



Universiteit
Leiden
The Netherlands

The Political Economy of Egypt's Pharmaceutical Industry: Medicine Access and Dreams of Self-Sufficiency

Pieters, Emma

Citation

Pieters, E. (2022). *The Political Economy of Egypt's Pharmaceutical Industry: Medicine Access and Dreams of Self-Sufficiency*.

Version: Not Applicable (or Unknown)

License: [License to inclusion and publication of a Bachelor or Master thesis in the Leiden University Student Repository](#)

Downloaded from: <https://hdl.handle.net/1887/3420803>

Note: To cite this publication please use the final published version (if applicable).

The Political Economy of Egypt's Pharmaceutical Industry: Medicine Access and Dreams of Self-Sufficiency

Emma Pieters (s3295341)

This thesis is supervised by Dr. Kayhan Valadbaghi and is part of the MA *Middle Eastern Studies* at Leiden University.

Keywords: Pharma Industry, Egypt, De-globalization, GVC, self-sufficiency



The cover image show President Abdel Fattah Sisi and his entourage during a tour around ‘medical city’ Gypto. This image derives from an article published on the website of the Egyptian news outlet Sada ElBalad. Photographer unknown.

Nawal Sayed, “Gypto Pharma... Facts You Must Know About Egypt’s Medicine City,” *Sada ElBalad*, April 1, 2021, <https://see.news/gypto-pharma-facts-you-must-know-egypts-medicine-city/>.

Acknowledgements

I would like to express my gratitude to Dr. Kayhan Valadbaghi, who has been an excellent supervisor and who has pushed this research in the right direction whenever needed. Furthermore, I would like to thank Dr. Sai Englert, who has incited my enthusiasm for International Political Economy (IPE), and Dr. Noa Schonmann who has helped me link IPE to my former training in Cultural Anthropology.

Moreover, thank you Dr. Cristiana Strava for encouraging me to pursue this research's topic and thank you for your helpful feedback on my proposal. Also, thank you Dr. Christian Henderson for inspiring me to think out of the box in terms of research topics.

Above all I would like to thank the people who participated in this research (who unfortunately I cannot credit by naming due to safety reasons). Thank you for bringing me into contact with people that work in Egypt's pharmaceutical and health sector and/or for participating in the interviews. Thank you for your trust and generosity in terms of time and effort. I can in all honesty say that you enabled this research, by notifying me of fundamental matters that I would otherwise have overlooked and by sharing with me your interesting insights and thoughts.

And of course, I would like to conclude by thanking my friends and family and my partner Bart Sandberg, your love was reassuring at the very least and absolutely heart-warming at most.

Abstract

Under the governance of President Abdel Fattah Al-Sisi (2014-present), Egypt has witnessed severe medicine shortages. As a way to mitigate those shortages, the government is increasing its domestic production of pharmaceutical products. This policy is grounded in a rhetoric of ‘self-sufficiency’, the aspiration for Egypt to provide in its own medicine needs, thereby reducing its dependency on the imports for medicine supply. National initiatives such as the establishment of the pharmaceutical production hub Gypto Pharma demonstrate concrete attempts to realize this ambition. This raises the question of how the political economy of Egypt’s pharmaceutical industry has developed under the current regime. While the ‘self-sufficiency’ rhetoric suggests that Egypt has taken a direction of economic de-globalization, further inquiry shows that this narrative does not tell the whole truth. Through the use of interviews and the analysis of formal documents and newspaper items, this research uncovers the political and economic aspects of Egypt’s contemporary pharmaceutical industry. Following its recent trail, it becomes evident that even if Egypt is limiting the import of finished pharmaceutical products, it is still very much dependent on the import of raw materials for its domestic production. Likewise, because Egypt lacks capital to invest in its local pharmaceutical industry, it relies on the input of foreign direct investment. Furthermore, another motivation for increasing its domestic manufacturing of medicine is also to become a regional production hub. Adopting the role of medicine supplier in turn creates new dependencies on the global value chain. Finally, coming back to the matter of medicine shortages, this research shows that the notion that the intensification of domestic production will improve the medicine supply, and thereby better medicine access is false. It takes further political action to ensure the affordability and availability of medicine.

Contents

Acknowledgements	2
Abstract	3
List of Abbreviations	6
1. Introduction	7
1.1 Why Egypt's pharmaceutical industry matters	8
1.2 Thesis outline	10
2. Filling the knowledge gaps	11
2.1 Theoretical metonyms	12
2.2 Health inequalities: A global matter	13
3. Theory & Methodology	16
3.1 Processes of (de-)globalization	16
3.2 (De-)globalization of trade: global value chains	19
3.3 Political Economy: connecting the dots	23
3.4 From 'the big picture' to the everyday	25
4. Egypt's pharmaceutical Industry (1952-2011)	27
4.1 Nationalization under Nasser	28
4.2 Sadat and the <i>infatah</i>	29
4.3 Mubarak and international financial institutions	31
5. Egyptian dreams of self-sufficiency: The pharmaceutical industry	34
5.1 Devaluation of the Egyptian Pound (2016-2017)	34
5.2 COVID-19 and health as national security	41
5.3 Gypto Pharma and the policy of a 'new country'	45
6. Conclusion	50

Bibliography	53
Other Sources	62
Appendix 1 – Interview transcriptions	

List of Abbreviations (A-Z)

API	Active Pharmaceutical Ingredient
EAF	Egyptian Armed Forces
EDA	Egyptian Drug Authority
ERSAP	Economic Reform & Structural Adjustment Program
FDI	Foreign Direct Investment
FPP	Finished Pharmaceutical Product
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GVC	Global Value Chain
IFI	International Financial Institutions
IMF	International Monetary Fund
ISI	Import Substitution Industrialization
NSPO	National Service Projects Organization
OTC	Over the counter [drugs]
R&D	Research & Development
SWF	Sovereign Wealth Fund
TRIPS	Trade-Related Intellectual Property Rights
WHO	World Health Organization
WTO	World Trade Organization

Transliteration

The transliteration of Arabic in this research has been carried out along the IJMES guidelines. See: “IJMES Translation and Transliteration Guide,” Cambridge University Press, Accessed April 15, 2022.

<https://www.cambridge.org/core/journals/international-journal-of-middle-east-studies/information/author-resources/ijmes-translation-and-transliteration-guide>.

1. Introduction

In recent years, the Egyptian government has taken significant efforts to increase its pharmaceutical production, with one of the most apparent efforts being the establishment of ‘medicine city’ Gypto Pharma. State-owned news outlet Ahram Online reports that this medicine hub is “set to play a pivotal role in transforming Egypt to a regional hub for medical production and exports”.¹ This leads to the question of how the political economy of Egypt’s pharmaceutical industry has developed during presidency of Abdel Fattah Al-Sisi (2014-present), and how that in turn relates to other political and economic developments in the country. Interestingly, the pharmaceutical production at Gypto Pharma is not merely intended to increase exports, but it is also directed at securing Egypt’s domestic medical supply.² The latter is crucial as Egypt has been coping with severe medicine shortages over the last years.³ Aspirations of self-sufficiency are not only expressed in relation to Egypt’s pharmaceutical industry, but extent to other sectors such as the local food and oil industries.⁴ Seeing the pharmaceutical industry in this context, it could be argued that this industry is going on a course of economic de-globalization, minimalizing its dependence on global value chains (GVC). However, as this research shows, the reality of Egypt’s pharmaceutical industry is a bit more complex than that. While the self-sufficiency strategy has indeed entailed some measurements that could lead to Egypt obtaining a larger share of the global production process, it fails at evading Egypt’s reliance on the imports and foreign investments. Because even if the Egyptian government obstructs the import of finished pharmaceutical products (FPPs) and increases the domestic manufacturing of medicines, that domestic

¹ Rasha Sadek, “Gypto Pharma Will Transform Egypt to a Pharmaceutical Regional Hub: Chairman of Medicine City,” *Ahram Online*, October 16, 2021, <https://english.ahram.org.eg/News/429019.aspx>; “Ahram Gate,” Egypt, Media Ownership Monitor, accessed May 3, 2022, <https://egypt.mom-rsf.org/en/media/detail/outlet/ahram-gate/>.

² “Egypt’s President Inaugurates Gypto Pharma City, Gets Briefed on Pharmaceuticals Status,” *Egypt Today*, April 1, 2021, <https://www.egypttoday.com/Article/1/100389/Egypt-s-president-inaugurates-Gypto-Pharma-City-gets-briefed-on>.

³ Mohamed Saied, “Why Can’t Egyptians Get the Medicines They Need?” *Al-Monitor*, November 28, 2016, <https://www.al-monitor.com/originals/2016/11/egypt-acute-drug-shortage-pharmacy-companies-import.html>.

⁴ “Egypt on Path to Achieve Self-Sufficiency in Oil Products by 2023: Cabinet,” *Ahram Online*, March 14, 2021, <https://english.ahram.org.eg/NewsContent/3/12/405986/Business/Economy/Egypt-on-path-to-achieve-selfsufficiency-of-oil-pr.aspx>; Samar Samir, “Food Security: How Did Egypt Achieve Self-Sufficiency in Vegetables, Fruits?” *Egypt Today*, May 15, 2022, <https://www.egypttoday.com/Article/1/115852/Food-Security-How-did-Egypt-achieve-self-sufficiency-in-vegetables>.

production still requires the import of raw materials such as active pharmaceutical ingredients (APIs). Despite President Al-Sisi stating that “work is underway to produce pharmaceutical raw materials”, there is no concrete evidence that this plan has made any progress.⁵ Furthermore, Egypt is dependent on foreign capital in the form of International Monetary Fund (IMF) loans and foreign direct investment for its pharmaceutical industry to continue its operations. Taking the reliance on imports and foreign capital into consideration, it must be concluded that the notion of self-sufficiency is deceptive when it comes to Egypt’s pharmaceutical industry. Furthermore, there are thus no clear signs self-sufficiency in Egypt’s medicine supply will be feasible in the near future.

1.1 Why Egypt’s pharmaceutical industry matters

Still why Egypt and why pharmaceuticals? First of all, according to the Egyptian General Authority for Investment and Free Zones Egypt has the largest pharmaceutical manufacturing base in the MENA region, making up for 30% of the regional market.⁶ Its production is thus significant. Additionally, it is one of the largest exporters in the region, with its export rates rapidly growing.⁷ Europe forms its biggest sales market, followed by other Arab countries, and thirdly the US.⁸ Even though Egypt’s significance should not be overestimated – for countries such as China and the US have a far greater value share in the global market of pharmaceuticals – the significance of Egypt’s pharmaceutical industry thus extends beyond the country’s borders.⁹ As I have pointed out in the first chapter, there are several indicators that the Egyptian government is trying to further strengthening its position within the regional and international trade of pharmaceuticals. However, other than this being informed by imperial aspirations – as it might appear at first sight – I will argue that this ultimately serves domestic interests. As the country’s (fairly) new regime seeks to stabilize its position by stabilizing the country, it tries to

⁵ “Gypto Pharma City,” *Egypt Today*.

⁶ “2030 Outlook,” Pharmaceutical and Medical Industries, Arab Republic of Egypt General Authority for Investment and Free Zones, accessed January 3, 2022, <https://www.investinegypt.gov.eg/english/pages/sector.aspx?SectorId=96>.

⁷ “Key Performance Indicators (KPIs),” Pharmaceutical and Medical Industries, Arab Republic of Egypt General Authority for Investment and Free Zones, accessed January 3, 2022, <https://www.investinegypt.gov.eg/english/pages/sector.aspx?SectorId=96>.

⁸ Ibid.

⁹ “Share of Pharmaceutical Value Worldwide 2021, by Country,” Pharmaceutical Products & Market, Statista, last modified November 15, 2021, <https://www.statista.com/statistics/1246593/value-share-of-pharmaceutical-companies-worldwide-by-country/>.

secure the availability and accessibility of necessities such as food and medicine. This means that developments within the pharmaceutical industry are not isolated but are intertwined with broader political and economic processes in Egypt. Studying this particular sector may therefore provide insights that are not limited to the pharmaceutical industry, but that reflect processes more generally.

Still then, the pharmaceutical industry might come across as niche to MENA scholars, as its examination is normally entrusted to medicine scholars or pharmacists, or to jurists concerned with the TRIPS Agreement.¹⁰ Regrettably so, for the approaches to medicine that come from regional studies are epistemologically different from the approaches familiar to medicine scholars and pharmacists or jurists. While MENA scholars may have little to contribute to the development and efficacy of medicine or to its corresponding jurisdictions, there is an immense knowledge gap to fill by MENA scholars on other topics. Some scholars have started paving the way for the rest of us, researching for example policies regarding generic drugs in the MENA Region (Kamphuis & Kanavos), pharmaceutical patent practices in Jordan (Malkawi) and the role of Hezbollah in the illegal trade of drugs (Ganor & Wernli).¹¹ However, until present the contribution of MENA scholars has remained remarkably limited. The lack of interest in the pharmaceutical industry is not only undeserved because it produces a gap in our understanding of the region, but also – and more importantly so – because the industry’s functioning is a critical matter that seriously affects people’s lives. While the pharmaceutical industry may pass unnoticed in the eyes of many, the consequences of its operations do not. What goes on in the pharmaceutical industry determines whether a person standing in a pharmacy can afford a required medicine, whether that medicine is of good quality, and if that medicine is available at all. As this may at worst mean the difference between life and death, it should not be downplayed or neglected. Coming from this understanding, the consequences of developments in Egypt’s pharmaceutical

¹⁰ See for example: Deema S. Jaafari, “Pharmaceutical Patents in Jordan” *The Journal of World Intellectual Property* 15, no. 4 (2012): 239-50; and Nourhan M. A. Salem, Mohamed A. Elbarrawy and Nashwa F. A. Azzam, “Microbiological Quality of Non-sterile Pharmaceuticals in Egypt,” *Beni-Suef University Journal of Basic and Applied Sciences* 10, no. 1 (June 2021): 1-6.

¹¹ Bregtje W. Kamphuis and Panos Kanavos. “Assessing Pricing and Reimbursement Policies for Generic Pharmaceuticals in the MENA Region for Improved Efficiency, Affordability and Generic Penetration,” *Health Policy OPEN* 2, no. 100045 (December 2021): 1-10; Bashar H. Malkawi, “Patent Protection and the Pharmaceutical Industry in Jordan,” *Asian Journal of WTO & International Health Law Policy* 4, no. 1 (March 2009): 93-127. Boaz Ganor and Miri Wernli, “The Infiltration of Terrorist Organizations into the Pharmaceutical Industry: Hezbollah as a Case Study,” *Studies in Conflict and Terrorism* 36, no. 9 (September 2013): 699-712.

industry for local medicine access are included in the scope of this research whenever possible – because in the end that is what matters most.

1.2 Thesis outline

This thesis consists of four substantive chapters. Chapter two entails the literature review, which first addresses the field of MENA Studies at large, before diving into the specific topics that entail this research. In chapter three, the theory and methodology of this research will be addressed. It discusses the concept of globalization, which is central to this research, and the subsequent political economy approach to study this, supported by an approach that examines its ‘everyday’ dimension. Then the two analytical chapter follow. First comes the historical context, which is essential for understanding the present. In this chapter, the most important developments that have affected Egypt’s pharmaceutical industry from 1952 until 2011 are examined. Thereafter, this research shifts its focus to the present, analyzing the political economy of Egypt’s pharmaceutical industry under the current regime (2013-present). This chapter thus entails the core argument of this research. Finally, the main points of this research will be summarized in the conclusion, leading to a discussion of this research pitfalls and strengths, and to recommendations for further research.

2. Filling the Knowledge Gaps

This chapter provides a critical overview of the most important academic work written on the topics that entail this research. Consequently, it positions this research's topics within existing debates, unravelling how this research relates to previous observations and how it may contribute to the field. First, taking Abu-Lughod's inquiry of 'theoretical metonyms' as a reference point, the debates that dominate Middle Eastern Studies are identified. This enables us to see how this research's topic relates to the rest of the academic field. As this research topic does not directly tie into one of the main debates, there is a limited amount of academic literature available, and most of the works that are available concentrate on periods before the 2011 uprisings. Nevertheless, these works have been incredibly valuable to this research, especially in their contribution to chapter 4, which constitutes the historical context. The limitation of literature on Egypt's pharmaceutical industry furthermore pushed me to look beyond works that take this industry as a central point. Although this seemed a constraint at first, it turned out to be a great enrichment. As I consulted works on Egypt's politics and economy more broadly in the hope that they would include useful observations on the pharmaceutical industry and/or health sector, I encountered related topics that were somewhat disregarded in the works I initially examined (such as the role of the Egyptian army). Moreover, as this research entails a political economy approach, these works provided a greater understanding of the developments taking place in Egypt, thereby contextualizing the processes in the pharmaceutical industry.

2.1 Theoretical metonyms

In the academic literature on the Middle East and North Africa (MENA) region, there is a significant lack of works that are concerned with the pharmaceutical industry and topics related to it. A plausible explanation for this is that MENA studies are largely centered around what Arjun Appadurai has coined 'theoretical metonyms', i.e., aspects of a region that are used interchangeably with the region itself.¹² This process, whereby the understanding of a (often foreign) place (or its 'imagination', as

¹² Arjun Appadurai. "Theory in Anthropology: Center and Periphery." *Comparative Studies in Society and History* 28, no. 2 (April 1986): 357-8.

Benedict Anderson would say) is brought down to a few topics, is inextricably linked to power.¹³ As Appadurai accurately points out:¹⁴

“The science of the other has inescapably been tied to the journey elsewhere. But the question of what kind of elsewhere is tied in complicated ways to the history of European expansion, the vagaries of colonial, and postcolonial pragmatics, the shifting tastes of Western men of letters.”

