

Reviewing State Ownership? An Outsider's View on Egypt's New State Ownership Policy

Ralf Boscheck

Economics & Business Policy, IMD, Lausanne, Switzerland

Email: ralf.boscheck@imd.org

How to cite this paper: Boscheck, R. (2024). Reviewing State Ownership? An Outsider's View on Egypt's New State Ownership Policy. *Beijing Law Review*, 15, 878-898. <https://doi.org/10.4236/blr.2024.152054>

Received: May 13, 2024

Accepted: June 25, 2024

Published: June 28, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

In December 2022, the Arab Republic of Egypt published its State Ownership Policy (SOP) to outline the government's view on the role of state-owned enterprises (SOEs) in various industries and the regulatory reforms needed to boost the private sector's involvement in the economy. The policy has since been discussed notably in terms of it underwriting pending national and international reform commitments, its impact on the military's share of public and private economic activities or its likely effect on Egypt's current-account position and hence continued need for international funding. Most of these assessments, however, do not evaluate the process and criteria used for selecting the sectors that the government wants to stay in, exit from or enter; nor do they offer a reference to judge which institutional arrangements, governance mechanisms or regulatory processes appear best to support the country's sectoral development given its present situation. This paper addresses some of these concerns. *Section one* sketches Egypt's economic context and current challenges; *Section two* draws on institutional economics to explore the trade-offs between efficiency and control at various levels of economic coordination and its implication for public or private decision-making and centralized or decentralized governance. Applying the resulting framework, *Section three* reviews the main elements of Egypt's State Ownership Policy focusing on the selection of key sectors and the policy's main concept of "competitive neutrality." *Section four* initially juxtaposes the government's espoused role in four industries with efficient regulatory processes that have been tried in other countries and contexts. Following that, the paper proposes to review the competitive impact of the growing number of trade alliances on domestic industries and their export performance. *Section five* concludes.

Keywords

Regulatory Reform, Privatization, State-Owned Enterprises, Economic Policy, Competitiveness

1. Introduction

In December 2022, the Arab Republic of Egypt published its State Ownership Policy (SOP)¹ to outline the government's view on the role of state-owned enterprises (SOEs) in various industries and the regulatory reforms needed to boost the private sector's involvement in the economy. The policy has since been discussed notably in terms of it underwriting pending national and international reform commitments,² its impact on the military's share of public and private economic activities or its likely effect on Egypt's current-account position and hence continued need for international funding (Adly, 2023; Sayigh, 2023; Springboard, 2023). Most of these assessments, however, do not evaluate the process and criteria used for selecting the sectors that the government wants to stay in, exit from or enter; nor do they offer a reference to judge which institutional arrangements, governance mechanisms or regulatory processes appear best to support the country's sectoral development given its present situation. This paper addresses some of these concerns.

Section one sketches Egypt's economic context and current challenges; *Section two* draws on institutional economics to explore the trade-offs between efficiency and control at various levels of economic coordination and its implication for public or private decision-making and centralized or decentralized governance. Applying the resulting framework, *Section three* reviews the main elements of Egypt's State Ownership Policy focusing on the selection of key sectors and the policy's main concept of "competitive neutrality." *Section four* initially juxtaposes the government's espoused role in four industries with efficient regulatory processes that have been tried in other countries and contexts. Following that, the paper proposes to review the competitive impact of the growing number of trade alliances on domestic industries and their export performance. *Section five* concludes.

2. A Case Study: Egypt's Need for Funds, Investments & Efficient Governance

In 2023, the Egyptian economy, the largest in Africa by nominal GDP, was under pressure. Since 2014, President Abdel Fattah Al-Sisi had promoted Egypt's 2030 Vision to diversify the economy and bring in more market-oriented structural reforms. From the outset, there was a lot of talk about an "Egyptian Renaissance," how the immense infrastructure build-up surrounding the New Cairo symbolized the success of "A New Republic," and how China's Silk Road Initiative, the country's growing number of trade alliances and the move towards BRIC + would make Egypt the gateway to Africa and a centre piece in the eco-

¹https://egyptembassy.jp/cms/wp-content/uploads/2023/02/State-Ownership-Policy-ENGLISH_230117_041444-2.pdf.

²Ranging from the 1991 Economic Reform and Structural Transformation Program to the country's 2022 Memorandum of Economic and Financial Policies (MEFP) backing the loan agreement with the International Monetary Fund (IMF).

conomic revival of the region.³

Except some fundamentals had not changed. Egypt's massive population growth, "adding a Switzerland every four years" to its populace, continued to considerably outpace any increase in its agricultural resource base, level of capital investments or rate of skill-building and formal job creation (Ikram, 2022). As a result, the country was becoming ever more dependent on imported grains, labour market participation rates for men and women were in constant decline, and around a third of the Egyptian population continued to live below the poverty line. On top, Egypt suffered hugely under COVID, the Ukrainian War and the further loss of trade position, all of which contributed to the devaluation of the currency, the rise of inflation, interest rates and production costs and the cut in disposable income.⁴

Already in 2021, the World Bank had estimated that, to improve employment, savings and investments, Egypt had to grow at 50% above the average rate it had achieved over the last 60 years, (World Bank, 2021). But who would drive the expansion?

The government, for one, had limited fiscal flexibility, a bleak investment

³For China, Egypt not only offered a significant consumer base for Chinese goods but the Suez Canal, connecting the Mediterranean Sea to the Red Sea and the Indian Ocean, was a vital element of its Belt and Road Initiative. Not surprisingly, China had invested heavily in related infrastructure projects. Set up in 2008, the Suez Economic and Trade Cooperation Zone (SETC-Zone), for example, in 2023 hosted more than 100 Chinese companies with more than 30.000 local employees and a total annual sales volume of over \$2.5bn. Egypt's role in The Belt and Road initiative was considered an outgrowth of a long and uninterrupted history of diplomatic relations that began in 1956, when Egypt, as the first Arab and African nation, established diplomatic contacts with the People's Republic of China in 1956. Both countries, members of the Non-Alignment Movement, soon agreed to cooperate in trade and economic affairs as well as scientific and technological developments. In the early 2000s, a joint communique paved the way for increased Chinese engagement in Egypt, particularly in infrastructures, which ultimately led to the signing of a comprehensive strategic partnership (CSP) agreement. During President Xi Jinping's 2016 visit to Egypt, the two countries signed 21 deals resulting in Chinese investments worth \$15 billion in various projects. As a result, China State Construction Engineering Corporation became the leading investor in creating the central business district for the New Administrative Capital. Over the years, China also has emerged as Egypt's fourth largest creditor, with outstanding debts representing approximately 5 percent of Egypt's total external debt of \$155.7bn.

