpW7>. Higher costs given in Samar Salamah, "Member of Parliament Zeinab Salem: Cost of Ghalioun Fish Farm Is 1.7 Billion Pounds," *Youm7*, November 20, 2017, <http://bit.ly/2lZjpWG>. Badeen was among the seventy-odd EAF generals dismissed by Morsi in August 2012, after which he was a defense attaché in Beijing until taking up his new post in late 2014.
- 128 "Hamdy Badeen Appointed Chairman of the National Company for Fishery and Aquaculture," *al-Sabah*, January 8, 2015, <http://bit.ly/2kWy7gS>.
- 129 Abdel-Tawab Barakat, "Sisi Destroys Fish Wealth," *al-Araby al-Jadeed*, January 23, 2017, <http://bit.ly/2mlTYyv>.
- 130 Ibrahim Saleh, "The Egyptian Army's Empire (Part 2): Military Control on Fish Wealth," *al-Araby al-Jadeed*, September 10, 2015, <http://bit.ly/2m7F7aL>; and Barakat, "Sisi Destroys Fish Wealth."
- 131 Barakat, "Sisi Destroys Fish Wealth." On Ain al-Sukhna transfer, Mohamed al-Jaly, "Presidential Decree to Reassign Lands in Ain al-Sukhna to Use Them in Fishery," *Youm7*, August 23, 2016, <http://bit.ly/2mlUblh>.
- 132 According to Aswan Governor Major General Magdy Hegazi, cited in Abdallah Salah, "Details of Hamdy Badeen's Meeting With Aswan's Governor to Develop Fish Wealth in Lake Nasser," *Youm7*, February 18, 2017, <http://bit.ly/2m0lhOU>.
- 133 "Fishing Industrial City in Ghalioun: New Achievement in the Series of National Projects," *al-Ahram*, November 18, 2017, <http://bit.ly/2kw7cIA>.
- 134 Cited in Soliman Joudah, "Hamdy Badeen's Fish," *al-Masry al-Youm*, April 7, 2017, <http://bit.ly/2mu068d>.
- 135 Karam al-Qurashy, "National Service Projects Organization Chairman Visits the Fish Farming Project in Kafr al-Sheikh," *al-Watan*, April 21, 2016, <http://bit.ly/2m0KY1I>; and Mohamed Masaad, "Major General Hamdy Badeen: Paving Roads Around Fish Farms and Supplying Water Pumps," *Port Said Today*, September 28, 2016, <http://bit.ly/2kY31Fv>.
- 136 Ahmed Farahat, "Baden: National Company for Fishery Acquired the First Exportation License Last Month," *al-Borsa*, August 21, 2016, <http://bit.ly/2kVRTck>.
- 137 "Cypriot Company and National Service Projects Organization Intend to Establish a Fish Farming Company," *al-Borsa*, November 30, 2016, <http://bit.ly/2kvYwC3>.
- 138 On Eritrea Amira Abdel-Salam, "The Purpose of MG. Hamdy Badeen's Visit to Eritrea," *Sout al Omma*, April 14, 2017, <http://bit.ly/2m56O4k>. On Mauritania, according to the Egyptian ambassador in Nouakchott, Maged Nafeh, "Egypt's Ambassador in Nouakchott Confirms

- the Importance of the Fishery Authority Delegation's Visit," *al-Masry al-Youm*, March 7, 2017, <http://bit.ly/2kJ8sbv>.
- 139 "During Inauguration of the First Marble Production in Cooperation Between Egypt Sinai and the Armed Forces," *Ahram*, December 28, 2015, <http://bit.ly/2kJ8tfz>.
 - 140 On startup capital and MOD share, Abdel-Halim Salem, "Egypt Sinai: Cooperation Protocol With National Service Projects Organization to Build Sinai Factories," *Yum7*, December 13, 2014, <http://bit.ly/2kvYv0X>. On stake held by Sinai clans, Misr Sinai director Ibrahim Arjani cited in: Abdel-Halim Salem, "Formation of the Board of Directors of Misr Sinai Investment Company, in Cooperation in Armed Forces," *Yum7*, August 27, 2014, <http://bit.ly/2kso2rF>.
 - 141 "Implementation of the Industrial City for Marble and Salt Kicks Off in Sinai With Investment of 1.2 Billion Pounds," *Shorouk News*, January 10, 2016, <http://bit.ly/2kWiupx>.
 - 142 On launch of new company, "Egyptian National Company for Marble and Granite," National Service Projects Organization, official website, <http://bit.ly/2kt5Uy1>, accessed on March 8, 2019. According to several sources, Misr Sinai and the NSPO own the National Company for Marble. Hasan Ibrahim, "Establishment of the National Company for Investment in Sinai," *al-Watan*, September 20, 2016, <http://bit.ly/2kuRPQx>. But others (including the NSPO) suggest they are separate entities. Hamadah al-Shawadfy, "Details of the Establishment of the Biggest Industrial Complex for Marble and Granite in the Middle East," *el-Watan*, January 16, 2017, <http://bit.ly/2m1aqnU>. On plan for new complex, which is planned to comprise seven factories equipped by Italy, Abdel-Halim Salem, "Misr Sinai: Sisi Opens the Biggest Complex to Process Marble at a Cost of 800 Million Pounds," *Yum7*, November 7, 2016, <http://bit.ly/2kNH3g>.
 - 143 According to the sector's director general, Major General Mohsen Basadah, cited in "Implementation of the Industrial City for Marble and Salt Kicks Off in Sinai for an Investment of 1.2 Billion Pounds," *Shorouk News*, January 10, 2016, <http://bit.ly/2kWiupx>.
 - 144 Jamal Boukhari, "Des conscrits au service du complexe militaro-industriel en Égypte," *OrientXXI*, August 28, 2017, <http://bit.ly/2kNC1sw>.
 - 145 Zaki al-Qadi, "Details of the President's Inauguration of Development Projects in Beni Suef and His Visit to Egyptian Steel," *Yum7*, August 15, 2018, <http://bit.ly/2m9uvIr>.
 - 146 On Egyptian Black Sand Company, official website: <http://bit.ly/2mprwM9>, accessed on March 8, 2019. On NSPO share, Mohamed al-Iraqi, Walid Zaidan, and Mohamed Metwaly, "Black Sand, the Forgotten Treasure," *Akhbar al-Youm*, June 25, 2018, <http://bit.ly/2m4fKqg>. The other shareholders are the Nuclear Materials Authority, Kafr al-Sheikh governorate, National Investment Bank, and Egyptian Company for Mineral Wealth.
 - 147 "Company Products," Egyptian Black Sand Company, official website: <http://bit.ly/2mu26NE>, accessed on March 8, 2019.
 - 148 Mohamed Soleiman, "Establishment of the Black Sand Project Kicks Off With EP1 Billion Investments," *Yum7*, January 4, 2017, <http://bit.ly/2kzS8K4>.
 - 149 On deal with Australian company Minerals Technology, Zaki al-Qadi, "National Service Projects Organization Signs Deal With Australian Company to Benefit From Black Sand," *Yum7*, May 19, 2018, <http://bit.ly/2kWXrJZ>. On cooperation protocol with China and the formation of the Egyptian-Chinese Black Sands Company, Zaki al-Qadi, "National Service Projects Organization Signs a Cooperation Protocol With China to Benefit From Black Sand," *Yum7*, June 12, 2018, <http://bit.ly/2kL4r6p>; and Islam Ammar, "10 Facts About the Second Factory for Black Sand in Kafr al-Sheikh," *Masrawy*, August 10, 2018, <http://bit.ly/2kWYMtV>.
 - 150 Noura Fakhry, "Dismissal of Parliamentary Session After Approving, in Principle, to Reconcile Building Violations," *Yum7*, January 27, 2019, <http://bit.ly/2ksOEsa>.

- 151 According to Major General Maged Farag, head of the holding company that owns Care Marine. Fahd Omran, "Chairman of the Holding National Company for Transportation Means: Nile Cargo Transports Between One to Three Thousands Containers Per Month," *al-Borsa*, July 19, 2016, <http://bit.ly/2kYpHFM>.
- 152 The fellow retiree was Major General Karim Abul-Kheir. "National Holding Company Seeks the Acquisition of 3 New River Ports in Upper Egypt," *al-Mal News*, August 12, 2010, <http://bit.ly/2m7Np2o>.
- 153 In an interview cited in Hamza Hindawi, "Retired Army General Takes Over Key Cabinet Post in Egypt," Associated Press, September 6, 2016, <http://bit.ly/2m1chcm>.
- 154 On NSPO role, "Mission," National Service Projects Organization, official website at <http://bit.ly/2kxSCAn>. Accessed March 13, 2019.
- 155 Egyptian political economist, anonymized interview. On GID front companies, also see "Gold-Digging Generals (Part 4): Food Sector," *Noon Post*, January 29, 2017, <http://bit.ly/2m13N51>.
- 156 Mohamed Sobeih, "After Revoking the Custom Tax Exemption on Poultry Imports," *Sada el-Balad*, December 5, 2016, <http://bit.ly/2mnOuDp>.
- 157 Statement by Minister of Supply and Internal Trade, Major General Ali Mseilhi, February 2018. Ahmed Ghoneim and Raga Adam, "Surprisingly, Chickens Priced at 15 Pounds Were Imported by the Government," *el-Watan*, February 4, 2018, <http://bit.ly/2kZJ7dd>; and ministry spokesperson Khaled al-Asmar, "Ministry of Supply: Sovereign Bodies Were Instructed to Import Chicken From Brazil," *el-Watan*, February 3, 2018, <http://bit.ly/2kqv4gy>.
- 158 On price decline, Central Bank of Egypt, Monetary Policy Report, December 2017, 15, <http://bit.ly/2kZJiVV>. Statement by the Poultry Producers Association, Hossam al-Shoqairy, "Poultry Producers Union Demand the Government to Set a 30% Fee on Imports," *Youm7*, December 21, 2017, <http://bit.ly/2m1cVqi>.
- 159 "Gold-Digging Generals (Part 4): Food Sector," *Noon Post*.
- 160 By one count, senior EAF officers occupied five senior posts in the Ministry of Supply in 2012. Ali Zalat, "The Army Rules Egypt's Ministries," *el-Watan*, May 1, 2012, <http://bit.ly/2kNusC9>. Senior officers also headed or sat on boards of several subsidiary companies.
- 161 On amounts of domestic and imported wheat, "Egypt," Global Information and Early Warning System, Country Briefs, updated on December 3, 2018, <http://bit.ly/2mu45S6>. Accessed on March 23, 2019. Egypt also imports 8–10 million tons annually of other grains, according to the same source. On percentage of total imports: "Egypt," Observatory of Economic Complexity, <http://bit.ly/2kOAZR/>. Accessed on March 8, 2019.
- 162 On the price difference in 2014, "Egypt Wheat Sector Review," Food and Agricultural Organization of the United Nations and the European Bank for Reconstruction and Development, 2015, xiv, <http://bit.ly/2mvRkXj>. In 2016, the government paid \$370 per ton for domestic wheat against \$190 per ton for foreign wheat. Eric Knecht, "Blumberg's High-Tech Attempt to Ease Egyptian Grain Drain," Reuters, April 8, 2016, <https://reut.rs/2m8ZYKM>.
- 163 "Egypt Wheat Sector Review," Food and Agricultural Organization of the United Nations and the European Bank for Reconstruction and Development, vii.
- 164 Mohamed Ayoub, "What Does the Corruption Scandal of Wheat Imports Mean?," *Youm7*, July 11, 2016, <http://bit.ly/2kzTXXq>.
- 165 On 2002 ratio, CARANA Corporation, "The Results and Impacts of Egypt's Privatization Program," Special Study for the United States Agency for International Development, USAID Coordinating and Monitoring Services Project, August 2002, 46, <http://bit.ly/2lj33YN>.
- 166 "Blumberg's High-Tech Attempt to Ease Egyptian Grain Drain," Reuters.

- 167 Mohamed Salman, "Truth Finding Committee Reveals That 700,000 Pounds Is the Value of One Bribe From the Owners of a Silo to Officials," *Parlmany*, August 24, 2016, <http://bit.ly/2m7Txro>. A summary of the full report's findings is in Mohamed Sobhi, "Exclusive: Names of the Corrupted Wheat Silos," *Parlmany*, August 24, 2016, <http://bit.ly/2mvduZC>.
- 168 On dismissal, Mohamed Azouz, "Minister of Supply Fires the Board of Directors of the Holding Egyptian Company for Silos and Storage," *al-Masry al-Youm*, February 22, 2014, <http://bit.ly/2m4KU0T>. The head of central administration in the ministry's Authority for Supply Commodities was removed on suspicion of corrupt dealings at the same time. Hani Mohamed, "Removal of the Chairman and the Members of the Egyptian Holding Company for Silos and Storage," *Akhbar al-Youm* (Masress), February 22, 2014, <http://bit.ly/2mqAqZS>.
- 169 Abu-Shadi's chef de cabinet was a police lieutenant colonel. Dalia Abdel-Qader, "Minister of Supply's Chef de Cabinet Arrested for Receiving an 8 Million Pounds Bribe," *Rose al-Youssef*, December 30, 2013, <http://bit.ly/2kYrNFE>; and "The Secret of Abu Shadi's Exclusion From Mahlab's Cabinet," *al-Masryoon*, February 28, 2014, <http://bit.ly/2kujuRB>. On Hassanein replacement, Abdel-Latif Sobh, "Parliament Fact Finding Committee Continues to Expose the Wheat Mafia," *Youn7*, July 11, 2016, <http://bit.ly/2kzDceW>.
- 170 Maggie Fick, "Egypt Army Extends Power by Taking Charge of Gulf Aid," Reuters, March 27, 2014, <https://reut.rs/2kNFWFK>.
- 171 Stephen Kalin and Maggie Fick, "Egypt, UAE Choose Army-Linked Company to Build Wheat Silos," Reuters, June 7, 2014, <http://bit.ly/2lZYsL7>. Although the board of directors of the General Company for Silos and Storage only has civilian members as of March 2019, its chief financial officer is a retired major general. Company website: <http://bit.ly/2mnPBmz>. The General Company for Silos and Storage was a publicly traded state-owned company that had been a subsidiary of the Holding Company for Food Industries, which is also involved in the wheat trade and storage, but was transferred by decree of the prime minister to the Holding Company Silos and Storage on June 29, 2014. Text of decree at <http://bit.ly/2mvSWQR>.
- 172 "Blumberg Says Its High-Tech Silos Not Used to Store Egyptian Wheat," *Arab Finance*, July 21, 2016, <http://bit.ly/2kuDYtw>.
- 173 Eric Knecht, "Egypt Reconsiders Grain Megaproject Amid Scandal Investigation," Reuters, August 15, 2016, <http://bit.ly/2kuDYtw>.
- 174 In the view of an Egyptian economist, EAF participation reflected a wish to influence the investigation, and to take advantage of the decree of May 2011 that EAF officers, including retirees, may only be tried before military courts for financial misdemeanors. Anonymized interview.
- 175 On Basili's role and appointment, Hagar Mohamed, "Source: A Major General From the Engineering Authority Is to Be Appointed Chairman of the Holding Company for Silos," *el-Nabaa*, November 21, 2016, <http://bit.ly/2kukIwb>. And Mohamed Omran, "Documented: Waste of Millions of Pounds at the Egyptian Company for Silos Due to Leadership Bonuses," *Rose al-Youssef*, January 30, 2018, <http://bit.ly/2mu66h8>.
- 176 The figures of 10–20 percent cited in "Egypt Wheat Sector Review," Food and Agricultural Organization of the United Nations and the European Bank for Reconstruction and Development, xii. The figures of 40–50 percent come from different Blumberg statements cited in "Blumberg's High-Tech Attempt to Ease Egyptian Grain Drain," Reuters. And in Salma El Wardany, "Egypt Considers Wheat Storage Program as Algeria Waits in Wings," Bloomberg, August 14, 2016, <https://bloom.bg/2mu5Z5c>.

- 177 Dalia Othman, “*al-Masry al-Youm* Publishes the Army’s Achievements to Support Development in 30 Months,” *al-Masry al-Youm*, May 29, 2015, <http://bit.ly/2mpvoNb>. And Maggie Fick, “Egypt Army Extends Power by Taking Charge of Gulf Aid,” Reuters, March 27, 2014, <http://bit.ly/2kuYxGl>.
- 178 Ahmed Ali, “American Blumberg Grain: We Refused to Work in Egypt Before Sisi,” *Masrawy*, July 24, 2016, <http://bit.ly/2kX38kL>; and “Wheat Storage: Blumberg Grain to Grant Egypt a Project in Algeria,” DZ Breaking, August 14, 2016, <http://bit.ly/2m7UNuC>.
- 179 Jane Wells, “The American Who Wants to Save Egypt’s Bread,” CNBC, August 12, 2014, <https://cnb.cx/2kNM4hc>.
- 180 Claims of savings cited in Salma El Wardany, “Storage Program as Algeria Waits in Wings,” *Bloomberg*, August 14, 2016, <https://bloom.bg/2kXLi12>. Claims regarding handling entire crop from cited in “Blumberg’s High-Tech Attempt to Ease Egyptian Grain Drain,” Reuters.
- 181 Global Information and Early Warning System, Country Briefs, Egypt, updated on December 3, 2018. Accessed March 13, 2019, <http://bit.ly/2mu45S6>.
- 182 “Wheat Storage: Blumberg Grain to Grant Egypt a Project in Algeria,” DZ Breaking. On lack of electricity, “Blumberg Says Its High-Tech Silos Not Used to Store Egyptian Wheat,” *Arab Finance*.
- 183 Basma Tharwat and Abdel Razek Al-Shuwekhi, “Supply Ministry Takes Blumberg at Its Word, Refuses to Continue Project,” *Daily News Egypt*, July 25, 2016, <http://bit.ly/2kZM6Cr>.
- 184 On Hanafi’s resignation, “Egyptian Minister of Supply’s Resignation Accepted,” *al-Arabiya*, August 25, 2016, <http://bit.ly/2kuYc6p>. On the appointment of Mseilhi, Mohamed Abdel-Halim, “Officially: Mseilhi al-Sheikh Appointed Minister of Supply,” *Dot Masr*, September 6, 2016, <http://bit.ly/2mnQnQv>.
- 185 Waad Ahmed, “Slashed Wheat Subsidies Leave Farmers at the Mercy of Fluctuating Global Markets,” *Mada Masr*, January 9, 2017, <http://bit.ly/2m7VpQW>. Blumberg Grain remained in discussion with the Egyptian government about its proposed second phase work as of July 2017. According to David Blumberg, email, July 12, 2017.
- 186 On MOMP contract, “Blumberg Grain Announces Completion of Phase 1, Beginning of Phase 2 of Its Shouna Project,” *Enterprise*, October 2, 2017, <http://bit.ly/2m4mxk5>.
- 187 On completion of first phase, “Egypt Received 105 Silos From Blumberg Grain,” *Al-Masry al-Youm*, August 21, 2017, <http://bit.ly/2m2OsAM>.
On second phase plan, “Blumberg Grain Statement Regarding Projects in Egypt,” press release, Blumberg Grain, October 2017, <http://bit.ly/2m8NhxD>. And “Blumberg Grain to Invest More in Egypt on Storage Sites, Plant,” Reuters, October 2, 2017, <https://reut.rs/2m4nnNL>. Involvement of the Long Live Egypt fund evident from photographs of facilities displaying its logo.
- 188 Claims made by Seth Gordon of Seth Gordon Initiatives, representing the supplier network, and John Crawford of Ag Growth International. “Blumberg Grain Storage Jobs Called at Risk as Egyptian Officials Delay,” *Miami Today*, August 21, 2018, <http://bit.ly/2m00smB>.
- 189 This is the opinion of several Egyptian analysts. Anonymized interviews.
- 190 Details here and in rest of paragraph from Ayman Emam, “Driving Development or Building an Empire of Corruption? Military Entrepreneurship and the Militarization of the Egyptian Economy,” master’s thesis, International Anti-Corruption Academy, October 2018, 32–33 and 62–65.