It is thus always important to ask the question of who has been able to construct and produce knowledge about whom/what, as this necessarily assumes a power relation of observer/observed. Especially in the case of the ‘Middle East’, this power relation has proven problematic, as Edward W. Said has convincingly argues in his influential work *Orientalism*.¹⁵ Sure, in practice power relations are not as static and clear-bounded as the dichotomy of observer/observed suggests, and some might argue that ‘the other’ has started to speak back. Nevertheless, the prevalence of theoretical metonyms signifies that the problem is far from resolved. This forces us to (re)consider our own roles and responsibility in the production of knowledge on the MENA region.

Following Appadurai, Lila Abu-Lughod has argued that in studies on the MENA region, there is an unbalanced fixation on the Islam, tribalism, and gender roles, resulting in a simplified image of ‘the Arab world’ as determined by religion, segmentation and gender inequality.¹⁶ Theoretical metonyms thus essentialize a region by the limitation of its study and consequently its representation to a few facets or themes. Although years have passed since Abu-Lughod’s observation, not much has changed since then. This is hardly surprising considering that theoretical metonyms are simultaneously ‘zones of prestige’ – meaning that because of academic debates centering around certain topics, scholars can best gain recognition by engaging with these topics (which is then reproducing the fixation on these topics). Alternative topics to be addressed in similar quantity and quality, therefore requires an active and thoughtful change from within. Certainly not under the impression that

¹³ Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 2006), 6.

¹⁴ Appadurai, “Theory in Anthropology,” 357.

¹⁵ Edward W. Said, *Orientalism* (London: Penguin Books, 2003).

¹⁶ Lila Abu-Lughod. “Zones of Theory in the Anthropology of the Arab World.” *Annual Review of Anthropology* 18 (1989): 267-306.

this thesis will incite such a change by itself, the aim here is merely to contribute to an already existing body of works of scholars that seek to explore largely ignored or overlooked matters in the MENA region.

2.2 Health inequalities: A global matter

Although little has been written about the pharmaceutical industry in the MENA region, when it comes to other regions and the world at large the topic has been widely addressed.¹⁷ Especially the establishment of the TRIPS Agreement during the WTO Uruguay in 1995 – which globalized patents on pharmaceutical products – has incited much debate. As one of the most controversial and far-reaching developments in global trade agreements in modern times, the TRIPS Agreement has received much scholarly attention. Few scholars have expressed support for the trade agreement, arguing that it constrains counterfeiting (Yu) and that it stimulates innovation (Maskus; Mishra).¹⁸ This much in line with the agreement's main objectives, captured in Article 7:¹⁹

“The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.”

But good as it may sound, these objectives have proven rather optimistic. Instead of stimulating innovation, David Tyfield argues that the establishment of the TRIPS Agreement has caused world's 'Big Pharma' (mainly US transnational companies) to try to prolong *existing* patents for maintaining profits.²⁰ According to

¹⁷ See for example: Michael A. Santoro and Thomas M. Gorrie, ed., *Ethics and the Pharmaceutical Industry* (Cambridge: Cambridge University Press, 2005); Stine J. Haakonsson, “The Changing Governance Structures of the Global Pharmaceutical Value Chain,” *Competition & Change* 13, no. 1 (March 2009): 75-95; and Gary Geferri, *The Pharmaceutical Industry and Dependency in the Third World* (Princeton: Princeton University Press, 2017).

¹⁸ Peter K. Yu, “From Pirates to Partners: Protecting Intellectual Property in Post-WTO China,” *The American University Law Review* 55, no. 4 (April 2006): 905-6; Keith E. Maskus, “The International Regulation of Intellectual Property,” *Weltwirtschaftliches Archiv* 134, no. 2 (1998): 186-7; Veena Mishra, “TRIPS, Product Patents and Pharmaceuticals,” *Economic and Political Weekly* 36, no. 48 (December 2001): 4464-5.

¹⁹ “Agreement on Trade-Related Aspects of Intellectual Property Rights as Amended by the 2005 Protocol Amending the TRIPS Agreement,” Article 7, World Trade Organization, accessed April 25, 2022, https://www.wto.org/english/docs_e/legal_e/trips_e.htm#art7

²⁰ David Tyfield, “Enabling TRIPS: The Pharma-Biotech-University Patent Coalition,” *Review of International Political Economy* 15, no.4 (2008): 547.

Tyfield, this means that rather than allocating capital to the research & development (R&D) of new medicine, Big Pharma is using its resources for improving its ‘legal strategy’. Seeing the agreement play out in real-time, most scholars have thus become highly critical of the TRIPs Agreement. These scholars not only point at how it fails to achieve its objectives but also criticize aspects that have been unaddressed by the WTO, such as its ambiguous roots in the US pharmaceutical industry (Tyfield), its colonial history (Deere), its reinforcement of global inequality (Lanoszka), and its ensuing commodification of local knowledges (Shiva).²¹

The few discussions that have entailed Egypt’s pharmaceutical industry have likewise centered around the TRIPS Agreement. Some scholars have expressed their concerns about the TRIPS Agreement and its negative effects on the local pharmaceutical industry (Mortada), the availability of medicine (Wanis).²² Other scholars have analyzed the TRIPS Agreement in relation to other Egyptian legal regimes (Aziz) and in relation to human right laws (Bahgat & Wright).²³ Especially comprehensive are the postdoctoral dissertations of Arsalan A. H. Alshinawi and Basma I. Abdelgafar.²⁴ Examining the political economy of the pharmaceutical industry in Egypt, Alshinawi links the establishment of the TRIPS Agreement to the globalization debate.²⁵ Alshinawi thereby explores the ongoing relevance of the nation-state in the light of globalization processes. Abdelgafar on the other hand

²¹ Tyfield, “Enabling TRIPs,” 535-66; Anna Lanoszka, “The Global Politics of Intellectual Property Rights and Pharmaceutical Drug Policies in Developing Countries,” *International Political Science Review* 24, no. 2 (2003): 181-183; Carolyn Deere, *The Implementations Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries* (Oxford: Oxford University Press, 2009), 34-56; Vandana Shiva, *Protect or Plunder? Understanding Intellectual Property Rights* (London: Zed Books, 2001), 49-55.

²² Farida H. Mortada, “Egypt’s Pharmaceuticals – Tripping Over TRIPS?,” *The American University of Cairo*, January 6, 2022, <https://www.aucegypt.edu/auc-academics/core-curriculum/egypt%25E2%2580%2599s-pharmaceuticals-%25E2%2580%2593tripping-over-trips>; Heba Wanis, “Agreement on Trade-Related Aspects of Intellectual Property Rights and Access to Medication: Does Egypt Have Sufficient Safeguards Against Potential Public Health Implications of the Agreement,” *The Journal of World Intellectual Property* 13, no.1 (2010), 24-46.

²³ Sahar Aziz, “Linking Intellectual Property Rights in Developing Countries with Research and Development, Technology Transfer and Foreign Direct Investment Policy: A Case Study of Egypt’s Pharmaceutical Industry,” *ILSA Journal of International & Comparative Law* 10, no. 1 (2003), 1-34; Hossam Bahgat and Rebecca Wright, “Access to Medicines in Egypt: A Human Rights Approach to IP, Trade and Health,” in *Access to Knowledge in Egypt: New Research on Intellectual Property, Innovation and Development*, edited by Nagla Rizk and Lea Shaver, 56-92 (London: Bloomsbury Academic, 2010), 56-92.

²⁴ Arsalan A. H. Alshinawi, “The Continuous Relevance of the Nation-State: The Political Economy of the Pharmaceutical Industry in Egypt.” (PhD diss., Radboud Universiteit, 2008); Basma I. Abdelgafar, “Implications of the WTO-TRIPS Agreement from a National Innovation Systems Perspective: The Pharmaceutical Industry in Egypt,” (PhD diss., Carleton University, 2003), 12-13; Basma I. Abdelgafar, *The Illusive Trade-off: Intellectual Property Rights, Innovation Systems, and Egypt’s Pharmaceutical Industry*. Toronto: University of Toronto Press, 2006.

²⁵ Ibid.

focusses on the possible effects of the TRIPS Agreement for Egypt's research & development of pharmaceutical products. However, all of these works were written in the 2000s, and so the long-term implications of the agreement for Egypt had yet to become evident. Still then, the insights on the situation at the time brought forward by these studies help us better navigate the current situation of the pharmaceutical industry. In fact, if it were not for the below mentioned work, I would have never come to the conclusion that Egypt's pharmaceutical industry is now taking a direction of de-globalization. Contemporary processes in Egypt's pharmaceutical industry are necessarily (although not in a deterministic way) following from past processes. It is thus against the backdrop of these prior developments that we should understand present developments.

3. Theory & Methodology

The main argument of this thesis is that the current political economy of Egypt's pharmaceutical industry is taking a direction of de-globalization. This necessarily implies that there has been a prior process of globalization, for 'de-globalization' refers to a reversed motion. Therefore, before the phenomenon of de-globalization is discussed, the debate on globalization is addressed. Since this research centers around an industry, the focus within this debate will be the globalization of production. Key to this focus is the term Global Value Chains (GVCs), which is therefore briefly discussed. After looking into globalization and GVCs, this chapter turns to the matter de-globalization to determine how it applies to this research, and to help situate the topic of this research in a broader context.

3.1 Processes of (de-)globalization

The concept of globalization has extensively been discussed. As the world seemed to become more and more intertwined with new technologies enabling faster communication and transport over greater distances, so did questions arise on how to understand these developments. Although a few scholars such as Paul Hirst and Grahame Thompson questioned the transformative aspect of these new developments, most scholars seemed to agree that we were now living in an 'age of globalization'.²⁶ And so, during a lecture in 2000, Anthony Giddens stated: "The debate now is about the consequences of globalization, not about the reality of globalization".²⁷ And although this may have appeared evident at the time, processes following this statement compel us to revise our understanding of 'globalization' – such as the global financial crisis (2007-2008), the Trump administration and COVID-19. In fact, this research' case study is a great example of why we should think of 'globalization' differently. This research thus takes a different approach to the

²⁶ Paul Hirst and Grahame Thompson, *Globalization in Question* (Cambridge: Polity Press, 2009), 16-17, 46; 'Age of globalization' as Thomas Hylland Eriksen puts it, see: Thomas Hylland Eriksen, *Small Places, Large Issues: An Introduction to Social and Cultural Anthropology* (London: Pluto Press, 2001), 305.

²⁷ Taylor Boas, "Anthony Giddens Discusses the Globalization Debate," Carnegie Endowment for International Peace, published July 5, 2000, <https://carnegieendowment.org/2000/07/05/anthony-giddens-discusses-globalization-debate-pub-8655>.

concept ‘globalization’, than Giddens and most other scholars do.²⁸ It does so in two ways: First, globalization is not understood as an entity by itself that is supposed to cause changes, but as a term that refers to the nature of the changes themselves. Second, and this derives from the first point, globalization is not understood as an all-encompassing phenomenon but as an analytical tool that explains specific sets of processes.

Globalization is often presented in a way that suggests it to be something that *does* things, as if it were a force that creates consequences by itself. Yet this reification of the term is misleading. Rather than globalization being a catalyst of events, it indicates the direction of a set of processes. In an earlier statement on globalization Giddens captured this well, stating globalization to be:²⁹

“[...] an intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa”

Coming from this understanding, we can start approaching globalization as an analytical tool with which we can interpret the nature of social processes – as a descriptive term that allows us to determine what we perceive. Indeed, this implies that the term ‘globalization’ is broadly applicable. As Larry Ray argues, ‘globalization is not one thing’, but something that can refer to economic, political, or cultural processes.³⁰ According to Ray: “globalization refers to multiple processes with diverse effects on everyday life in different parts of the world”.³¹ This brings us to the second stance. This research rejects the idea that globalization is a general condition of the world, and instead approaches it as specific processes within that world entailing concrete places, people, and/or objects. From this perspective, globalization is thus not a static, all-enhancing condition that is or is not ‘there’, assuming a clear beginning and endpoint. Conversely, it may refer to many different processes, concerning many different matters. Of course, this does not mean that every increase in interconnectedness should be called ‘globalization’. But as with any interpretation

²⁸ John Baylis, Steve Smith and Patricia Owens, ed., “Introduction,” in *The Globalization of World Politics: An Introduction to International Relations*, ed. John Baylis, Steve Smith and Patricia Owens (New York: Oxford University Press, 2011), 7-8.

²⁹ Anthony Giddens, *The Consequences of Modernity* (Cambridge: Polity Press, 1990), 64.

³⁰ Larry Ray, *Globalization and Everyday Life* (New York: Routledge, 2008), 5.

³¹ Ibid.: XV.

of the social world, the acceptability of applying a concept relies on the persuasiveness of the argument. The aspiration here is therefore for these claims to become evident through this case study.

The conceptualization of globalization the intensification of global ties through specific processes (instead of one all-encompassing one) implies that processes of globalization and de-globalization can simultaneously take place. That may sound counterintuitive, but if we start to think of globalization as a term to describe concrete processes it naturally follows from it; it is impossible to think of a process of globalization that synchronously and in like manner engages the entire globe. The microcomputer for example, which was commercialized in the 1970 and enabled faster and further-reaching communication, first only entered the households of a privileged few in high-income countries.³² In other words, this globalizing technological development unfolded in different places across the world, while simultaneously it was localized as it was limited to very specific social spaces. Furthermore, a technology is not necessarily applied in like manner across the globe. When the term ‘globalization’ first was coined in 1983 by Theodore Levitt, it was defined as a process of worldwide homogenization enabled by technological development.³³ However, this prediction of a uniform world never materialized due to its disregard for the complexity of power dynamics. Levitt assumed globalization to be a linear, top-down process in which local communities would passively undergo changes enforced from outside, which he typified as ‘Americanization’.³⁴ However, as Thomas Hylland Eriksen rightly points out: “[...] foreign artifacts and practices are incorporated into pre-existing worlds of meaning, modifying these life-worlds somewhat, but not homogenizing them”.³⁵ Likewise, technologies are embedded in pre-existing societies, thereby part of a reiterative process of practice and meaning-making in which ‘techniques [and technologies] shape our relationships, but our relationships also shape techniques [and technologies]’.³⁶ When we revisit the case of the microcomputer, we can thus conclude that it may have signified an intensification of global relations for some (enabling for example correspondence with people all over the world), while it may not have had this implication for others (functioning for

³² Eriksen, *Small Places, Large Issues*, 200-201.

³³ Theodore Levitt, “The Globalization of Markets,” *Harvard Business Review*, accessed April 15, 2022, <https://hbr.org/1983/05/the-globalization-of-markets>.

³⁴ *Ibid.*

³⁵ Eriksen, *Small Places, Large Issues*, 200.

³⁶ *Ibid.*, 200-201.

example as an accountancy tool for a local company, only accessed by its management staff).

To avoid tiresome discussions about whether globalization exists at all – as Giddens urged us to do – we ought to approach the concept in a more practical way. Instead of getting lost in abstractions whereby we start with the concept and try to make our way back to the ‘real world’, we might reverse our approach and start with examining concrete processes, employing the terms globalization and de-globalization as analytical tools. In the case of this research, trends in the pharmaceutical industry of Egypt are thus discussed through the lens of (de-)globalization, whereby the developments entailing the case study are understood as significant on their own, though not isolated from broader trends.

3.2 (De-)globalization of trade: global value chains

The pharmaceutical industry today is highly dispersed around the globe. The eight biggest transnational companies (TNCs) in the pharmaceutical industry all have their headquarters in the US and Europe, while large parts of the manufacturing process take place in other parts of the world.³⁷ The active pharmaceutical ingredients (APIs) of drugs for instance are mainly produced in production plants situated in China and India.³⁸ These APIs are then transported again to places where they are assembled into perhaps a cream or a pill through the addition of excipients (non-active pharmaceutical ingredients such as binders, preservatives or flavoring agents).³⁹ After being packaged into a final product and having completed a great journey around the globe, the pharmaceuticals are distributed to medical hubs such as hospitals and pharmacies before ending up into bathroom cabinets and bedroom drawers.

Although I will not go into much further detail on the GVC of pharmaceutical that extends outside Egypt’s borders, it may be clear from this short account that most countries are very dependent on import for securing their medical supplies. The complications of such dependency became evident when, according to former World

³⁷ “Top 10 Pharma Companies” Pharmaceutical Technology, last modified January 19, 2022, <https://www.pharmaceutical-technology.com/features/top-ten-pharma-companies-in-2020/>.

³⁸ Ibid.; “Chinese API Industry Is in the Change (II),” China Chamber of Commerce for Import and Export of Medicines and Health, last modified on July 16, 2019, <http://en.cccmhpie.org.cn/Web/Content.aspx?queryStr=w7x1X10x16x0X10x16o3w8w1u9v1u9v2v3v5z8w7x08q7x15x15o3w8w1v3v1z8p0w7x08q7x15x15o3w8w1v2v7>.

³⁹ “Inactive Ingredients,” Drugs, accessed April 20, 2022, <https://www.drugs.com/inactive/>.