⁴Given its strong economic ties with both Russia and Ukraine, the war affected already high inflation rates, imports of wheat and other necessary products, as well as the number of tourists travelling to Egypt. Supply shortages, between 2018 to 2022, Egypt had imported around 85% of its wheat from Ukraine and Russia, in addition to the global increase in food prices and the frequent rise in domestic inflation to up to 36,8% in June 2023, raised concerns about food security among the country's most vulnerable households. In June 2023 alone, Egyptian food prices soared by 64.9%. Clearly, the country had no alternative but to increase its own food production. Observers called for relevant infrastructure projects and the improvement of domestic market conditions. See also Tanchum, M, (2023) *The Russia-Ukraine war forces Egypt to face the need to feed itself: Infrastructure, international partnerships, and agritech can provide the solutions*, Middle East Institute, at <https://www.mei.edu/publications/russia-ukraine-war-forces-egypt-face-need-feed-itself-infrastructure-international> and Gadallah, Mamdouh, (2023) *The Socioeconomic Impact of the Russia-Ukraine Crisis on Vulnerable Families and Children in Egypt: Mitigating Food Security and Nutrition Concerns* Policy Research Report ERF PRR 46 | June 2023 at <https://www.unicef.org/egypt/media/10766/file/The%20Socioeconomic%20Impact%20of%20the%20RussiaUkraine%20Crisis%20on%20Vulnerable%20Families%20and%20Children%20in%20Egypt.pdf>

record and little, bankable evidence of its ability to open and diversify the economy. As to funding, the size of the informal sector activity and the inefficiency of the tax collection system diminished the administration's revenue potential. With at least \$17 billion of foreign debt to repay over the next five years, the government had to forgo future revenues and sell public assets. Yet, an envisioned IPO program, with 32 SOEs earmarked for privatization, proofed less attractive to international investors than previously thought.⁵ Suggestions to further increase foreign borrowings met with severe criticism, domestically and internationally. As to spending, most public outlays were either obligatory, as in servicing the debt or sustaining a bulging bureaucracy, or politically unassailable, as in maintaining food subsidies or the military. Since the 1970s, large scale infrastructures and "new town" projects, to address the acute urban congestion in the Nile Valley and the Delta, had sometimes devoured up to 80% of the annual national investment budgets. But relatively few Egyptians seemed willing to relocate. By 2019, some of the twenty-eight "new towns" remained largely vacant or had shaky occupancy rates, (Sims, 2022). The New Cairo, with a geographic footprint of Washington D.C. built-up in merely six years, was criticized by some as a megalopolis, based on doubtful financing and rental schemes that had taken the focus off more urgent investments in education and healthcare. For others, it was symptomatic of the government's preference for state investments in construction-related industries to create jobs and income, even though these non-tradable activities did not improve the country's external position nor its ability to earn or at least retain hard currency.

In view of all the above, it seemed logical to look at the private sector for growth. Egypt's private sector, however, was rather heterogenous in terms of the size and formality of operations and their involvement with SOEs and their interests, (World Bank, 2020; Atiyas & Diwan, 2022; El Ashmawy, 2022).⁶ More than 50% of all establishments were unregistered; many industries were characterized by a small group of entrepreneurial, mid-size companies that were squeezed in between a few big-size enterprises and a large, mostly informal, unregulated competitive fringe. All private entities had to compete, or at least coexisted, with SOEs that often benefited from import protection, regulatory privileges as well as preferential access to resources, land, and capital. Also, as SOEs were typically tasked with additional social objectives, they operated under soft budget constraints. This meant that any potential default was avoided

⁵To some observers, the flotation list merely repackaged companies and assets that the governments had been trying to sell off to foreign investors over the last five years. These sectors are banking and finance, real estate, tourism, logistics, medical and pharmaceutical, electricity generation, and carbon-intensive processing. The two outlier firms, Safi and Wataniya, were military-owned and did not fit into any of these sectors. The former produces bottled water, and the latter sells fuel to motorists.

⁶Atiyas and Diwan (2022) discuss differences among private sector companies tackling two important obstacles to productivity, the absence of a level playing field when competing with state-owned enterprises and the absence of skilled technical labor. El Ashmawy (2022) attempts to define the structure and quantify of the informal sector.

through treasury guarantees, public borrowings and, eventually, the likely crowding out of private access to financial resources, for all but the privileged private insiders of the SOE network.

This tilting of the playing field had strong historical roots. Presidents Nasser, Sadat, Mubarak and Al-Sisi had all been officers in Egypt's semiautonomous military, an institution that not only had been able to withstand socialist, Islamist, neoliberal, and revolutionary transitions but also internal attempts at reform. Not even President Sadat had been able to demilitarize the state and open-up the economy. On the contrary, under his successor Mubarak, the military expanded rapidly into food production, mining, and petrochemicals as well as infrastructures such as roads, schools, family parks and hospitals. As a rule, this was justified by welfare and security concerns.

In 2020, the IFC had pointed to the complexity of the SOEs involvement in almost every sector of the Egyptian economy, and a year later, the IMF recommended that the state should exit many industries and centralize the remaining state ownership in a single entity. As a result, companies across the economy, from banking and finance, real estate, tourism, logistics, medical and pharmaceutical, electricity generation, and carbon-intensive processing, were earmarked for privatization. But all along there were doubts about the attractiveness of these investments (Sayigh, 2023). For example, would the generous spread between banking interests and those paid for Egypt's sovereign debt, which largely explained the success of the financial market, be sustained after privatization? Could dominant business positions, such as insuring energy assets, be maintained going forward? Would companies that procured or consumed gas at subsidized prices continue to be profitable once subsidies were to be removed? And finally, would military businesses, which the Memorandum of Economic and Financial Policies (MEFP) had placed under the same regulatory and governance framework as the rest of the (civilian) public sector⁷, be able to use loopholes to maintain their independence? But then again, would the government be able to subject a powerful military to the SOP provisions?

By 2022, it was nearly impossible to measure the size and focus of the military's industrial position. For one, the constitution did not address the need for civil oversight of the Egyptian Armed Forces (EAF) including its commercial activities; next, Law No. 313 of 1956, prohibiting the publication of any news about the military, effectively shielded it from public and political scrutiny.⁸ By the same token, the precise extend of private-sector, "insider" involvement with state agencies or the military, and its effects on other private sector "outsiders",

⁷The MEFP required all state-owned enterprises, including military companies, to 1) submit biannual financial accounts and publicly disclose "any quasi-fiscal activities"; 2) control management performance in line with formal operational and financial targets; 3) submit to more centralized oversight in each sector; 4) use transparent and competitive methods of public procurement; and 5) lose all their current tax exemptions.

⁸According to a US estimate at the end of the 1990s, only 24% of the end items produced in the Ministry of Military Production factories were military in nature.

consumer welfare or the economy was difficult to ascertain, (Adly, 2023).⁹

It was here, where Egyptian Prime Minister Mostafa Madbouly had promised in May 2022 that the new State Ownership Policy would redraw “the state’s border in the economy,” set proper rules of economic governance, and help to revitalize entrepreneurship, investments, and growth. But did it? Which economic reference was guiding the State Ownership Policy? Which approach would seem best to replace trite doctrinal debates with efforts to advance coherent and pragmatic solutions?