- 191 EAF spokesperson Brigadier General Mohammed Samir cited in “The Egyptian Army’s Empire: Creating Crises to Ensure Control,” *al-Araby al-Jadeed*, September 8, 2016, <http://bit.ly/2m7WbNQ>.
- 192 Ahmed Sabry, “Distributors Start Supplying Tahya Misr Baby Formula at 55 Pounds,” *al-Mal News*, February 14, 2019, <http://bit.ly/2kX67cX>.
- 193 Reham Sa’id, “Stents Business: A Heartache,” *Veto Gate*, January 26, 2016, <http://bit.ly/2m1apQT>.
- 194 Reham Sa’id, “Exclusive: The Army Ends the Stents Crisis,” *Veto Gate*, June 8, 2016, <http://bit.ly/2kOG5Zx>; and Reham Sa’id, “Confirming Veto’s Exclusive: Sisi Orders the Armed Forces to Supply Stents in Egypt,” *Veto Gate*, August 27, 2016, <http://bit.ly/2kNAdQh>.
- 195 Major General Sayyed al-Shahed, cited in Reham Sa’id, “Confirming Veto’s Exclusive.”
- 196 Sahar al-Makkawy, “Health Ministry Signs Protocol to Build Medical Solvents Factory for 140 Pounds Million,” *al-Watan*, October 15, 2016, <http://bit.ly/2m791ME>. The Arab Company for Drug Industry and Medical Appliances, was established by the Arab League’s Arab Economic Unity Council in 1976.
- 197 According to announcement by the company, cited in Abdel-Rahman Jameel, “The Egyptian Company for Blood Transport Services: Sisi Instructed the Military to Provide Egypt’s Needs of International Medicine,” *Dostor*, May 23, 2016, <http://bit.ly/2kzHpPM>.
- 198 Then minister of investment Ashraf Salman claimed in March 2016 that public business sector companies under the ministry’s aegis had risen from EP588 million in 2014 to EP2.1 billion by January 31, 2016. Cited in Mostafa Eid, “Public Sector Ministry, the Most Recent Newborn in the Egyptian Government,” *Masrawy*, March 23, 2016, <http://bit.ly/2kzHtz0>. Decree 148 of 2017 allowing establishment of Egyptian National Company for Pharmaceuticals was issued by then prime minister Ismail Sherif. Text at <http://bit.ly/2m1aDHJ>.
- 199 On universities, Rabi’ah al-Sa’dani, “Assigning All Biddings for University Hospitals’ Medicines to the EAF,” *Tahrir News*, July 23, 2016, <http://bit.ly/2m7YpNc>. On hospitals Moa’taz Shams el-Din, “From Contracting to Baby Formula,” *Huffington Post*, Wayback Machine, September 9, 2016, <http://bit.ly/2mpyZe9>.
- 200 On contracts in 2013–2015, Mohamed Ahmed Tantawi, “EAF Engineering Authority, the Development Giant Implement 1,350 Projects to Serve the State,” *Youn7*, September 19, 2015, <http://bit.ly/2mudmtl>. On Upper Egypt projects, Nermin Afifi, “Chairman of the EAF Projects Department: We Have Upgraded 54 Medical Entity in Upper Egypt,” *el-Watan*, January 21, 2018, <http://bit.ly/2kzHD9A>; and Zaki al-Qadi, “Get to Know the Projects of the Engineering Authority That Were Completed in 2017,” *Youn7*, January 2, 2018, <http://bit.ly/2kNAX1r>. The latter is also the source for the EP1.6 billion figure.
- 201 Emam, “Driving Development or Building an Empire of Corruption?,” 62.
- 202 Moa’taz Shams el-Din, “From Contracting to Baby Formula”; and al-Tayeb al-Sadeq, “\$600 Million Joint Saudi-Emirati-Egyptian Investments in Agricultural Waste Recycling Project,” *al-Abram*, October 19, 2013, <http://bit.ly/2kX7qsn>. On Benha, Osama Alaa-el-Din, “Cooperation Protocol Between Benha University and the EAF to Establish a Specialized Hospital,” *Masrawy*, July 5, 2017, <http://bit.ly/2mudHfB>.
- 203 Maha Salem, “Military Production Signs a Protocol With the Lawyers to Build 3 Hospitals and a Commercial Building,” *al-Abram*, October 30, 2018, <http://bit.ly/2kNBnLD>.
- 204 Ahmed Goma’a, “Healthcare Authority Signs a Contract With the EAF Hospitals to Provide Special Service to Patients,” *Masrawy*, December 17, 2018, <http://bit.ly/2m9Cs0f>.

- 205 Mohamed Samy, “Assar Receives Emirati Investors to Discuss Cooperation in the Solid Waste Issue,” *Masrawy*, February 12, 2019, <http://bit.ly/2m03aIN>.
- 206 Industry insider. Anonymized interview.
- 207 For a short critical history of the establishment and award of mobile market contracts, see Safinaz El Tarouty, *Businessmen, Clientelism, and Authoritarianism in Egypt* (London: Palgrave Macmillan, 2015), 100–102.
- 208 According to the company board report for 2001, for example, Ali Gamal-el-Din Salama, a graduate of the Military Academy and Military Staff College, was appointed chief financial officer and a board member in 2000 and in 2007 became vice president for financial affairs.
- 209 “Egypt Military Uneasy Over Business Ties,” *Financial Times*, February 28, 2011, <https://on.ft.com/2muf7Xt>.
- 210 Then minister of communications and information technology Atef Helmy denied the Ministry of Defense would have a controlling stake, but this was publicly confirmed by Gamal El-Sadat, CEO of mobile operator Etisalat Egypt. Cited respectively in Lin Noueihed and Michael Georgy, “Egypt Needs Billions to Upgrade Telecom Infrastructure - Minister,” Reuters, October 22, 2014, <https://reut.rs/2kNM0Ow>; and “Defence Ministry to Gain Ruling Share of Communications Infrastructure,” *Daily News Egypt*, October 15, 2014, <http://bit.ly/2m1kMEi>.
- 211 Information from industry insider. Anonymized interview.
- 212 Information from Mahmoud Radwan, “Final Detail of the Establishment of the National Company for Communications Infrastructure,” *al-Borsa*, November 4, 2018, <http://bit.ly/2mqHTTrS>.
- 213 Emir Nader, “Concern as Defence Ministry Sets Sights on Telecoms Controls,” *Daily News Egypt*, May 12, 2015, <http://bit.ly/2m2XNZm>. Tamer Imam, “Looking Into the New National Entity for Telecommunication Infrastructure,” *DotMasr*, July 18, 2014, <http://bit.ly/2m4ucyR>.
- 214 On objections, Yosry al-Hawari, “Ambiguity Dominates the Creation of a New Telecommunications Infrastructure,” *al-Masry al-Youm*, October 23, 2014, <http://bit.ly/2m7dZJi>. On Telecom Egypt’s interest in the mobile operation market: Mohamed Hamama, “Telecom Egypt and the Battle of Competition in the Mobile Market: A New Beginning or a New Ban?,” *Mada Masr*, March 21, 2016, <http://bit.ly/2m8019K>.
- 215 “Communication Ministry Is Retreating From the Infrastructure Entity and Replacing It With Egypt Telecom Cuts,” *al-Mal News*, June 29, 2015, <http://bit.ly/2mn1WYa>.
- 216 An earlier attempt by Egypt Telecom to renegotiate the owner structure of Vodafone Egypt with partner Vodafone UK ended without result in 2010, according to a statement by Vodafone Egypt on July 1, 2010 (all posts earlier than 2014 have been removed on the website). On ownership structure, “About Vodafone Egypt,” Vodafone, <http://bit.ly/2kA6bzi>, accessed on March 14, 2019. Industry insider, anonymized interview. Other industry watchers confirmed that the buyer would be “a new government partner.” Cited in Tamim Elyan and Michael Scaturro, “Vodafone Squeezed in Egypt as State-Backed Partner Turns Rival,” *Bloomberg*, September 21, 2016, <https://bloom.bg/2kYDufw>.
- 217 Mohamed Hamama, “With More Than 7 Billion Pounds: Egypt Telecom Prepares to Enter the Cellular Market,” *Mada Masr*, August 8, 2016, <http://bit.ly/2ky7Sx9>. Postponement of decision on divestment cited in Tamim Elyan and Tarek El-Tablawy, “Vodafone Egypt, Etisalat Misr Sign 4G License Deals,” *Bloomberg*, October 16, 2016, <https://bloom.bg/2kt3mji>.

- 218 According to an anonymous official in the Ministry of Telecommunications in “4G Frequencies to Be Handed Out to Egyptian Operators This June,” *Arab Finance*, June 4, 2017, <http://bit.ly/2m309aE>.
- 219 According to a researcher consulted for this report, the Saudi hosts feed the workers *sadaqah* (religious donation) food left over from the annual pilgrimage.
- 220 “Egypt Announces Vatican-Approved Pilgrim Trail of the Holy Family’s Journey From Sinai to Asyut,” *Cairo Scene*, October 5, 2017, <http://bit.ly/2m30f20>. AOI contract confirmed by AOI head Major General Abdul-Aziz Saif-el-Din, cited in al-Sawy Ahmed, “Cooperation Between the AOI and the Tourism Ministry to Revive the Holy Family Trail,” *al-Mal News*, November 27, 2017, <http://bit.ly/2kONCHN>.
- 221 Mohamed Basal and Khaled Moussa, “Presidential Decree to Form a Committee Headed by Mahlab to Create an Inventory of the al-Awqaf Ministry’s Property and Look Into Benefiting From Them Economically,” *Shorouk News*, July 14, 2016, <http://bit.ly/2kZYimG>.
- 222 Ahmed al-Biheiry, “Ministers of Awqaf and Military Production Look Into Mutual Cooperation,” *al-Masry al-Youm*, June 19, 2016, <http://bit.ly/2m8561M>; and Zaki al-Qadi, “Mutual Cooperation Between the MOMP and Ministry of Awqaf to Develop and Upgrade the Ministry’s Assets,” *Youm7*, June 19, 2018, <http://bit.ly/2kNSOvy>.
- 223 Springborg, *Egypt*, 79–80.
- 224 Mahmoud Taha Hussein, “Major General Yousri Abdallah Appointed Chairman of Educational Building Authority,” *Youm7*, August 23, 2015, <http://bit.ly/2msra7z>.
- 225 Marina Ottawa, “Al-Sisi’s Egypt: The Military Moves on the Economy,” Wilson Center, Summer 2015, <http://bit.ly/2kLi7ON>.
- 226 Decree 64 for the year 2015 published in the Official Gazette on May 18, cited in “New Military Company Established With Wide Mandate,” *Mada Masr*, May 23, 2015, <http://bit.ly/2mpHupz>.
- 227 “Egypt’s Military Establishes New Multi-industry Company,” *Ahram Online*, May 27, 2016, <http://bit.ly/2m831mw>.
- 228 Signatories of these contracts for both sides resembled a military roll call: executive head of Giza wholesale market Mohamed Sami Abdul-Rahim; deputy governor Usama Shamaah; secretary general Mohammad al-Sheikh; and assistant secretary general Ahmad Hani were all major generals. “Giza and Ministry of Military Production Sign a Contract to Upgrade the 6 October Wholesale Market,” *Akhbar al-Youm*, February 23, 2012, <http://bit.ly/2mpHOVj>.
- 229 Cited in Ahmed Hassan, “Minister of Military Production: The Ministry Contributes to the Local Contracting Sector With a Volume of 15 Billion Pounds” *Youm7*, June 16, 2019, <https://t.co/xK1K4Xmia7>.
- 230 On the company’s complaint, Mohamed Mostafa, “Sisi Instructs to Reassign Baby Formula to the Egyptian Pharmaceutical Company,” *al-Borsa News*, September 22, 2015, <http://bit.ly/2kt54kI>; and Ahmed Abdel-Rahman, “Khairy Ramadan Exposes Corruption in Subsidized Baby Formula,” *Youm7*, October 23, 2015, <http://bit.ly/2m4Y1PF>. On military supply of baby formula, Khaled Sa’id Ahmed, “Why Does the Army Import Baby Formula?,” *Shorouk News*, September 2, 2016, <http://bit.ly/2mvtwTi>.
- 231 Assar’s statement cited in Karim Waziri, “Minister of Military Production: Establishment of a Baby Formula Factory Soon,” *al-Fajr*, January 10, 2017, <http://bit.ly/2mw2uez>. On cancelation of open bidding, Abdel-Rahman, “Khairy Ramadan Exposes Corruption in Subsidized Baby Formula,” *Youm7*, October 23, 2015, <http://bit.ly/2m4Y1PF>. Criticism noted in “Egypt: Journalist Posts Documents Exposing Corruption in the Baby Formula Sector,” *al-Araby al-*

- Jadeed*, September 2, 2016, <http://bit.ly/2mvtzhW>; and “Gold-Digging Generals (Part 4): Food Sector,” *Noon Post*.
- 232 Zaki al-Qadi, “To Combat Inflation, Armed Forces Supply 250 Tons of Meat and Commodities Daily at Reduced Prices,” *Youm7*, August 29, 2017, <http://bit.ly/2kvauf3>. Major General Mostafa Amin, cited in “Director of the NSPO: Ghalioun Provides 8,000 Jobs for Young People,” *al-Ahram*, November 18, 2017, <http://bit.ly/2kZXPAX>.
- 233 Major General Mostafa Amin, cited in “Director of the National Service Projects Organization: Ghalioun Provides 8,000 Jobs for Young People,” *al-Ahram*.
- 234 Mohamed Sa’id, “Details of ‘Aman’ Outlets of Ministry of Interior,” *al-Borsa News*, May 15, 2018, <http://bit.ly/2kygUdu>. On GID outlets, Mamdouh Thabet, “Medical Convoys and Outlets for Food Commodities in Assiut Under the Auspices of General Intelligence,” *al-Masry al-Youm*, March 20, 2016, <http://bit.ly/2kNKg7X>.
- 235 Mahmoud Ghallab, “Interior Ministry’s Potatoes,” *al-Wafd*, October 28, 2018, <http://bit.ly/2mupnir>.
- 236 Egypt had one of the highest frequencies of nontariff barrier use in the world in 2010 according to Patricia Augier, Olivier Cadot, Julien Gourdon and Mariem Malouche, “Nontariff Measures in the MNA region: Improving Governance for Competitiveness,” World Bank August, 2012, <http://bit.ly/2m2rf1K>.
- 237 Disruption noted in relation to Canada in Maha El Dahan, “UPDATE 1-Egypt Rejects Canadian Wheat Shipment Over Ergot Fungus,” Reuters, February 16, 2016, <https://reut.rs/2kNXpxO>; and in relation to France in Gus Trompiz, “French Wheat Exporters to Lose Out Even as Egypt Tries to Settle Fungus Dispute,” Reuters, March 18, 2016, <http://bit.ly/2m9NrXx>.
- 238 Shana Marshall, email to the author, 3 October 2016.
- 239 Major Generals Ali Azmy Ali Azzam, Ibrahim Hasaneen Ahmad (later replaced by Major General Magdy al-Shater), and Mohamed Yousef, respectively.
- 240 Eric Knecht and Maha El Dahan, “Bureaucrat and Old Fungus Law Hold Egypt’s Wheat Supplies Hostage,” Reuters, March 2, 2016, <https://reut.rs/2mswdVz>; and Mohamed Sa’id, “Why Did Egypt Really Back Down on Russian Wheat Import Ban?,” *al-Monitor*, October 2, 2016, <http://bit.ly/2m876Hm>. The latter source cited claims that traders “stood to earn an additional \$875 million in profits if wheat containing ergot were authorized for import.”
- 241 Maha El Dahan and Asma Alsharif, “Egypt, World’s Largest Wheat Buyer, Appoints New Head of Agriculture Quarantine,” Reuters, January 8, 2017, <https://reut.rs/2mswpUN>. In 2005, the authority was headed by Major General Mohammed Abdul-Hamid Ali al-Banna. Mohamed Ibrahim, “After Applying a Unified Statistical Model for Imports and Exports,” *al-Alam al-Youm*, reposted in *Masress*, July 31, 2005, <http://bit.ly/2m2rTfG>.
- 242 Arwa Gaballa, “Egyptian Court Suspends Food Inspection System Meant to Ease Trade,” Reuters, June 13, 2017, <https://reut.rs/2kNMSCN>.
- 243 This was Major General Alaa Fahmi. Reported in Mona Maher, “After the Arrest of Its Chairman, Meet the Holding Company for Food Industries,” *Akhbar al-Youm*, May 29, 2018, <http://bit.ly/2kt96cQ>.
- 244 Hossam Bahgat, “Anatomy of an election,” *Mada Masr*, March 14, 2016, <http://bit.ly/2kve4pv>. A somewhat divergent account of these events is in Maged Atef, “The Egyptian Media, the Conflict of Agencies, and the President,” *Fikra Forum*, March 18, 2016, <http://bit.ly/2kXwsre>.

CHAPTER 7

BEHIND THE VEIL: MANAGING THE FINANCES

THE COMBINATION OF DISCRETIONARY POWERS, legal immunity, and opacity of information relating to military incomes and accounts has generated a mode of financial management that enjoys the veneer of legality and yet permits manipulation of public funds and assets without meaningful accountability to any civilian authority. Indeed, even within the military, financial management appears to consist of little more than basic bookkeeping—logging incomings and outgoings and producing end-of-year financial statements. This makes it virtually impossible either to evaluate their individual cost-effectiveness or to provide overall accounts for the military economy as a whole. It also obscures what insider accounts suggest is a financial system rife with corrupt practices. At best, a further consequence of financial opacity is that military agencies find it difficult to assess economic feasibility, resulting in demonstrably counterproductive investments of military-held funds.