Health Organization (WHO) director Kees de Joncheere, a Chinese factory that produces rifampicin – the API used to treat Tuberculosis – was closed due to poor air quality. As more than 4000 people die of tuberculosis each day and this factory was (at least at the time) the only factory in the world to produce rifampicin, its closure caused an immediate catastrophe. It was only after the Chinese authorities were pressured by the WHO that the factory was opened again. Another significant incident that shone a light to the downside of a dispersed production process took place in 2015. That year, the Food and Drug Authority (FDA) banned the import 29 medical products from Hisun Pharmaceuticals after alarming inspections, only to exempt 14 of those products from its own ban for the lack of alternatives. Such incidents have made it painfully clear what vulnerabilities the reliance of states on imports of medicine encompass and the partial loss of control of quality and access it has caused. Although this interdependency is not unique to the pharmaceutical industry, for it is true for all kinds of industries such as the garment and food industries, the above examples have shown that the interdependency concerning medicine may lead to very pressing situations.

One of the reasons for the GVC of pharmaceutical products to have become this globalized was, as Stine Haakonsson argues, the establishment of the TRIPS Agreement in 1995 by the WTO.⁴⁰ This new legal framework enforced patent law – previously organized nationally – on a global level, thereby setting an international standard. This international legal standard then ‘opened up’ new markets for (especially US) TNCs, giving them an advantage over local producers of pharmaceutical products.⁴¹ But if Haakonsson typifies the TRIPs Agreement as a ‘harmonisation of standards for patents’, both its establishment and outcome were far from harmonious (as already briefly discussed in the previous chapter). As David Tyfield has pointed out, the agreement was initiated by the US pharmaceutical industry in a successful attempt to secure its own interests. Unsurprisingly then, these interests did not necessarily match the interests of pharmaceutical industries elsewhere. On the contrary, as many scholars have argued, the globalization of patent laws has thwarted local industries in many countries while favoring the position of

⁴⁰ Haakonsson, “Global Pharmaceutical Value Chain,” 75-95.

⁴¹ Tyfield, “Enabling TRIPS,” 535-7.

US TNCs. According to Farida H. Mortada, this had the following consequence for Egypt:⁴²

“While the process patent regime under the 1949 law provided considerable latitude in guaranteeing access to medication, by allowing local pharmaceutical firms to manufacture cheap, generic versions of patented drugs to meet domestic demand, the move to the TRIPS product patent regime rendered this production illegal, crowding out a great number of local manufacturers, and increasing imports of these drugs.”

By stimulating the import of drugs and by weakening the local production, the TRIPS Agreement made Egypt more dependent on other countries for its medicine supply. The negative implications of such dependencies became especially visible during the COVID-19 pandemic when there were serious distortions in the global supply chain.⁴³ Not only did the pandemic bring with it an insecurity of access to (essential) goods, it also made clear how easily diseases may spread in an highly interconnected world.⁴⁴ With the vulnerabilities of a highly interconnected world coming to light during the pandemic, some scholars have suggested that globalization (at least when it comes to production) is at its end.⁴⁵ As Suborna Barua puts it:

“[...] a de-globalization pattern may emerge, where countries may focus on producing essential goods more domestically in an effort to reduce dependence on other countries in case of an emergency. All considered, a new world order of international trade is imminent in the post-pandemic world.”

The global crisis caused by COVID-19 was however not the first time for the downside of strong international ties to become evident; already during the global financial crisis (GFC) of 2007-2008, and the Trump administration globalized systems began to show cracks. As Adam Posen points out, the aftermath of the GFC made way for anti-globalization sentiments, resulting in “greater tolerance for state-owned

⁴² Mortada, “Egypt’s Pharmaceuticals.”

⁴³ “Availability of Medicines During COVID-19 Pandemic,” Human Regulatory, European Medicines Agency, accessed April 18, 2022, <https://www.ema.europa.eu/en/human-regulatory/overview/public-health-threats/coronavirus-disease-covid-19/availability-medicines-during-covid-19-pandemic>.

⁴⁴ Suborna Barua, “COVID-19 Pandemic and World Trade: Some Analytical Notes,” *Social Science Research Network*, April 16, 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3577627.

⁴⁵ See: Ibid.; Major K. Bhusal, “The World After COVID-19: An Opportunity for a New Beginning,” *International Journal of Scientific and Research Publications* 10, no. 5 (May 2020): 735-41.; Philippe Legrain, “The Coronavirus is Killing Globalization as We Know It,” *Foreign Policy*, March 12, 2020, <https://foreignpolicy.com/2020/03/12/coronavirus-killing-globalization-nationalism-protectionism-trump/>.

enterprises [...], the protection of special interests from trade competition, and the promotion of companies with their headquarters in their home country as national champions”.⁴⁶ Sailing on this rhetoric, the Trump administration aimed at breaking down global cooperation, using the catchphrase ‘America First’.⁴⁷ Interestingly so, while the US meanwhile has sought to re-establishing its global relations under the Biden administration (2021-present), Egypt’s politics continue to resemble that of the US under Trump.⁴⁸ In 2016 the campaign “Proudly Made in Egypt” (*bi-kull faxr šana ‘a fī mašr*) was launched, an “[...] initiative [that] supports [the] Egyptian economy by investing in manufacturing in Egypt”.⁴⁹ Likewise, in November 2015 the Central Bank of Egypt began imposing restrictions on imports.⁵⁰ These restrictions did however not entail “medicines and serums and the active ingredients necessary for their local manufacture,” for Egypt could not substitute these products with locally produced ones.⁵¹ Since then however, the Egyptian government has tried to expand its local production of medicine – most notably through the establishment of ‘Gypto Pharma’ in 2021, a production hub ‘meant to secure drug security’ in Egypt.⁵² And indeed, this is not only true for the pharmaceutical industry, but also for the food production; Egypt has of lately aimed at intensifying its domestic production of various industries, trying to become more ‘self-sufficient’.⁵³ However, as the Egyptian regime has in the wake of the Ukrainian war applied for yet another IMF loan in an attempt to advert severe consequences of grain shortages, the narrative of ‘self-sufficiency’ seems to be more of a rhetoric aimed at generating popular support for the current regime than a realistic short-term goal (to be further discussed in chapter

⁴⁶ Adam S. Posen, “The Post-American World Economy: Globalization in the Trump Era,” *Foreign Affairs*, March 1, 2018, <https://heinonline.org/HOL/P?h=hein.journals/fora97&i=246>.

⁴⁷ Ibid.

⁴⁸ Kristen E. Eichensehr, ed., “Biden Administration Reengages with International Institutions and Agreements,” *American Journal of International Law* 115, no. 2 (April 2021): 323-9.

⁴⁹ “Quality Seal ‘Proudly Made in Egypt’,” Industrial Modernisation Centre, Egyptian Ministry of Trade and Industry, accessed April 30, 2022, <http://www.imc-egypt.org/index.php/en/component/k2/item/229-madeinegypt-en>.

⁵⁰ Tamer Hafez, “Import Restrictions Draw Mixed Reviews,” American Chamber of Commerce in Egypt, last modified February, 2016, <https://www.amcham.org.eg/publications/business-monthly/issues/242/February-2016/3404/import-restrictions-draw-mixed-reviews>.

⁵¹ Ahmed Kotb, “Better Regulation on Import?” *Ahram Online*, February 28, 2022, <https://english.ahram.org.eg/News/461593.aspx>.

⁵² Rasha Sadek, “Gypto Pharma Will Transform Egypt to a Pharmaceutical Regional Hub: Chairman of Medicine City,” *Ahram Online*, October 16, 2021, <https://english.ahram.org.eg/News/429019.aspx>.

⁵³ Mohamed Sabry, “Egypt plans ‘New Delta’ to Boost Food Security,” *Al-Monitor*, April 6, 2021, <https://www.al-monitor.com/originals/2021/04/egypt-plans-new-delta-boost-food-security>.

5).⁵⁴ Finally, as this section has hopefully illustrated, the recent developments in the pharmaceutical industry should be understood as part of broader developments within Egypt. This development is not naturally unfolding but is organized and intended as it is part of Egypt's official policy.

3.3 Political Economy: connecting the dots

As the de-globalization of Egypt's pharmaceutical industry is not only an economic development, but just as much a political one, this research takes a political economy approach. After the academic disciplines of politics and economics had for a prolonged time been guilty of navel-gazing, the combined field of political economy was revived. Sparked in 1970 by Susan Strange's article "International Economics and International Relations: A Case of Mutual Neglect", the 'new political economy' – as Robert Cox' refers to it – made its way to the realm of social sciences.⁵⁵ The decades following Strange's persuasive article brought along several works that forced both fields of politics and economics to seriously reconsider their sharp division.⁵⁶ But although this new political economy incorporated some important novel ideas from feminist and colonial studies, its foundations had long before been established. In fact, to some of the most prominent thinkers of the modern era it had seemed rather obvious to combine economics and politics. Thus, in the 18th century, Adam Smith first coined the term 'political economy' in his famous *The Wealth of Nations*.⁵⁷ This example was then followed by intellectuals such as Karl Marx, who like Adam understood politics and economics to be inextricably intertwined.⁵⁸ And so, rather than the revival of political economy being an unexpected turn of events, we ought to wonder why the two disciplines were separated in the first place.

It is hard to legitimize an analytical division between economics and politics, as their relatedness is so evident. Harold Lasswell strikingly captured this relation

⁵⁴ Mirette Magdy and Eric Martin, "Egypt in IMF Talks on Possible Funding Amid War Pressures," *Bloomberg*, March 17, 2022, <https://www.bloomberg.com/news/articles/2022-03-17/egypt-in-imf-talks-on-possible-funding-as-war-pressures-economy>.

⁵⁵ Susan Strange, "International Economics and International Relations: A Case of Mutual Neglect," *International Affairs (Royal Institute of International Affairs 1944-)* 46, no.2 (April 1970); Robert Cox, "Beyond Empire and Terror: Critical Reflections on the Political Economy of World Order," *New Political Economy* 9, no. 3 (2004): 307.

⁵⁶ Joan E. Spero, *The Politics of International Economic Relations*, (New York: St. Martin's Press, 1977); Robert Gilpin, *The Political Economy of International Relations* (Princeton: Princeton University Press, 1987); and Stephen Gill and David Law, *The Global Political Economy: Perspectives, Problems, and Policies* (Baltimore: John Hopkins University Press 1988).

⁵⁷ Adam Smith, *The Wealth of Nations Books I-III* (London: Penguin Books, 1999), 753.

⁵⁸ Karl Marx, *Capital Volume I*, trans. Ben Fowkes (London: Penguin Books, 1990), 173-4.

between economics and politics in 1936 with the title of his book *Politics: Who Gets What, When, How*.⁵⁹ In other words, politics is precisely about the justification of and responsibility for the division of economic means. How material wealth is allocated can be largely traced back to political decisions on matters such as tax laws, minimum wages, public projects, subsidies, excise duties, social welfare and so on. Likewise, it is impossible to say something valuable about economics without taking into consideration the political context. The classical political economists seemed to be well aware of this, yet the more economics became isolated as a discipline the more it failed to perceive its embeddedness in society. Instead of acknowledging that economics is ultimately a social science dealing with human behavior, the discipline gained more and more positivist tendencies from the mid 20th century onwards.⁶⁰ As historian of economics Bruce Caldwell argues, this positivist tendency was merely a *rhetoric* of hard science, for its scientific practice was and is untenable.⁶¹ Most importantly then is that this misrepresentation of economics as a hard science gives economics the false appearance of being an objective science, while by contrast it is far from value-free. Because economic theories are *social* theories, they convey different viewpoints on the ontology of social relations. Consequently, economic theories are not just descriptive, but also interpretative and normative – thereby always informing and legitimizing a certain form of politics. The liberal school of thought for example –adhered to amongst others by Smith and Ricardo – assumes that people are cooperative, and primarily ‘rational’ actors.⁶² In modern times, this economic theory has translated into neoliberalist politics, which entails the (partial) withdrawal of the state from the economy.⁶³ This example clearly illustrates the interconnectedness of economics and political economy.

Even though the link between economic theory and political action is not always as straightforward or articulate as with the above example, political decisions related to the distribution of wealth necessarily draw on a particular perception of economics. These perceptions of economics are in turn informed by interests of their

⁵⁹ Harold Lasswell. *Politics: Who Gets What, When, How* (New York: Whittlesey House, 1936).

⁶⁰ Bruce Caldwell, “Of Positivism and the History of Economic Thought,” CHOPE Working Paper no. 2012-09 (November 2012), <https://hope.econ.duke.edu/sites/hope.econ.duke.edu/files/Of%20History%20of%20Economic%20Thought%20final.pdf>.

⁶¹ Ibid.

⁶² Robert O’Brien and Marc Williams, *Global Political Economy: Evolution & Dynamics* (London: Palgrave, 2016), 20.

⁶³ Ibid.: 268-70.

beholders. As Cox notably stated: “Theory is always *for* someone and *for* some purpose”.⁶⁴ These interests or purposes can be either material (e.g., money, property, goods) or immaterial (e.g., equality, status). When looking at the political economy of the pharmaceutical industry of Egypt, this thus means that the political, economic decisions and interests of the primary actors involved must be taken into consideration.

3.5 Methodology

The primary method of this research is documentary analysis. This entail examination of official state documents and announcements of the Egyptian government on the websites of the Egyptian Drug Authority, the Ministry of Health and Population, the Ministry of Defense, the Arab Republic of Egypt Presidency, the General Authority for Investment and Free Zones, and the Ministry of Trade and Industry. Other textual sources that will be examined newspaper articles of both Egyptian state-owned news outlets and other media.⁶⁵ Although the scope of this thesis is somehow defined by the Egyptian state borders, it is not bounded by it. To prevent methodological nationalism, the thesis will zoom into processes formed by smaller entities within the state such as local businesses, employees, and patients, and zoom out to examine entities that transgress the state such as the WTO, the IMF, and multinational firms.⁶⁶ This research therefore also enhances an analysis of text and data shared by the Economic Reviews and Annual Reports of the Central Bank of Egypt, by the World Bank DataBase, on the IMF website, the WHO website, and the WTO website. However, because law and policy are primarily organized and determined at the state level, this thesis takes Egypt as a starting point.

In an effort to move beyond traditional ideas of politics as being exclusively constituted on the state-level and by state-actors, some international relation (IR) scholars have increasingly become concerned with the politics of ‘everyday life’.⁶⁷ Although formal documents such as trade agreements, official statistics and official

⁶⁴ Cited in O’Brien and Williams, *Global Political Economy*, 19-20.

⁶⁵ “WTO Documents Online,” World Trade Organization, accessed January 3, 2022, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S005.aspx; “World Bank Open Data,” World Bank, accessed January 4, 2022, <https://data.worldbank.org>.

⁶⁶ Nina Glick-Schiller and Andreas Wimmer, “Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences,” *Global Networks* 2, no.4 (2002), 301-34.

⁶⁷ See for example: Ty Solomon and Brent J. Steele, “Micro-moves in International Relations Theory,” *European Journal of International Relations* 23, no. 2 (2017): 267-91; Matt Davies and Michael Niemann, “The Everyday Spaces of Global Politics: Work, Leisure, Family,” *New Political Science* 24, no. 4 (December 2002): 557-77.

statements by the state may provide a useful insight into the unfolding of affairs concerning the pharmaceutical industry in Egypt, it does so only in a limited way. Data acquired from formal sources may not be representative of the situation ‘on-the-ground’. The official sources may for example tell us that there is a certain amount of a particular medicine circulating in Egypt (obtained through import or local production). This does however not tell us how these medicines are exactly distributed, who can access them and at what price. In other words, official documents only tell us a partial story. To get a deeper understanding of the political economy of the pharmaceutical industry in Egypt, it is necessary to incorporate the everyday experience and knowledge of people working in the healthcare and pharmaceutical sector. Although the interviews with people working in Egypt’s pharmaceutical sector form only a small part of the primary sources, they interviews have greatly contributed to this research. As commentary on recent developments, the interviews confirm, complement, and contradict the public sources. In total five people have been over a period of three months, two of whom I have spoken with several times. In total, 6 interviews have been recorded and transcribed, as the other conversations were exploratory and unrecorded. Three of the interviewed people are pharmacists, working in community pharmacies as well as hospital and government pharmacies, one works at an foreign pharmaceutical company with a production hub in Egypt and one works at an Egyptian pharmaceutical company with a production hub in Egypt. The interviews took an hour on average and were conducted through phone calls and video calls – whatever was preferred by the participant. For the safety of the interviewees, I will not provide any personal information which may identify them, nor will I elaborate on how I got into contact with them. The political situation in Egypt is very precarious and the so-called ‘red line’ more ambiguous than ever. As an involved contact person (whom I have not interviewed) explained: “We here are not that safe you know, they might get in trouble because they made the interview in the first place”. This person moreover explained that it is nowadays hard to access whether you are ‘playing by the rules’, for even repeating something that was said on the news earlier might cause a problem. To take a cautious approach, names of the interviewees are thus altered to pseudonyms and occupations are only referred to in very general ways (like ‘pharmacist’).

4. Egypt's Pharmaceutical Industry: A Brief History (1952-2011)

This chapter discusses the historical context of Egypt's pharmaceutical industry. As that industry is not isolated but instead embedded within society at large, this historical account is not limited to the pharmaceutical sector. Rather, it examines important developments that have affected the country's political economy more generally, thereby pointing out what those developments entailed for the pharmaceutical specifically. As Egypt's health sector is tightly interlinked with the pharmaceutical industry – for pharmaceutical products are purchased and provided by the health sector – this chapter also zooms into the changes that took place in this sector over the years.