3. On Efficiency, Control & Market Preference

Institutional economists present rich but largely disconnected perspectives on the formation, structure, and economic impact of various institutions of governance. Integrating some of their findings, **Figure 1** sketches a reference for discussing coordination issues from intra- and inter-company contracting, the regulation of private and public enterprises, the monitoring of national regulatory and political decision-making to the level of international governance, (Boscheck, 2008).¹⁰

To be brief, companies procure readily available commodities in spot markets, sign long-term supply contracts for more risky provisions, or decide to produce vital components in-house. More control comes at the expense of playing suppliers against each other to drive up efficiency. In labor relations, blue collar workers are paid industry rates, less substitutable collaborators are offered a career or in the extreme are tied to the company via equity shares. A company’s performance may be checked by spot markets, regulatory supervision or, in the end, by bureaucratic, SOE controls. Regulatory results may be benchmarked across various regulatory authorities, subjected to sector-specific hearings or, stemming from ministerial operations, put under political control. Political control may be provided by the voting general electorate, more complex issues are left for parliamentary negotiations, and fundamental political concerns are sheltered by constitutional status. A society’s performance at these first five stages is ultimately checked by competition in international product or factor markets or sheltered by regional accords or global standards.

Each of the six levels of governance relies on competition, contract-based monitoring, and internal control, depending on context. At each level of governance, markets are typically preferred as the most efficient process for handling

⁹Although it was clearly visible, for example, in the construction the New Capital City. Adly (2023) points out that the New Capital City “demonstrates an investment model in which state agencies sell overpriced plots of desert land to private developers for the construction of high-end housing and commercial units. The developers sell “off-plan” units to final customers, usually affluent Egyptians, whose monthly or quarterly instalments finance the building process over periods that may extend anywhere between seven and thirteen years. These cash flows enable developers to pay their own instalments thanks to the state agencies involved, most prominently NUCA or the NAC, which the agencies in turn use to finance infrastructure projects outside the official state budget.”

¹⁰For an interesting discussion of the broader institutional context in Egypt see El-Mikawy and Moubieddin (2022).

dispersed information and decentrally coordinating activities. But decentralized market coordination presupposes comprehensive and explicit contracts, based on clearly defined supplies, skill-levels, product features, standards of agency performance, single-issue ballots, and undistorted global market conditions. As complexities and risks increase, and non-efficiency considerations matter, necessarily incomplete agreements are complemented by more centralized forms of monitoring and control. Fiat replaces market contest.

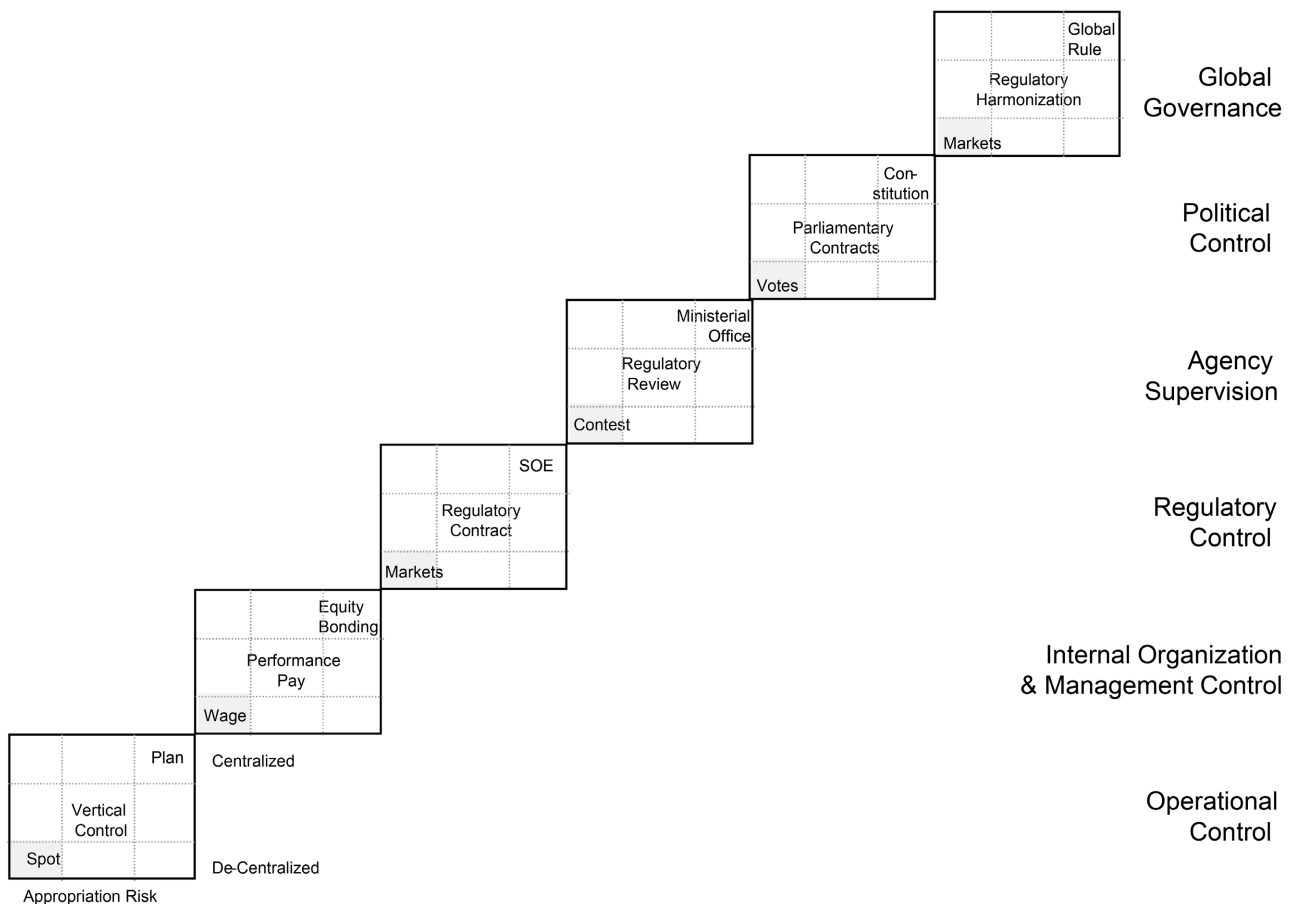


Figure 1. The hierarchy of governance mechanisms.

However, the emergence of “visible hands” triggers concerns over strategic behaviour, rent-seeking, accountability, and fairness, all outcomes of unavoidable discretion. Attempts to increase transparency and control over more centralized coordination are unlikely to alter the essential contractual incompleteness that requires discretion to start with. Checks and balances do not guarantee the effectiveness and impartiality of decision-making *per se*; they rather respond to a fundamental feature of guardianship that addresses failure to trust by adding layers of control in infinite regress. Alternatively, subjecting discretionary governance to the “market-test” enhances the efficiency and perceived “legitimacy” of outcomes only if the “invisible hand” can actually work, i.e. in the absence of market-failures.