As noted in Chapter 1, this enabling environment benefits numerous civilian agencies and private actors as well. The World Bank's World Justice Project summarized the enduring problem in late 2014:

For years, people in power in Egypt created patronage networks in the civil service, judiciary, army, police and parts of the private sector that fed on public contracts. They and their contacts benefited from 'rent-seeking' (earning income free of competition). The institutional environment they relied on was based on little—if any—access to information; when it came to even minor bureaucratic decisions, 'discretion' (individual judgment) prevailed.¹

The outcome is a military economy that does not all pull in one direction. Its dynamics are shaped by much the same intra- and interagency bargaining, interest-driven networks and coalition-building, and persistent rivalries across sectoral and functional lines as characterize the rest of the Egyptian state and political economy. In the case of the military, economic decisionmaking and flows of capital are heavily determined by three factors:

- 1) which military college, graduating class, and EAF branch of service the leading officials derive from, with their distinct and often competing cliques and networks;
- 2) bottom-up interactions with interest groups in the state bureaucracy (including local government, as well as potential competitors in the MOI and intelligence services), public business sector companies, and the private sector, channelled through informal networks behind the façade of formal institutions and rules; and
- 3) responses to top-down pressure generated by policy directives and goals set by the president.

Consequently, there is no economic or income-generating master plan, even if military economic agencies often work in tandem. They do so pursuing relatively consistent interests,

The military economy does not all pull in one direction. Its shaped by much the same bargaining, interest-driven networks, and persistent rivalries as characterize the rest of the Egyptian state and political economy.

but the evidence suggests that these tend to be defined and pursued independently of each other, and that each agency holds onto and manages its separate financial pot jealously. This is not to deny strategic behavior, but to underline implications for the military's financial capital. First, military agencies will spend or invest funds in response to presidential instructions, even when these are economically unsound and lead to financial losses. Second, converse-

ly, these agencies have virtually complete discretion to allocate funds they control—in the sense that they are not obligated to consult any other state agency beforehand, let alone obtain its authorization—so long as their activities align broadly with the president's policy orientation. This is what offers scope for informal networks to capture or generate their own income streams, often in ways that undermine the purpose of both the president and of senior figures in the formal military economy—although evidence suggests that this happens with their full knowledge. Third, the military lacks both the equivalent of Eagle Capital, which in effect acts as a private equity vehicle for the GID, and the know-how or intention to deploy its funds as a form of venture capital to help develop civilian economic sectors.

These patterns and relationships may be observed by mapping how military incomes are generated and utilized, where they are deposited, and the means by which meaningful audit by any civilian agency, including parliament, is almost entirely avoided.

MAPPING MILITARY INCOME STREAMS: GOING FOR POLITICAL OR FINANCIAL GAIN?

Clearly, the military's mode of financial management is hardly unique among Egyptian state agencies, many of which also handle extra-budgetary incomes and deposits. But the volume and diversity of military income streams almost certainly exceed those of any individual civilian counterpart by a wide margin. Indeed, by May 2018 the head of an MOMP factory could happily tell Reuters correspondents that “[As] soon as I submit a request to the ministry and say I need 60 million or 40 million Egyptian pounds . . . the following day [minister] Major General Assar approves the request.”²

The anatomy of the military economy presented in this report indicates the following sources of legally sanctioned funding, most of which are exempt from all taxes and levies:

- the defense budget;
- fees earned from MOD-owned hotels, resorts, and other social and sports facilities;
- sales of basic food commodities in domestic markets and provision of fee-paying medical services;
- fees for managing public works, including land reclamation, megaprojects, and other housing and infrastructure schemes, or profit margins built into project budgets agreed with implementing contractors;
- rent income—fees or donations received for granting licenses to use land, leasing facilities such as ports, and levying tolls on highways or at mines and quarries;
- fees for providing specialized services such as clearing imported goods at ports of entry to Egypt, stevedoring, transport of heavy equipment, and demining of state land leased to civilian parties;
- revenue from sales of civilian goods and services by military businesses (factories, farms, and other companies), including new ventures in mining, prospecting, and other extractive sectors;
- deposits held in special funds and interest accruing on them;
- fees for ad hoc activities such as contribution of troops to United Nations peacekeeping or demining missions, or the conduct of joint exercises on Egyptian soil with foreign militaries; and
- income from commercial investments through front companies (this is indirect, but may be covered by the internal bookkeeping of the relevant military agencies).

Profit margins are probably significant in only a few of these activities, but not all are primarily profit-oriented anyway. For example, at least 60 percent of the defense budget is spent on salaries and compensation (allowances and benefits other than pensions).³ The balance is spent on other recurrent nonsalary expenses such as food and gear, healthcare, fuel, replenishment of combat consumables and upkeep of equipment, estates maintenance, and investment in new facilities or equipment. It is unlikely that funds remain unspent, but if so they are certainly retained by the MOD, and carried over on its books as deferred surpluses from year to year and transferred to one of its special funds. Currency depreciation has reduced the relative cost to the MOD of salaries and domestically sourced consumables and services (since they are denominated in Egyptian pounds), but generally made it difficult to do more than maintain the dollar value of the overall defense budget.

The defense budget nonetheless allows the bonuses and pay increases that help keep the EAF rank-and-file loyal. Military salaries are modest compared to public business sector and private companies (at least at management level), but defense sector personnel—the EAF, Ministries of Defense and of Military Production, and ancillary agencies—are designated as “special cadre” in state statutes and enjoy significant disparities in pay and benefits compared to civil servants.⁴ During periods of unrest, EAF officers have additionally received bonuses worth up to double their salaries, which are presumably charged to the defense budget.⁵ Basic pay has moreover been increased at least three times since 2011, although this has not offset the depreciation of the Egyptian pound. Military pensions saw a more significant cumulative rise of 140 percent by July 2016, and then a further 15 percent in July 2018 and the same again with effect from July 2019, but they are charged to the general state budget and so the defense budget is unaffected.⁶

MOD-owned hotels, resorts, and other social and sports facilities presumably provide a steady income. The extension of the military’s exemptions from taxes (including VAT) to their civilian facilities enables them to inflate profits even while undercutting private competitors, though the MOD’s revenue from these facilities may be net of profits shared with the EAF officers who manage them.⁷ The ministry has moreover sought to expand its market share: the NSPO runs the Tolip Hotels and Resorts chain (launched in 2015, with at least fifteen hotels), while the MOD’s Financial Authority manages the al-Masah (Diamond) chain, including the massive al-Masah Capital Hotel that was inaugurated in the new administrative capital in late 2017.⁸

This expansion strongly suggests a desire to benefit from tourism, one of Egypt’s more lucrative economic sectors, which made a total contribution of EP528.7 billion (\$29.6 billion), representing 11.9 percent of the country’s GDP in 2018.⁹ Along with other military-run social facilities such as clubs, military-owned hotels appear to cater primarily to a domestic clientele that accounted for 48 percent of the total number of tourists in Egypt in 2017, although this percentage was above normal following the decline in foreign tourism due to terrorist attacks. Indeed, it is evident that the al-Masah and Tolip chains seek business

especially through preferential deals with government ministries.¹⁰ This is probably crucial for their viability in an industry dominated by the private and public sectors: the number and capacity of military-owned hotels is a mere fraction compared to the national total of 730 hotels with over 108,000 rooms by 2017, besides the 1.4 million rooms that the government plans to add to publicly owned capacity by 2020.¹¹ High investment and operating costs, the offer of below-market prices, and profit-sharing among military managers may nonetheless mean that net profits are relatively modest. According to the private contractor who constructed the Triumph Hotel on behalf of the EAF Engineering Authority (for a client fronting for Military Intelligence), it cost EP2 billion; although this was atypical, as it was built in an unsuitable area, it confirmed that crony interests may dispense with commercial feasibility.¹² But catering to an EAF officer corps with aspirations of upward social mobility and to a civilian middle-class that increasingly feels the financial pinch may be as important a goal as commercial gain in prompting these ventures.

Political objectives are even more unambiguously uppermost with regard to the sale of food and provision of medical services to the general public. Sisi, military economic officials, and government ministers repeatedly emphasize the need to provide the public with basic commodities and services at affordable prices, countering inflationary pressures. The MOD and related agencies such as the NSPO probably make a net profit on cheap goods they import in bulk, such as frozen chickens and chicken parts, but this is done in response to political directives. Military-run supermarkets almost certainly profit from any imported commodities they sell, since these are probably exempt from customs duties, but the need to keep prices low to cater to the families of EAF personnel and low-income groups likely limits their overall profitability.

Political considerations similarly play into the provision of medical services. Researcher Ayman Emam estimates that the MOD's Medical Services Department is the second-largest healthcare provider in Egypt after the Ministry of Health, but its services are offered free to military personnel and their immediate families and to all other civilians at rates 50 percent cheaper than in private facilities.¹³ That potentially means the department may only break even or incur a loss on services to low-income groups. Receiving fee-paying middle-class patients at its upmarket hospitals and clinics is no doubt profitable, but whether the number of patients is sufficient to offset the cost of equipping and maintaining these facilities and of providing free services to ranking defense sector personnel cannot be established without full financial transparency. As in other instances, simply reducing the cost of meeting the expectations of core constituencies for advanced medical care is probably the primary

Military salaries are modest compared to public business sector and private companies, but defense sector personnel are specially designated and enjoy significant disparities in pay and benefits compared to civil servants.

objective, rather than capturing market share. Egypt's failure to become a destination for medical tourists from other Arab states additionally limits the commercial potential of military medical facilities.

In all cases, these activities are not major money spinners, though some have the potential to be. The military's investment in them responds in part to demand from constituencies deemed socially and politically important, and therefore is not always driven by commercial feasibility or a clear profit motive. Furthermore, according to an Egyptian economic analyst, military special funds are partly used to pay bonuses and allowances to EAF person-

Political objectives are even more unambiguously uppermost with regard to the sale of food and provision of medical services to the general public.

nel, but some profits are also distributed to a few dozen top-ranking officers.¹⁴ As political scientist Dina Rashed argues in her assessment of similar schemes in the Ministry of Interior, they predominantly benefit senior officials and commanders.¹⁵ The exact pattern of distribution cannot be independently verified, but in the case of special funds that come under the gen-

eral state budget this was based on a percentage of basic salary until June 30, 2015, when profit-sharing was converted into fixed amounts.¹⁶ Profit-sharing is additionally written into the laws of establishment of military agencies producing civilian goods and services for commercial sale, such as the MOMP's National Authority for Military Production; whether this is strictly applied only when an overall net profit is actually made, or taken from turnover before all income and spending is calculated, is unclear and may be open to misuse.

Harder to estimate are incomes to the MOD from licensing land use, leasing facilities, levying tolls on highways and quarries, providing specialized import or transport services, demining, and the like.¹⁷ These activities involve fewer sunk costs, and can ensure a dependable income that is especially significant in the case of approving use of state land. However, some of the more lucrative sources of potential income may be traded for other kinds of advantages; a foremost example is waiving fees for granting use of land or facilities, in return for equity in new joint ventures or simply as a means of attracting investors to high-priority schemes such as the Suez Economic Development Corridor. Another is approving land use applications in return for the award of services, infrastructure, or supply contracts to companies favored by the military or in which officers have a commercial interest. Several of these activities moreover generate opportunities for illicit income on the side.

The MOD clearly has access to substantial funds, nonetheless. The NSPO's establishment or acquisition of several new companies since 2016 suggests it can draw on considerable reserves held by the MOD, command large-scale funding from the state treasury, or leverage credit (cheaply) from publicly or privately owned banks—or assemble mixed funding packages. Much the same is true of construction under EAF management of dual-use

civilian infrastructure such as highways and bridges since 2013, which is funded by the state treasury or government borrowing, but it is possible that the MOD finances military-only infrastructure using its extra-budgetary funds (rather than the defense budget). Similarly, the cost of expanding certain military-owned facilities has been at least partly offset by using the income from feeding civilian projects with products such as cement, reinforced iron, and water meters.

In theory at least, the MOD can also put its reserves toward making major arms purchases not covered by U.S. foreign military financing. This includes orders placed in 2014–2018 for French and Russian weapons systems totaling \$8 billion (€7.15 billion) and up to \$7.5 billion, respectively.¹⁸ At least half the €5.2 billion cost of purchasing French combat aircraft was to be covered by several Gulf states, with the other half coming from commercial loans raised and guaranteed by the French government, and Gulf states were reportedly contributing to some purchases of Russian weapons. The Egyptian MOD would still have had to finance a major part of these deals; this may be why, along with the subsequent withdrawal of Saudi funding, some agreements for French and Russian systems were not translated into actual orders or else have been delayed.¹⁹ And in all cases the MOD would have to allocate funds from the defense budget or its own reserves for the future costs of maintenance and repairs, upgrades and spare parts, and training for the duration of the operational lives of all these weapons systems, which can add up to six times their purchase cost. It is not certain that such investments are actually made, potentially undermining the EAF's operational effectiveness.

Consequently, the only military agencies with clear opportunities to build substantial financial surpluses are the MOD and some of its subordinate agencies: the NSPO, the EAF Engineering Authority, and the Mining Sector. Management of national and megaprojects may have jumped to the top of the list of earners since late 2013, given the sheer scale of public works launched by the Mansour and, especially, Sisi administrations. Figures issued by the Administrative Monitoring Authority for military-managed projects indicate a volume of EP369 billion over nearly two years between February 2016 and January 2018 (\$22.5 billion, using an average exchange rate for that period). In theory, if military agencies earned agreed fixed management fees for these projects, then a 5 percent rate would translate into EP18.45 billion in income for the MOD, or somewhat over \$500 million annually (depending on the exchange rate used), while a 20 percent management fee would translate into over \$2 billion annually. This is the range suggested by available, if fragmentary, evidence. The claim made in August 2019 by the fugitive owner of Amlaak Holdings, whose main client for fifteen years was the MOD, that the military regularly rakes in 25–30 percent of project budgets cannot be verified independently, nor can it be assumed to be true across the board, but even if it were, this would result in peak annual income for the military of \$3 billion from public works.

But this is not how the finances of national and megaprojects work. The MOD and other military economic agencies do not receive set percentages of the budgets approved by the government in return for managing these projects. Rather, they are assigned a fixed budget within which to deliver the project, and then negotiate deals with the contractors who will undertake the implementation.²⁰ Making a net income depends on the margin that military negotiators succeed in extracting between the official budget and actual project costs. Margins may vary widely. Military agencies are in a strong position to make smaller companies bear a greater share of costs—including those arising from fluctuations in currency exchange rates and the price of inputs—or even to compel them to undertake the work at their own expense, which they may do in hope of securing future contracts.²¹ But the military may forgo much or all of their profit margin in order to bring on board big businesses whose expertise, industrial plants, or capital they need. Political factors also play a role: when the president sets deadlines that push costs beyond the allocated budget, the MOD may absorb the resulting losses from its own funds. This was the case with the construction of the cathedral in the new administrative capital, which Sisi wanted finished in time to celebrate Coptic Christmas in January 2019. What all this suggests is that the military's net income from the public works projects it manages approximates the aggregate amount by which the profit margin of private contractors is reduced.

Estimating net military income from national and megaprojects is virtually impossible, therefore. But it will not continue at the inflated levels seen since 2014, as the pace of new projects is declining. Military agencies benefited from the huge construction surge of housing and infrastructure—managing nearly 24 percent of projects announced by the government, if official statistics are accurate—but this may have plateaued as government figures show a decline in the rate of new projects from EP500 billion annually in 2014–2016 to EP224 billion annually through the end of 2018.²² However, it is also unlikely that military incomes will drop to pre-2013 levels, when the MOD earned more modest income from managing long-term projects such as the Toshka land reclamation scheme. This is because the MOD and its subordinate agencies have been assigned to manage projects such as the new administrative capital, Sisi's 1.5 million feddan reclamation, and East Port Said development zone indefinitely, and will no doubt be assigned a significant role in the construction of at least fourteen new desert cities in coming years, and so their overall management portfolio will remain several times larger than it was before 2013.

Evidence of profitability is less convincing for the MOMP, MOD companies, or the AOI. Even though the MOMP reported impressive sales growth of 276 percent between the 2014–2015 and 2017–2018 financial years, from EP4.2 billion to EP11.6 billion, in dollar terms this went more modestly from \$552 million to \$649 million, or 18 percent. And according to Assar, who provided these figures, fourteen of the MOMP's twenty companies were still recording net losses in 2018.²³ He did not specify which companies were profitable, but it is likely that these produced intermediate chemicals, in which they have cornered the Egyptian market and contributed to exports, or else have provided contracting

and management services, thanks to their captive market of government contracts. MOD companies such as the Alexandria Shipyard have yet to post profits, and there is no publicly available evidence that the AOI is performing better, despite sporadic boasts of new contracts and healthy sales.

Increases in turnover should have improved balance sheets across the board, but gains would partly have been offset by the commensurate rise in the total cost of factors of production, continued low productivity, inadequate research and development, and the need to invest in modernizing industrial plants and processes. And even in loss-making enterprises, EAF officers in management positions and other employees possibly receive a share of income under the profit-sharing provision stipulated in the regulations of military businesses, prior to calculating net profits, if indeed there are any. Furthermore, military businesses apparently manipulate budget rules and laws that allow them to carry surpluses forward from year to year—even as they post operating losses that are charged to the state treasury—in order to build up substantial deposits in discretionary funds (discussed below).

Military businesses have clearly faced continuing difficulties in adding value in most areas of manufacturing, but might achieve healthier results in the extractive sectors into which they are currently expanding. According to their statements, the MOD's Mining Sector and related NSPO companies are set to produce, or at least control, a major share of the country's total output of marble and granite, gold, minerals, and heavy metals, and are expanding their share of phosphate production. In part, this is done with the purpose of increasing revenue for the state treasury, but the military agencies involved will presumably receive either a management fee or a set share of net income—whether allocated formally or asserted as a *de facto* tithe. But the military is not the only actor in any of these sectors—with the possible exception of heavy metals—and would have to force out the domestic and foreign-based private companies that currently dominate them. Yet this may prove costly, certainly politically but also financially (as the military investments in the media, steel, and cement sectors discussed in Chapter 5 indicate).²⁴

BANKING AND BLACK BOXES

Contrary to the defense budget, which is deposited with the Central Bank of Egypt, the MOD places at least a portion of its income in a variety of Egyptian banks; “one billion here and half a billion there,” according to an anonymous source in the central bank.²⁵ Deposits are possibly managed by the MOD's Financial Authority, but even in this case the extent of its authority over military financial assets is unclear: it is not represented on the board of directors of a major economic actor such as the NSPO, for example, nor does it hold the military-owned shares in companies such as al-Tharwa.²⁶ Indeed, subsidiary MOD agencies such as the NSPO are also empowered by law to open and manage their own accounts in state-owned commercial banks, and probably manage these independently.