The chapter is structured around Egypt's three successive regimes from 1952-onwards, i.e., the governments led by Gamal Abdel Nasser (1952-1970), Anwar Sadat (1970-1981), and Hosni Mubarak (1981-2011).⁶⁸ Although these ruling periods are not as strictly cut off from one other as this distinction may suggest – rather they 'seep into one another' thereby creating ongoing effects as Salem argues – the politics of these governments have been quite distinct when it comes to economics, thereby impacting Egypt's pharmaceutical industry in various ways.⁶⁹ Whereas Nasser greatly nationalized the state's economy, Sadat initiated the *infitah* (meaning the 'opening' of the market to private and foreign companies). Moreover, Mubarak proceeded on a neoliberal tour, further privatizing the country's economy and integrating Egypt and its pharmaceutical industry into the world economy. This chapter thus lays out the historical background against which the current developments in Egypt's pharmaceutical industry should be understood. This narration of history is not all-encompassing or complete but selective, as it centers around the processes that have affected the pharmaceutical industry most evidently. The aim here is thus not for it to be a comprehensive history, but for this chapter to highlight the elements that are most relevant to this research topic.

⁶⁸ In this historical account the period of 2011-2013 in which first Mohamed Hussein Tantawi and then Mohamed Morsi governed Egypt is excluded, as this short period of time has not been as important to Egypt's pharmaceutical industry.

⁶⁹ Sara Salem, "Haunted Histories: Nasserism and the Promises of the Past," *Middle East Critique* 28, no. 3 (2019), 261.

4.1 Nationalization under Nasser

Three years after the Free Officers Movement led by Gamal Abdel Nasser and Mohamed Naguib overthrew King Farouk (1952), Nasser took on the position of President in the new-found republic.⁷⁰ Under his rule, the Egyptian economy underwent extensive reforms. Most notably, domestic production was intensified and diversified through a policy of Import Substitution Industrialization (ISI).⁷¹ This policy is a form of protectionism that, as Mark Skousen explains, entails: “The use of tariffs, quotas, subsidies, and restrictions to protect and promote local production of all kinds of consumer goods, from shoes to toothpaste to automobiles”.⁷² In other words, it is an economic strategy that aims at replacing imported products by locally manufactured products. From the 1950s until the 1970s, as many countries went through processes of de-colonization, ISI was a common means with which formerly colonized or occupied countries tried to detach their economies from the countries that had exploited their lands.⁷³ In the case of Egypt, its lands had been transformed to primarily serve as provider for the British market, producing vast amounts of raw materials such as cotton.⁷⁴ As Raymond A. Hinnebusch put it: “Western imperialism shaped Egypt to suit its own needs, turning the country into a plantation for Western industry”.⁷⁵ The Egyptian republic thus tried to counteract this unequal power relation through the strategy of ISI which, as Alshinawi argues, came down to adopting “a self-reliant development model” (in the next chapter the reappearance of this ideal is discussed).⁷⁶ This entailed a great deal state-intervention, for in the previous decades the local market had been almost entirely dependent on foreign supplies, and likewise had been largely clear from state protection.⁷⁷ During the 1940s and 1950s, the domestic firms had compromised less than 10% of the local market.⁷⁸ And so following the decrees of July 1961, most large-scale industries

⁷⁰ William L. Cleveland and Martin Bunton, *A History of the Middle East* (London: Routledge, 2016): 288-93.

⁷¹ Mark Skousen, “Whatever Happened to the Egyptians?” in *EconoPower: How a New Generation of Economists Is Transforming the World* (Hoboken: John Wiley & Sons, Inc., 2008): 165; Lama Abu-Odeh, “On Law and the Transition to Market: The Case of Egypt,” *International Journal of Legal Information* 37, no. 1 (March 2009), 59.

⁷² Skousen, “Whatever Happened,” 165.

⁷³ Abu-Odeh, “The Case of Egypt,” 59.

⁷⁴ Ibid.

⁷⁵ Raymond A. Hinnebusch. *Egyptian Politics Under Sadat: The Post-Populist Development of an Authoritarian-Modernizing State* (Cambridge: Cambridge University Press, 1985), 11.

⁷⁶ Abu-Odeh, “The Case of Egypt,” 59-60; Alshinawi, “The Pharmaceutical Industry in Egypt,” 106.

⁷⁷ Alshinawi, “The Pharmaceutical Industry in Egypt,” 163.

⁷⁸ Ibid.

became state-owned.⁷⁹ For the pharmaceutical industry this meant that privately owned companies were put under direct control of the Egyptian Public Drug Corporation (EPDC), “which imposed heavy regulatory constraints”.⁸⁰ In 1963, pharmaceutical firms were brought under public ownership.⁸¹ As Alshinawi explains:⁸²

“The placing of local, privately owned pharmaceutical laboratories and factories under the direct supervision of the state during the nationalization schemes of 1960s has significantly contributed to their expansion into larger, better-equipped enterprises, which heavily embarked on the manufacturing of large quantities of essential generics, in order to meet domestic consumers’ growing needs [...]. The economic reforms contributed to the development of the local private sector [...]; factories increased in number and output, exporting locally- manufactured products to Arab and African markets.”

The deepening of state control also entailed an increase in public spending on healthcare. From 1953 until 1975, expenditures on healthcare almost quadrupled from 0,5 % to 1,9% of GDP, encompassing a greater availability of medicines at subsidized prices and an increased number of pharmacies and public health centers.⁸³ But as expenditures were rising state debts also expanded, leading to a fivefold increase of the external debt towards the end of Nasser’s era, thereby jeopardizing the ideal of ISI.⁸⁴ Also contributing to the failure of the ISI strategy was the cutback on the import of products as before domestic production had had enough time to ramp up. As Raymond A. Hinnebusch argues: “This combined with shortfalls in foreign assistance [...] led to a widening balance of payments deficit and a foreign exchange crisis which pinched the inflow of needed production materials”.⁸⁵ As will become evident in the next section, the ISI strategy was soon to be replaced by a new economic policy termed the *infitah*.

4.2 Sadat and the *infitah*

⁷⁹ Alshinawi, “The Pharmaceutical Industry in Egypt,” 107.

⁸⁰ Ibid.

⁸¹ John Waterbury, *The Egypt of Nasser and Sadat: The Political Economy of Two Regimes* (Princeton: Princeton University Press, 1983), 72.

⁸² Ibid.: 163.

⁸³ Khalid Ikram, *The Egyptian Economy, 1952-2000: Performance Policies and Issues* (New York: Routledge, 2006): 10-11.

⁸⁴ Alshinawi, “The Pharmaceutical Industry in Egypt,” 107.

⁸⁵ Hinnebusch. *Politics Under Sadat*, 34.

Nasser's economic reforms had brought along (ironic as it may sound) a class of 'national capitalists'.⁸⁶ This class – to which Hinnebusch also refers to as 'private bourgeoisie' – were closely tied to state actors through family bonds or through shared interests and political views.⁸⁷ Simultaneously, a 'state bourgeoisie' arose, which as the name suggests was constituted by state actors, such as government officials, engineers and military officers.⁸⁸ From the start, socialism had not been very popular with either of these elite classes.⁸⁹ But when the ISI strategy failed, and the 1967 defeat in the war with Israel dealt Egypt's image a blow, 'Nasserism' almost completely lost its support from the elites.⁹⁰ Consequently, when Nasser died in 1970, there was little reason for his successor Anwar Sadat to continue on his path of economic nationalization. Besides, the economic setbacks and growing national debt gave Sadat little choice but to alter course. And so following Egypt's victory in the war with Israel in 1973, Sadat issued the October Paper of 1974, thereby announcing Egypt's *infitah*, or 'open-door policy'.⁹¹ The *infitah* entailed adopting a 'free-market' policy whereby the Egyptian economy opened up to foreign import and investment.⁹² In the words of Hinnebusch: "Egypt was gradually reintegrated into the world capitalist system".⁹³ Simultaneously, the public sector withdrew from Egypt's economy (although not entirely) and many social facilities were privatized.⁹⁴ Where Nasser had significantly expanded Egypt's healthcare services, Sadat disregarded the health sector, leaving it up to private companies to provide in the needs of the Egyptian citizens.⁹⁵ Unfortunately, that did not turn out very well for the vast majority. As Hinnebusch explains:

"By the seventies, [healthcare] services were contracting. Public hospitals fell into abysmal squalor; standards of sanitation were appalling, quality nursing almost absent, and equipment old and deteriorating. [...] Unable to reform or upgrade the public medical service, the strategy of the Sadat regime was to neglect it and encourage the development of a

⁸⁶ Hinnebusch. *Politics Under Sadat*, 29.

⁸⁷ Ibid.:30.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Hinnebusch. *Politics Under Sadat*, 35-8.

⁹¹ Ibid.: 53-4; Encyclopedia Britannica, "infitāḥ," Egyptian History, accessed on March 30, 2022, <https://www.britannica.com/event/infitah>.

⁹² Sara Salem, *Anticolonial Afterlives in Egypt: The Politics of Hegemony* (Cambridge: Cambridge University Press, 2020), 262.

⁹³ Hinnebusch. *Politics Under Sadat*, 57.

⁹⁴ Ibid.

⁹⁵ Ibid.

qualitative private sector. Thus new private clinics opened with expensive imported equipment and a new project was put forward to build a major private hospital.”

In the years 1974-1979, Egypt’s public sector only invested in two projects in the ‘health and hospital’-category (out of a total of the 134 projects it invested in), spending E£11 million (2,5% of its total investment spendings).⁹⁶ Nevertheless, the share of the public sector in the total investment in the ‘health and hospital’-category during those years accounted for 31,5% of the total spendings (public and private), meaning that the private sector invested a mere E£34,9 million in Egypt’s health sector in those 5 years.⁹⁷ As pointed out before, Sadat’s regime did little to make up for deficits. When it comes to the pharmaceutical sector, the government sector invested in only two projects, spending E£1 million (0,2% of its total investment spendings).⁹⁸ The percentage of private investments was however significantly higher than that in the ‘health and hospitals’-category; private investments constituted 87,2% of the total investments in the pharmaceutical industry from 1974 to 1979 (equaling E£7.8 million). Either way, whether it concerned Egypt’s health sector or pharmaceutical industry, it only received a small share of Egypt’s public investments. And so, left much to be desired in those years.

4.3 Mubarak and international financial institutions

Where Sadat had opened up Egypt’s market to the rest of the world and restored its foreign relations, Hosni Mubarak took Egypt’s liberalization politics a step further.⁹⁹ When Mubarak became the president of Egypt after Sadat’s death in 1981, Egypt’s economy was in an even worse state than when Sadat’s term had begun.¹⁰⁰ Relying heavily on income from oil sales, remittances, and Suez Canal fees (accounting for more than 40% of GDP by the mid-1980s), Egypt’s economy was highly vulnerable.¹⁰¹ Furthermore, the state’s foreign debt and balance of payments deficits had reached excessive amounts. By 1986, the latter had reached a staggering \$5.3 billion (15% of GDP), and the budget deficit amounted for \$8.8 billion (23% of

⁹⁶ Waterbury, *Nasser and Sadat*, 143.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Robert Springborg, *Mubarak’s Egypt: Fragmentation of the Political Order* (New York: Routledge, 2018), 21.

¹⁰⁰ Simon Bromley and Ray Bush, “Adjustment in Egypt? The Political Economy of Reform,” *Review of African Political Economy* 21, no. 60 (June 1994): 201-202

¹⁰¹ Ibid.

GDP).¹⁰² As Springborg argues, Egypt's economic situation put Mubarak in a tough position, where he had to choose between "national self-sufficiency and its alternative, which is further integration into the world economic order through pursuit of a policy of export-led growth".¹⁰³ In other words, he had to choose between going further down Sadat's path or returning to Nasser's strategy. Although Mubarak was initially hesitant to become involved with international financial institutions (IFIs) – remembering all too well the riots in 1977 when Sadat had entered into negotiations with IFIs –, he carefully dipped his feet into the waters of the International Monetary Fund (IMF) in 1987 before finally bowing down in 1991 by entering Egypt into IMF's Economic Reform and Structural Adjustment Program (ERSAP).¹⁰⁴ The ERSAP meant major reforms for Egypt's public sector. In 1996 and 1997, Egypt was praised by the IMF for privatizing more than one third of its public sector portfolio, as Karen Pfeifer points out.¹⁰⁵ This also opened the way for what Zeinab Abul-Magd coins 'military entrepreneurs'.¹⁰⁶ Benefitting from the opportunity created, the military entrepreneurs penetrated a broad spectrum of Egypt's economy; going from bread producing, to construction work to making medicine.¹⁰⁷

From the 1990s onwards, the role of the Egypt's military corps in the pharmaceutical industry and health sector (and in the economy more broadly) thus expanded. The army opened forty-four hospitals and medical complexes – a massive quantity compared to the two projects that had been publicly funded when Sadat was in power.¹⁰⁸ But although these medical facilities – controlled by the Department of Medical Services of Armed Forces – received massive fundings, civilians could only use their services at the cost of high fees.¹⁰⁹ Equally dubious was the army's interference in the pharmaceutical industry. As Abul-Magd points out:¹¹⁰

"The military produced medications and sold them to public hospitals. The medical department at the army's Authority of Supply owned a drug factory and a "pharmaceutical

¹⁰² Ibid.

¹⁰³ Springborg, *Mubarak's Egypt*, 19.

¹⁰⁴ Bromley and Bush, "Adjustment in Egypt?" 201-202

¹⁰⁵ Karen Pfeifer, "How Tunisia, Morocco, Jordan and even Egypt became IMF 'Success Stories' in the 1990s," *Middle East Report* 29, no. 210 (April 1999): 24.

¹⁰⁶ Zeinab Abul-Magd, *Militarizing the Nation: The Army, Business, and Revolution in Egypt* (New York: Columbia University Press, 2017): 220.

¹⁰⁷ Ibid.: 361-2.

¹⁰⁸ Ibid.: 289.

¹⁰⁹ Ibid.

¹¹⁰ Ibid: 290.

city” [...]. It also produced prosthetic devices for artificial limb replacement services. The Ministry of Health ordered these goods for its state-run hospitals, and they also fed military Factory in Helwan.”

But however dubious its cause, the domestic production of medicine did indeed increase during this period of time.¹¹¹ From 1981-1982 to 1999-2000, the local production as a percentage of the local consumption of pharmaceuticals increased from 73.6% to 93%, and in 2003/2004 it even reached 96%.¹¹² However, this did not translate into better medicine access. Due to deficient public healthcare and insurance coverage, “and the consequent reliance on private pharmacies” as Bahgat and Wright point out, Egyptian households had to spend relatively much on healthcare.¹¹³ In 2006, out of the pocket expenditure on medical needs accounted for 58,8% of the total medical expenditure in Egypt.¹¹⁴ Moreover, the burden was not shared evenly. In 2010, Bahgat and Wright observed that:¹¹⁵

“The poorest economic bracket reportedly devotes the highest percentage of household expenditures to medical treatments at 10.8% per year [...]. Egyptian citizens in the low-income bracket are not, therefore, guaranteed access to medicines despite existing efforts.”

And so, history shows that increased domestic production does not necessarily result in better medicine access. Medicine affordability and availability are also determined by other factors. One of these factors is legislation, which brings us to the next point.

With all these domestic changes going on during Mubarak’s rule, you would almost overlook a significant development that took place in the background: the implementation of the TRIPS Agreement. As discussed in the previous chapter, this legislature was initiated by the WTO and installed over the years of 1995-2005, thereby creating an international patent regime. The TRIPS Agreement has been particularly instrumental in further incorporating Egypt’s pharmaceutical industry into the world market, subjecting it to its global legal framework. This has set the preface for contemporary developments, which will be discussed in detail in the following chapter.

¹¹¹ Salem, *Anticolonial*, 211.

¹¹² Alshinawi, “The Pharmaceutical Industry in Egypt,” 163.

¹¹³ Bahgat and Wright, “Access to Medicines in Egypt,” 59.

¹¹⁴ *Ibid.*

¹¹⁵ *Ibid.*

5. Egyptian dreams of self-sufficiency:

The pharmaceutical industry

In August 2016 the ‘Proudly Made in Egypt’ campaign (*bi-kull faxr šana ‘a fi mašr*) was launched.¹¹⁶ Although at first sight it seemed to be little more than a trademark, in hindsight it turned out to be the harbinger of what was yet to come. Through a series of events, both coordinated and uncoordinated, the fairly new Egyptian government proceeded on a trail of economic de-globalization, aiming at self-sufficiency.¹¹⁷ In this chapter we will follow this trail and investigate the most decisive moments for Egypt’s new direction. Through the examination of official documents, newspaper items and interviews this chapter reconstructs the political economy of Egypt’s pharmaceutical industry and its broader context from 2013 onwards. This then brings us to the question of whether self-sufficiency is an achievable goal or whether it has more to do with a nationalistic narrative. This chapter will show that although both claims – self-sufficiency as a reality and as a narrative – hold some truth, the idea of complete self-sufficiency ultimately does not hold. Egypt is too dependent on the import of materials and on financial assistance from abroad for it to be considered self-sufficient. Moreover, the prospect of Egypt’s pharmaceutical industry being entirely independent is unlikely, as there are no current developments that suggest that this dependence will soon be overcome.

5.1 Devaluation of the Egyptian pound (2016-2017)

A wave of unrest shook Egypt in the spring of 2016. For the first time since right after the coup in 2013, big crowds took to the streets to protest against President Al-Sisi because of his decision in a dispute with Saudi Arabia.¹¹⁸ At the same time, Egypt’s domestic production was stagnating due to foreign exchange shortages.¹¹⁹ As a consequence, the Egyptian government was in desperate need of finding ways to

¹¹⁶ Shaimaa Al-Aees, “Industry Ministry Inaugurates ‘Proudly Made in Egypt’ Campaign,” *Daily News Egypt*, August 2, 2016, <https://dailynewsegypt.com/2016/08/02/industry-ministry-inaugurates-proudly-made-egypt-campaign/>.