Today, a strong market-drive is causing corporations to focus production and outsource, governments to privatize and deregulate, and economies to liberalize their trade and investment rules. They all answer calls for efficiency and competitiveness by shedding the cost of red tape and internal organization. But in some cases, enticing rationales are flawed and market-driven governance proofs incompatible with the underlying activity. Market-driven public policy reforms in OECD countries, for example, are often motivated with the need to cut regulatory burden which is seen as a tax on economic resources. But some regulations target objectives other than efficiency or are explicitly designed to constitute or supersede the market. That is, they are unlikely to meet the market test or only at substantial hidden costs.¹¹

With these qualifications in mind, it is nonetheless important to continuously challenge regulatory claims in view of viable market alternatives, more decentralized forms of decision-making or productivity standards. The following will do just that. Section three focuses on the SOP's selection of key sectors and the policy's main concept of "competitive neutrality;" section four compares the government's espoused role in four industries and its trade performance with efficient policy benchmarks. Section five uses **Figure 1** to tie up these various elements and offer a conclusion.

4. Egypt's State Ownership Policy: Sector Selection & "Competitive Neutrality"

The SOP document is divided in eight chapters to discuss the objectives, criteria and means for effectively privatizing some of the key assets and operations of the Egyptian economy. The government informs that a substantial funding gap requires the "empowerment of the private sector," that OECD guidelines had been followed to give the state an unbiased role, as "a professional, efficient, transparent, and accountable actor," and that the overall objective is to create a "competition favourable" atmosphere.

¹¹To give an example, in 2001, US President George W. Bush, announcing far reaching reforms in human capital, sourcing, finance and budgeting, embraced New Public Management as an approach to "reinvent government through decentralization, de-bureaucratization, and privatization." Particularly, the Department of Defence saw a potential to save up to \$18bn chiefly by replacing key personnel, promoting managerial ability ahead of service allegiance, devolving authority and accountability and tendering all non-core activities. Outsourcing was to plough-back vital resources to better leverage troops in combat zones. Hence, while during the 2nd Gulf War the contractor-to-troop ratio had still been 1:60, and 1:10 during the Balkan Crisis, going forward, it was expected to exceed the 1:2 relation estimated in the Kosovo conflict. But by 2004, US Congress had grown critical about the high costs of negotiating with dominant defence contractors and their recorded unwillingness to self-govern. More importantly, however, in the face of the Abu Ghraib scandal, Congress recognized that private military contractors were not subject to US military law, and therefore could not be held fully accountable for their actions. Under a new law, written into the 2007 military spending bill, private military contractors working in Iraq fell under the jurisdiction of courts-martial. To some, this reestablished the government's effective monopoly over the use of force, the *raison d'être* and source of any public authority; to others it proofed sufficient to challenge the constitutionality of the resulting changes in existing employment/agency contracts and, in effect, asked the Supreme Court to review the viability of market-testing national security.

The text should not be criticized for its vague language and concepts, after all, it is a framework document. There are however a few important issues where an outside perspective may be useful: first, the criteria for sector selection, rather than the method used for generating inputs into the process; second, the notion of “competitive neutrality,” not in terms of tax, debt, legislative neutrality, or neutrality in procurement, but as pertains to the assessment of the competitive actions of an SOE, that cannot be typecasted *a priori* and for which few or no benchmarks exist; third, the government’s view on how to operate or govern in specific sectors, even though less burdensome, regulatory processes might be available, (section four).

As to the *process of sector selection*, five objectives and a set of criteria were identified to determine whether the government should exit or, conversely, maintain position in the sector with the aim to either later reduce or increase its presence. The five objectives include “growth”, “private sector empowerment”, “public investments in neglected areas”, “governance of public capital”, “creation of fiscal space”. As key selection criteria appear “the correlation with public benefit/national security”, “governmental support for 4IR (the fourth industrial revolution)”, “a sector’s attractiveness for private investments”; “no crowding out private initiatives”, “public exiting saturated markets”, “SOE’s profitability”.

There is little evidence that the public was able to credibly input into the process or contest its results. Some may consider this questionable especially since public benefit/interest is a criterion that appears in one form or another quite often in the document. This, however, is not different from the three cases below, which one may consider as references. It is often assumed that governments have the right and the ability to decide what is for the greater good of the economic development. What is different in the cases below, are the sets of criteria to facilitate the selection.

For one, consider France’s post-WWII approach to identify and upgrade its “*filierre economique*”, an exercise involving industrial engineers scouting markets, buying technologies, setting up and protecting infant industries, with significant short-term success. The criteria were essentially economic with a view on targeting important generic technologies. The problem came later as most of these players had never learnt to effectively compete by and for themselves and ended up as rent-seeking clients of the system (Assogba & Klebaner, 2015).

Next, one may study several country-analysis projects undertaken by Monitor Company in the wake of Michael Porter’s *The Competitive Advantage of Nations*. Here the approach was to first identify key sectors where an economy had a revealed comparative advantage based on export market shares and FDI scores, and then examine in detail the underlying industrial clusters to devise sectoral strategies and close gaps in supporting resources and infrastructures. In each case, the approach was straightforward economic with the role of the government limited to supporting market-based adjustments.¹²

¹²For a critical review see Waverman (1995).

Finally, it seems useful to investigate the less known North Sea *Crine and Norsok* initiatives, undertaken in parallel by the UK and Norwegian offshore clusters to recuperate the competitiveness of their shared oil interests. Competitiveness was regained by identifying value creation and value capture opportunities as well as by standardizing technologies and contracting practices. This ultimately not only improved the attractiveness of the resource base and its fiscal regime but also impacted the regulation of Norway's NOC Statoil, (Boscheck, 1994) (Bergseth, 1996).

One may wonder whether similar type of analyses had been undertaken in Egypt prior to the compilation of the SOP document, and if not, whether these evidently more market-oriented approaches would have not resulted in a different sector list, with the government's involvement limited to mitigate unavoidable and grave market failures. Be this as it may, the question that remains is how to ensure a "competition-friendly" or a "competition-neutral" position of any public venture relative to other players in its market?

The framework document admits that it is rather vague in tackling this important issue due to the large variances in SOE activities and market conditions. Hence, it leaves it to the Consumer Protection Agency (CPA) to devise a "Competitive Neutrality Strategy," act as the secretary in the Supreme Committee for the Promotion of Competition Policy and Competitive Neutrality, and to "pre-emptively set government policies that limit any hindrances to entering the markets, increase investment and trade liberalization, and reduce unnecessary government intervention in the market."¹³ Put differently, "*competitive neutrality*" remains an empty concept. There is no clarity with respect to permissible conduct, tolerable market power and, through both, acceptable impact on actual and potential competitors. With no competitive standard defined the action of any regulator is patently discretionary, unpredictable and either administratively inefficient when opting for *rule of reason* reviews or apt to result in wrong decisions when devising overreaching *per se* norms.

The problem of looking for viable competition standards to prejudge and assess complex situations obviously is not limited to Egypt, which means, that there are useful references to be considered. Changes in EU Competition Law over the last two decades, for instance, illustrate how to write and enforce efficient regulatory standards. Consider the complicated task of evaluating vertical agreements (restraints) between businesses.

For Nobel laureate Jean Tirole, "(t)heoretically, the only defensible position on vertical restraints seems to be the *rule of reason*. Most vertical restraints can increase or decrease welfare, depending on the environment. Legality or illegality *per se* thus seems unwarranted. *At the same time, this conclusion puts far too heavy a burden on the antitrust authorities.* It seems important for economic theorists to develop a careful classification and operative criteria to determine in which environments certain vertical restraints are likely to lower social welfare,"

¹³SOP, op.cit., section 7, part 3, p. 18.