As importantly, the MOD holds a significant portion of its funds in dollar deposits. In late 2011, for example, it loaned the central bank \$1 billion to help shore up the Egyptian pound.²⁷ Its easy access to large amounts of dollars was based on a law in force since at least 1984 allowing it to purchase and retain “free currency” in order to finance its imports and investments and to settle dues to suppliers.²⁸ But in May 2013, Major General Mohamed Nasr, then assistant defense minister for finance, also justified MOD retention of foreign currency deposits as a means to assist civilian authorities to tackle “emergencies.” According to the same article, which claimed to be citing him directly, he also revealed that the MOD had refused a request from then president Mohamed Morsi for \$2 billion in foreign exchange to help the government deal with worsening shortages of electricity, fuel, and other basic commodities.²⁹ As a leading banker complained, the military’s special privilege made them “a state within a state, with their own hard currency supplies.”³⁰

The MOD and other military agencies also retain special funds in which they deposit budget surpluses—denominated in Egyptian pounds, since they are part of official budgets—which a great many civilian government agencies do as well. More infamously known as “black boxes,” special funds were established by a series of presidential decrees issued in the 1970s onward. This offered a perverse incentive for public institutions to charge capital investment costs and operating losses to the state treasury, while showing net budget surpluses that they were allowed to place in special funds and defer from one financial year to the next. The rare publication of the annual accounts of the MOMP’s NAMP and a few other EAF agencies in 2011 revealed that they followed the same practice.

As Nizar Manek and Jeremy Hodge found in an impressive piece of investigative journalism, special funds are held at the central bank, but neither the latter body nor the Ministry of Finance or Central Accounting Organization (CAO) has any oversight or regulatory power over them.³¹ According to former police finance officer turned whistleblower Abdel-Khaleq Farouq, there were 600 special funds (containing EP500 million) by 2000–2001, rising to 1,045 by 2003.³² In 2012, Nasr gave their number as 7,000, with EP35.5 billion (then nearly \$6 billion) in deposits, while Manek and Hodge estimated that the special funds held the equivalent of at least \$9.4 billion two years later.³³ The military’s share cannot be determined with any confidence, but Manek and Hodge claimed that special funds worth about \$4.9 billion in the 2010–2011 fiscal year belonged to state economic agencies with close ties to the military—such as the Suez Canal Authority, General Authority for Petroleum, and, not surprisingly, the AOI.³⁴

In May 2017, Major General Safwat al-Nahas, member of a recently formed administrative reform committee, confirmed that special funds still lacked organizational structures and statutes, making them “no more than companies belonging to the [state] entity that owns the funds.”³⁵ Unwittingly, he echoed the late Samer Soliman, political scientist and founding member of the Egyptian Social Democratic Party, who in 2011 had described the transformation of state institutions in the Mubarak era into “autonomous financial

fiefdoms.”³⁶ What uses military special funds are put to remains the subject of speculation, but as a 2018 report by Transparency International on security funding mechanisms in Nigeria showed, discretionary funds of this kind may exceed significant parts of the regular national defense budget, if not the whole of it.³⁷

The MOD may additionally control funds that originate outside the black boxes. In February 2015, a leaked conversation between Sisi and his chief aide Major General Abbas Kamel showed that the president planned to deposit \$10 billion of assistance from Gulf states in the MOD’s account.³⁸ Whether the Gulf donation went to its general account or a separate special fund is unclear, but the MOD is almost certainly one of the state agencies authorized to receive foreign donations in its special funds.³⁹

Equally probable is that the military was exempted from a government decision in 2013 transferring 6,061 special funds worth a cumulative EP38.6 billion (around \$5.7 billion) to a unified account in the central bank. The military was probably again automatically exempt from a subsequent decree issued by Sisi in July 2014 requiring “service, economic, and national general authorities” that had special funds to contribute 10 percent of their annual income to the state budget.⁴⁰ The mandatory contribution was later raised to 25 percent in the 2016 budget law; as a public business sector entity, the NAMP would normally have been subject to the law, but was explicitly exempted.⁴¹ The depreciation of the Egyptian pound in the meantime would have significantly reduced the value of the special funds in dollar terms, so the military’s exemption from making similar contributions probably served only to offset part of the loss.

Standing legislation since at least 1984 authorizes military borrowing from banks, companies, and other bodies—including foreign ones—and lending to companies. Economic analyst Abdul-Fattah Barayez assessed that the MOD had not in fact taken loans of this kind until the end of 2015, nor competed with the private sector for credit.⁴² But this has started to change, as military acquisition of steel companies since then has shown. The MOD has also invested capital from state-run bodies in projects it manages, a significant example being the investment by the National Authority for Social Insurance and Pensions in the MOD-managed Toshka land reclamation scheme.⁴³

Companies in which the military has a commercial interest are also known to have benefited from preferential access to loans. In a Carnegie Endowment for International Peace paper, Shana Marshall noted the example of a subsidiary of Tharwa Petroleum, in which the military has a direct stake, that was able to borrow \$20 million from the National Bank of Egypt in 2014: having done little business with the state previously, the subsidiary swiftly won two major concessions.⁴⁴ The desire to maintain bank support for poorly performing state-owned companies, including any with military affiliations, may help explain then defense minister Tantawi’s opposition to the proposed privatization of Cairo Bank in 2004.⁴⁵ That this remains a problem was revealed by the Egyptian National Maritime Transport

Company, an MOD affiliate that was found to have racked up major debts in the years running up to 2016.⁴⁶

ACCOUNTING WITHOUT AUDIT

EAF spokespersons and senior defense industry officials routinely state that military businesses, “be they agricultural, services, industrial, or other, are subjected to taxation and monitoring by the Central Accounting Organization, like any other company in Egypt.”⁴⁷ Ahmed el-Sayed al-Naggar, a senior economist at the state-owned Ahram Center for Political and Strategic Studies, bluntly responded that such claims “are at complete variance with the truth.” The logical outcome of each government ministry running its own economic activities, he added for good measure, was to dismantle the state and inflict an injustice on the Egyptian people.⁴⁸

That was in 2012, but little has changed since then. Generally, defense sector officials are guilty of conflating accounting—tracking inflows and outflows of funds and balancing the financial sheets at the end of each reporting period—with auditing—the more demanding verification of financial statements for the purposes of identifying financial risk areas and assessing controls, processes, and information flows and thereby the overall efficiency of management and other systems. The former is conducted internally, while the latter is usually done by bodies external to and independent from the agencies under inspection.

Military agencies duly keep their financial books—as does the MOD for the EAF and other affiliated departments—but do not appear subject to anything constituting a full audit. Still less does the CAO or any other specialized government agency evaluate the ability of military agencies undertaking economic activities to attain performance targets, resolve problems, and alter or redesign processes to improve results. Further impeding effective evaluation of performance is the lack of transparency regarding whether newly acquired or established companies count as assets or expenditures in military books, and whether the latter show outstanding dues as debts or rather as arrears, which may be carried forward from year to year. This appears to be the accounting method for MOMP companies, at least, helping to explain their significant cumulative losses. Delaying payment to civilian contractors indefinitely is similarly a means of portraying military-managed projects as efficient and profitable, as the high-profile case of Amlaak Holdings that came to light in August 2019 demonstrated, whose owner claimed it was owed EP225 million for construction work done for the military.

The MOD appears to have managed the accounts of all agencies under its umbrella until around the turn of the century. But as military involvement in the civilian economy accelerated at that time, a special Ministry of Finance office was established within the MOD to review the books of the EAF- and MOD-affiliated agencies and companies engaged in nondefense production and public works.⁴⁹ According to a knowledgeable source, however,

the special office simply reports overall expenditure and income, suggesting that its main task is to balance the books rather than conduct detailed audits.⁵⁰ This interpretation was supported by the interim minister of finance in 2011, Samir Radwan, who complained that his ministry could only track allocations of public funds to government agencies and report actual spending, but lacked detail and could not evaluate that spending; defense-related agencies were subject to even less monitoring.⁵¹

The MOMP may similarly undertake bookkeeping through its own accounting department, but the fact that the head of the MOD's Financial Authority sits on the board of the MOMP's NAMP suggests that its budget and financial operations might also come under review by the same Ministry of Finance office at the MOD.⁵² However, the head of the "state general budget sector" at the Ministry of Finance, a retired EAF major general, is also a board member, indicating an extra level of involvement. In either case, this is apparently what enabled Assar to claim that his ministry's budget is audited by the CAO "under supervision of the Ministry of Finance."⁵³ (The AOI, by way of contrast, does not come formally within the scope of any audit agency, as it retains the status of an international organization and is therefore governed only by its own by-laws, even though it may allow CAO inspections on a voluntary basis.⁵⁴)

Whatever the merits or demerits of this accounting setup, it falls short of an audit, even less an independent one. Defense officials claim otherwise. For example, then assistant defense minister for finance Nasr stated in March 2012 that "we submit to the Central Accounting Organization ... which sends hundreds of monitoring committees annually."⁵⁵ An unnamed military source provided greater clarity in 2015 by stating that the CAO reviewed military economic activities related to providing "public services" specifically, a nuance later confirmed by Assar, who stated that MOMP companies paid taxes, customs duties, and social security contributions on their production for civilian markets.⁵⁶ How the distinction is verified and maintained is unclear, assuming it is at all; similarly, equipment and materials acquired for production are likely to benefit from the military's broad range of tax and customs exemptions regardless of whether their end-use is military or civilian.

Military agencies duly keep their financial books but do not appear subject to anything constituting a full audit.

This distinction apparently allowed the CAO, which has no jurisdiction over defense-related bodies, a circumscribed window into the formal military economy. Speaking in early 2014, CAO head Hesham Geneina gave military companies a clean bill of health. But his call two years later for "a legislative revolution" to empower state audit bodies brought him into conflict with Sisi; a committee appointed by Sisi to investigate Geneina accused him of using

“incorrect and imprecise data, endangering public peace and weakening respect for the state and confidence in its institutions,” and in March 2016 he was removed from office.⁵⁷

WEAPONIZED AUDIT

The CAO has been eclipsed completely since then by the Administrative Monitoring Authority, whose head, former EAF officer Major General Mohamed Erfan Jamal-al-Din, led the investigation of Geneina.⁵⁸ Established by then president Gamal Abdel Nasser in 1958 and upgraded in Law 54 of 1964, the AMA’s mandate is to combat corruption in any government agency or private company involved in public works. For decades its remit effectively excluded the defense sector, but in 2017 Sisi ratified an amended Law 207 that made this exclusion official by limiting the AMA’s scope specifically to civilian agencies.⁵⁹ This act removed the last vestigial claim that any defense-related agency—outside of its public business sector companies—comes under external audit by any state agency.

Thanks to its powers of judicial investigation, the AMA is Egypt’s most powerful audit agency, which successive presidents have used to punish opponents and keep supporters in line. Sisi has similarly used it as what one Egyptian journalist called his “striking arm,” underlining his public commitment to stamping out corruption while ensuring obedience.⁶⁰ In April 2015, he removed Major General Mohamed Omar Heibah, who had only headed the authority for two and a half years (instead of the normal four), to replace him with Erfan, Sisi’s fellow graduate from war college in 1977.⁶¹

The AMA has always been headed by EAF officers (seconded during active service), who also lead many of its operational divisions and twenty-nine regional branches.⁶² Law 112 of 1983 reflected the extent of this inter-penetration by establishing a conversion table for all commissioned military ranks into their equivalent bureaucratic grades, and carrying over the pay, allowances, and seniority of EAF officers transferred to the authority.⁶³ As former AMA investigator Moatassem Fathi described it in 2014, the agency “operates like an intelligence service whose officers mostly come from the military or police, and enjoy vast powers of interrogation, search, and surveillance.”⁶⁴ This leaves the EAF Inspection Authority as the only body authorized to investigate corruption in the military; cases are tried exclusively by the military tribunal, ensuring they do not enter the civilian justice system even for nonmilitary charges.⁶⁵

Since assuming the presidency, Sisi has consolidated the AMA as an instrument of presidential power.⁶⁶ In 2015, a decree issued by the prime minister designated it “a state agency whose procurement contracts should be kept secret for national security considerations.”⁶⁷ And in October 2017, parliament agreed to end the authority’s autonomous status by empowering the president to hire and fire its head, granted the rank and benefits of minister to the AMA head, and exempted it from the provision of Social Security Law limiting

pensionable pay to 80 percent of final basic salary (thereby raising the allowable ceiling to 100 percent).⁶⁸

The AMA's public profile has risen in parallel. Erfan, whose tenure was renewed for a further four years on March 31, 2017, broadened his portfolio by visiting infrastructure projects and speaking about national economic development.⁶⁹ In the meantime, Lieutenant Colonel Mostafa el-Sisi, the president's son who was transferred from the EAF to the AMA after his father took office, won unusual publicity for a middle-ranking authority official by being credited with delivering several high-profile cases.⁷⁰ Progovernment media burnished his credentials, celebrating him as a "torchbearer" and "strongman" who has dealt "a painful blow to the 'corruption mafia' in Egypt," suggesting he is being groomed to head the authority eventually.⁷¹ Erfan's standing appeared secure after the president assigned the AMA to resolve tax disputes valued at EP900 billion in July 2018, but his abrupt dismissal only a month later lent weight to predictions about Mostafa el-Sisi's swift rise.⁷²

Sisi has clearly used the AMA to disown corrupt networks and burnish his own credentials, but continues to use it selectively, and has not tackled the discretionary powers and opacity that enable systemic corruption in Egypt. AMA involvement in reviewing tenders and bids for public works managed by the EAF since the end of 2015 has probably resulted in tighter scrutiny of the terms of reference for contracts awarded to private companies, but does not constitute a meaningful audit of military economic activity and finances. Indeed, the AMA's teaming up with the EAF Engineering Authority may provide a means of circumventing government rules, a pet peeve of Sisi, who bluntly castigated the state's administrative apparatus as "an obstacle to Egypt's progress" in 2015.⁷³ He was equally scathing of feasibility studies, stating three years later that "in my estimate, if I had followed [them] and allowed them to be a decisive factor in resolving matters in Egypt, we would have achieved only 20 to 25 percent of what we actually achieved."⁷⁴

Whistle-blower Abdel-Khaleq Farouq's description of Egypt's wider security sector (defense, interior, and justice) in 2008 remains apt today. It is "characterized by opacity and complete lack of transparency under pretexts of 'national security concerns,' allowing 'cancerous' expansion in administrative-organizational and economic-financial terms, giving rise to a multi-tentacled nature and incomprehensible organograms."⁷⁵

PARLIAMENTARY ABDICATION

The inability (and unwillingness) of the People's Assembly to exercise oversight of the defense budget or any other aspect of defense affairs merely confirms the military's lack of accountability to civilian authorities. For decades, parliamentarians were allowed only to approve the defense budget as a one-line item, without receiving a detailed breakdown. The Supreme Council of the Armed Forces strove to curtail even this minimal parliamentary prerogative following Mubarak's ouster, by issuing a constitutional declaration in June 2012

that required the defense budget to be submitted only to the National Defense Council (all but defunct since its establishment under the 1971 constitution).⁷⁶ This limitation was reaffirmed in the revised constitutions passed by referendum under the Morsi and Mansour administrations in 2012 and 2014. Sisi has occasionally convened the council since assuming the presidency and established a general secretariat based at the MOD to routinize its work in July 2014, but it is not clear that the council has ever reviewed the defense budget.⁷⁷

In any case, dissent was rare in the politically subservient People's Assembly. The fact that an attempt by representative Elwy Hafez to expose corruption in defense procurement in 1988 is still remembered today shows how exceptional it was. His efforts finally led to a debate in 1990, but even this was subsequently excised from the parliamentary record.⁷⁸ Twenty years later, Ayman Nour, a former member of parliament who ran unsuccessfully against Mubarak in the 2005 presidential election, took advantage of the 2011 revolution to oppose a draft supra-constitutional framework document proposed by the ruling SCAF. Arguing that this would "gift the nation to the army," he rejected maintaining "'black zones' in the general budget, over which there is no monitoring or review or accountability." He also demanded that "expenditure on armament, defense production, with what expenses this entails" be discussed in a dedicated parliamentary committee. As for "for-profit companies, cement, car, and washing machine companies and mineral water companies, and National Service Projects," these "should be subject exclusively to public regulations." Otherwise, he warned, the EAF would be "transformed into a state within the state," and Egyptians "a nation for the army rather than an army for the nation."⁷⁹

The military pushed back. In March 2012, assistant minister of defense and SCAF member Major General Mokhtar al-Molla insisted that the defense budget would remain exempt from parliamentary oversight.⁸⁰ A month later, assistant defense minister for constitutional and legal affairs and SCAF member Major General Mamdouh Shahin argued that "previously the military budget was subject to specific laws and was not in any constitution." By proposing constitutional amendments exempting defense from parliamentary debate, he added, "I am simply asserting a reality that has existed for a long time. What is the problem with that?"⁸¹ Their colleague Nasr openly boasted a year later that he had blocked efforts by the Muslim Brotherhood and allied Islamists of the Nour Party to bring the defense budget (and the NSPO) under parliamentary scrutiny.⁸²

Despite these objections, a very broad breakdown of the defense budget was submitted for the first time ever to the Shura Council (the Senate) in April 2013. This was three months prior to the council's dissolution by court order during the brief interlude of the Morsi administration.⁸³ But the exception only proved the rule. In April 2012, the Muslim Brotherhood-dominated parliament approved the decree issued by SCAF head Tantawi in May 2011 awarding the MOD the power to determine whether EAF officers accused of illicit gains should be prosecuted in civilian or military courts.⁸⁴ And in October 2017, parliament approved draft Law 207 that explicitly limited audit by the AMA to civilian

agencies alone, making the exemption of military agencies from its remit de jure for the first time ever.

A historically supine People's Assembly has become openly complicit with the military. Former EAF, police, or security officers won eighty-four parliamentary seats in the 2015 election, at least seventeen of whom sit on the Committee on Defense and National Security.⁸⁵ This has assured military economic agencies of vocal support in the People's Assembly, not that this has ever been in doubt. When asked about the MOMP's foray into medical manufacturing in October 2016, for example, several representatives praised this as "a guarantee of quality." Another called for the MOD to oversee Egypt's health sector in its entirety, arguing this would "guarantee 100 percent success ... and reveal 90 percent corruption [in the existing sector]." He added, for good measure, "if the army were to take the country in hand we would become like Europe within one year."⁸⁶ And one parliamentarian who acknowledged that use of conscript labor in military companies gave them a competitive advantage over the private sector, nonetheless endorsed their constant expansion on the grounds that they fill "an economic void to provide goods that the state could not provide."⁸⁷

The inability (and unwillingness) of the People's Assembly to exercise oversight of the defense budget or any other aspect of defense affairs merely confirms the military's lack of accountability to civilian authorities.