¹¹⁷ Samir Hosni, “al-ra’īs al-sīsī: nastahdif taḥqīq al-iktifā’ al-dhātā li-l-sūq al-muḥalā,” *Youm7*, December 25, 2021, <https://www.youm7.com/story/2021/12/25/-الذاتي-الاكتفاء-الذاتي-الرئيس-السياسي-نستهدف-تحقيق-الاكتفاء-الذاتي-السوق-المحلي/5593124>.

¹¹⁸ Kareem Fahim, “Egyptians denounce President Sisi in Biggest Rally in 2 Years,” *New York Times*, April 15, 2016, <https://www.nytimes.com/2016/04/16/world/middleeast/cairo-protesters-denounce-egyptian-president-sisi.html>.

¹¹⁹ “Egypt’s Economic Outlook – Spring 2016,” The World Bank, accessed May 20, 2022, <https://www.worldbank.org/en/country/egypt/publication/economic-outlook-spring-2016>.

recover the local economy, to be able to reinforce political stability. Just like in 1991, the IMF was right there to assist the Egyptian government – provided that Egypt would undergo extensive reforms. Thus, at the end of that year when all preconditions such as securing \$6 billion in external funds were settled, Egypt and the IMF reached an agreement on a loan of \$12 billion.¹²⁰ As part of measures imposed by the IMF, Egypt free floated the Egyptian pound (EGP) November that year. The free floating of the EGP was supposed to correct the overvalued currency and to avert the country's economic crisis, by increasing export and dollar liquidity and decreasing import.¹²¹ And so in the night from the 2nd to the 3rd of November, the EGP went from 1\$ values 8.8583 EGP to 1\$ values 13.5277 EGP (which quickly rose to 17.7663 EGP later that month, see Figure 1).

Figure 1. Historical Data CBE on Exchange Rates (\$1 to EGP)



Chart created based on data from: "Exchange Rates Historical – 01/06/2016 to 01/06/2017," Central Bank of Egypt, accessed May 15, 2022, <https://www.cbe.org.eg/en/EconomicResearch/Statistics/Pages/ExchangeRateshistorical.aspx>.

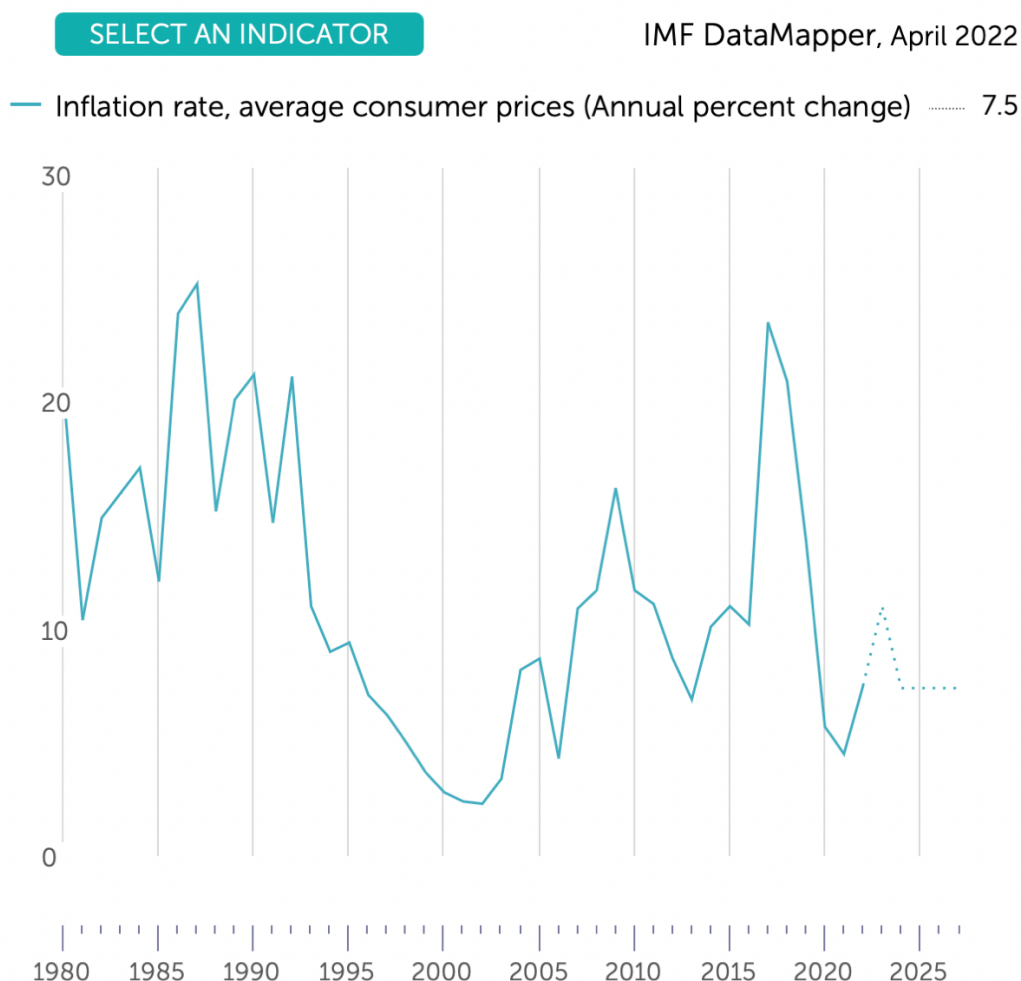
¹²⁰ Bessma Momani, "Egypt's IMF Program: Assessing the Political Economy Challenges," *Brookings*, January 30, 2018, <https://www.brookings.edu/research/egypts-imf-program-assessing-the-political-economy-challenges/>.

¹²¹ "Egypt Devalues Currency by 48% to meet IMF demands for \$12bn loan," Associated Press in Cairo, *The Guardian*, published November 3, 2016, <https://www.theguardian.com/world/2016/nov/03/egypt-devalues-currency-meet-imf-demands-loan>.

But although dollar liquidity improved, inflation went sky-high, thereby “causing deep public concern and hardship” according to an IMF report in 2017.¹²² As Bessma Momani points out: “Inflation, which had fluctuated within a range of 8-15 percent between 2011 and 2016, rose to 22 percent in December 2016”.¹²³ And this was not even at its peak, as it would further rise to 30 percent in May 2017 (see Figure 2).¹²⁴

Figure 2. Inflation Rate Egypt 1980-Present

Country Data



“Inflation Rate, Average Consumer Prices (Annual Percent Change),” Arab Republic of Egypt, Country Data, International Monetary Fund, accessed May 7, 2022, <https://www.imf.org/en/Countries/EGY#countrydata>.

¹²² International Monetary Fund, “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 – Press Release; Staff Report; And Statement By the Executive Director for the Arab Republic of Egypt,” IMF Country Report No. 17/290 (September 2017), 1.

¹²³ Momani, “Egypt’s IMF Program.”

¹²⁴ International Monetary Fund, “Arab Republic of Egypt.”

The 2016 devaluation of the EGP had an immediate effect on the affordability and availability of medicine.¹²⁵ As Arwa Gaballa and Eric Knecht reported:¹²⁶

“Unable to raise prices above levels set by the Health Ministry but now paying roughly twice as much to import drugs or active ingredients, pharmaceutical firms say they have been forced to phase out certain medicine to stay in business.”

This is also confirmed by Adil, who worked at a Japanese pharmaceutical company based in Egypt at the time of the devaluation:¹²⁷

Emma: Have there been any remarkable changes in the medicine prices?

Adil: Of course. Of course, of course. [...] Since 2017, when the dollar jumped from 8 pounds to 18 pounds, EGP.

Emma: Yeah, and was that for all the medicines, or only the ones that relied more on the import?

Adil: Every, every, all the medicines. [...] I think now from 2017 every medicine just jumped from like 40% to 80% increase. Or maybe more. Since the exchange liberation in Egypt [...] at the end of 2016.

And so, due to the massive increase in import costs, by December 2016 about 48 medicines had become entirely unavailable in Egypt (which equaled more than one third of the total of medicines without a local alternative at that time), and about 200 medical products with a local alternative had run out.¹²⁸ However, problems with medicine access did not only arise after the devaluation. In fact, the dollar scarcity that preceded the devaluation had likewise caused medicine shortages, as without sufficient dollars pharmaceutical firms were not able pay for the imports they required”.¹²⁹ In March 2017, state-owned newspaper Egypt Today stated that:¹³⁰

¹²⁵ Saied, “Medicines They Need?.”; Arwa Gaballa and Eric Knecht, “Currency Drop Hits Egypt’s Medicine Supplies, Angering Public,” *Aswat Masriya*, November 22, 2016, <http://en.aswatmasriya.com/news/details/18051>.

¹²⁶ Gaballa and Knecht, “Currency Drop.”

¹²⁷ For all interview transcriptions see Appendix 1.

¹²⁸ Saied, “Medicines They Need.”; Dahlia Kholaf and Nikhil Lohade, “Egypt Grapples With Drug Shortage Brought On by Currency Devaluation,” *The Wall Street Journal*, December 11, 2016, <https://www.wsj.com/articles/egypt-grapples-with-drug-shortage-brought-on-by-currency-devaluation-1481452381>.

¹²⁹ Gaballa and Knecht, “Currency Drop.”

¹³⁰ “Health Ministry Supplies 25k Anti-RH Injections to Ease the Shortage,” *Egypt Today*, March 6, 2017, <https://www.egypttoday.com/Article/12/3559/Health-Ministry-supplies-25k-anti-RH-injections-to-ease-shortage>; Media Ownership Monitor, “Egyptian Media Group,” Egypt, accessed May

“Since 2014, Egypt has suffered the disappearance of hundreds of medicines in pharmacies nationwide due to the dollar crisis; the Central Bank of Egypt (CBE) struggled to provide hard currency to other banks so importers, including pharmaceutical companies, could find the dollar liquidity required to buy their raw materials. However, the medicine shortage eased after the government floated the national currency last November.”

The assumption thus seemed to have been that floating the EGP freely would have a positive effect on medicine availability. As explained above this however was not the case – a miscalculation that, as this statement shows, the government was reluctant to admit. Thus remarkably so, floating the EGP in a free or managed way made little difference for medicine access. Both economic policies failed to resolve the weak position of the EGP. On the one hand, managed floating had caused the EGP to become ‘overvalued’ in relation to the dollar, resulting in a stagnation in the dollar-EGP exchange.¹³¹ This then made it difficult for Egyptian companies to import pharmaceutical products because there were insufficient dollars to trade with and foreign traders were reluctant to accept EGP. On the other hand, the free-floating policy caused the EGP to lose so much worth in relation to the dollar that it became immensely costly to import – something that could not be corrected with a price increase due to price controls on medicine.¹³² Thus, especially in the case of the pharmaceutical industry the dependence on the import of materials and products has been a concern. As the pharmaceutical industry is primarily directed by market forces, the financial issues that resulted from the strict price controls in combination with risen import costs had caused pharmaceutical companies to simply stop producing certain medicines.¹³³ This in turn has a direct effect on medicine availability, as about 95% of pharmaceutical ingredients used for Egypt’s production of medicines is imported – as head of the Egyptian Center for the Rights to Medicine Mohamed Fouad points out.¹³⁴

30, 2022, <https://egypt.mom-rsf.org/en/owners/companies/detail/company/company/show/egyptian-media-group/>.

¹³¹ Associated Press in Cairo, “Egypt Devalues Currency.”

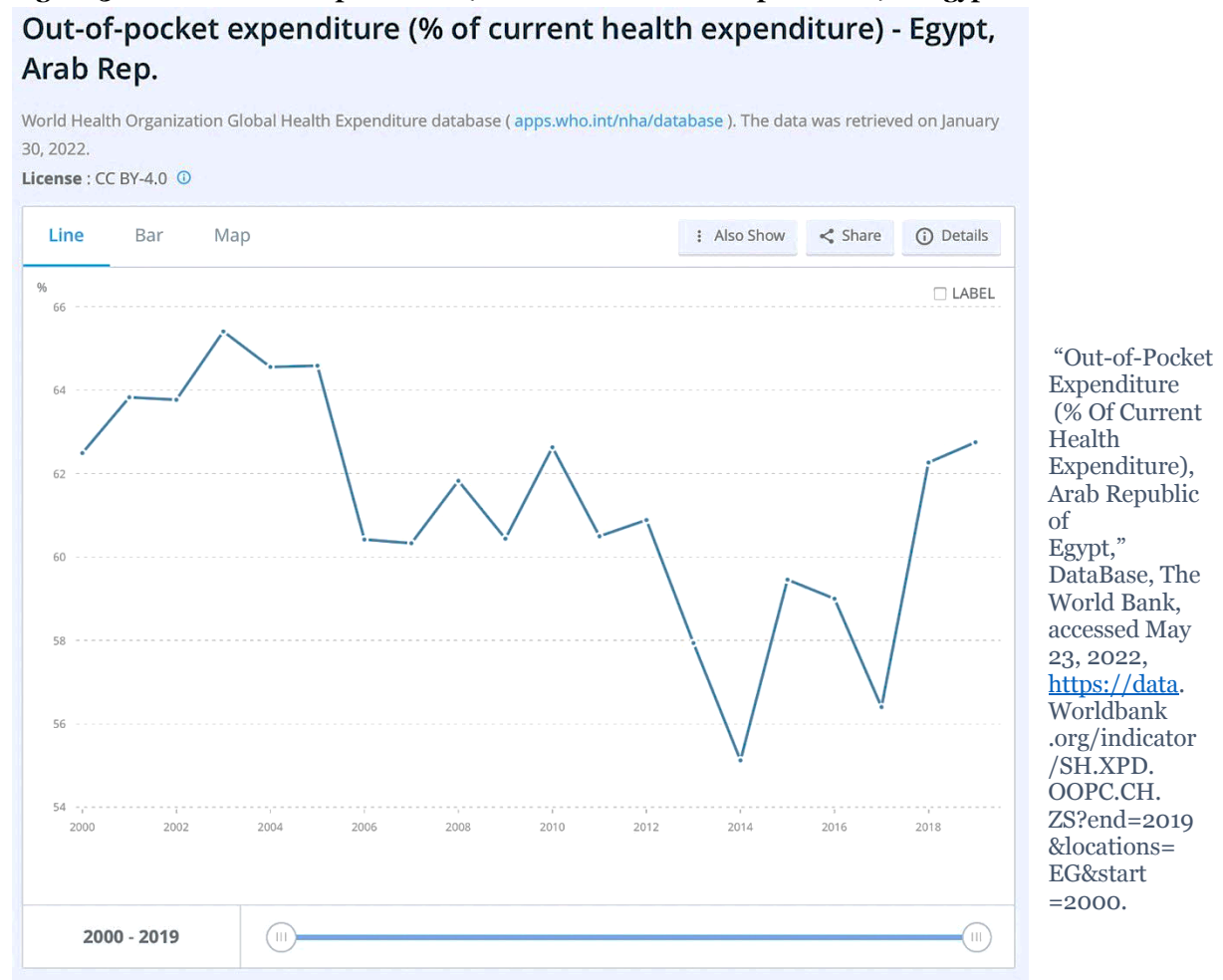
¹³² Saied, “Medicines They Need.”

¹³³ Gaballa and Knecht, “Currency Drop.”

¹³⁴ Hend El-Behary, “Egyptian Patients Scream Amid Life-Saving Drug Shortages,” *Egypt Independent*, November 21, 2016, <https://egyptindependent.com/egyptian-patients-scream-amid-life-saving-drug-shortages/>.

Following the devaluation, two measures were taken to mitigate its negative effect on Egypt's medicine supply. First, the Egyptian government released \$186 million so that Vacsera, a state-owned pharmaceutical firm, could import unavailable drugs.¹³⁵ Although this may have given some short-term relief, this measure did not provide a sustainable solution to medicine shortage as it did not address the above-mentioned issues. Second, as an outcome of lengthy negotiations with pharmaceutical companies the prices of some medicines were raised in January 2017, allowing the companies to pass on the rise in production costs to the buyer.¹³⁶ In Egypt, the out-of-pocket (OOP) expenditure on health has revolved around 60% of total health expenditures (see Figure 3) for the last 20 years, with the pharmaceutical

Figure 3. Out-of-Pocket Expenditure (% of Current Health Expenditure) in Egypt 2000-2020



¹³⁵ Saied, “Medicines They Need.”; Egypt Independent, “Sisi Orders Imports of 146 Unavailable Medications Subsidized by National Company,” November 17, 2016, <https://egyptindependent.com/sisi-orders-imports-146-unavailable-medications-subsidized-national-company/>.

¹³⁶ “Egypt’s Military to Enter Pharmaceutical Industry,” *Al-Arabiya*, January 23, 2017, <https://english.alarabiya.net/News/middle-east/2017/01/23/Egypt-s-military-to-enter-pharmaceutical-industry>

expenditure representing about 43% of that OOP expenditure.¹³⁷ This means that because of this measure, Egyptians had to spend more on medicine. And as Heba Wanis points out in her research of pharmaceutical pricing in Egypt: “In a country with high out-of-pocket expenditure on medicines, affordability remains a major determinant of access to medicines”.¹³⁸ So while the price increase of certain drugs partly helped decrease medicine shortages, it did not improve medicine access. Neither of the measurements that the Egyptian government took in direct response to the medicine shortages thus effectively addressed the problem.