(Tirole, 1988). This is what the EU Commission tried to do with its 1999 competition policy reform.

Since its origin, EU competition law had followed a block exemption approach, permitting or forbidding types of contract clauses *per se*; a method, that has been criticized for causing companies to adjust their commercial arrangements to meet legal rather than market requirements. The rule changed, when in 1999 the commission published a short “blacklist” of *per se* not acceptable contract clauses and a market share limit of 30%. Contracts that did not include any of the blacklisted clauses and whose contract parties were holding less than 30% market share, were free to operate; anyone above the market share limit was advised to prepare an “efficiency defence” that justified the clauses used. That efficiency defence was not to be submitted for review but rather had to be kept ready in case the commission, typically tipped off by interested third parties, would ask. At the same time, the level of fines was increased significantly.

So what is the essence of all of this? By effectively outsourcing the task of regulating and, to some extent, legislating regulatory standards to the companies that needed to be controlled, the Commission induced self-regulation to establish an efficient rule, reducing the sum of enforcement costs plus the costs of taking a wrong decision. The approach has since been successfully carried over to other parts of EU Competition Policy, (Boscheck, 2009a). The question is, if a similar practice could be developed in Egypt to substitute the hollow concept of “competition neutrality” by a credible and efficient system of SOE enforced self-regulation. How could the CPA, if deemed adequate, be enabled and empowered to put this into effect? Could this be the model for reforming all of Egypt’s Competition Rules? Or should identified key sectors be treated differently?

5. Egypt’s State Ownership Policy: Reasons for Expanding Government Involvement?

Moving on from the general principle of regulatory and legislative outsourcing to some of the sectors identified in the SOP document, this section discusses rationales and proposed methods of government involvement in the water, electricity, pharmaceuticals, and hydrocarbon sectors. In each case, the comments are necessarily sketchy, but an attempt is made to offer alternative arrangements and some counterfactual thinking.

To begin with *Water*, building the Aswan High Dam was a monumental achievement, as could be the completion of the controversial Toshka Project. With the latter, the size of inhabitable land could be increased from 5% to 25% of Egypt’s territory, boosting agricultural production to the level of self-sufficiency and creating opportunities for additional export earnings. For twenty years, technical issues caused by the high salinity of the soil or insurmountable granite walls had blocked progress, now the venture is being revamped.

Given the scale, the risks, and the economic significance of this project, it is obvious that the government wants to be controlling progress. What however is

not clear then is why it wants to maintain a fragmented position in various elements of the remaining water system that may result in more coordination requirements than wholesale privatization and light-touch regulation.

The SOP proposes that the government 1) exits drinking water production from desalination plants and projects to transform sludge into energy; 2) maintains (or reduces) its presence in drinking water pumping, distribution and sewage collection, treatment plants and reuse, metering and bill collection as well as network operations; 3) maintains (or increases) its role in drinking water production from surface water. The latter two positions should “allow private sector’s participation,” (SOP, 2022).¹⁴

Figure 2 shows alternative formats for organizing water infrastructures across Europe. Countries have developed unique governance structures that differ substantially regarding asset ownership, investment planning, the financing of fixed assets and working capital, the bearing of commercial risks, and the structure and method of regulatory controls. ‘Private ownership and operation’ is far from being the dominant design but has been put in place in cases, like England and Wales, where public authorities had proven unable to meet investment requirements and private sector funds where needed. With the privatization of water works came specific governance challenges that needed to be addressed.

**Weighted Average of European Water Management Systems,
based on EURAU Classification**

	63.5%					20.5%			16%	
	Government Department	Public Enterprise (PE)	PE & Corporatized & Commercial	PE & Service Contract	PE & Management Contract	Leasing Contract	Concession Contract	Built, Operate Transfer	Private Ownership & Operation	Community Self-help/Buyer Integration
Asset Ownership	Public	Public	Public	Public	Public	Public	Public	Private	Private	Private/ Common
Investment Planning	Public	Public	Public	Public	Public	Public	Public	Public/ Private	Public/ Private	Public/ Private
Regulation	Parent Ministry, Economic, Quality, Environment Regulators, NGOs		Parent Ministry, Economic, Quality, Environment Regulators, NGOs		Parent Ministry, Economic, Quality, Environment Regulators, NGOs		Parent Ministry, Economic, Quality, Environment Regulators, NGOs		Parent Ministry, Economic, Quality, Environment Regulators, NGOs	
Financing Fixed Assets	Public	Public	Public	Public	Public	Public	Private	Private	Private	Private/ Common
Working Capital	Public	Public	Public (Revenues)	Public (Revenues)	Public (Revenues)	Private	Private	Private	Private	Private/ Common
Operations & Maintenance	Public	Public	Public	Private	Private	Private	Private	Private	Private	Private/ Common
Managerial Authority	Public	Public	Public	Public	Private	Private	Private	Private	Private	Private/ Common
Bearer of Commercial Risk	Public	Public	Public	Public	Public	Private	Private	Private	Private	Private
Basis of Private Compensation	n.a.	n.a.	n.a.	Fixed Fees	Incentive Contract	Incentive Contract	Incentive Contract	Incentive Contract	Incentive Contract	Incentive Contract
Typical Duration	No limit	No limit	No limit	Less than 5 years	Less than 5 years	Less than 15 years	Less than 30 years	Between 25 and 30 years	No limit	No limit

Figure 2. Alternative governance formats for water infrastructures across Europe.

¹⁴SOP, op.cit., Appendix (1), section 3, p. 22.

England and Wales contain in total ten valley systems that for all practical purposes cannot be made contestable and, due to vastly different topographic conditions, cannot be easily benchmarked, (OFWAT, 2023). The regulatory system that hence was used was a “light-tough method,” which asked companies to accept an initial, politically motivated, water price and then negotiate with the regulator investment needs (Y) and obtainable efficiencies (-X). The sum of +Y and -X, known as the K-factor, drove share prices and thus gave rise to gaming and periods of more intrusive regulatory controls. By now, however, all parties seem to have bought into the incentive-compatible regulatory logic. Also, it can be argued that this approach beats the French concession schemes and the German decentralized Stadtwerke system both in terms of capital expenditure and operational efficiency, (Boscheck, 2013). So the question is, why, apart from colossal infrastructure projects, Egypt would not opt for privatizing its water works as part of an incentive compatible regulatory regime?

In the case of *Electricity*, the State Ownership Policy document suggests unbundling with the state ultimately controlling the naturally monopolistic transmission grid, while, for the time being, also holding on to upstream and downstream assets. Experience elsewhere, however, suggests that generation and distribution assets ought to be privatized and separated from the outset to make the regulatory system more transparent and its outcomes less questionable.

The traditional justification for government intervention and asset ownership, the problem of “no-storage”-based coordination of electricity generation, transmission, and supply, has long been well refuted, (Beesley & Littlechild, 1983a, 1983b), (Boscheck, 2009b), (MacKay & Mercadal, 2022). Today, the unbundling and complete separation of privatized assets and their management in a pool-based market system is usually considered best to ensure the static and dynamic efficiency of coordinating capacities and demand. But adjustment costs must be managed, and regulatory precautions need to be met.