An altercation during a debate on July 25, 2016, demonstrated parliament's relationship with the military vividly. In question was a proposal to increase military pensions, which are charged to the general budget. Addressing the MOD representative who was attending the session, the head of the parliamentary committee on human rights (and nephew of the late president) Mohamed Anwar Sadat objected that "we know neither the basic salaries nor the pay scale [of the EAF], so how can we increase [pensions]?" The main problem, he continued, was not knowing what salaries and pensions were awarded from the (general) budget to officers "who hold civilian positions as ministers, governors, mayors, or chairmen of authorities and companies."⁸⁸ At this point the Speaker of the House forcibly silenced Sadat, who some months later was stripped of his parliamentary seat.⁸⁹ The speaker was himself to gain a brief moment of international notoriety when, in October 2019, he likened Sisi's ambitious development strategies to those of Nazi Germany, saying that "Hitler had his mistakes, but what allowed him to expand eastward and westward was that he created a strong infrastructure."⁹⁰

Parliamentary abdication enables the military economy in significant ways. The Planning and Budget Committee, for example, judged that it could not review the budgets of mega-projects managed by the military. "The rules that apply to the armed forces budget also apply to the budget of the new Administrative Capital for Urban Development Company," Member of Parliament Yasser Omar told investigative journalist Beesan Kassab.⁹¹ He

justified this particular case on the grounds that it “does not take a single piaster from the state budget,” which is both erroneous—since the government provided some initial funding and the company’s start-up capital came from the ministries of defense and hous-

A historically supine People’s Assembly has become openly complicit with the military.

ing—and misleading—since NUCA and other civilian authorities involved in fact receive official public funding, albeit under a budget for general authorities that is separate from the state budget. Other officials, including Sisi and the spokesperson for the company managing the adminis-

trative capital project, added the further justification that its development was financed solely from the proceeds of land sales. Parliament has tacitly allowed this wholesale transfer of usufruct over state land and assets and the revenues deriving from them to privileged institutional actors. It similarly withheld from seeking clarification when Sisi acknowledged the use of public funds to construct multiple presidential palaces around the country in September 2019 and vowed to build more, claiming “Those aren’t for me. Nothing is for me ... they are for Egypt.”⁹²

THE WAGES OF IMPUNITY

The EAF has assiduously cultivated an image of financial probity and rectitude, for the most part successfully as the adulation of the members of parliament quoted above confirms. This contrasts with the widespread perception—actively if informally propagated by military personnel—that corruption pervades its civilian counterparts, whether in the private or public sectors. Mismanagement of state assets and national resources and outright corruption have been structural features of Egypt’s economy since the EAF established the republic—rather than an aberration. To paraphrase analyst Thomas de Waal’s assessment of corruption in Ukraine, the problem is not that a well-functioning state has been corrupted by certain illegal practices, but rather that those corrupt practices constitute the rules by which the state is run.⁹³ But the notion that the military has been able to remain a bastion of integrity amid a sea of corruption for decades is neither convincing nor borne out by the facts. Rather, anecdotal evidence, insider accounts, and public revelations of the kinds cited below indicate extensive and routinized corruption within at least those parts of the defense sector concerned with procurement and supply, licensing civilian functions of any kind, and public contracting and services.

Sisi has repeatedly identified corruption as a major challenge in public, noting that it will take considerable time and effort to resolve.⁹⁴ He has moreover recognized that this affects major state institutions; for example, he acknowledged to a senior U.S. State Department official cited by journalist Peter Hessler that he was unable to tackle corruption in the police because “it’s a million-man mafia.”⁹⁵ But another senior U.S. official involved in the

formal relationship with the Egyptian MOD argues that this also works to Sisi's advantage: "As a former Director of Military Intelligence, he is intimately familiar with the military economy in all its dimensions ... [and] knows where the metaphorical bodies are buried."⁹⁶ Indeed, according to Transparency International, the risk of corruption has worsened since he assumed the presidency: Egypt scored consistently between 32/100 and 37/100 in its overall Corruption Perception Index for 2014 and 2018, keeping it in the poorly performing end of the index.⁹⁷

Major General Michael Collings, who served as senior U.S. defense representative and chief of the Office of Military Cooperation in Cairo from 2006 to 2008, later told the *New York Times* that corruption was endemic in the senior EAF officer corps. He asserted that "a fair amount" of the income of formal military businesses "goes back to the senior officers that are in charge of these particular factories." Collings also revealed that, according to EAF counterparts he met during his posting, Mubarak used to disburse cash payments to the commanders of the four EAF services (Army, Navy, Air Force, and Air Defense Forces), a claim confirmed separately to the *New York Times* by a high-ranking EAF retiree.⁹⁸ The pattern extends all the way down the chain of command: conscripts who can afford to reportedly pay bribes to be assigned to units or locations they prefer—up to EP15,000 in 2015 (then \$2,000).⁹⁹

Legal immunity is further reinforced by the formal prohibitions placed on divulging information relating to the military, starting with Law 313 of 1956 and replicated in more general legislation such as Presidential Decree 35 of 1960 on the Central Agency for Public Mobilization and Statistics and the National Archives and Intelligence Law 100 of 1971.¹⁰⁰ Transparency International's Government Defense Anticorruption Index concluded that the procedures and mechanisms in place to prevent corruption put Egypt in the top category of countries where the risk of defense sector corruption was "critical" in every category it measured.¹⁰¹

Insider accounts reveal that this is an actuality, not mere risk: there is an established pattern in the MOD financial administration of approving invoices known to be fraudulent, for example, and procurement officers routinely demand bribes for the award of contracts. Anecdotal evidence moreover shows that bribe amounts have risen sharply since the military takeover of 2013, reflecting the military's enhanced leverage. Indeed, inhibitions linked to notions of legality have weakened further, resulting in what might be termed rapacious entrepreneurship: greater awareness of opportunities for extra income-generation and boldness in extracting it from civilian actors. A foremost example is military intrusion into the operation of the government investment company that provides seed capital to startup companies, imposing officers onto their boards or extorting a share in equity (reportedly up to 20 percent) in return for approval of funding.

There is considerable cumulative evidence of these practices, stretching back for decades. Political scientist John Waterbury noted in the early 1980s that “senior EAF officers traded on their influence, pocketed kickbacks on everything from citrus exports to arms purchases, acquired property and income through appropriations or management of sequestered properties.”¹⁰² Fellow political scientist and Egypt expert Robert Springborg corroborated reports from foreign contractors working in Egypt that similar lucrative practices in that era centered on major ports for leasing of quays, permission to offload cargo, and filing fraudulent insurance claims for damaged goods.¹⁰³ EAF officers were still supplementing their incomes thirty years later by taking fees in cash for routine services they control such as passage through the Suez Canal, according to foreign diplomats interviewed by journalist Matthew Axelrod in 2011.¹⁰⁴ In March 2014, a private importer of satellite receivers complained openly of having to pay thousands of dollars in bribes to EAF officers working with the Suez Canal Authority in order to release his recent shipments.¹⁰⁵ And ships transiting through the Suez Canal were routinely compelled to hire local crews to facilitate their crossing, in addition to paying smaller tips and bribes.¹⁰⁶

Extracting illicit income occurs wherever the military controls physical or regulatory access. Businessmen confirm that they have regularly been asked to donate to MOD funds in return for receiving permission to register land or change its use since 2001, or to pay outright bribes. Applications relating to land use are moreover often made to local EAF commanders rather than an authorized MOD department—let alone to the Ministries of Local Development, Trade and Industry, or Finance, any of which would be the more obvious authority—creating opportunities to demand bribes, especially from smaller businesses. But public sector and government agencies are no less afflicted: insiders confirm that the Housing Ministry, for example, has routinely paid bribes amounting to millions of Egyptian pounds to MOD officers in return for approving land use applications for publicly funded schemes.

Control over borders offers other lucrative opportunities. Since 2014 especially, agricultural produce of military-owned farms in the Farafra and Bahriyyah oases that used to be sold to government agencies is reportedly being sold in Libyan black markets instead. Local clans operate large convoys of goods in both directions across the border with EAF knowledge; soldiers serving in the area report being told by their commanders which to intercept and which to protect.¹⁰⁷

Corruption is so prevalent in the wider economy and administration that officials routinely identify fighting it as a priority. In 2010, for example, Admiral Mohamed Ibrahim Youssef, then head of the Holding Company for Maritime and Land Transport, stressed this fight as one of the company’s key social corporate responsibilities—alongside serving society, securing its workers’ rights, and protecting the environment.¹⁰⁸ But much of the reported fraud or mismanagement takes place in sectors in which the military claims primacy. For example, a study commissioned by the Cabinet of Ministers in 2009 concluded that the

development plan for Sinai, which the MOD leads in setting priorities and implementing, had fallen short by 70 percent on its goals in agriculture; 66 percent in industry, mining, and petroleum; and 86 percent in water and sanitation. With no hint of irony, North Sinai governor Major General Munir Shash attributed this failure to corruption.¹⁰⁹

Local government is commonly perceived to experience the highest levels of corruption within the executive branch of the Egyptian state.¹¹⁰ It is also a branch that has been heavily penetrated by EAF retirees; much of the corruption revealed over the past decade has clustered around seaports, airports, and ground transport infrastructure—all bastions of the officer's republic. In 2011, the AMA found that the Port Said Port Authority and Maritime Transport Sector of the Ministry of Transport had awarded a series of contracts, extensions, and exclusive terms to the Suez Canal Container Transport company since 1999 that would result in losses to the state treasury of \$489 million (including \$350 million in future earnings); responsible were three retired major generals who headed these agencies at the time.¹¹¹ Port Said was again the focus of a corruption investigation in 2015, when the governor of the province, another retired major general, was accused of fraudulent import dealings.¹¹²

In the same year, the head of the National Maritime Navigation Company, Vice Admiral Nabeel Lotfi, announced that fifteen years of declining performance had left the company EP100 million in debt and with only eight ships out of an original fleet of seventy by 2015; he did not explain this, but in Syria similarly severe depletion of the state-owned merchant fleet was due to fraud.¹¹³ Lotfi was replaced by yet another vice admiral the following year, and the government transferred the company to the newly created public business sector.¹¹⁴ And in February 2016, a former assistant to the Navy commander and head of the Port Said Port Authority was sentenced to five years imprisonment for accepting bribes.¹¹⁵

Local government is seen to experience the highest levels of corruption within the executive branch of the Egyptian state. It is also a branch that has been heavily penetrated by armed forces retirees.

Civil aviation, a fiefdom of the Egyptian Air Force in the way the Suez Canal and ports are the Navy's sinecure, has been similarly afflicted. Retired Air Force Major General Atef Abdul-Hamid headed the Company for Maintenance and Technical Services of the national carrier EgyptAir and then EgyptAir itself before becoming minister of transport (from 2011 to 2013), at which point the Illicit Gains Agency charged him and a deputy of illegally receiving EP4 million in profits from the aviation services company.¹¹⁶ In April 2015, the CAO head Geneina publicly stated he was "appalled by the extent of corruption in the airport," which he blamed on "corrupting and beneficiary cliques."¹¹⁷ The AMA ordered the removal of the new head of the Holding Company for EgyptAir for financial violations and

then announced a “cleanup” of the Holding Company for Civil Aviation on Sisi’s instructions at the end of August.¹¹⁸

Domestic food supply is another obvious candidate for fraud. The MOD claimed to be producing up to 60 percent of EAF requirements of food, uniforms, and other consumable goods by the late 1980s and was selling its surplus produce in domestic (and, it claimed, export) markets starting in the early 2000s. And yet it continues to import considerable quantities of the same commodities or to purchase them from local suppliers. As with the import of commodities such as wheat, sugar, and medicines, MOD procurement officers and favored commercial agents may extract significant profits from pricing differences between open markets and subsidized military production. Most prominently, several EAF retirees who headed the Holding Company for Food Industry or advised the minister of supply were arrested in May 2018 on charges of accepting bribes worth EP2 million. The AMA was reported at the same time to be investigating several of the company’s subsidiaries.¹¹⁹

Rotating discredited officials from one job to another has been a standard response when mismanagement or fraud can no longer be disguised. The revolving door does not always reflect corrupt practices, but it has routinely hidden debt arising from poor performance as well as fraud. Once again, this has a long history. In 1986, for example, the head of the board of directors of the MOMP’s Factory 360, was accused of misappropriating funds, conducting secret deals with foreign companies, and gifting company property “to high officials in various sectors of the state,” for a total loss of EP20 million (then \$28.6 million) in two years.¹²⁰ Another military company—AOI subsidiary Kader—claimed to have dismissed corrupt officers in 1998 and 2004, only to have its director tried in 2011 for receiving bribes from Mercedes-Benz in return for awarding supply contracts.¹²¹ In 2012, the AMA referred former AOI chairman Major General Sayyed Meshaal himself for prosecution for allegedly awarding contracts above cost.¹²²

The legal umbrella that shields EAF officers—whether in active service or retired—from scrutiny also protects them when they face challenges. For example, the head of the Holding Company for Silos and Storage, a retired EAF major general, was charged with fixing contracts in 2011, and then again in 2012 for burdening the company with fraudulent legal expenses, but remained in his post until the company’s general assembly finally referred him to prosecution in 2016.¹²³ Similarly, a retired EAF major general who headed the Company for Sale of Egyptian Products and was also charged in the holding company fraud case in 2011, reappeared on the company board following its merger with the publicly owned Sidnawi Company in 2018.¹²⁴

That the cases listed above reflect a pattern rather than an exception is highlighted by the AMA’s own record. Its role in protecting senior officials from investigation during the Mubarak era embedded it in the regime’s crony networks, and inevitably several of its own heads were accused of corruption, while those who did not conform were penalized.¹²⁵ In

1996, for example, Major General Ahmad Abdul-Rahman was reportedly replaced after insisting on pursuing a corruption case against then housing minister Ibrahim Soliman that the president wanted dropped.¹²⁶ But Abdul-Rahman, too, was subsequently accused of heading several housing companies in partnership with a Saudi prince and then selling their assets for his own gain.¹²⁷

Abdul-Rahman's successor as AMA chief, Major General Hitler Tantawi, apparently proved more pliant in serving Mubarak's wishes, as he received three one-year extensions after the end of his normal four-year term in the post. After retiring in 2004 (with the Medal of the Republic, First Class, awarded by Mubarak), he was accused of abusing his position to illegally acquire subsidized officer housing and land in high-value development zones, reportedly registering some of these properties in the names of his children and grandchildren.¹²⁸ Tantawi was followed by Major General Mohammad al-Tohamy, whose tenure was similarly extended four times after it had ended in 2008. The final extension was decreed by SCAF head Field Marshall Mohamed Hussein Tantawi in December 2011, despite accusations that Tohamy had ordered the shredding of documents relating to corruption in the Mubarak era.¹²⁹

Tohamy was eventually dismissed in September 2012 by then president Morsi. This followed accusations by whistle-blowing AMA officer Lieutenant-Colonel Motasem Fathi that Tohamy had blocked investigations into retired EAF officers, including a governor of North Sinai and a minister of military production as well as current members of the SCAF, who Fathi claimed had made up to \$7 million from smuggling subsidized fuel.¹³⁰ Tohamy himself allegedly received "millions of pounds" in gifts from state companies, and used AMA funds to purchase gifts for ministers and Mubarak's family.¹³¹ (Tohamy was also Sisi's mentor in Military Intelligence, and was eventually rewarded by being made head of the GID immediately after the military's takeover of power in July 2013.¹³²)

The new AMA head appointed by Morsi, Major General Mohamed Omar Heibah, projected a different image by openly acknowledging that the "marriage of capital and power" under Mubarak had obstructed the AMA from carrying out its duties properly.¹³³ He also revealed that Morsi had taken the unprecedented step of making the presidency subject to AMA audit, and teamed up with the CAO under Geneina in a joint investigation of illegal encroachments on state land, which were reported in October 2015 to have cost the public treasury EP440 million in lost income.¹³⁴ But Heibah's tenure was cut short when Sisi replaced him midterm with Erfan.

Rotating discredited officials from one job to another has been a standard response when mismanagement or fraud can no longer be disguised.

Lower-ranking AMA officers have moved into lucrative consultancies in government agencies and state-owned enterprises on retiring, including in companies they had previously audited. A press report in February 2009 revealed, for example, that former EAF officer Major General Samir Yousef had moved from auditing al-Qawmiyya Construction Company to consulting for it; it later appointed him to head the committee that took its well-known subsidiary company, Omar Effendi, back into public ownership in 2013.¹³⁵ Also joining him at al-Qawmiyya Construction was Major General Hamdi Rashed, formerly AMA deputy head. Major General Mohamed Amin Abdul-Ghani similarly went from being assistant AMA head to heading Misr Company for Car Trade.¹³⁶

With so many overlapping and potentially competing military agencies and jurisdictions, individual officers may easily claim they are the legitimate authority to license one activity or prohibit another.

Sisi may have curbed the potential for mismanagement and fraud in military-managed public works when he ordered the AMA to team up with the EAF Engineering Authority in late 2015. But the effects can only be partial, both because the relationship between the AMA and EAF is so intimate and because the AMA focuses on the formal paperwork of tenders and invoices. This does not necessarily impede the opportunity to cream

profits from outsourcing the actual work to private subcontractors and from procuring or supplying materials and equipment for projects, which as Ayman Emam argues offers the larger opportunities for fraud.¹³⁷ And as this section has shown more generally, there are few other barriers to the involvement of EAF officers in a range of corrupt practices given their extensive penetration of public sector agencies and local government, their exclusion from audit by the AMA or any other civilian agency, and their quasi-assured immunity from prosecution in civilian courts. With so many overlapping and potentially competing military agencies and jurisdictions, individual officers may easily claim they are the legitimate authority to license one activity or prohibit another. But as the example of extorting equity from startup companies in return for approving their applications for venture capital showed, even such legal niceties are weakening.