Another significant development that took place in the aftermath of the devaluation of the EGP was that the Egyptian army received a license to create its own pharmaceutical firm.¹³⁹ In January 2017, then Prime Minister Sherif Ismail issued a decree by which the National Authority for Military Production was given the right to establish the Egyptian National Company for Pharmaceutical Products.¹⁴⁰ In our interview, pharmacist Bilal argued that the factories run by the military help overcome medicine shortages:

Bilal: The army of Egypt, we can provide factories for itself to overcome the shortage of some medicines. [...] Egyptian army now in Egypt, [...] have some factories under supervision of army, directly under supervision of army, can manufacture drugs for the governmental field [...] and for the market in general.

Yet again, the establishment of a pharmaceutical firm run by the army did not solve the problems caused by the dependence on the imports. It is therefore doubtful in how far its factories truly help overcome medicine shortages. As there have still been issues with medicine shortages since the establishment of this military-run firm, the interference of the military does not seem to have really created a sustainable solution either. Nevertheless, the factories run by the army may unlike private firms continue their production in the face of profit loss (although this is not guaranteed). As will become evident in the following sections, the establishment of its own

¹³⁷ Ahmad Fasseeh et al., “Healthcare Financing in Egypt: A Systematic Literature Review,” *Journal of the Egyptian Public Health Association* 97, no. 1 (January 2022): 4.

¹³⁸ Heba Wanis, “Pharmaceutical Pricing in Egypt,” in *Pharmaceutical Prices in the 21st Century*, ed. Zaheer-Ud-Din Babar (Auckland: Adis, 2015), 59.

¹³⁹ “Egypt’s Military Given Green Light to Own Pharmaceutical Company,” *Middle East Monitor*, January 23, 2017, <https://www.middleeastmonitor.com/20170123-egypts-military-given-green-light-to-own-pharmaceutical-company/>; Sonia Farid, “Why Is Egypt’s Military Entering the Pharmaceutical Industry?” *Al Arabiya*, February 2, 2017, <https://english.alarabiya.net/features/2017/02/02/Why-is-Egypt-s-military-entering-the-pharmaceutical-industry->.

¹⁴⁰ Ibid.

pharmaceutical firm would give the Egyptian army the opportunity to invigorate the notion of medicine access as a matter of national security, taking up the role of supplier. By becoming more involved with the local production of medicines, the Egyptian army has become further integrated into Egypt's economic and social realms. Furthermore, the increased interference of the Egyptian army with the pharmaceutical industry was the first clear indicator of the efforts of the current Egyptian government to increase the domestic production of pharmaceutical products.

5.2 COVID-19 and health as national security

The notion that health is a matter of national security has long been implied by the interference of Egyptian army with the pharmaceutical industry and health sector (see previous chapter). At first sight the notion of health as a matter of national security might seem natural or instinctive (because what is there to dislike about prioritizing such a critical matter?). This case study however shows that this narrative and its consequent actions closely tie to specific economic and politic interests. Although this may come across as a cynical view, the Egyptian army has given us plenty reason not to underestimate its strategic choices.¹⁴¹ Seen in the light of the coup by the army in 2013 and the institute's position of power further down Egypt's history, it is safe to say that how the army relates to the rest of society and how that relation shifts is not random, but highly coordinated.¹⁴² Furthermore, under the rule of Al-Sisi, the interference of the army with other parts of society has greatly intensified. As Sarah Smierciak points out:¹⁴³

“Since Abdel Fattah al Sisi assumed the presidency in 2014, the militarization of politics has become more pronounced than any time in the last half century. This domination of the political sphere has spread like a virus (always present, but relatively dormant) into the state's institutional foundations—into the economic, legal and traditionally civilian bureaucratic arenas.”

¹⁴¹ Abul-Magd, *Militarizing the Nation*.

¹⁴² Ibid.

¹⁴³ Sarah Smierciak, “Introduction: The Evolution of Military Rule in Egypt,” in *Routledge Handbook on Contemporary Egypt*, ed. Robert Springborg, et al. (London: Routledge, 2021), 81.

This has also been true for the pharmaceutical industry, as pointed out in the previous section.

There could not have arrived a better opportunity for the Egyptian army to further expand its activities in the health sector and pharmaceutical industry than the one that the COVID-19 pandemic in 2020 presented. As Omer Aslan puts it: “The pandemic allowed a predator army such as Egypt’s army a new excuse to expand its economic and political power”.¹⁴⁴ Adopting the role of protector of Egypt’s national health, the army was quick to take up the manufacturing and selling of medical masks and other medical supplies.¹⁴⁵ Furthermore, the EAF deployed its Chemical Warfare Department to sanitize public locations (see Image 1). The Egyptian army did

Image 1. Chemical Warfare Department sanitizes public locations in Egypt



“Video: Egyptian Armed Forces Lead Fight Against Coronavirus,” *Egypt Independent*, March 19, 2020, <https://egyptindependent.com/video-egyptian-armed-forces-lead-fight-against-coronavirus/>; Photographer unknown.

however not only jump in to provide ad hoc support; It also reinforced its role as a main actor in Egypt’s health sector in more permanent ways. Recent changes to the

¹⁴⁴ Omer Aslan, “The Egyptian Army During the COVID-19 Pandemic,” *Al Sharq Strategic Research*, October 1, 2022, <https://research.sharqforum.org/2020/10/01/the-egyptian-army/>.

¹⁴⁵ “Will Egypt’s Military Corner the Coronavirus Market?” *Al-Monitor*, April 2, 2020, <https://www.al-monitor.com/originals/2020/04/egypt-army-selling-medical-masks-shortage-coronavirus.html>.

capabilities of the National Service Projects Organization (NSPO), a manufacturing entity subordinate to the Ministry of Defense, have enabled the Egyptian army to partake in Egypt's economy more autonomously.¹⁴⁶ The NSPO was established under Sadat, but like other elements of the army it gained more power since Al-Sisi's governance. In 2018, a cooperative agreement was signed between the NSPO and Egypt's newly found sovereign wealth fund (SWF), thereby making it easier for the NSPO to create partnerships with private firms.¹⁴⁷ During the pandemic, in 2020, the NSPO thus entered into a partnership agreement with Spanish pharmaceutical firm Grifols.¹⁴⁸ On the website of Grifols it is stated that the agreements with the NSPO "is a unique collaborative opportunity that will strengthen Egypt's healthcare system and self-sufficiency".¹⁴⁹ Moreover, it is disclosed that the cooperation will entail the establishment of twenty plasma centers and the construction of an unspecified number of production facilities in Egypt".¹⁵⁰ As will be further explained in the next section, foreign pharmaceutical firms with a local production hub have a significant advantage in the Egyptian market over their competitors that have to import FFPs. The ability of the NSPO to 'grant' foreign firms the advantage of a local hub in exchange for their cooperation, thus gives the army a position of great power in Egypt's pharmaceutical industry. Simultaneously, as Yezid Sayigh points out: "The Ministry of Military Production is now one of two bodies that approves the import of foreign goods or services by government agencies".¹⁵¹ Over the last few years, the Egyptian army has thus succeeded in securing its versatile role in Egypt's pharmaceutical industry as a producer of medicine supplies, a facilitator for foreign firms in the establishment of local production hubs, and a monitor of the government's imports of pharmaceutical products.

¹⁴⁶ Mahmoud Khalid, "Egypt's Expanding Military Economy," *Carnegie Middle East Center*, March 26, 2020, <https://carnegie-mec.org/sada/81376>.

¹⁴⁷ Khalid, "Expanding Military Economy."

¹⁴⁸ "The National Service Projects Organization (NSPO) Signs a Strategic Partnership Agreement with the Spanish Pharmaceutical Company, Grifols," *Armed Forces News*, Ministry of Defense, last modified November 25, 2020, <https://www.mod.gov.eg/modwebsite/NewsDetails.aspx?id=40523>.

¹⁴⁹ "Strategic Alliance between Grifols and the Egyptian Government to Boost Plasma-derived Medicines Self-sufficiency in the Middle East and Africa," *Newsroom*, Grifols, last modified November 24, 2020, <https://www.grifols.com/en/view-news/-/news/strategic-alliance-between-grifols-and-the-egyptian-government-to-boost-plasma-derived-medicines-self-sufficiency-in-the-middle-east-and-africa-1>.

¹⁵⁰ *Ibid.*

¹⁵¹ Yezid Sayigh, "Retain, Restructure, or Divest? Policy Options for Egypt's Military Economy," *Carnegie Middle East Center*, January 31, 2022, <https://carnegie-mec.org/2022/01/31/retain-restructure-or-divest-policy-options-for-egypt-s-military-economy-pub-86232>.

The interference of Egypt's army with the pharmaceutical industry acquired further legitimacy during the COVID-19. Although the notion that the military is responsible for national security in all realms of civic life already prevailed, the pandemic gave an extra dimension to the army's engagements with the health and pharmaceutical sectors.¹⁵² As Aslan points out:¹⁵³

“The Egyptian army gradually became a giant economic actor. It is therefore no surprise that the army would now use the COVID-19 pandemic to peddle itself as a responsible and competent actor while simultaneously exploiting the crisis to either penetrate or consolidate its sway over producing pharmaceuticals, medical tools, and designing public health policies.”

But even if in the case of Egypt the interference of the army with the pharmaceutical industry and health sector has been especially extensive, the pandemic's ratification of health as a matter of national security is not necessarily a development that is specific to Egypt. As Major K. Bhusal points out, the pandemic has largely broadened our concept of 'security'.¹⁵⁴ Bhusal states that “in the post-pandemic world, a virus or a disease could easily be a national security threat”, which thereby authorizes the intervention of national security forces in ways that were not accepted before.¹⁵⁵ In the case of Egypt, this shift was particularly clear in a statement by President Al-Sisi's health advisor Mohamed Awad Tageldin on national television in April 2021, when the COVID-19 pandemic had been shaking the world for about a year:¹⁵⁶

“The coronavirus pandemic undoubtedly proved that we must have huge pharmaceutical industries and strong health institutions capable of providing for all our needs. The issue of medicines has become an important national, security and medical one.”

Thus even if it still have to become evident to what extent the COVID-19 pandemic has shifted the role of Egypt's army in the health domain, it is very likely that the way that the pandemic has altered common understandings of 'security' will have a far-

¹⁵² Khalid, “Military Economy.”

¹⁵³ Aslan, “The Egyptian Army.”

¹⁵⁴ Bhusal, “The World After COVID-19,” 737.

¹⁵⁵ Ibid.

¹⁵⁶ Ahmed Gomaa, “Egypt Opens Mega Pharmaceutical City,” *Al-Monitor*, April 10, 2021, <https://www.al-monitor.com/originals/2021/04/egypt-opens-mega-pharmaceutical-city>.

reaching effect on how the Egyptian army relates to the domestic pharmaceutical sector.

5.3 Gypto Pharma and the policy of a ‘new country’

One of the most noticeable efforts of the Egyptian government to expand the domestic production of pharmaceutical products has been the establishment of Gypto Pharma, which was inaugurated by President Al-Sisi in April 2021 (see Image 2).¹⁵⁷

Image 2. President Al-Sisi inaugurates Gypto Pharma



Fatma Mohamed, “al-sīṣī: jadārat muntajāt al-dawā’ al-maṣriyya yujīb ‘an takūn 100% wa laysa 99,9%,” *Egypt Independent*, April 1, 2021, <https://www.almazryalyoum.com/news/details/2301486>; Photographer unknown.

One of the main objectives of this 182,000 square meter ‘medicine city’ in Khanka is to “achieve sufficiency of supply and therefore enhancing the state’s strategic pharmaceutical safety”, as a state-owned newspaper reported.¹⁵⁸ So again, the intensification of domestic production is seen as the key to self-sufficiency.

¹⁵⁷ Gomaa, “Pharmaceutical City.”

¹⁵⁸ Mohamed S.E. Othman, “Gypto Pharma: The City of Medicine,” *Ahram Online*, July 13, 2021, <https://english.ahram.org.eg/NewsContent/3/12/417124/Business/Economy/Gypto-Pharma-The-city-of-medicine-.aspx>.

Interestingly, this highly resembles the ISI strategy and its logic that prevailed under Nasser. In a similar fashion, the ambition is for domestic manufactured pharmaceutical products to replace imported finished pharmaceutical products (FPPs), thereby gaining greater independency. Whereas under Nasser Egypt tried to become independent of the colonial economies, under Al-Sisi it tries to become less dependent on GVCs. Thus, Gypto Pharma is aimed at “supporting the Egyptian economy and reducing the pharmaceutical imports”.¹⁵⁹ Although there is not (yet) data available that shows an exact number of the change in imports of finished pharmaceutical products (FPPs) over the last couple of years, Adil (who has worked at several pharmaceutical firms) has also noticed that the Egyptian government is taking concrete measures to obstruct the import of FPPs. As Adil explains:

Adil: They can import but there’s a lot of irregularities and a lot of obstructions to import now in Egypt because the country is like going to or want to like manufacturing all the products here.

Emma: Yeah. So importing has become more difficult?

Adil: Yeah, more difficult now. [...] Exporting is more easier and importing is more difficult now.

Emma: And since when?

Adil: I think... It was difficult since a lot of time ago, but now it’s more difficult, I think from 1 or 2 years you can’t import like easily.

Emma: Yeah, I just wondered if this change in import regulations if this was like an official change?

Adil: Yeah semi-official, because... [...] Not every country can like document it because it’s more about the economy of the country and they say like to public like we have stopped importing product. That’s what I mean. It’s an intuitive kind of information. [...] They didn’t stop it all. They didn’t stop it, but it is more this now.

Emma: And do you know how exactly? Like, is that another law? Or is it...

Adil: It’s more like they increase the taxes they increase everything to make it more difficult. You got it? They increased the price to pay for importing the product. They increased the like, the instructions and the acquired, the acquired rules to start a company that can import that has to wait I think 6 months to get information to open this company and stuff like that.

As Adil points out, this is semi-official, ‘intuitive’ information, something that people working in the pharmaceutical field know through their daily practices, witnessing

¹⁵⁹ Othman, “Gypto Pharma.”

and experiencing the implementation of policy in real time.¹⁶⁰ Similarly, pharmacist Mohamed has noticed that there is an increase in the domestic production of pharmaceuticals:

Mohamed: [...] policy of country want all, everything is produced by Egyptian hands. So in the near future, our... *ya 'nī* the near future excipients, non-active ingredient, or even active ingredient will be produced by Egyptian hands [...] This the policy of a new country.

Emma: A new country?

Mohamed: Yeah, new country *ya 'nī al*-President Sisi wants it. And this is good for Egypt *ya 'nī*. I believe that President Sisi is a good president.

But contrary to the economic nationalization reforms that were part of the ISI strategy, the policy of Al-Sisi's 'new country' greatly welcomes private firms. In fact, it needs them, for Egypt is lacking the capital that they bring along. Only recently having received the last sum of its 2016 \$12 billion IMF loan, the Egyptian government is already trying to secure its next loan – a sign that Egypt is short of public money.¹⁶¹ True, this is also due to external developments such as the war in Ukraine, but even without such external factors it is doubtful whether the Egyptian economy would have done much better.¹⁶² Rather than spending its public money, as with the economic nationalization the ISI, the Egyptian government thus tries to get foreign firms to invest in Egypt's pharmaceutical industry.

The Egyptian government tries to actively attract foreign direct investment (FDI) for its pharmaceutical industry in different ways. The two primary ways in the past few years have been through the NSPO (as discussed in the previous section), and by getting foreign firms to participate in public projects, such as Gypto Pharma. State-owned newspaper Egypt Today reported on Gypto Pharma that:¹⁶³

¹⁶⁰ Even if Adil's observation cannot be supported by hard figures, we may assume it to be accurate because it aligns with the official story of the Egyptian state (conveyed through state-owned newspaper articles and official statements by the government), and because he is a professional that does not benefit in any obvious way from lying about this.

¹⁶¹ "A Chance for Change: IMF Agreement to Help Bring Egypt's Economy to Its Full Potential," IMF News, International Monetary Fund, last modified November 11, 2016, <https://www.imf.org/en/News/Articles/2016/11/11/NA111116-A-Chance-For-Change-Egypt>; Timothy E. Kaldas, "Egypt's Next IMF Loan: How to Avoid the Failures of the Past Six Years," *The Tahrir Institute for Middle East Policy*, July 6, 2022, <https://timep.org/commentary/analysis/egypts-next-imf-loan-how-to-avoid-the-failures-of-the-past-six-years/>.

¹⁶² Ibid.

¹⁶³ "Egypt's President Inaugurates Gypto Pharma City, Gets Briefed on Pharmaceutical Status," *Egypt Today*, April 1, 2021, <https://www.egypttoday.com/Article/1/100389/Egypt-s-president-inaugurates-Gypto-Pharma-City-gets-briefed-on>.

“The prime minister highlighted that LE125 billion are invested [in Gypto Pharma] by the private sector in the health sector, while LE35 billion are invested by the public sector. He added that Egypt has achieved self-sufficiency of drug production by 88 percent.”

And so ironically, on the occasion of the opening of Gypto Pharma the Egypt’s prime minister was boasting about Egypt’s self-sufficiency in producing medicine, right after disclaiming that private firms have invested more than 3,5 times as much money in this project. Somehow, in the self-sufficiency rhetoric it is systematically ignored that Egypt is still very much dependent on the import of raw materials and on the input of foreign capital. Egypt is therefore not really able to cut off from the GVC of pharmaceutical products. Likewise, the country’s ambition to become a local production hub for pharmaceutical products, merely shift its role from buyer to supplier in the GVC, thereby creating a new dependency.¹⁶⁴

That the increase of the domestic production of pharmaceutical products and the decrease of the imports of FPPs does not necessarily entail self-sufficient, does however not mean that there are not genuinely benefits to this change. Even if relocating a greater part of the manufacturing process to domestic grounds does not entirely solve problems caused by import, it could make medicine more affordable. As Mohamed, a pharmacist, explains, this is mainly due to a decrease in labor costs:

Emma: Is medical access now a problem [...] because it is imported?