In 1990, the UK government initiated one of the early attempts at privatizing an electricity sector. Stephen Littlechild, an accomplished regulatory economist turned head of OFFER, the regulatory agency, faced severe political pressures and criticism about the outcome of his proposed system. While some observers had expected industry electricity charges to fall and private consumers to benefit only later, consumer bills went down instantly as industry prices increased. Also, industrial users observed that during 80% of peak-demand periods, pool prices were set by older generators; hence industry brought cartelization charges for the Monopoly and Merger Commission (MMC) to investigate. Both concerns, however, had straightforward explanations. For one, prices adjusted as industry subsidies were taken away and private consumers were relieved of their need to cross-subsidize bigger users; next, the high probability of using older, less efficient generators during peak period was a natural outcome of the merit-order that brought in more efficient producers earlier.

Nevertheless, in the ensuing discussions two additional issues came to the

fore. To begin with, there was a need to shelter and institutionally support the regulator in the face of any vested interest, be it from industry users rejecting higher electricity charges or the government, which, as main shareholder of previously state-owned enterprises, had clear preferences for some regulatory outcomes rather than others. Also, it became clear that pool-based coordination required a complete unbundling of all operations, if only to ensure that downstream operations could not give an information advantage to integrated generators in the pool-bidding process. These concerns seem worthwhile reviewing when elaborating Egypt's State Ownership Policy about electricity supply. How can a complete separation of asset ownership and control be enforced? How can adjustment costs be managed, and the regulator be institutionally strengthened?

Although market size numbers are conflicting, most analysts consider the potential of the *Pharmaceutical industry* in Egypt to be vast chiefly due to the demographics of the country, the still relatively low level of government spending on healthcare and regional markets of similar characteristics. International players like Novartis, GSK and Sanofi are market leaders and more than 90% of the raw materials are imported and currently affected by devaluation and general inflation. The public sector production is estimated to have a 6% share of the Egyptian pharma market. But the SOP states the government's intention to significantly grow its presence across nearly the entire sector, from chemicals, drugs and vaccines to biologics and medical devices.

For long, the sector had been overseen by the Ministry of Health, the Ministry of Pharmaceutical Affairs with three agencies focusing on delivery, research, registration. To cut the protracted process of registration and licensing, these operations have since been consolidated into the Egyptian Pharma Agency & the Egyptian Agency for Standard Medical Product Supply, with complete authority to procure for the public sector. The challenge here is not only to ask what justifies public ownership and involvement. Rather one key issue seems to be how can the government, as a producer and competitor, effectively and credibly act on drug price control and market access conditions.

To maximize the return on their R&D investments, branded drug producers regularly pursue four objectives: 1) attaining dominance within the therapeutic class/reference; 2) sustaining that position through patenting active compounds, preferred formulations, manufacturing methods etc.; 3) using various methods of life-cycle management to delay substitution; 4) seeking to expand a compound's market by looking for ways to increase its off-label use or seeking approval for new indications based on extensive clinical trials. Conversely, public authorities interested in healthcare cost containment and the safety of drug supply are looking for ways to speed-up generic substitution while scrutinizing off-label use. The benefits of generic substitution are substantial. As patents expire, the first generic competitor typically enters the market with a 20 to 30 per cent discount relative to the branded product, capturing about 44 to 80 per cent of total sales within the first full year after launch. Subsequent entry quickly

erodes prices to a cost-plus standard. However, such public benefits must be weighed against the costs of drug development: the current average drug development cost per compound (pre-approval) is estimated to be around \$1.5bn, and the average new drug requires \$0.5bn sales to earn a return just above the industry cost of capital.

In this context, pharma companies and regulators around the world are playing games that will be even more complicated when the government sits on both sides of the table. Just consider the case of driving generics into the market fast. Cost containment measures modelled after the US Hatch-Waxman Act, for example, provide immediate approval for “not infringing” and not legally challenged bioequivalent generics in addition to a 180-day marketing exclusivity before any 2nd generic could enter the market. If successfully implemented in Egypt, such a rule would enormously benefit healthcare budgets but also drastically affect the revenue streams of domestic branded drug producers, state-owned or otherwise. Producers may thus react by resorting to “reverse payment” deals compensating fast generics to delay their entry into the market. While effectively constituting collusion with potential competitors, such settlements could benefit consumers, and therefore should be legal, if they lead to entry before litigation would be terminated or patents expires, whichever comes first. With state-owned drug production, however, how would one credibly ensure that the state will not use registration regulation or preferential data access to either keep generic competition out, raise market-access costs of branded rivals, or, conversely, challenge patents internationally to either build a generic business or simply extract reverse payment rents in ways that private player could not do? To eschew any distortions of competition and conflicts of interest, Egypt’s government may be better off guaranteeing transparent and competitive healthcare markets rather than actively operating in them.

Although in the Arab world, Egypt currently has the largest non-oil GDP in absolute and relative terms, the *Hydrocarbon* industry remains vital for the country’s development. Its export revenues underpinned much of the national investments in infrastructure and industries; domestically, hydrocarbons have come to complement straining hydropower generation. However, today’s hydrocarbon production and exports are reduced due to technical issues in major fields and a slowing of international investments. Reflecting these concerns but also for reasons of national security and domestic supply assurance, the SOP aims at increasing the government’s operational footprint, from the extraction of oil and gas to the refining of the full range of hydrocarbon derivatives.

To be sure, criticism of national oil companies (NOCs) or their variants is often ill-founded. A few years back, the Economist’s unceasing disparagement of NOCs as “badly run signs of resource nationalism that should be privatized” was quickly rebutted by Saudi Arabia’s Minister of Petroleum and Mineral Resources Ali Al-Naimi as showing “a lack of knowledge and lack of appreciation of an NOCs role,” (Al-Naimi, 2004). NOCs cannot simply be compared with private,

international oil companies, independents or integrated ones, because different from these, they are an integral part of national policies about resource depletion, value capture, revenue management, income distribution and, through this, stir the direction of economic development.

Still, any assessment of a NOC's operation should begin by answering the question why any country would set up its own import-competing NOC rather than create a regulatory and fiscal regime able to attract global specialists?

The answer must lie in the perceived inability of the resource base or regulatory regime to appeal to adequate suitors, overcome differences in views on the value of the reserves and its development plans, engender trust in the enforceability of contracts, capture spillovers in related industries, infrastructures and skill-building or simply make use of existing but idle capacities. Yet, even if all these requirements were met, NOCs may still serve some broader political purpose.

Throughout the last two decades, regular annual reviews of fiscal regimes by the *Oil & Gas Investor* have shown that, while numerous countries had switched to or improved existing production sharing regimes, only a few considered noticeably reducing or even abolishing state participation. In fact, most countries had done exactly the opposite. Resource owners are apparently convinced that fiscal and regulatory systems cannot capture all economic value and political leverage.

But superseding the market and, in the extreme, putting the exploitation of a country's oil and gas resources into the hands of one stand-alone, state-owned, state-run enterprise raises efficiency and broader regulatory concerns. The issue soon becomes how to efficiently control a "state within the state," the cost of which increases with the complexity of the role that the NOC is expected to take.