NOTES

- 1 World Bank, “Egypt: Too Many Regulations Breed Corruption,” December 11, 2014, <http://bit.ly/2m0zTO9>.
- 2 Major General Magdy Shawqy Abdel-Monem, cited in “From War Room to Boardroom. Military Firms Flourish in Sisi’s Egypt,” Reuters, May 16, 2018, <https://reut.rs/2mwGq3z>.
- 3 Percentage from former security finance officer Abdel-Khaleq Farouq, cited in Bassem Abul-Abass, “Egypt Military Budget Allocations to Reach LE31 Billion in 2013/14: Source,” *Ahram Online*, May 29, 2013, <http://bit.ly/2m50QjI>. And “Egypt - Military Budget,” Global Security, <http://bit.ly/2m8ybKw>. Accessed April 23, 2019.
- 4 Most personnel under the ministries of interior and justice also come under the special cadre. Abdel-Khaleq Farouq, *Roots of Administrative Corruption in Egypt: Work and Wages and Payroll Policies Environment in Egypt, 1963–2002* (Cairo: Dar al-Shorouq, 2008), 278, 289, and 290.
- 5 An unnamed officer interviewed by Jack Shenker, “Egyptian Army Officer’s Diary of Military Life in a Revolution,” *Guardian*, December 28, 2011, <http://bit.ly/2m9wNHv>.
- 6 On pension increases: “A Timeline for the Increases in Army and Police Salaries in Egypt After the January Revolution,” *Sasa Post*, April 4, 2016, <http://bit.ly/2kvHK5T>. Updated on March 24, 2017. In some cases the increases were matched for civil servants. According to Zeinab Abul-Magd, “The Ministry of Defense’s State of Law,” *al-Masry al-Youm*, May 6, 2012, <http://bit.ly/2m3ASgw>; and in 2019 the contribution to pension calculations of the so-called “nature of work allowance”—a fringe benefit awarded for every additional assignment—was increased by 250 percent for all EAF personnel in August 2015. Some sources wrongly reported that overall pensions had been increased by 250 percent. Sa’id Abdelrahim, “Sisi Increases Military Pensions by 25 Percent,” *al-Araby al-Jadeed*, August 19, 2015, <http://bit.ly/2mte6yN>. The most recent increase of 15 percent was ratified by Sisi on June 27, 2019. “Sisi Ratifies the Military Pensions Increase by 15 Percent,” CNN, June 27, 2019, <https://cnn.it/2mwMOrt>.
- 7 As of April 2019, the standard VAT rate was 14 percent on taxable goods and services and imports, 5 percent capital equipment used by taxable businesses; basic foodstuffs; agricultural supplies; construction of new properties; consulting services; and oil products, and 0 percent on exports and related services and on financial services; medical supplies; healthcare; public broadcasting; education; domestic energy; basic foodstuffs; and the sale and leasing of real estate. “Egyptian VAT Rates,” Alvara, <http://bit.ly/2mrG124>. Accessed April 20, 2019.
- 8 NSPO ownership of the Tolip chain noted in Hend Mokhtar, “Government Approves Management Contracts for the Hotel Facilities of the Ministry of Youth,” *Yom7*, December 6, 2018, <http://bit.ly/2l14hrr>. An incomplete list of Tolip hotels is at the chain’s main website: “Tolip Hotels and Resorts Chain,” Tolip, official website, <http://bit.ly/2krtcnM>, accessed on April 23, 2019. Military ownership of al-Masah noted in “From War Room to Boardroom. Military Firms Flourish in Sisi’s Egypt,” Reuters. The management role of the MOD’s Financial Authority of the al-Masah chain is noted in Dina Saied, “Al-Masah Capital Hotel,” *Nisfel-Dunia, al-Ahram*, January 13, 2018, <http://bit.ly/2kOTW1Y>.
- 9 WTTC, Travel & Tourism Economic Impact 2018 Egypt, 1, <http://bit.ly/2kPMHqz>.
- 10 For example, the Ministry of Sports signed a deal with three Tolip hotels in November 2018: Shadi Mohamed, “Minister of Sports Signs 3 Contracts With the National Company for Hotels,” *Akhbar al-Youm*, November 27, 2018, <http://bit.ly/2mx0wKX>.
- 11 Figure of 730 hotels from BMI Research, cited in Karim Khalife, “The Revival of Egypt’s Tourism Industry,” *Hospitality News Middle East*, June 6, 2018, <http://bit.ly/2m2e5BU>. Figure on number of rooms from CEIC Data, updated on September 19, 2018, and last accessed

- on July 9, 2019, <http://bit.ly/2moWpQT>. Government plans cited in Julian Nabil, “Egypt’s Tourism Bounces Back Strong,” *Invest Gate*, April 21, 2018, <http://bit.ly/2mvmAWf>.
- 12 Amlaak Holdings Company owner Mohamed Ali posted his revelations in video clips after fleeing Egypt, at <http://bit.ly/2l1Rntp>. Highlights were presented in “Watch: Businessman Exposes Corruption Worth Billions in the Egyptian Army,” *al-Jazeera Mubasher*, September 4, 2019, <http://bit.ly/2kMkeBX>.
 - 13 According to the head of the Medical Services Department Major General Al-Serefi, interviewed in Ahmed al-Sharif, “Armed Forces Reveal New Medical Services Announced for the First Time,” *Masrawy*, August 18, 2014, <http://bit.ly/2m9T0VT>. And Ayman Emam, “Driving Development or Building an Empire of Corruption? Military Entrepreneurship and the Militarization of the Egyptian Economy,” master’s thesis, International Anti-Corruption Academy, October 2018, 30.
 - 14 Egyptian financial analyst. Anonymized interview.
 - 15 Dina Rashed, “Violence From Above, Violence From Below: Policing Citizens in Mubarak’s Egypt,” in Bettina Koch, ed., *State Terror, State Violence Global Perspectives* (Springer V, 2016), 106. Rashed cites estimates that the ministry of interior had 174 special funds and protection service bonuses established on the basis of Laws 88 and 95 of 2000, collectively worth EP15 billion (\$2 billion at that time).
 - 16 The new rule was stated in Article 15 of the budget law. “State Budget Law for Financial Year 2015/2016,” *Manshurat*, July 2, 2015, <http://bit.ly/2mqTWp3>.
 - 17 Assistant minister of defense for financial affairs Major General Mahmoud Nasr stated that EAF demining activity in Kuwait following the 1991 Gulf war brought in “millions,” which the EAF refused to hand over to state treasury because “this is not the state’s money and we will not allow the state to ruin it.” “The Disappearance of Major General Mahmoud Nasr, the Generals’ Finance Minister Who Confronted the MB’s Attempts to Seize the Army’s Money,” *al-Mogaz*, May 1, 2013, <http://bit.ly/2mrWxPC>.
 - 18 The total value of orders from France comprised €5.2 billion for 24 Rafale combat aircraft, 950 million euros for two Mistral amphibious assault ships, and €1 billion for a Naval Group multimission frigate and four Gowind corvettes. Sources: Shadi Bushra and Ali Abdelatti, “3.2 Billion Euros of Egypt-French Arms Deal Financed by Loan From Paris: Sisi,” Reuters, March 1, 2015, <https://reut.rs/2mwKbWA>; and Jean-Baptiste Vey, John Irish, “France, Egypt Agree €950 Million Mistral Warship Deal,” Reuters, September 23, 2015, <https://reut.rs/2m95a1i>; and Yiftah Shapir, Yoel Guzansky, “A Bridge Over the Mediterranean: The French-Egyptian Arms Deal,” Institute for National Security Studies, March 12, 2015, <http://bit.ly/2kvA5o7>. Orders from Russia comprised \$3.5 billion for S-300VM4 “Antei 2500” and Buk-M2E anti-aircraft missiles, \$2 billion for 46 MIG 29MM2 combat aircraft, \$1 billion for 46 Kamov Ka-52 and Ka-52K ship-borne helicopters, and “over two dozen” Su-35 multirole combat aircraft. Joseph Colonna, “SIPRI: Egypt’s Arms Imports Skyrocket Amidst Greater Security Threats,” *Egypt Today*, March 12, 2018, <http://bit.ly/2kYWmel>; and Jeremy Binnie, “Egypt Reportedly Orders Su-35 Fighters,” *Jane’s Defence Weekly*, March 18, 2019, <http://bit.ly/2kZYLWa>.
 - 19 For example, Egypt did not follow up on expected orders for up to twelve Airbus A400M military transport aircraft or for a military telecommunication satellite. Sources: “Egypt Nears Order for A400M Airlifter,” *Defense-Aerospace.com*, November 26, 2015, <http://bit.ly/2ma5Xit>; and Shaul Shay, “US Out – France In: The Importance of Cairo’s Military Ties with Paris,” *IsraelDefense*, December 17, 2017, <http://bit.ly/2mr4Bjz>. On the political motives behind the Rafale deal, “Egypt Loses Rafale Fighter Worth Over \$200 Million - Pilot Dead,” *Military Watch Magazine*, January 30, 2019, <http://bit.ly/2m5YHUX>.

- 20 According to well-placed former cabinet minister. Anonymized interview.
- 21 The former head of the EAF Engineering Authority Major General Kamel al-Wazir implied that private contractors were bearing the costs of implementing projects on schedule despite the sharp drop in value of the Egyptian Pound. Interviewed in Hani Abdelrahman, “Kamel al-Wazir: The Army Begins Iron Production at an Annual Capacity of 2 Million Tons,” *al-Masry al-Youm*, February 8, 2017, <http://bit.ly/2m5YQrt>.
- 22 AMA head Major General Erfan stated that 1,705 projects costing EP285 billion were undertaken between February 15, 2016, and May 20, 2017. Ahmed Farhat, “AMA: Completing the Review of 1,705 Projects Costing EP 285bn,” *al-Borsa News*, May 23, 2017, <http://bit.ly/2knm0sO>. He later stated that additional projects worth EP84 billion were undertaken by January 2018. “Sisi Inaugurates Several Projects in 10 Ramadan City,” *Egypt Today*, January 8, 2018, <http://bit.ly/2kWQsdx>. Prime Minister Mostafa Madbouly stated that a total of EP1.56 trillion had been spent on completing 8,278 projects in 2014–2018 (\$87 billion at the exchange rate at that time). Cited in Hend Mokhtar, Mohsen al-Bediewy and Mohamed al-Sharkawi, “Prime Minister in the Opening of Several Service Projects: We Completed 8,278 Projects,” *Youn7*, December 15, 2018, <http://bit.ly/2mjPyYW>.
- 23 According to Assar, cited in Mohamed Youssef, “Minister of Military Production: We Achieved EP 8.9bn in Sales in 2017,” *al-Watan*, March 5, 2018, <http://bit.ly/2mvJflh>; And “EP 11.6bn Revenues of the MOMP in 2018,” *Nile News*, December 31, 2018, <http://bit.ly/2kZj2es>.
- 24 Centamin PLC, which is listed on the London and Toronto stock exchanges, claims that it runs the only gold mine in Egypt, Sukari (through local subsidiary Pharaoh Gold Mines), <http://bit.ly/2kzfDmv>, accessed on April 23, 2019.
- 25 Anonymized interview.
- 26 On management of NSPO deposits, Mohamed Hosni and Ousama Sayyad in “Gold-Digging Generals, the Internal Structure of the Military,” *Noon Post*, January 27, 2017, <http://bit.ly/2m9fbLU>. The NSPO board of directors includes the heads of the EAF’s Organization and Administration Authority and Logistics Authority, but not the Financial Authority. “Reorganization of the National Service Projects Organization,” *Manshurat*, February 15, 1979, <http://bit.ly/2mr82Xv>. Military shares in al-Tharwa are registered to the National Authority for Defense Production. Shareholders, Tharwa Petroleum Company, <http://bit.ly/2maaaTj>. Accessed on April 24, 2019.
- 27 According to Major General Mahmoud Nasr, assistant defense minister for finance and member of the SCAF, cited in “Army Gets 4.2% of State Budget, Says SCAF Member,” *al-Masry al-Youm*, March 27, 2012, <http://bit.ly/2m1gvR7>. This source erroneously reported the loan to the central bank as EP1 billion.
- 28 Article 18 of the Law 6 of 1984 on the National Defense Production Authority, February 2, 1984. This represents an exemption from Law 97 of 1976. “Establishment of the National Authority for Military Production, law 6/1984,” *Manshurat*, February 2, 1984, <http://bit.ly/2kzjiAL>.
- 29 “The mystery of the disappearance of Major General Mahmoud Nasr,” *al-Mogaz*, May 1, 2013, <http://bit.ly/2mrWxPC>.
- 30 Clement Moore Henry, email to author October 20, 2016.
- 31 Nizar Manek and Jeremy Hodge, “An Interview on Egypt’s Slush Funds,” *Sada* (blog), Carnegie Endowment for International Peace, July 09, 2015, <http://bit.ly/2l09xf4>.
- 32 Farouq, *Roots of Administrative Corruption in Egypt*, 229. Farouq notes that special funds were set up using a loophole in Law 11 of 1973, so as to escape Basic Budget Law 53 of 1973.

- 33 “Army Gets 4.2% of State Budget, Says SCAF Member,” *al-Masry al-Youm*. Manek and Hodge, “An Interview on Egypt’s Slush Funds.”
- 34 Figure of \$9.4 billion given in Manek and Hodge, “An Interview on Egypt’s Slush Funds”; and in Nizar Manek and Jeremy Hodge, “Opening the Black Box of Egypt’s Slush Funds,” *Africa Confidential*, May 26, 2015, <http://bit.ly/2mtY2wJ>; and Eman el-Sherbiny, “Uncovering Egypt’s Slush Funds,” *Business Today Egypt*, August 2015, <http://bit.ly/2mxBTxP>.
- 35 Cited in Amira Mamdouh, “Administrative Reform Committee Rejects the Permeant Employment of Special Funds’ Contractors,” *Dostor*, May 3, 2017. Retrieved from *Akhbarak*, <http://bit.ly/2kzl7h5>.
- 36 Samer Soliman, “Army Demands and the Fate of Democratic Transition,” *Shorouk News*, November 24, 2011, <http://bit.ly/2mrfEt3>.
- 37 “Camouflaged Cash: How ‘Security Votes’ Fuel Corruption in Nigeria,” Transparency International, May 2018, <http://bit.ly/2l1s4HI>.
- 38 Omar Ashour, “The Sisi Leaks and Intra-regime Power Dynamics,” *al-Araby al-Jadeed*, February 17, 2015, <http://bit.ly/2mwRgXb>; and “Egypt’s President Allegedly Mocks Gulf Wealth,” BBC, February 10, 2015, <https://bbc.in/2kQlmob>. The alleged recording can be heard at <http://bit.ly/2mpxlt1>.
- 39 On eligibility of some funds to receive foreign donations, “Egypt’s Finance Ministry Aims to Reform \$4 Billion in Special Funds,” *Ahram Online*, August 28, 2014, <http://bit.ly/2mxLeph>.
- 40 Both decrees cited in “El-Sisi Appropriates 10% of ‘Special Funds’ Annual Revenues to 2014/15 Budget,” *Ahram Online*, July 14, 2014, <http://bit.ly/2m1u5nz>. Ironically, both measures had previously been decreed by Morsi and the Muslim Brotherhood-led parliament in 2012–2013. “Egypt’s Finance Ministry Aims to Reform \$4 Billion in Special Funds,” *Ahram Online*, August 28, 2014, <http://bit.ly/2mxLeph>.
- 41 The exemption was stated in Law 8 of 2016, text at <http://bit.ly/2kzAE0k>.
- 42 Abdul-Fattah Barayez, “Forbidden to Approach or Photograph: The Army and the Economy in Egypt,” *Jadaliyya*, January 25, 2016, <http://bit.ly/2kuuf6A>.
- 43 The social insurance fund generates major surpluses that are mandatorily invested with the National Investment Bank, which invests in government schemes without optimal return potential. Khalid Ikram, *The Egyptian Economy, 1952–2000: Performance, Policies, and Issues* (Abingdon, UK: Routledge, 2006), 204–6.
- 44 Shana Marshall, “The Egyptian Armed Forces and the Remaking of an Economic Empire,” Carnegie Middle East Center, April 2015, 14, <http://bit.ly/2mx1C9v>.
- 45 On Tantawi, author’s interviews with a former EAF general and a former cabinet colleague of Tantawi. Anonymized.
- 46 Sara Ibrahim, “Disouky Appointed Chairman of the Egyptian Navigation Succeeding Lotfi,” *al-Borsa News*, July 29, 2016, <http://bit.ly/2m6gATB>.
- 47 For example, the EAF spokesperson speaking to Al Jazeera, Dahlia Kholaf, “The Egyptian Army’s Economic Juggernaut,” Al Jazeera, August 5, 2013, <http://bit.ly/2kBv9hK>; and Assar speaking in a television interview, cited in Sahar Azzam, “Al-Assar: MOMP Pays Taxes, Customs and Insurance,” *Masrawy*, January 24, 2017, <http://bit.ly/2mapIq9>.
- 48 Op-ed by Naggar. Ahmed al-Sayed al-Naggar, “Military Economy Between Exaggeration and the Logic of Dismantling the State,” *Al-Ahram*, April 11, 2012, <http://bit.ly/2mx4gvX>. The unit in which Naggar worked has enjoyed eyes-only access to defense budget data. He subsequently became chairman of the entire Ahram group until April 2017.

- 49 “The Army’s Economic Empire: Supporting the Ruling Power Threatens the Influence of the Private Sector,” *Mada Masr*, December 24, 2014, <http://bit.ly/2mpK2nF>.
- 50 Retired EAF general with access. Anonymized interview.
- 51 Cited only as a “former” finance minister in Named in Andrew Puddephatt, “Corruption in Egypt,” Global Partners and Associates, March 2012, <http://bit.ly/2msvbJa>.
- 52 In addition to the head of the MOD’s Financial Authority, the board comprised (as of mid-November 2016): the head of State General Budget Sector at the Ministry of Finance, commanders of the Air Force, Air Defense, and Navy, head of the EAF Armaments Authority, head of administrative development at the MOMP, and heads of the Maadi Chemical Industries Factory and Engineering Projects Company. Ahmed al-Bahnasawy, “With Names, Reformation of the National Authority of Military Production’s Board of Directors,” *al-Watan*, November 16, 2016, <http://bit.ly/2mxQTM9>.
- 53 Speaking in Mohamed Hassan; Maha Salem, “‘New Development in Military Factories’ Production,” *al-Ahram*, May 20, 2017, <http://bit.ly/2kwBevP>.
- 54 The AOI’s legal character confirmed, for example, in a court ruling in 1994: “Ruling 2332 of Judicial Year 55,” Appeal rulings-civil. Part 1 P. 537, <http://bit.ly/2mx7kYZ>.
- 55 Cited in Wael Gamal, “The [Military] Council: Our Projects Are the Sweat [of the Brow] of the Defense Ministry, and We Will Not Permit the State to Interfere in Them,” *Shorouk News*, March 27, 2012, <http://bit.ly/2maxn7T>.
- 56 Unnamed military source cited in Nourhan Fahmy, “Defense, Security Industries at Highest Risk for Corruption in 11 MENA Countries,” *al-Bawaba News*, November 4, 2015, <http://bit.ly/2kwFzPv>. Assar’s quote: Ibrahim Hassaan and Mohsen al-Bediwi, “Minister of Military Production in His First Appearance With ON Live,” *Yom7*, January 24, 2017, <http://bit.ly/2l0yJCa>.
- 57 Geneina’s call, for example, in an interview in “Some ‘Sovereign Bodies’ Commit Financial Irregularities: Central Auditing Head,” *Egypt Independent*, October 16, 2015, <http://bit.ly/2l1MvEr>. Sisi’s decree dismissing Geneina and the accusation sheet brought against him in Omnia al-Mougy, “Statement by the Supreme State Security Prosecution: Hisham Geneina Remarks on the Cost of Corruption Are Not Appropriate,” *Yom7*, March 28, 2016, <http://bit.ly/2m8PgUY>. The special committee had used these charges in its own report issued in mid-January 2016. Rania Amer, “We Exclusively Publish the Report of Truth Seeking Commission on the ‘600 Billion Pound’ Remarks Made by Hisham Geneina,” *Yom7*, January 12, 2016, <http://bit.ly/2kw1RU2>.
- 58 The AMA is sometimes translated in English as Administrative Control Authority. Erfan joined the Administrative Monitoring Authority in 1986 and was appointed head in April 2015. Wael Saad, “Al-Watan Publishes the C.V of the New Head of the Administrative Control Authority,” *al-Watan*, April 9, 2015, <http://bit.ly/2m1Gjfx>.
- 59 Law 207 of 2017, October 18, 2017, <http://bit.ly/2mw8Fzg>.
- 60 Mohamed Abdelmoti al-Mohamed, “Administrative Monitoring Authority: Sisi’s Striking Arm in Egypt,” *al-Modon*, March 28, 2017, <http://bit.ly/2l1O0Cz>.
- 61 Erfan had been an AMA officer since 1986. For details of his career, Mohamed Abdelmoti al-Mohamed, “Administrative Monitoring Authority: Sisi’s Striking Arm in Egypt,” *al-Modon*, March 28, 2017, <http://bit.ly/2l1O0Cz>.
- 62 The authority’s seven heads since establishment are: major generals Kamal al-Ghurr (GID) 1964–1978; Mohamed Abdullah 1978–1982; Ahmed Abdul-Rahman 1982–1996; Hitler

Tantawi 1996–2004; Mohamed Farid Tohami 2004–2012; Mohamed Omar Heibah 2012–2015; Erfan. Kamal Mourad Abdelhamid, “The Administrative Monitoring Authority: The State’s Arm to Strike at Corruption,” *al-Ahram*, December 8, 2016, <http://bit.ly/2kBo0Oq>. According to the authority’s official website and Facebook page, it suffered a setback when then president Anwar Sadat suspended or dissolved it (accounts vary) in 1980 after it investigated his brother Esmat. His successor as president, Hosni Mubarak, reactivated it in 1982. “About the Administrative Monitoring Authority,” Administrative Monitoring Authority official website, <http://bit.ly/2m2Uwtd>, accessed on April 26, 2019; and “About,” Official Facebook Page of the Administrative Monitoring Authority, Facebook, <http://bit.ly/2m2UWjh>, accessed on April 26, 2019. Mubarak later used the authority to bring down then defense minister Field Marshall Abdul-Halim Abu-Ghazalah in 1989, whom Mubarak perceived as a potential contender for the presidency. For examples of the appointment of EAF officers to AMA regional branches: Gamal Abu el-Fadl and Nasser Gouda, “Appointment of Ashraf Youssef as Chairman of the Administrative Monitoring Authority in Behira and Khaled Galal in Gharbyia,” *Youm7*, May 7, 2015, <http://bit.ly/2mbjtLZ>.