Mohamed: [...] Imported drug is very expensive. So national drug, national drug will be cheap. For example, [...] the pharmacist who work in industry USA will take about 3 or 4 thousand of dollar [...]. But pharmacist in Egyptian industry will take about 5 or 6, 6 thousand Egyptian pound. 6 thousand Egyptian pound is equal to about 400 dollar. So the difference... *ya ‘nī* see the difference, there is a difference. The difference of salary [...] *al*-patient will pay the difference. [...], for example Plavix is 200 Egyptian pound. But Clopex, which is a state active ingredient, is 60. Because Clopex is *maṣnū‘*, *ya ‘nī* produced by Egyptian hands.¹⁶⁵

But even if the Egyptian government is to take on greater ownership of the production process of pharmaceuticals through projects such as Gypto Pharma, it may take some time before Egypt can consolidate its position in the global trade. As Mohamed points out:

¹⁶⁴ Othman, “Gypto Pharma.”

¹⁶⁵ The active substance of both Plavix and Clopex is Clopidogrel.

Mohamed: Medicine national security, so President Sisi established Gypto company. But Gypto company is beginner, beginner. Its age is about 9 months. Which nothing, which nothing. Pfizer has 100 year.

Thus, developments such as the establishment of Gypto have been fairly recent, it will take some time before we the lasting effects of the current developments can be determined.

6. Conclusion

About two weeks after our interview, Adil told me that his company was forced to close down due to the severe economic situation in Egypt. He had not seen it coming and he would be jobless in a month. Even though his resume would normally have given him a good chance of finding a new job, he said that the situation was now ‘very difficult’. Amid an unannounced overnight devaluation of the EGP of 17%, pharmaceutical companies had ‘frozen their vacancies’, hesitant to hire anyone new in the face of a unsure prospects.¹⁶⁶ Thus even though in our interview Hamza said that he could not predict the future, his hypothesis that “the companies that has a strong base in Egypt and have enough money to survive, they will continue, uh... the fragile companies or companies that is not stable enough, I guess they will quit” seemed to be already materializing. With Egypt’s food security in serious danger due to the war in Ukraine, the instability within the pharmaceutical industry is however just one of many concerns.¹⁶⁷ As the precise implications of these recent developments for Egypt’s pharmaceutical industry are difficult to determine at present, it has not been included in the scope of this research. It is very likely however that these developments will have far-reaching consequences, thereby impacting Egypt’s pharmaceutical industry. As Adil’s story already shows, some pharmaceutical firms may be forced to close down or to curtail their production, thereby directly affecting the local medicine access. It can thus only be hoped that the Egyptian government will take swift and adequate precautions to mitigate the damages. To do so, the Egyptian government is however required to face the reality of its interdependencies. Because if there is something that can be concluded from these recent developments however, then this is that the country is still very much connected with and impacted by the rest of the world. Although the rhetoric of self-sufficiency has been widespread, giving the impression that Egypt is taking a direction of economic de-globalization, this narrative does not tell the whole truth. Even if Egypt is obtaining a greater part of the production process of pharmaceutical

¹⁶⁶ Devon Murray, “Devaluation: Why Now and What Next?” *The American University in Cairo*, March 29, 2022, <https://www.aucegypt.edu/news/devaluation-why-now-and-what-next>.

¹⁶⁷ Jessica Barnes, “In Egypt, Where a Meal Isn’t Complete Without Bread, War in Ukraine Is Threatening the Wheat Supply and Access to Staple Food,” *The Conversation*, March 25, 2022, <https://theconversation.com/in-egypt-where-a-meal-isnt-complete-without-bread-war-in-ukraine-is-threatening-the-wheat-supply-and-access-to-this-staple-food-179361>.

products, its pharmaceutical industry is still highly dependent on both the import of raw materials and on FDI. It is therefore hardly tenable to claim that Egypt's pharmaceutical industry is truly self-sufficiency. Neither is there evidence to be found that its dependencies will soon be overcome. Moreover, as Egypt aims at becoming a regional pharmaceutical production hub, it remains part of the GVC. This in turn creates new dependencies on buyers.

This research used mixed methods to explore the developments in the politics and economics of Egypt's pharmaceutical industry during President Al-Sisi's term. The analysis of official documents, statistics and newspaper items was supported by in-depth interviews with five Egyptians that work in Egypt's pharmaceutical industry. Even if it only entailed a very limited number of participants, the in-depth interviews have been pivotal in directing this research topic and in creating an informed understanding. As these five interviewees engage with Egypt's pharmaceutical industry and health sector on a daily basis, and as they are also part of Egyptian society, these five people initially had a much better idea of which developments have been of importance to the pharmaceutical industry, and know-how of its practices. By sharing their insights and thoughts, the interviewees have among other things brought the narrative of self-sufficiency to my attention. Furthermore, Adil's disclosure on the specifics of import regulations is something that is only known to insiders of the industry. However, as he is the only person I interviewed about this topic, it is not very solid information. As it was aligned with official statements conveyed in state-owned newspapers, I decided to include Adil's observation in my research. However, it would be interesting to further explore import regulation practices by interviewing more people to see if other people working in the industry have similar experiences and observations, thereby creating a complete picture. This also applies to the other topics discussed in the interviews, such as how medicine shortages are detected (mentioned by Mariam), and how exactly the financial positions of patients determine their medicine access (mentioned by Bilal). Other topics that require further investigation are the role of the medicine distribution centers in the trade of medicine, the role of big national pharmaceutical firms such as EVA, and the global production chain of the raw materials and APIs that medicine manufacturing requires.

Above all, what demands more research is medicine access. By approaching medicine access from a political economy view, this research has shown that

medicine access is something that can be facilitated or obstructed. Medicine access is not random, or simply the result of market forces, but it is the consequence of policy. As this case study has shown, medicine supply does not equal medicine access, because it does not guarantee affordability and availability for all. In order for supply to translate into access, medicine has to be priced fairly and distributed equitably. A dilemma that has been slumbering around the background of this research and that I have not been able to solve is the matter of price affordability. As this research showed, price controls may not always be the best outcome as they may enhance profit losses that lead to medicine shortages. Since raw materials need to be imported, it seems impossible for the Egyptian government to control fully price rises. A solution could be to further subsidize medicine, but as Egypt lacks capital, that does not appear to be a sustainable solution. And so, I highly encourage anyone who would like to further investigate this topic.

Bibliography

- Abdelgafar, Basma I. "Implications of the WTO-TRIPS Agreement from a National Innovation Systems Perspective: The Pharmaceutical Industry in Egypt." PhD diss., Carleton University, 2003.
- Abdelgafar, Basma I. *The Illusive Trade-off: Intellectual Property Rights, Innovation Systems, and Egypt's Pharmaceutical Industry*. Toronto: University of Toronto Press, 2006.
- Abul-Magd, Zeinab. *Militarizing the Nation: The Army, Business, and Revolution in Egypt*. New York: Columbia University Press, 2017.
- Abu-Lughod, Lila. "Zones of Theory in the Anthropology of the Arab World." *Annual Review of Anthropology* 18 (1989), 267-306.
- Abu-Odeh, Lama. "On Law and the Transition to Market: The Case of Egypt." *International Journal of Legal Information* 37, no. 1 (March 2009), 59-88.
- Abu Zaid, Mohammed. "Egypt Produces 30m Doses of Vaccera-Sinovac Vaccine." *Arab News*, August 31, 2021.
<https://www.arabnews.com/node/2029116/middle-east>.
- Ahram Online. "Egypt on Path to Achieve Self-Sufficiency in Oil Products by 2023: Cabinet." March 14, 2021.
<https://english.ahram.org.eg/NewsContent/3/12/405986/Business/Economy/Egypt-on-path-to-achieve-selfsufficiency-of-oil-pr.aspx>.
- Appadurai, Arjun. "Theory in Anthropology: Center and Periphery." *Comparative Studies in Society and History* 28, no. 2 (April 1986): 356-61.
- Al-Aees, Shaimaa. "Industry Ministry Inaugurates 'Proudly Made in Egypt' Campaign." *Daily News Egypt*. Published August 2, 2016.
<https://dailynewsegypt.com/2016/08/02/industry-ministry-inaugurates-proudly-made-egypt-campaign/>.
- Al-Arabiya. "Egypt's Military to Enter Pharmaceutical Industry." Published January 23, 2017. <https://english.alarabiya.net/News/middle-east/2017/01/23/Egypt-s-military-to-enter-pharmaceutical-industry>
- Al-Monitor. "Will Egypt's Military Corner the Coronavirus Market?" April 2, 2020.
<https://www.al-monitor.com/originals/2020/04/egypt-army-selling-medical-masks-shortage-coronavirus.html>.
- Alshinawi, Arsalan A. H. "The Continuous Relevance of the Nation-State: The Political Economy of the Pharmaceutical Industry in Egypt." PhD diss., Radboud Universiteit, 2008.

- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso, 2006.
- Aslan, Omer. "The Egyptian Army During the COVID-19 Pandemic." *Al Sharq Strategic Research*, October 1, 2022.
<https://research.sharqforum.org/2020/10/01/the-egyptian-army/>.
- Associated Press in Cairo. "Egypt Devalues Currency by 48% to meet IMF demands for \$12bn loan." *The Guardian*. Published November 3, 2016.
<https://www.theguardian.com/world/2016/nov/03/egypt-devalues-currency-meet-imf-demands-loan>.
- Azab, Ahmed. "The Regulatory Framework of the Pharmaceutical Sector in Egypt: Challenges and Advances." American University in Cairo. Published April 20, 2021. <https://aps.aucegypt.edu/en/articles/684/the-regulatory-framework-of-the-pharmaceutical-sector-in-egypt-challenges-and-advances>
- Aziz, Sahar. "Linking Intellectual Property Rights in Developing Countries with Research and Development, Technology Transfer and Foreign Direct Investment Policy: A Case Study of Egypt's Pharmaceutical Industry." *ILSA Journal of International & Comparative Law* 10, no. 1 (2003), 1-34.
- Bahgat, Hossam and Rebecca Wright. "Access to Medicines in Egypt: A Human Rights Approach to IP, Trade and Health." In *Access to Knowledge in Egypt: New Research on Intellectual Property, Innovation and Development*, edited by Nagla Rizk and Lea Shaver, 56-92. London: Bloomsbury Academic, 2010.
- Barnes, Jessica. "In Egypt, Where a Meal Isn't Complete Without Bread, War in Ukraine Is Threatening the Wheat Supply and Access to Staple Food." *The Conversation*, March 25, 2022. <https://theconversation.com/in-egypt-where-a-meal-isnt-complete-without-bread-war-in-ukraine-is-threatening-the-wheat-supply-and-access-to-this-staple-food-179361>.
- Barua, Suborna. "COVID-19 Pandemic and World Trade: Some Analytical Notes." *Social Science Research Network*, April 16, 2020.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3577627.
- Baylis, John Steve Smith and Patricia Owens, ed. "Introduction." In *The Globalization of World Politics: An Introduction to International Relations*. Edited by John Baylis, Steve Smith and Patricia Owens, 2-13. New York: Oxford University Press, 2011.
- Bhusal, Major K. "The World After COVID-19: An Opportunity for a New Beginning." *International Journal of Scientific and Research Publications* 10, no. 5 (May 2020): 735-41.
- Boas, Taylor. "Anthony Giddens Discusses the Globalization Debate." Carnegie Endowment for International Peace. Published July 5, 2000.
<https://carnegieendowment.org/2000/07/05/anthony-giddens-discusses-globalization-debate-pub-8655>.

- Bromley, Simon and Ray Bush. "Adjustment in Egypt? The Political Economy of Reform." *Review of African Political Economy* 21, no. 60 (June 1994), 201-13.
- Caldwell, Bruce. "Of Positivism and the History of Economic Thought." CHOPE Working Paper no. 2012-09 (November 2012).
<https://hope.econ.duke.edu/sites/hope.econ.duke.edu/files/Of%20History%20of%20Economic%20Thought%20final.pdf>
- Cambridge University Press. "IJMES Translation and Transliteration Guide." Accessed April 15, 2022.
<https://www.cambridge.org/core/journals/international-journal-of-middle-east-studies/information/author-resources/ijmes-translation-and-transliteration-guide>.
- Cleveland, William L. and Martin Bunton. *A History of the Modern Middle East*. London: Routledge, 2016.
- Cohen, Benjamin J. *International Political Economy: An Intellectual History*. Princeton: Princeton University Press, 2021.
- Costa-Font, Joan, Gilberto Turati and Alberto Batinti. *The Political Economy of Health and Healthcare: The Rise of the Patient Citizen*. Cambridge: Cambridge University Press, 2020.
- Cox, Robert. "Beyond Empire and Terror: Critical Reflections on the Political Economy of World Order." *New Political Economy* 9, no. 3 (2004): 307-23.
- Davies, Matt and Michael Niemann. "The Everyday Spaces of Global Politics: Work, Leisure, Family." *New Political Science* 24, no. 4 (December 2002): 557-77.
- Deere, Carolyn. *The Implementations Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries*. Oxford: Oxford University Press, 2009.
- Drugs. "Inactive Ingredients." Accessed April 20, 2022.
<https://www.drugs.com/inactive/>.
- Egypt Independent. "Sisi Orders Imports of 146 Unavailable Medications Subsidized by National Company." November 17, 2016.
<https://egyptindependent.com/sisi-orders-imports-146-unavailable-medications-subsidized-national-company/>.
- Egypt Independent. "Video: Egyptian Armed Forces Lead Fight Against Coronavirus." March 19, 2020. <https://egyptindependent.com/video-egyptian-armed-forces-lead-fight-against-coronavirus/>.
- Egypt Today. "Egypt's President Inaugurates Gypto Pharma City, Gets Briefed on Pharmaceuticals Status." April 1, 2021.

<https://www.egypttoday.com/Article/1/100389/Egypt-s-president-inaugurates-Gypto-Pharma-City-gets-briefed-on>.

Egypt Today. “Egyptian Embassy in Beijing Hosts Signing of Cooperation Deal to Establish Vaccine Complex in Egypt.” *Egypt Today*, January 19, 2022. <https://www.egypttoday.com/Article/1/112009/Egyptian-Embassy-in-Beijing-hosts-signing-of-cooperation-deal-to>

Egypt Today. “Health Ministry Supplies 25k Anti-RH Injections to Ease the Shortage.” March 6, 2017. <https://www.egypttoday.com/Article/12/3559/Health-Ministry-supplies-25k-anti-RH-injections-to-ease-shortage>.

Egyptian Gazette, “Manufacturing Medicines Element of National Security,” April 1, 2021, <https://egyptian-gazette.com/egypt/manufacturing-medicines-element-of-national-security/>

Eichensehr, Kristen E., ed. “Biden Administration Reengages with International Institutions and Agreements.” *American Journal of International Law* 115, no. 2 (April 2021): 323-9.

El-Behary, Hend. “Egyptian Patients Scream Amid Life-Saving Drug Shortages.” *Egypt Independent*. November 21, 2016. <https://egyptindependent.com/egyptian-patients-scream-amid-life-saving-drug-shortages/>.

El Shinnawy, Azza. “Understanding the Impact of Protection on Manufacturing Efficiency Levels and Relative Pharmaceutical Prices Evidence from Egypt’s Generics Pharmaceutical Industry (1993-2008).” PhD Diss., London School of Economics and Political Science, 2012.

Encyclopedia Britannica, “infitāḥ,” Egyptian History, accessed on March 30, 2022, <https://www.britannica.com/event/infitah>.

Eriksen, Thomas Hylland. *Small Places, Large Issues: An Introduction to Social and Cultural Anthropology*. London: Pluto Press, 2001.

Fahim, Kareem. “Egyptians denounce President Sisi in Biggest Rally in 2 Years.” *New York Times*. April 15, 2016. <https://www.nytimes.com/2016/04/16/world/middleeast/cairo-protesters-denounce-egyptian-president-sisi.html>.

Fahmy, Khaled. *In quest of Justice: Islamic Law and Forensic Medicine in Modern Egypt*. Oakland: University of California Press, 2018.

Farid, Sonia. “Why Is Egypt’s Military Entering the Pharmaceutical Industry?” *Al Arabiya*. February 2, 2017. <https://english.alarabiya.net/features/2017/02/02/Why-is-Egypt-s-military-entering-the-pharmaceutical-industry->.