Already for the relatively narrow task of upstream exploration and production, ensuring the efficiency of an NOC requires an interaction across all stages of governance sketched out in **Figure 1**. At the level of operations and management, this may involve the partial or complete outsourcing of operations or a benchmarking vis-à-vis other undertakings in each resource base. In the absence of these, performance may be monitored via investment indicators, the use of incentive-based budgets or the "shadowing" of operations based on some input-output plan. At the level of regulatory control, product markets may provide competitive checks depending on the hydrocarbon grade, supply conditions and delivery contracts. Labor and financial markets can perform this function only if NOCs are permitted to raise capital and capital and labor markets are sufficiently liquid. Regulatory tasks, proper, may be combined or broken up subject to the technology or activity-base and their effectiveness benchmarked nationally vis-à-vis other sectors, or globally across the industry. Where such comparison is deemed futile, regulators themselves may be subjected to incentive-based assignments and ministerial reviews. National political control may involve public discourse and even referenda on depletion or expansion programs, parliamentary reviews, or be limited to presidential verdict. Ultimately, a given combination

of governance arrangements, the national institutional structure, must survive product and factor market competition or may be sheltered by regional or international market arrangements from global market review.

Clearly, assessing the governance of an NOCs goes beyond following any of the academic NOC governance principles offered by the likes of Chatham House, the IMF or others, (Benn, 2003; Chatham House, 2006; Heller, 2018).¹⁵ Clearly also, as the NOC's remit broadens, the distinction between operation and policy making begins to blur, conflicts of interests become "unavoidable", bear on operational and regulatory efficiency and raise concerns about the true location of political power. Then, who should monitor the NOC and, ultimately, based on what? Will multiple regulators and stakeholder groups deliver effective monitoring or be divided and captured by the state-owned operator? Which level of transparency is required for supervision but potentially detrimental to commercial operation? Will the time horizon of regulatory and political contracts underpin or defy operational imperatives? Who decides whether, when and how to adjust the system? What is the link between the NOC's governance structure and the country's macro-economic status and what is the role of the outside world?

One would assume that Egypt's government has sketched out the broader governance concerns related to further increasing its operational footprint in the oil and gas sector, if only to identify ways to play the market and reduce its regulatory burden. The SOP document, however, does not deal with these important issues at all.

The final observation relates to Egypt's *trade*, the country's growing number of trade alliances and their competitive impact on domestic industries and their export performance. Many analysts find with imports at 25.2% and exports at 17.3% of its 2022 GDP respectively, Egypt's trade performance remains well below potential for a country of its size and economic diversity, (BMI, 2023). Only a few trace trade outcomes to dismal savings, investment, and productivity records, an often overvalued Egyptian pound that fuels, externally funded, current account deficits, or the country's import protection due to many non-tariff barriers and a Most Favoured Nation tariff, which is the second highest in the world, (Osman & El-Laithy, 2022). Any positive trade outlook is typically based on projected growth in outsourcing investments from the EU, increased commerce with Nile-basin and wider African markets as well as Egypt's growing involvement in regional trade agreements.¹⁶ Yet, while in one World Bank publication, Egypt's increase in trade accords is glorified as "the more the better," another Bank publications finds little spill-over regarding economic

¹⁵The Chatham House principles include 1) clarity of goals, roles and responsibilities; 2) enablement to carry out the role assigned; 3) accountability of decision-making and performance; 4) transparency of information and, finally, 5) sustainable development for future generations.

¹⁶The major ones are the Pan Arab Free Trade Agreement/Greater Arab Free Trade Agreement (GAFTA), the Common Market for Eastern and Southern Africa (COMESA), the Agadir Free Trade Agreement, the Egypt-EU Association Agreement, the Egypt-EFTA Free Trade Agreement, the Qualified Industrial Zones (QIZ), the Egypt Turkey Free Trade Agreement, the Egypt-MERCOSUR Free Trade Agreement.

growth, income distribution, poverty reduction, or female labour market participation. Similarly, Egypt's government is often referring to its potential role within China's One Belt - One Road initiative, which links 68 countries, 40% of the World's GDP, 65% of the World Population and is backed by \$1 trillion funding. But what is in it for Egypt? Will it be able to use the arrangements to structurally transform the economy and give it a market-drive?

Regrettably, the SOP document does not provide any insight on whether and how the sector selection and form of government involvement takes into consideration the industrial composition and market access terms of all these trade arrangements. Comparing the sector mix and the details of commercial provisions should help identify Egypt's resulting trading position as predominantly geared towards either complementary or competitive specialization. Only the latter would give the country the necessary market check that reduces regulatory burden and continuously forces domestic industries to upgrade.

6. Summary

The Egyptian economy is under pressure. The country needs income, jobs, investments, and financial infusion. And the government must manage expectations internally and externally. There is talk about an "Egyptian Renaissance," how the New Cairo symbolizes the success of "A New Republic," how China's Silk Road Initiative, the growing number of trade alliances and the move towards BRIC + will make Egypt the gateway to Africa and a centre piece in the economic revival of the region. Most importantly, there is talk about the necessary revitalization of the private sector. But is the government sending credible signals?

The State Ownership Policy Document of December 2022 sketches the future of the public and private sector involvement in the economy. It is to set proper rules of economic governance, and help to revitalize entrepreneurship, investments, and growth. But did it? Which economic reference was guiding the State Ownership Policy?

To avoid a trite doctrinal debate, the paper introduced the language of institutional economics to outline a reference for discussing coordination issues from intra- and inter-company contracting, the regulation of private and public enterprises, the monitoring of national regulatory and political decision-making to the level of international governance. Providing a complete graphical representation of this, **Figure 1** helps to structure the discussion of various important elements of the SOP document that could benefit from an external perspective.

For one, not the process for selecting the sectors in which the government wants to maintain and increase control, but the criteria used would need to be reconsidered. The paper highlights three alternatives. Next, the notion of "competitive neutrality" lacks clarity and operability and thus results in excessive regulatory discretion. The paper offers an alternative derived from the reform of EU competition law. Furthermore, discussing four key sectors, the above ques-

tions the rationale for government involvement, its format and welfare impact, suggesting the discussion of counterfactuals and illustrating diverse options. Finally, it is asked whether the increasing use of preferential trade arrangements will be able to structurally transform the economy and give it the needed market-drive.

Hence, to guide internal and external stakeholders as well as the attainment of the espoused policy objectives, the State Ownership Policy Document requires a substantial review. It may be naïve to believe that the document was intended to provide such guidance in the first place. As a neutral bystander, one would give it the benefit of the doubt.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Adly, A. (2023). *Crowding Egypt's Private Sector in, Not out*. On the Website of the Malcom H. Kerr Carnegie Middle East Center Conference. <https://carnegie-mec.org/2023/05/08/assessing-egypt-s-state-ownership-policy-challenges-and-requirements-pub-89637>
- Al-Naimi, A. (2004). The Role of National Oil Companies in a Changing World's Economic and Energy Relations. In *OPEC International Seminar*.
- Assogba, G., & Klebaner, S. (2015). *Vers un cadre d'analyse institutionnaliste de la politique de filière: Quelle cohérence pour la politique de filière française?*
- Atiyas, I., & Diwan, I. (2022). Egypt's "Missing Middle" and Its Impact on Economic Growth. In K. Ikram, & H. Nassar, (Eds.), *The Egyptian Economy in the Twenty-First Century* (pp. 289-312). AUC Press. <https://doi.org/10.5040/9780755651214.ch-011>
- Beesley, M., & Littlechild, S. (1983a). Privatization: Principles, Problems and Priorities. *Lloyds Bank Review*, 149, 1-20.
- Beesley, M., & Littlechild, S. (1983b). *Privatisation and Monopoly Power*. Unpublished Paper for H. M. Treasury.
- Benn, E. et al. (2003). Managing Oil Wealth. *Finance & Development*, 40. <https://doi.org/10.5089/9781451953350.022>
- Bergseth, S. (1996). Offshore, Northern Europe—The Challenges. In *The 1996 ONS Conference*.
- BMI (2023). *Egypt Trade & Investment Risk Report*. <https://fitchsolutions.com/bmi>
- Boscheck, R. (1994). *North-Sea Offshore Partnering Contracts, IMD Case Study*.
- Boscheck, R. (2008). *Strategies, Markets & Governance*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511753848>
- Boscheck, R. (2009a). The EU's New Competition Policy Standards: In Search of Effects-Based, Economically Intuitive or Efficient Rules. *Intereconomics*, 44, 295-299. <https://doi.org/10.1007/s10272-009-0306-y>
- Boscheck, R. (2009b). The EU's Third Internal Energy Market Legislative Package: Victory of Politics over Economic Rationality? *World Competition: Law & Economics Review*, 32, 589-604. <https://doi.org/10.54648/WOCO2009054>

- Boscheck, R. (2013). Procurement, Privatization, Principles & Presumptions: The EU's Proposed Concession Directive & the Governance of Water Supply. *Intereconomics*, 48, 136-139.
- Chatham House et al. (2006). *Good Governance of the National Petroleum Sector*. Interim Report.
https://www.google.com/search?q=-+https%3A%2F%2Fwww.chathamhouse.org%2Fsites%2Fdefault%2Ffiles%2Fpublic%2FResearch%2FEnergy%2C%2520Environment%2520and%2520Development%2Fgginterim_report.pdf&oeq=-%09https%3A%2F%2Fwww.chatham-house.org%2Fsites%2Fdefault%2Ffiles%2Fpublic%2FResearch%2FEnergy%2C%2520Environment%2520and%2520Development%2Fgginterim_report.pdf&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBBzY5MmowajSoAgCwAgE&sourceid=chrome&ie=UTF-8
- El Ashmawy, F. (2022). Fiscal Policies and Issues. In K. Ikram, & H. Nassar (Eds.), *The Egyptian Economy in the Twenty-First Century* (pp. 359-390). AUC Press.
<https://doi.org/10.2307/j.ctv2vm3b3k.19>
- El-Mikawy, N., & Mobieddin, M. (2022). Institutional Constraints and Opportunities in Egypt. In K. Ikram, & H. Nassar (Eds.), *The Egyptian Economy in the Twenty-First Century* (pp. 411-449). AUC Press. <https://doi.org/10.2307/j.ctv2vm3b3k.21>
- Gadallah, M., & Mamdouh, N. (2023). *The Socioeconomic Impact of the Russia-Ukraine Crisis on Vulnerable Families and Children in Egypt: Mitigating Food Security and Nutrition Concerns*. Policy Research Report ERF PRR 46.
<https://www.unicef.org/egypt/media/10766/file/The%20Socioeconomic%20Impact%20of%20the%20RussiaUkraine%20Crisis%20on%20Vulnerable%20Families%20and%20Children%20in%20Egypt.pdf>
- Heller, P.-R.-P. (2018). Doubling Down: National Oil Companies as Instruments of Risk and Reward. In T. Addison, & A. Roe (Eds.), *Extractive Industries* (pp. 298-317). Oxford Academic Books. <https://doi.org/10.1093/oso/9780198817369.003.0015>
- Ikram, K. (2022). Introduction. In K. Ikram, & H. Nassar (Eds.), *The Egyptian Economy in the 21st Century* (pp. 1-68). AUC Press. <https://doi.org/10.2307/j.ctv2vm3b3k>
- MacKay, A., & Mercadal, I. (2022). *Deregulation, Market Power and Prices: Evidence from the Electricity Sector*. MIT Center for Energy and Environmental Policy Research, Working Paper Series.
<https://ceep.mit.edu/wp-content/uploads/2022/04/2022-008.pdf>
- OFWAT (2023). *Water Sector Overview*.
<https://www.ofwat.gov.uk/regulated-companies/ofwat-industry-overview/>
- Oil & Gas Investor. <https://www.hartenergy.com/policy-regulations>
- Osman, A. M., & El-Laithy, H. (2022). The Poverty Trap: Why Is It Persisting in Egypt. In Ikram, & Nasser (Eds.), *The Egyptian Economy in the 21st Century* (pp. 103-141). AUC Press. <https://doi.org/10.2307/j.ctv2vm3b3k.9>
- Sayigh, Y. (2023). *Egypt's State Ownership Policy and the Military Economy: An Irreconcilable Gap*. On the Website of the Malcom H. Kerr Carnegie Middle East Center Conference.
<https://carnegie-mec.org/2023/05/08/assessing-egypt-s-state-ownership-policy-challenges-and-requirements-pub-89637>
- Sims, D. (2022). Urbanization in Egypt. In K. Ikram, & H. Nassar (Eds.), *The Egyptian Economy in the 21st Century* (pp. 143-160). AUC Press.
<https://doi.org/10.2307/j.ctv2vm3b3k.10>
- SOP (2022).

https://egyptembassy.jp/cms/wp-content/uploads/2023/02/State-Ownership-Policy-EN-GLISH_230117_041444-2.pdf

Springboard, R. (2023). *Investing in Egypt's Future, or Selling Family Jewels?* On the Website of the Malcom H. Kerr Carnegie Middle East Center Conference.

<https://carnegie-mec.org/2023/05/08/assessing-egypt-s-state-ownership-policy-challenges-and-requirements-pub-89637>

Tanchum, M. (2023). *The Russia-Ukraine War Forces Egypt to Face the Need to Feed Itself: Infrastructure, International Partnerships, and Agritech Can Provide the Solutions*. Middle East Institute.

<https://www.mei.edu/publications/russia-ukraine-war-forces-egypt-face-need-feed-itself-infrastructure-international>

Tirole, J. (1988). *Industrial Organization*. MIT Press.

Waverman, L. (1995). A Critical Analysis of Porter's Framework on the Competitive Advantage of Nations. In A. M. Rugman, J. Van den Broec, & A. Verbeke (Eds.), *Beyond the Diamond (Research in Global Strategic Management, Vol. 5)* (pp. 67-95). Emerald Group Publishing Limited.

World Bank (2020). *Creating Markets in Egypt: Realizing the Full Potential of a Productive Private Sector*.

World Bank (2021). *Unlocking Egypt's Potential for Poverty Reduction and Inclusive Growth*.