- 63 Text of law at Law 112 of 1983, August 11, 1983, <http://bit.ly/2l26J0R>.
- 64 Hossam Bahgat, “The Mubarak Mansions,” *Mada Masr*, May 20, 2014, <http://bit.ly/2maDOYB>.
- 65 Transparency International, “Government Defence Anti-Corruption Index 2015: Egypt,” Defense & Security Program, <http://bit.ly/2m4E7UY>.
- 66 For an extended discussion and history of the AMA’s role, see the excellent review Jessica Noll, “Fighting Corruption or Protecting the Regime? Egypt’s Administrative Control Authority,” Project on Middle East Democracy, February 6, 2019, <https://bit.ly/2JmT9OA>.
- 67 Prime Ministerial Decree 1196 of 2015. Text at <http://bit.ly/2m6AZrF>.
- 68 As confirmed in final version of law ratified by Sisi. Text at <http://bit.ly/2mw8Fzg>.
- 69 Erfan was deputized as AMA head in April 2015 but confirmed by parliament in March 2017. Ibrakim Kassem, “After Sisi’s Decision to Appoint Him as Adviser for the Affairs of Governance and Information Infrastructure,” *Youm7*, September 1, 2018, <http://bit.ly/2mrO4ff>. Decree on the four-year renewal published in the Official Gazette at Mohamed al-Galy and Mohamed Attia, “The Official LA Gazette Publishes Sisi’s Decision to Appoint the Chairman of the AMA for 4 Years,” *Youm7*, April 2, 2017, <http://bit.ly/2m45EWI>.
- 70 Abeer al-Qadi, “Sisi’s Son Refers 7 Officials to Prosecution on Charges of Receiving Bribes,” video, *Masrawy*, April 6, 2015, <http://bit.ly/2mpaWvU>.
- 71 Ali al-Hawari, “The Process of ‘Polishing’ Sisi’s Son in the AMA,” *al-Nabaa*, March 6, 2017, <http://bit.ly/2muBpIx>.
- 72 Mohamed Nassar and Ahmed al-Saicedy, “AMA Chairman: EP 900 Billion in Tax Disputes Dating Back to 15 Years,” *Masrawy*, July 29, 2018, <http://bit.ly/2kNqhpT>.
- 73 In a speech on May 12, 2015, posted at <https://www.youtube.com/watch?v=qFo3g-xrEXs&feature=youtu.be&t=931>.
- 74 In a speech on December 9, 2018, posted at <https://www.youtube.com/watch?v=i4BwVZJASg8>.
- 75 Farouq, *Roots of Administrative Corruption in Egypt*, 273.
- 76 The 1971 constitution conferred formal legal status on a precursor council that had been set up under Nasser as an instrument of presidential power, but a law setting out its statutes was never issued, and it rarely met or exercised any discernible authority.

- 77 One publicized instance of defense budget review was a meeting on June 5, 2016. Mohamed al-Galy, "The National Defense Council Reviews the Budget of the Armed Forces for the Fiscal Year 2016/2017," *Youm7*, June 5, 2016, <http://bit.ly/2kZlUbd>.
- 78 Nagwa Ibrahim, "Details of Elawi Hafez's Interrogation That Took the Life of Rifat Mahjoub," *Tahrir News*, April 13, 2015, <http://bit.ly/2l1YiTd>.
- 79 Ayman Nour, "An Army for the Nation or a Nation for the Army," *Youm7*, November 15, 2011, <https://bit.ly/2kSVw2y>.
- 80 Molla was assistant minister of defense and military police commander. Cited in Jack Shenker, "Egypt's Military Will Have Final Say on Country's New Constitution," *Guardian*, December 7, 2011, <http://bit.ly/2m47iHS>.
- 81 Shahin was assistant defense minister for constitutional and legal affairs. Cited in Marwa Awad, "Special Report: In Egypt's Military, a March for Change," Reuters, Politics Special Reports, April 12, 2012, <https://reut.rs/2m34gnh>.
- 82 "The Mystery of the Disappearance of Major General Mahmoud Nasr," *al-Mogaz*, May 1, 2013, <http://bit.ly/2mrWxPC>.
- 83 The Shura Council is the upper house of parliament. The budget was submitted to it as the lower house had been dissolved by order of the constitutional court in June 2012. Walaa Nematallah, Mohamed Youssef, Heba Amin, and Mohamed Hamdi, "EAF Budget Included in the State Public Budget for the First Time," *al-Watan*, April 23, 2013, <http://bit.ly/2kwy62W>.
- 84 "'No to Military Trials': Legislating Committee of the Parliament Only Listens to SCAF," *al-Masry al-Youm* April 23, 2012, <http://bit.ly/2m6gziF>.
- 85 Pervasive political engineering by the security agencies heavily shaped the outcome. Detailed in Hossam Bahgat, "Anatomy of an Election," *Mada Masr*, March 14, 2016, <http://bit.ly/2kve4pv>. On total number of officers in parliament, Khaled Othman, Ali Abdelhafiz and Sama Saleh, "After the Victory of 84 Police and Military Officers," *al-Masa'ya*, December 12, 2015, <http://bit.ly/2m36tPB>; while another gave their number as seventy-one: Abdelghani Diab and Ahlam Hasanein, "Names...71 Generals Under the Parliament Dome," *Masr al-Arabya*, December 4, 2015, <http://bit.ly/2kwAeHY>. On parliamentary committee membership: Mahmoud al-Emary and Ihab Mohamed, "Full Names of the Members of the National Defense and Security Parliament Committee," *Parlmany*, April 22, 2016, <http://bit.ly/2kZrler>.
- 86 "Members of Parliament Welcome the Army's Manufacture of Medicine," *Parlmany*, October 16, 2016, <http://bit.ly/2m37LtV>.
- 87 Rania Rabeaa Elabd, "Will Egyptian Parliament Cut Into the Military's Profit Margin?," *al-Monitor*, April 1, 2016, <http://bit.ly/2maPKtn>.
- 88 Ahmed al-Gaafary, "A Strong Response From Parliament Speaker to Mohamed Anwar al-Sadat After Speaking About the Armed Forces," *Parlmany*, July 28, 2016, <http://bit.ly/2mwA3x1>; English version relayed in: Khalid Hassan, "Is Discussing Military Budget Taboo in Egypt?," *al-Monitor*, August 11, 2016, <http://bit.ly/2muJjSd>.
- 89 Sadat's expulsion came in February 2017, following a series of skirmishes, of which the incident relayed here was only one. "Egypt Parliament Expels MP Critical of Human Rights Record," BBC, February 28, 2017, <https://bbc.in/2kwXzcx>; and Nour Ali, "Officially... Parliament Expels Mohamed Anwar al-Sadat With a Two-Third Majority," *Youm7*, February 27, 2017, <http://bit.ly/2kzXMMf>.
- 90 "Egypt's Speaker Praises Hitler to Justify Government Spending," BBC News, October 3, 2019, <https://bbc.in/32Q3sTd>.

- 91 Beesan Kassab, “The New Administrative Capital: Outside the State Budget or Outside Public Accountability?,” *Mada Masr*, May 25, 2019, <https://bit.ly/2JmDzTg>.
- 92 Shahira Amin, “Videos Alleging Corruption Open Public Debate on Egyptian Military’s Economic Empire,” *Al-Monitor*, September 20, 2019, <https://bit.ly/365Rve4>.
- 93 Thomas de Waal, “Fighting a Culture of Corruption in Ukraine,” Carnegie Europe, April 18, 2016, <http://bit.ly/2kQcPBE>.
- 94 In a speech to the nation in May 2015, he confirmed that recent cases brought to light had involved bribery, misuse of power, causing harm to public money, profiteering, and seizure of state lands. “Sisi’s Monthly Speech Summed Up: The 10 Most Important Issues Addressed,” *Mada Masr*, May 12, 2015, <http://bit.ly/2m9ZiVw>; and “Sinai Locals Step Up to Fight Against Terrorism Alongside Army: Egypt’s Sisi,” *Abram Online*, May 12, 2015, <http://bit.ly/2mqmQ8R>.
- 95 Peter Hessler, “Egypt’s Failed Revolution,” *New Yorker*, December 25, 2016, <http://bit.ly/2m4DE5c>.
- 96 Email to the author, December 17, 2018.
- 97 Scores for successive years in Egypt, Transparency International, <http://bit.ly/2mbxS1x>; and in Transparency International Secretariat, “Transparency International Statement on Egypt’s Corruption Perception Index Ranking for 2015,” press release, Transparency International, August 1, 2016, <http://bit.ly/2m9RCCI>.
- 98 Aram Roston and David Rohde, “Egyptian Army’s Business Side Blurs Lines of U.S. Military Aid. 650-bed International Medical Center,” *New York Times*, March 5, 2011, <https://nyti.ms/2kA5uG8>.
- 99 Aziz al-Afandi, “Compulsory Conscription in Egypt...Serving in Wedding Halls,” *al-Araby al-Jadeed*, March 30, 2015, <http://bit.ly/2l28R8P>. The role of bribes and personal connections to influence deployment is also cited in Home Office (UK), “Country Policy and Information Note Egypt: Military Service Version 1.0,” March 2017, 8, <http://bit.ly/2kuYYAk>.
- 100 As noted in “Egypt 2014: National Integrity System Assessment,” Transparency International, August 23, 2015, <http://bit.ly/2l29Vtl>.
- 101 “Government Defence Anti-Corruption Index 2015: Egypt,” Transparency International, Defense and Security program, <http://bit.ly/2m4E7UY>.
- 102 John Waterbury, *The Egypt of Nasser and Sadat* (Princeton, NJ: Princeton University Press, 1983), 337.
- 103 Robert Springborg, “The President and the Field Marshall: Civil-Military Relations in Egypt Today,” *Middle East Report* 17, no. 147 (July/August 1987): 8, <http://bit.ly/2kQiRSO>. Also an international businessman and contractor. Anonymized interview.
- 104 Matthew Axelrod, “The Egyptian Military Calculus,” *Foreign Policy*, January 31, 2011, <http://bit.ly/2m3dEr1>.
- 105 Abigail Hauslohner, “Egypt’s Military Expands Its Control of the Country’s Economy,” *Washington Post*, March 16, 2014, <https://wapo.st/2kx4oeh>.
- 106 Tamer Hafez, “In Depth: Choppy Waters for New Suez Canal,” *Business Monthly*, American Chamber of Commerce in Egypt, July 2016, <http://bit.ly/2msKGkv>.
- 107 Informants interviewed on behalf of the author. Anonymized.
- 108 “Integrating Misr Automotive Trading in the Nile Company,” *Rose al-Youssef*, September 21, 2010, <http://bit.ly/2m6P7kH>.

- 109 According to a study prepared for the Center for Information and Support for Decision-Making, which is attached to the council of ministers. Atef Hilal, "Second: The National Project to Develop Sinai, 1994–2017," *Atef Helal*, April 2009, <http://bit.ly/2kQmpEC>.
- 110 "Wikicorruption Releases May Report on the Revealed Corruption Incidents in the Public and Private Sectors," *HRDO*, July 2, 2015, <http://bit.ly/2kBHV9A>. This perception is also cited by Robert Springborg, who notes that in Egypt "common wisdom is that local government is profoundly corrupt and inefficient," and refers to a study issued in August 2016 estimating that two-thirds of government corruption takes place in local government. Robert Springborg, *Egypt* (Cambridge, UK: Polity Press, 2017), 24.
- 111 Member of Parliament Mostafa Bakri claimed \$1.794 billion in total waste. Samah Mansour and Ali Mohamed Ali, "Prosecution to Investigate Tomorrow Waste of About \$2 Billion by the Nazif Government in Favor of Ibrahim Kamel," *al-Ahram*, April 25, 2011, <http://bit.ly/2l2jicu>; and Ahmed Metwally, "Text of Bakry's Report on Public Money Waste in the East Port Said Port," *Youm7*, April 23, 2011, <http://bit.ly/2mwL959>. Also, Ahmed Metwally, "State Finance Investigates Accusations That Nazif Wasted \$1.749 Billion," *Youm7*, April 23, 2011, <http://bit.ly/2kQac2N>.
- 112 Al-Sayyed al-Ghadban, "Salute to the Administrative Monitoring Authority," *al-Wafd*, September 12, 2015, <http://bit.ly/2mt8CnG>.
- 113 According to the Syrian police brigadier who investigated the case. Anonymized interview.
- 114 On replacement: Reda Houbaisy, "Collapse of the Biggest Egyptian Navigation Company in the Mediterranean," *Youm7*, July 10, 2015, <http://bit.ly/2m23sPn>. On transfer: "Egyptian Company for Maritime Navigation Transferred to the Public Sector Ministry to Save It From Collapse," Maritime Transport Sector, <http://bit.ly/2l2yDK9>.
- 115 Salam Sa'deh, "Egypt...Media Hides the Military Rank of a General Charged With Bribery," *al-Araby al-Jadeed*, February 19, 2016, <http://bit.ly/2m3nqtc>.
- 116 On EgyptAir and cabinet appointments, Abdelaziz Gamal, "Governors Reshuffle...We Publish the C.V of Atef Abdelhamid, the New Cairo Governor," *Sada el-Balad*, September 7, 2016, <http://bit.ly/2m50lkg>. On charges, Hani Mohanna, "4 Million 'Illicit' Pounds Chase the New Cairo Governor," *al-Ghad*, September 8, 2016, <http://bit.ly/2m9hYVK>.
- 117 Ahmed Mostafa and Mohamed Tantawi, "Chairman of the Cairo Airport to *Youm7*," *Youm7*, April 25, 2015, <http://bit.ly/2mbHCJ9>.
- 118 Youssef al-Oumi, "Presidency Orders a Report on the Violations of the Holding Financial Company for Civil Aviation," *al-Masry al-Youm*, August 29, 2015. Wayback Machine, <http://bit.ly/2m6zUQC>.
- 119 Mohamed Magdy, "What Happened in the Ministry of Supply," *al-Mal News*, May 29, 2018, <http://bit.ly/2kC88v6>.
- 120 This was Major General Abbas Abd al-Gawad. Original source *al-Ahram*, August 4, 1986, cited in Robert Springborg, "The President and the Field Marshall."
- 121 AOI claim of dismissing company officials in 1998 and 2004 in "AOI's Reply," *Sout al-Oumma*, April 17, 2011, reposted in *Masress*, <http://bit.ly/2kZJ4hF>. Case cited in Shana Marshall, "Egypt's Other Revolution: Modernizing the Military-Industrial Complex," *Jadaliyya*, February 10, 2012, <http://bit.ly/2kZYbYk>; and "Suspects in Daimler-Mercedes Bribery Case to Face Criminal Trial," *Egypt Independent*, April 7, 2011, <http://bit.ly/2m6CgyW>; and Mahmoud al-Mamlouk, "Military Court Ruling of Two Years Imprisonment for the Accused in the Mercedes Bribery Case," *Youm7*, June 22, 2011, <http://bit.ly/2mwTgP9>.