- Fasseeh, Ahmad, Baher El Ezbawy, Wessam Adly, Rawda El Shahawy, Mohsen George, Sherif Abaza, Amr El Shalakani and Zoltán Kaló. "Healthcare Financing in Egypt: A Systematic Literature Review." *Journal of the Egyptian Public Health Association* 97, no. 1 (January 2022): 1-12.
- Fawcett, Louise. *International Relations of the Middle East*. Oxford: Oxford University Press, 2013.
- Gaballa, Arwa and Eric Knecht. "Currency Drop Hits Egypt's Medicine Supplies, Angering Public." *Aswat Masriya*. November 22, 2016. <http://en.aswatmasriya.com/news/details/18051>
- Ganor, Boaz and Miri Wernli. "The Infiltration of Terrorist Organizations into the Pharmaceutical Industry: Hezbollah as a Case Study." *Studies in Conflict and Terrorism* 36, no. 9 (September 2013): 699-712.
- Geferri, Gary. *The Pharmaceutical Industry and Dependency in the Third World*. Princeton: Princeton University Press, 2017.
- Giddens, Anthony. *The Consequences of Modernity*. Cambridge: Polity Press, 1990.
- Gill, Stephen and David Law. *The Global Political Economy: Perspectives, Problems, and Policies*. Baltimore: John Hopkins University Press 1988.
- Gilpin, Robert. *The Political Economy of International Relations*. Princeton: Princeton University Press, 1987.
- Glick-Schiller, Nina and Andreas Wimmer. "Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences." *Global Networks* 2, no.4 (2002), 301-34.
- Gomaa, Ahmed. "Egypt Opens Mega Pharmaceutical City." *Al-Monitor*. April 10, 2021. <https://www.al-monitor.com/originals/2021/04/egypt-opens-mega-pharmaceutical-city>.
- Grifols. "Strategic Alliance between Grifols and the Egyptian Government to Boost Plasma-derived Medicines Self-sufficiency in the Middle East and Africa." Newsroom. Last modified November 24, 2020. <https://www.grifols.com/en/view-news/-/news/strategic-alliance-between-grifols-and-the-egyptian-government-to-boost-plasma-derived-medicines-self-sufficiency-in-the-middle-east-and-africa-1>.
- Haakonsson, Stine J. "The Changing Governance Structures of the Global Pharmaceutical Value Chain." *Competition & Change* 13, no. 1 (March 2009), 75-95.
- Hafez, Tamer. "Import Restrictions Draw Mixed Reviews." American Chamber of Commerce in Egypt. Last modified February, 2016. <https://www.amcham.org.eg/publications/business-monthly/issues/242/February-2016/3404/import-restrictions-draw-mixed-reviews>.

- Haley, Donald R. and Sama A. Bég. "The Road to Recovery: Egypt's Healthcare Reform." *The International Journal of Health Planning and Management* 27, no.1 (June 2011), e83-e91.
- Hayes, Adam. "Egyptian Pound (EGP)." Investopedia. Last updated on October 20, 2021. <https://www.investopedia.com/terms/e/egp.asp>.
- Hinnebusch, Raymond A. *Egyptian Politics under Sadat: The Post-populist Development of an Authoritarian-modernizing State*. Cambridge: Cambridge University Press, 1985.
- Hirst, Paul and Grahame Thompson. *Globalization in Question*. Cambridge: Polity Press, 2009.
- Hosni, Samir. "al-ra'īs al-sīsī: nastahdif taḥqīq al-iktifā' al-dhātā li-l-sūq al-muḥalā." Youm7. Published December 25, 2021. <https://www.youm7.com/story/2021/12/25/5593124/الرئيس-السيسي-نستهدف-تحقيق-الاكتفاء-الذاتي-للسوق-المحلى>
- Ikram, Khalid. *The Egyptian Economy, 1952-2000: Performance Policies and Issues*. New York: Routledge, 2006.
- Jaafari, Deema S. "Pharmaceutical Patents in Jordan." *The Journal of World Intellectual Property* 15, no. 4 (2012): 239-50.
- Kaldas, Timothy E. "Egypt's Next IMF Loan: How to Avoid the Failures of the Past Six Years." *The Tahrir Institute for Middle East Policy*, July 6, 2022. <https://timep.org/commentary/analysis/egypts-next-imf-loan-how-to-avoid-the-failures-of-the-past-six-years/>.
- Kamphuis, Bregtje W. and Panos Kanavos. "Assessing Pricing and Reimbursement Policies for Generic Pharmaceuticals in the MENA Region for Improved Efficiency, Affordability and Generic Penetration." *Health Policy OPEN* 2, no. 100045 (December 2021), 1-10.
- Kandil, A. "Pharmaceutical Industry and Legislation in Egypt – Historical Perspectives and Current Practice." *Journal of Clinical Pharmacy and Therapeutics* 14 (1989), 83-85.
- Khalid, Mahmoud. "Egypt's Expanding Military Economy." *Carnegie Middle East Center*, March 26, 2020. <https://carnegie-mec.org/sada/81376>.
- Kholaif, Dahlia and Nikhil Lohade. "Egypt Grapples With Drug Shortage Brought On by Currency Devaluation." *The Wall Street Journal*. December 11, 2016, <https://www.wsj.com/articles/egypt-grapples-with-drug-shortage-brought-on-by-currency-devaluation-1481452381>.
- Kotb, Ahmed. "Better Regulation on Import?" *Ahram Online*, February 28, 2022. <https://english.ahram.org.eg/News/461593.aspx>.

- Lanoszka, Anna. "The Global Politics of Intellectual Property Rights and Pharmaceutical Drug Policies in Developing Countries." *International Political Science Review* 24, no. 2 (2003), 181-197.
- Lasswell, Harold. *Politics: Who Gets What, When, How*. New York: Whittlesey House, 1936.
- Legrain, Philippe. "The Coronavirus is Killing Globalization as We Know It." *Foreign Policy*, March 12, 2020.
<https://foreignpolicy.com/2020/03/12/coronavirus-killing-globalization-nationalism-protectionism-trump/>.
- Levitt, Theodore. "The Globalization of Markets." *Harvard Business Review*. Accessed April 15, 2022. <https://hbr.org/1983/05/the-globalization-of-markets>.
- Lynch, Julia. *Regimes of Inequality: The Political Economy of Health and Wealth*. Cambridge: Cambridge University Press, 2020.
- Magdy, Mirette and Eric Martin. "Egypt in IMF Talks on Possible Funding Amid War Pressures." Bloomberg. Published March 17, 2022.
<https://www.bloomberg.com/news/articles/2022-03-17/egypt-in-imf-talks-on-possible-funding-as-war-pressures-economy>.
- Malkawi, Bashar H. "Patent Protection and the Pharmaceutical Industry in Jordan." *Asian Journal of WTO & International Health Law Policy* 4, no. 1 (March 2009): 93-127.
- Marx, Karl. *Capital Volume I*. Translated by Ben Fowkes. London: Penguin Books, 1990.
- Maskus, Keith E. "The International Regulation of Intellectual Property." *Weltwirtschaftliches Archiv* 134, no. 2 (1998): 186-208.
- Media Ownership Monitor. "Ahram Gate." Egypt. Accessed May 3, 2022.
<https://egypt.mom-rsf.org/en/media/detail/outlet/ahram-gate/>.
- Media Ownership Monitor. "Egyptian Media Group." Egypt. Accessed May 30, 2022.
<https://egypt.mom-rsf.org/en/owners/companies/detail/company/company/show/egyptian-media-group/>.
- Middle East Monitor. "Egypt's Military Given Green Light to Own Pharmaceutical Company." January 23, 2017.
<https://www.middleeastmonitor.com/20170123-egypts-military-given-green-light-to-own-pharmaceutical-company/>.
- Mishra, Veena. "TRIPS, Product Patents and Pharmaceuticals." *Economic and Political Weekly* 36, no. 48 (December 2001): 4464-7.

- Mohamed, Fatma. "al-sīsī: jadārat muntajāt al-dawā' al-mašriyya yujib 'an takūn 100% wa laysa 99,9%." *Al-Masry Al-Youm*, April 1, 2021. <https://www.almasryalyoum.com/news/details/2301486>.
- Momani, Bessma. "Egypt's IMF Program: Assessing the Political Economy Challenges." *Brookings*, January 30, 2018. <https://www.brookings.edu/research/egypts-imf-program-assessing-the-political-economy-challenges/>.
- Mortada, Farida H. "Egypt's Pharmaceuticals – Tripping Over TRIPS?." The American University of Cairo. Accessed January 6, 2022. <https://www.auc.edu/auc-academics/core-curriculum/egypt%25E2%2580%2599s-pharmaceuticals-%25E2%2580%2593tripping-over-trips>.
- Murray, Devon. "Devaluation: Why Now and What Next?" *The American University in Cairo*, March 29, 2022, <https://www.aucegypt.edu/news/devaluation-why-now-and-what-next>.
- O'Brien, Robert and Marc Williams. *Global Political Economy: Evolution & Dynamics*. London: Palgrave, 2016.
- Othman, Mohamed S.E. "Gypto Pharma: The City of Medicine." *Ahram Online*, July 13, 2021. <https://english.ahram.org.eg/NewsContent/3/12/417124/Business/Economy/Gypto-Pharma-The-city-of-medicine-.aspx>.
- Pfeifer, Karen. "How Tunisia, Morocco, Jordan and even Egypt became IMF 'Success Stories' in the 1990s," *Middle East Report* 29, no. 210 (April 1999), 23-27.
- Pharmaceutical Technology. "Top 10 Pharma Companies." Last modified January 19, 2022. <https://www.pharmaceutical-technology.com/features/top-ten-pharma-companies-in-2020/>.
- Posen, Adam S. "The Post-American World Economy: Globalization in the Trump Era." *Foreign Affairs*, March 1, 2018. <https://heinonline.org/HOL/P?h=hein.journals/fora97&i=246>.
- Ray, Larry. *Globalization and Everyday Life*. New York: Routledge, 2008.
- Rikap, Cecilia. "Asymmetric Power of the Core: Technological Cooperation and Technological Competition in the Transnational Innovation Network of Big Pharma." *Review of International Political Economy* 26, no.5 (2019), 987-1021.
- Rubinstein, Robert A. "'Breaking the Bureaucracy': Drug Registration and Neocolonial Relations in Egypt." *Social Science & Medicine* 46, no. 11 (1998), 1487-94.
- Saad, Abeer A. "Drug Shortage in Egypt: Causes and Mitigation Measures." MA thesis, The American University of Cairo, 2013.

- Sabry, Mohamed. "Egypt plans 'New Delta' to Boost Food Security." *Al-Monitor*. Published April 6, 2021. <https://www.al-monitor.com/originals/2021/04/egypt-plans-new-delta-boost-food-security>.
- Sadek, Rasha. "Gypto Pharma Will Transform Egypt to a Pharmaceutical Regional Hub: Chairman of Medine City." *Ahram Online*. October 16, 2021. <https://english.ahram.org.eg/News/429019.aspx>.
- Said, Edward W. *Orientalism*. London: Penguin Books, 2003.
- Saied, Mohamed. "Why Can't Egyptians Get the Medicines They Need?" *Al-Monitor*. November 28, 2016. <https://www.al-monitor.com/originals/2016/11/egypt-acute-drug-shortage-pharmacy-companies-import.html>
- Salem, Nourhan M. A. Mohamed A. Elbarrawy and Nashwa F. A. Azzam, "Microbiological Quality of Non-sterile Pharmaceuticals in Egypt," *Beni-Suef University Journal of Basic and Applied Sciences* 10, no. 1 (June 2021): 1-6.
- Salem, Sara. "Haunted Histories: Nasserism and the Promises of the Past." *Middle East Critique* 28, no. 3 (2019), 261-77.
- Salem, Sara. *Anticolonial Afterlives in Egypt: The Politics of Hegemony*. Cambridge: Cambridge University Press, 2020.
- Samir, Samar. "Food Security: How Did Egypt Achieve Self-Sufficiency in Vegetables, Fruits?" *Egypt Today*, May 15, 2022. <https://www.egypttoday.com/Article/1/115852/Food-Security-How-did-Egypt-achieve-self-sufficiency-in-vegetables>.
- Santoro Michael A. and Thomas M. Gorrie, ed. *Ethics and the Pharmaceutical Industry*. Cambridge: Cambridge University Press, 2005.
- Sayed, Nawal. "Gypto Pharma... Facts You Must Know About Egypt's Medicine City." *Sada ElBalad*, April 1, 2021. <https://see.news/gypto-pharma-facts-you-must-know-egypts-medicine-city/>.
- Sayigh, Yezid. "Retain, Restructure, or Divest? Policy Options for Egypt's Military Economy." *Carnegie Middle East Center*, January 31, 2022. <https://carnegie-mec.org/2022/01/31/retain-restructure-or-divest-policy-options-for-egypt-s-military-economy-pub-86232>.
- Shiva, Vandana. *Protect or Plunder? Understanding Intellectual Property Rights*. London: Zed Books, 2001.
- Skousen, Mark. "Whatever Happened to the Egyptians?" in *EconoPower: How a New Generation of Economists Is Transforming the World*. Hoboken: John Wiley & Sons, Inc., 2008.
- Smierciak, Sarah. "Introduction: The Evolution of Military Rule in Egypt." In *Routledge Handbook on Contemporary Egypt*, edited by Robert Springborg, et al., 81-94. London: Routledge, 2021.

- Smith, Adam. *The Wealth of Nations Books I-III* (London: Penguin Books, 1999).
- Solomon, Ty and Brent J. Steele. "Micro-moves in International Relations Theory." *European Journal of International Relations* 23, no. 2 (2017): 267-91.
- Spero, Joan E. *The Politics of International Economic Relations*. New York: St. Martin's Press, 1977.
- Springborg, Robert. *Mubarak's Egypt: Fragmentation of the Political Order*. New York: Routledge, 2018.
- Strange, Susan. "International Economics and International Relations: A Case of Mutual Neglect." *International Affairs (Royal Institute of International Affairs 1944-)* 46, no.2 (April 1970): 304-315.
- Tyfield, David. Enabling TRIPs: The Pharma-Biotech-University Patent Coalition." *Review of International Political Economy* 15, no.4 (2008), 535-66.
- Wanis, Heba. "Agreement on Trade-Related Aspects of Intellectual Property Rights and Access to Medication: Does Egypt Have Sufficient Safeguards Against Potential Public Health Implications of the Agreement." *The Journal of World Intellectual Property* 13, no.1 (2010), 24-46.
- Heba Wanis, "Pharmaceutical Pricing in Egypt," in *Pharmaceutical Prices in the 21st Century*, edited by Zaheer-Ud-Din Babar, 59-78. Auckland: Adis, 2015.
- Waterbury, John. *The Egypt of Nasser and Sadat: The Political Economy of Two Regimes*. Princeton: Princeton University Press, 1983.
- Yu, Peter K. "From Pirates to Partners: Protecting Intellectual Property in Post-WTO China," *The American University Law Review* 55, no. 4 (April 2006): 901-1000.

Other sources

- Arab Republic of Egypt General Authority for Investment and Free Zones. "2030 Outlook." Pharmaceutical and Medical Industries, accessed January 3, 2022. <https://www.investinegypt.gov.eg/english/pages/sector.aspx?SectorId=96>.
- Arab Republic of Egypt General Authority for Investment and Free Zones. "Key Performance Indicators (KPIs)." Pharmaceutical and Medical Industries. Accessed January 3, 2022. <https://www.investinegypt.gov.eg/english/pages/sector.aspx?SectorId=96>.
- Arab Republic of Egypt General Authority for Investment and Free Zones. "About." Pharmaceutical and Medical Industries. Sccessed January 3, 2022. <https://www.investinegypt.gov.eg/english/pages/sector.aspx?SectorId=96>

Central Bank of Egypt, “Publications,” Economic Research, accessed January 3, 2022. <https://www.cbe.org.eg/en/EconomicResearch/Publications/Pages/MonthlyStatisticalBulletin.aspx>.

Central Bank of Egypt. “Exchange Rates Historical – 01/06/2016 to 01/06/2017,” Accessed May 15, 2022. <https://www.cbe.org.eg/en/EconomicResearch/Statistics/Pages/ExchangeRatesHistorical.aspx>.

China Chamber of Commerce for Import and Export of Medicines and Health. “Chinese API Industry Is in the Change (II).” Last modified on July 16, 2019. <http://en.cccmhpie.org.cn/Web/Content.aspx?queryStr=w7x1X10x16x0X10x1603w8w1u9v1u9v2v3v5z8w7x08q7x15x1503w8w1v3v1z8p0w7x08q7x15x1503w8w1v2v7>.

Egyptian Ministry of Trade and Industry, “Quality Seal ‘Proudly Made in Egypt’,” Industrial Modernisation Centre, accessed April 30, 2022, <http://www.imc-egypt.org/index.php/en/component/k2/item/229-madeinegypt-en>.

European Medicines Agency, “Availability of Medicines During COVID-19 Pandemic.” Human Regulatory. Accessed April 18, 2022. <https://www.ema.europa.eu/en/human-regulatory/overview/public-health-threats/coronavirus-disease-covid-19/availability-medicines-during-covid-19-pandemic>.

Gypto Pharma. “Who We Are.” Accessed January 2, 2022. <http://www.gyptopharma.com>.

Gypto Pharma. “Otsuka Partnership.” Accessed January 2, 2022. <http://104.248.126.35/otsuka-gypto/>

International Monetary Fund. “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 – Press Release; Staff Report; And Statement by the Executive Director for the Arab Republic of Egypt.” IMF Country Report No. 17/290 (September 2017).

International Monetary Fund. “Inflation Rate, Average Consumer Prices (Annual Percent Change).” Arab Republic of Egypt, Country Data. Accessed May 7, 2022. <https://www.imf.org/en/Countries/EGY#countrydata>.

International Monetary Fund. “A Chance for Change: IMF Agreement to Help Bring Egypt’s Economy to Its Full Potential.” IMF News. Last modified November 11, 2016, <https://www.imf.org/en/News/Articles/2016/11/11/NA111116-A-Chance-For-Change-Egypt>.

Ministry of Defense. “The National Service Projects Organization (NSPO) Signs a Strategic Partnership Agreement with the Spanish Pharmaceutical Company, Grifols.” Armed Forces News. Last modified November 25, 2020. <https://www.mod.gov.eg/modwebsite/NewsDetails.aspx?id=40523>.

World Trade Organization “Agreement on Trade-Related Aspects of Intellectual Property Rights as Amended by the 2005 Protocol Amending the TRIPS Agreement.” Article 7. Accessed April 25, 2022.
https://www.wto.org/english/docs_e/legal_e/trips_e.htm#art7