- 122 “Former Military Production Minister Investigated for Corruption,” *Egypt Independent*, October 10, 2012, <http://bit.ly/2l054ch>.
- 123 This was Major General Mohamed Said Hafez. See charges documents posted by al-Ahram at Ahmed Abdelazzim Amer, “Documents: A Report Against Two Former Major Generals in the Administrative Monitoring Authority,” *al-Ahram*, April 30, 2014, <http://bit.ly/2kwSn8y>; and Ahmed Abdelazzim Amer, “Documents: A Complaint Accusing the ‘Silos and Storage’ of Paying More Than One Million Pounds for a Lawyer to Plead Twice in a Closed Case,” *Al-Ahram*, May 1, 2014, <http://bit.ly/2kBOVts>. Referral to prosecution reported in Amgad Amer, “Documents: Chairman and Members of the General Directorate of Silos Referred to the Public Funds Prosecution,” *al-Bawaba News*, May 5, 2016, <http://bit.ly/2m6AsWR>.
- 124 This was Major General Bahi Ahmed Abul-Dahab. Abdelhalim Salem, “Chairman of Sidnawi in his First Interview After Integration,” *Youm7*, May 28, 2018, <http://bit.ly/2m55ZZ6>.
- 125 This role was confirmed by a former head of the Illicit Gains Authority cited in Yousry al-Badry, “Judge Ahmed Shalakany Former Head of Illicit Gains Authority,” *al-Masry al-Youm*, February 23, 2011, <http://bit.ly/2msghTb>.
- 126 According to a senior former official in the Authority, Lieutenant Colonel Mutasim Fathi, interviewed in: “Officer in the Administrative Monitoring Authority: Major Corruption in Government,” *al-Wafd*, March 3, 2011, <http://bit.ly/2m4rysU>.
- 127 Shawky Abdelkader, “32 Years of Violations,” *Youm7*, April 16, 2009, <http://bit.ly/2kQk1xH>.
- 128 Mohamed Saad Khattab, “Prosecute Hitler Tantawi and the Corrupt AMA Officers Immediately,” *Sout al-Ouma*, April 10, 2011. *Masress*, <http://bit.ly/2m4RBA6>.
- 129 Mohamed Abdelmoety al-Mohamed, “Administrative Monitoring Authority: Sisi’s Striking Arm in Egypt,” *al-Modon*, March 28, 2017, <http://bit.ly/2l1OOCz>.
- 130 Hani al-Wazeery, “Heiba...From an Intelligence Man to the Head of the AMA,” *al-Watan*, September 2, 2012, <http://bit.ly/2mv5OXb>; and David Kirkpatrick, “Ousted General in Egypt Is Back, as Islamists’ Foe,” *New York Times*, October 30, 2013, <https://nyti.ms/2mbOk1N>.
- 131 Kirkpatrick, “Ousted General in Egypt Is Back, as Islamists’ Foe.”
- 132 Tohamy was eventually replaced for health reasons. “Egypt President Appoints New Acting Head of Intelligence Agency,” *Ahram Online*, December 21, 2014, <http://bit.ly/2m4T4GC>.
- 133 Heibah moved from the General Intelligence Directorate to the AMA, where he worked for 25 years before heading it. Hani al-Waziri, “Heibah...From Intelligence Agent to Head of the Administrative Monitoring Authority,” *al-Watan*, September 2, 2012, <http://bit.ly/2mv5OXb>. His acknowledgement came at a press conference in May 2013, cited in Abdel-Raouf Khalifah, “Chairman of the Administrative Monitoring Authority: All State Institutions Are Audited, Including the Presidency,” *al-Ahram*, May 3, 2013, <http://bit.ly/2m4TwVk>.
- 134 Mohamed al-Ashwa, “The Presidency Receives a Report on the Stolen Desert Lands,” *al-Watan*, September 9, 2015, <http://bit.ly/2kChpmU>; and “Administrative Monitoring Authority Seconded Hisham Geneina’s Report,” *al-Masryoon*, January 15, 2016, <http://bit.ly/2mv8mVf>.
- 135 Rida Awad, “List of the Fortunate in the National Company for Construction,” *Sout al-Ouma*, February 9, 2009, reposted in *Masress*, <http://bit.ly/2kCidrW>. According to the article, Yousef and Rashed each earned consultancy fees of EP6,000 monthly plus allowances and bonuses worth EP10,000.
- 136 “Obituary of MG. Mohamed Amin Abdel-Ghani,” *al-Ahram*, January 1, 2016, <http://bit.ly/2my5OG0>.
- 137 Ayman Emam, “Driving Development or Building an Empire of Corruption?” 4.

CONCLUSION

WHAT'S AT STAKE?

WHAT IS THE MILITARY ECONOMY'S likely trajectory going forward, and what are the political implications? Its evolution has always, to a very considerable degree, tracked that of the wider political economy of Egypt, replicating the behavior of civilian institutional and social actors. But it is now poised for significant qualitative, even transformative, change paralleling its enhanced political and constitutional stature. The military economy has expanded significantly beyond its enclave since 2013 and, although this was not by design or even largely of its own making, at least initially, it will not return to its former size or status. This is partly because the political stage is set for the military to have a more central influence on governing arrangements. But the cumulative effects of Egypt's chronic economic problems and increasing decrepitude of its state institutions also create both context and opportunity for greater intertwining of military and civilian economic actors and a more direct implication of the military in setting economic direction.

In the Introduction to this report, I argued that the core economic problem for Egypt lies in how the state functions, which reflects how political power is generated and used. Writing in 2018, Khalid Ikram, a former senior economist and director of the World Bank's Egypt department concluded that since 1952, concerns about regime survival have always trumped considerations of economic vulnerability in the calculations of Egyptian policymakers. This is the defining feature of Egypt's political economy, as successive regimes have sought to bolster their fragile legitimacy "by continually increasing public consumption expenditures ... [and] minimiz[ing] resource mobilization from domestic sources."¹ The fundamental economic problems of Egypt have resulted, in his assessment, "not so much

from a shortage of financial resources as from failures of governance,” allowing influential factions within the state and society to “benefit from economic rents created by inefficiencies in the economy.”

The failure of governance, Ikram added, has resulted in a political economy characterized by

unclear property rights, a sluggish bureaucracy, an overburdened judicial system, a weak and unbalanced taxation system, corruption, uneconomic pricing of scarce resources (such as electricity and water), an education system that does not deliver the skills and especially the quality demanded by an internationally competitive market economy, the prevalence of crony capitalism, oligopolies and reduced competition in many sectors of the economy, significant overstaffing in public enterprises, a perceived lack of accountability at many levels of government, and the list goes on. These impediments raise the cost of doing business and thereby discourage investment, and they also lower its productivity.

The macroeconomic consequences were neatly summarized by George Abed, a former director of the Middle East and Central Asia Department at the IMF. Egypt’s average growth rates over the past three decades have lagged behind those of other emerging markets countries. GDP per capita increased by 50 percent from 1988 to 2018, compared to 600 percent for the group of emerging markets monitored by the IMF’s Institute of International Finance—and to around 400, 600, and 700 percent in Turkey, Malaysia, and South Korea respectively.² Total investment (public and private) since 1991 is one-third lower than the average for emerging markets generally, manufacturing value added per capita rose by only 105 percent compared to 273 percent for the emerging markets as a whole, and merchandise exports as a ratio of GDP virtually stagnated in contrast to increases of 36, 100, and 165 in South Korea, Thailand, and India respectively.³ Responding in February 2019 to enthusiastic rhetoric about an economic rebound from both Egyptian and Western officials,

Abed observed that the economy still has to achieve “rates of increase in capital, savings, and in the quality of human resources” at “about double those sustained by Egypt in the last fifty years” if it is to meet the challenges facing it.

The military has never formally controlled key levers of economic or fiscal policy, such as setting taxes or interest rates, except briefly when it held government power in 1952–1956 and 2011–2012.

A former director of the World Bank’s Egypt department concluded that since 1952, concerns about regime survival have always trumped considerations of economic vulnerability in the calculations of Egyptian policymakers.

But it contributed to the economic, social, and institutional outcomes summarized above by upholding the authoritarian bureaucratic alliance and its regime maintenance strategy

for the best part of seven decades. The impact was not merely indirect. The military's own claims—of a moral right to steer the ship of state, of making major contributions to the government's national economic development plans, and of “we do it better, quicker, cheaper” management skills—confirm its self-image as directly implicated in the economic record of Egypt, which it naturally portrays positively. Predictably, the military replicated the regime maintenance logic within its own economic enclave, prioritizing military constituencies, especially the senior officer corps, both during service and after. More importantly, it helped reproduce that logic through the daily practices and influence of the thousands of active and retired senior officers embedded in the state's civilian bureaucracy, economic agencies, public business sector, and local government.

The military economy has not resolved any of its own chronic problems and shortcomings, but the primacy it has achieved in a political arena that has been systematically emptied of all serious contenders since 2013 enables it to enter a new phase of expansion and deepening. In theory, it could resume its pre-2013 profile as the megaprojects that most embody its expanded role wind down or if funding for launching new ones runs out. Improvement in the national economy could also reduce the incentive for military involvement in economic management, production, and supply. Similarly, the president could encourage meaningful administrative and budgetary decentralization and, in the face of inevitable resistance from entrenched officer networks, make local government genuinely participatory and responsive to citizen's needs as a path to inclusive social development and to economic growth and diversification. But in practice, the opposite is likely to happen, as both Sisi and the military double down on privileging central interventions, command policy, and investment in megaprojects that trump social profitability.

The underlying economic and social problems that led to the 2011 revolution and the repositioning of the military since 2013 as a manager and producer of economic assets on an expanded scale have set the stage for a more profound shift in the military's relationship to the national economy and to public finances. Its economic assets and opportunities have expanded to such an extent that it may become more assertive. Over several decades, the military has repeatedly refused to relinquish economic assets or access once it has acquired them; indeed, the scale of changes since 2013 more-

over may see it double down on their stake. And in turn, the military must influence, if not control, policy levers if it is to preserve its economic interests and build them up. Self-promotion comes at a price, however: the military's prominent role at a time of deepening poverty and inequality is starting to generate unease and dent its image among a public that has almost always held it in high regard.

The military economy has not resolved any of its own chronic problems and shortcomings, but the primacy it has achieved in a political arena enables it to enter a new phase of expansion and deepening.

Deepening and expansion are not inevitable. The military economy is in transition, and displays mixed signals and contradictory trends. The failure of acquisitions in the media sector could dampen military appetite, for example, as might the burden of investment in the cement and steel sectors once demand for military production declines and pushback from the domestic private sector and foreign companies mounts. There are also indications of a desire within the EAF to refocus on its own professional development and improve its operational capabilities. The revised constitution of April 2019, which empowered the armed forces to “protect the constitution and democracy” and “preserve the pillars of the civil state,” may represent a formula allowing the EAF to extricate itself from the complex politics and institutional turf battles of governing Egypt, while still claiming the right to intervene whenever it deems necessary.⁴

But the reasons for a deepening and expansion of the military economy are at least as powerful. One is inertia: both the desire to retain existing assets, best represented by the inefficient companies and factories of the MOMP, and the conservative tendency of the military to reproduce and reinforce past patterns and legacies. More importantly, the weakness or absence of other institutional or social actors that might concentrate public assets and funds in their own hands leaves the military as a leading player in the emerging economic field—in contrast to the privatization era, which preponderantly favored big businesses and Mubarak cronies and visibly sidelined the military.

The process in either direction will be gradual, with starts and stops, but the boundaries of the former military economic enclave may remain blurred, if not dissolve altogether. An expansionary trend could see the military emerge as a major economic actor in its own right, embedding more broadly and formally in the structure of national economic management and decisionmaking. Their interventions in determining price and supply in the cement and steel sectors and in importing commodities ranging from meat and poultry to baby formula to meet market shortages could presage a more routinized policy-setting role. The twinning of the EAF Engineering Authority with the AMA in managing public infrastructure projects offers a significant example of the kind of formal military-civilian partnership that could become normalized in other areas.

In theory, again, a positive economic growth path could generate conditions for a contraction of the military’s economic role from its current scope and scale. But Egypt lacks both the political legacy and the socioeconomic prerequisites to replicate the experience of Chile or Turkey, where sustained economic growth generated social change and empowered the business and labor sectors that pressed for the restoration of civilian rule and full return of the military to barracks. In Egypt, growth that is overwhelmingly state-led and comes in response to top-down initiatives is far more likely instead to confirm the military as an economic actor on an even larger scale, expand its reach beyond the scope of the post-2013 crash program of publicly funded construction and revenue-generation, and extend its economic role well into the long term.

Conversely, worsening social and economic conditions or deepening debt will neither discourage nor impede deeply entrenched military networks from sucking up the funding resources needed to generate sustained growth and domestic savings. Authoritarian systems need to raise economic efficiency once they have exhausted their initial growth phases, especially if they are to appease key constituencies on whom their power rests. Egypt is clearly not geared to achieve this. To the contrary, tight economic straits are more likely to spur and accelerate militarization of the economy in the ways suggested above—in part, on the grounds that emergency conditions require abnormal measures and even greater investment in publicly funded works.⁵

Should it respond in this way, the Sisi administration and the military will open the door to massive free-riding and opportunity-seeking by military (and allied nonmilitary) interest groups. Behind his appearance of supremacy, Sisi is in fact heavily dependent on his partners within the governing coalition of state institutions—and even on divergent factions within senior EAF echelons—all of whom expect a return on their support. These political considerations are as important in some respects as his policy goals of generating growth, managing living costs for the public, and consolidating the domestic and international credibility and legitimacy of his administration. Military networks and interest groups are already entrenched enough to resist any other course of action, and may indeed be in a position to continue expanding the informal military economy and deepening predatory practices regardless of what Sisi or the leaders of the formal military economy decree. The extortion of equity in start-up companies is just the latest example of behavior that is not only predatory but also market savvy—and that could not be undertaken without aid and abetting by formal military authorities.

Worsening social and economic conditions or deepening debt will neither discourage nor impede deeply entrenched military networks from sucking up the funding resources needed to generate sustained growth and domestic savings.

Yet both Sisi (like all his predecessors) and the military are fully wedded to top-down and capital-intensive activity—as are a great many senior civil servants and technocrats across government ministries—making it exceedingly unlikely that they will change tack. The military cannot, in fairness, be blamed for not being better at economics, but it is at fault for standing in the way of approaches that are more likely to raise total factor productivity—and for milking the state treasury in the meantime. Similarly, its economic forays increasingly reveal growing insensitivity to the political ramifications. Not least of these is the damage done to the administration's relations with the private sector, which has to pay high interest rates on loans due to crowding out by the state, which is the largest borrower from banks, and then suffers from unfair competition by military companies entering new sectors or expanding their own market

share.⁶ Further diversion of public funds into military-run projects and schemes will only encourage more favoring of cronies and elbowing aside of the rest of the private sector.

The Sisi administration faces the task of delivering sufficient economic goods to keep political challenges at bay in the medium term. On the one hand, this requires both preserving the membership of all coercive agencies—the military, the sprawling Ministry of Interior (police and internal security), and the General Intelligence Directorate—within the governing coalition, and expanding it. But on the other hand, preservation and expansion cannot take place to an extent that taxes the economy excessively.⁷ This is a tall order for an administration with a particularly crude grasp of economics and market dynamics, and which has narrowed its political base considerably in contrast to the Mubarak era by excluding all shades of Islamists, liberals, and old economic elites. Its attempts to elicit middle-class support through favoring small and medium-sized enterprises with public works contracts or establishing funding schemes to encourage new ones are impeded by inadequate investment and high political risk, including vulnerability to the predatory behavior of networks loyal to the regime itself. Consequently, private investment in the economy has remained exceedingly small.

The odds against maintaining a stable coalition while generating the capital needed to underpin it—in the absence of deep economic and administrative reforms, which would necessarily collide with military interests, both formal and informal—are considerably heavier than might seem from rosy assessments of Egypt's macroeconomic indicators—GDP growth rates, foreign reserves, and foreign investment—issued by Egyptian officials and their counterparts in Western governments and international financial institutions.

Western officials who publicly endorse these assessments and court the Sisi administration—extolling his supposed commitment to the democratic path, despite his administration's systematic repression of political and social freedoms and egregious human rights violations—appear in fact to cling privately to the hope that he can somehow build a successful developmental dictatorship that will produce economic growth that is both on a sufficient scale and sustained.⁸ Among international economic and financial practitioners, a similar outlook may result from recent thinking that recognizes the state's role in solving coordination failures in industrial policy: this acknowledges that insiders will initially be privileged, but posits that ultimately all economic actors will enjoy universal access to opportunity and resources. In the case of Egypt, Western and international officials who seek refuge in this kind of reasoning are effectively pinning their hopes on the military to advance these outcomes. But more than reflect mere wishful thinking, this masks willful blindness to the underlying realities of Egypt's economy.

Egypt is “too big to fail” is the trite response in Western capitals when challenged. An implicit corollary article of faith, despite denials, is that the military is as good as it claims as an economic actor and manager. This willfully overlooks the sixty-seven-year-old legacy of the

military's economic role, but may explain the public silence of the IMF and the World Bank, among others, on the military's economic activities, of which Abed confirms they have "long been aware."⁹ Indeed, the military footprint in the economy has grown significantly on the watch of the IMF program that has released \$12 billion into Egypt since November 2016.

Egypt is "too big to fail" is the trite response in Western capitals when challenged. An implicit corollary is that the military is as good as it claims as an economic actor. This willfully overlooks its legacy.

Faith in the ability of the Egyptian military to snatch economic success from the jaws of social meltdown rests on precious little substance. Egypt will instead remain critically dependent on the formula, nearly seven decades old, of securing injections of foreign capital to stave off its most severe crises.¹⁰ At present, only the armed forces could keep the country from painting itself into an economic and financial corner again. But this would require it to initiate a political dialogue and a reform process that could only end in dismantling both its formal economy and the automatic entitlement to bureaucratic and economic power that retired officer networks claim.

NOTES

- 1 Khalid Ikram, *The Political Economy of Reforms in Egypt: Issues and Policymaking Since 1952* (London: I. B. Tauris, 2018), 10–11.
- 2 Writing with George Abed, Chun Jin, and Boban Markovic, “Egypt: Good Progress to Date, but Sustainability Requires Deep, Transformational Change,” Institute of International Finance, February 20, 2019, 5, <https://bit.ly/2pWro8U>.
- 3 Ibid., 7 and 9.
- 4 Text of revised constitution at <https://bit.ly/2JuaGEB>.
- 5 This point was made by John Waterbury about Egypt, specifically, citing Guillermo O’Donnell, *The Egypt of Nasser and Sadat* (Princeton NJ: Princeton University Press, 1983), 7.
- 6 As Amr Adly argues in “Egypt’s Regime Faces an Authoritarian Catch-22,” Carnegie Middle East Center, July 21, 2016, <https://bit.ly/32TJJlw>.
- 7 I owe this observation to Ishac Diwan, email on July 16, 2019.
- 8 Numerous reports have been published on freedoms and human rights in Egypt since the July 2013 coup. For example, Human Rights Watch, “‘We Do Unreasonable Things Here’: Torture and National Security in al-Sisi’s Egypt,” September 5, 2017, <https://bit.ly/2WiCD7u>. Luca Mieke and Stephan Roll discuss developmental dictatorship as a possible outcome in “Three Scenarios for the Development of the Sisi Regime in Egypt Development Dictatorship, Mubarak 2.0, or Rapid Collapse?,” SWP Comment, No. 18, Stiftung Wissenschaft und Politik, March 2019, <https://bit.ly/2Jnz0In>.
- 9 Abed, Jin, and Markovic, “Egypt: Good Progress to Date,” 5.
- 10 Khalid Ikram notes that a “World Bank background paper for one of its economic reports claimed that Egypt’s fiscal strategy was, as far as possible, simply to tax the foreigner.” *The Political Economy of Reforms in Egypt*, 97.

CARNEGIE MIDDLE EAST CENTER

The Carnegie Middle East Center is an independent policy research institute based in Beirut, Lebanon, and part of the Carnegie Endowment for International Peace. The center provides in-depth analysis of the political, socioeconomic, and security issues facing the Middle East and North Africa. It draws its scholarship from a pool of top regional experts, working in collaboration with Carnegie's other research centers in Beijing, Brussels, Moscow, New Delhi, and Washington.

The center aims to impact policymakers and major stakeholders by offering fresh insight and ideas that cultivate a deeper understanding of the region and by developing new approaches to the challenges of countries in transition.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

The Carnegie Endowment for International Peace is a unique global network of policy research centers in Russia, China, Europe, the Middle East, India, and the United States. Our mission, dating back more than a century, is to advance peace through analysis and development of fresh policy ideas and direct engagement and collaboration with decisionmakers in government, business, and civil society. Working together, our centers bring the inestimable benefit of multiple national viewpoints to bilateral, regional, and global issues.



CARNEGIE
MIDDLE EAST CENTER

Carnegie-MEC.org

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE