



COUNTRY PRIVATE SECTOR DIAGNOSTIC

CREATING MARKETS IN EGYPT

Realizing the full potential of a productive private sector

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ABBREVIATIONS AND ACRONYMS

ADSL	Asymmetric Digital Subscriber Line
AEO	Authorized Economic Operator
AMIC	Automotive Marketing Information Council
AMICA	Moroccan Association for Automotive Industry & Trade
AOI	Arab Organization for Industry
ARPU	Average Revenue per User
BOOT	Build, Own, Operate and Transfer
CAGR	Compound Annual Growth Rate
CAIX	Cairo Internet Exchange Point
CAPEX	Capital Expenditures
CAPMAS	Central Agency for Public Mobilization and Statistics
CATGO	Cotton Arbitration & Testing General Organization
CBE	Central Bank of Egypt
CBU	Completely Built-up Units
CIA	Cairo International Airport
CICH	Chemical Industries Holding Company
CIT	Corporate Income Tax
CKD	Completely Knocked-down
COMESA	Common Market for Eastern and Southern Africa
COVID	Coronavirus Disease
CPD	Continuous Professional Development
CPO	Charge Point Operator
CPSD	Country Private Sector Diagnostic
CV	Commercial Vehicles
DB	Doing Business
DE-CIX	Deutscher Commercial Internet Exchange
EA	Economic Authority
EAFA	Egyptian Automotive Feeders Association
EASPMTM	Egyptian Authority for Standard Procurement and Medical Technology Management
EBRD	European Bank for Reconstruction and Development
ECA	Egyptian Competition Authority
ECHEM	Egyptian Petrochemicals Holding Company
EDA	Egyptian Drug Authority
EEHC	Egyptian Electricity Holding Company
EGAS	Egyptian Natural Gas Holding Company
EGP	Egyptian Pound
EGPC	Egyptian General Petroleum Corporation
EHCAAN	Egyptian Holding Company for Airports and Air Navigation
ELS	Extra Long Staple
ENR	Egypt National Railways
EOS	Egyptian Organization for Standardization and Quality
ERA	Egyptian Railways Authority

EU	European Union
EV	Electric Vehicle
FAO	Food and Agriculture Organization
FAOSTAT	Food and Agriculture Organization Statistics
FCA	Fiat Chrysler Automobiles
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FTTC	Fiber to the Cabinet
GAFI	General Authority for Investment and Free Zones
GAFTA	Great Arab Free Trade Agreement
GAHAR	General Authority for Healthcare Accreditation and Regulation
GAHI	General Authority for Health Insurance
GASCO	Egyptian Natural Gas Company
GB	Gigabyte
GCC	Gulf Cooperation Council
GCMA	Greater Cairo Metro Area
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GICS	Global Industry Classification Standard
GigE	Gigabit Ethernet
GM	General Motors
GNI	Gross National Income
GOEIC	General Organization of Export and Import Control
GPT	General-Purpose Technology
GVC	Global Value Chains
GVM	Gross Vehicle Mass
HCI	Human Capital Index
HCO	Healthcare Organization
HCWW	Holding Company for Water and Wastewater
HEI	Higher Education Institutes
HS	Harmonized System
ICT	Information and Communication Technology
IDA	Industrial Development Authority
IMC	Industrial Modernization Centre
IMF	International Monetary Fund
IPO	Initial Public Offering
ISP	Internet Service Provider
IT	Information Technology
ITC	International Trade Center
ITES	Information Technology Enabled Services
ITU	International Telecommunication Union
IXP	Internet Exchange Points
JIT	Just-In-Time
LCV	Light Commercial Vehicle
LPI	Logistics Performance Index

LSCI	Liner Shipping Connectivity Index
Mbps	Megabytes per Second
MCIT	Ministry of Communications and Information Technology
MENA	Middle East and North Africa
MFN	Most-Favored Nation
MIDOR	Middle East Oil Refinery
MMF	Man-Made Fibers
MoCA	Ministry of Civil Aviation
MoD	Ministry of Defense
MOEs	Military-Owned Enterprises
MoETE	Ministry of Education and Technical Education
MoF	Ministry of Finance
MoHP	Ministry of Health and Population
MoMP	Ministry of Military Production
MoT	Ministry of Transport
MRA	Mutual Recognition Agreement
MSME	Micro, Small and Medium Enterprises
MVA	Manufacturing Value Added
NASCO	El Nasr Automotive Manufacturing Co.
NASI	National Authority for Social Insurance
NFSA	National Food Safety Authority
NPK	Nitrogen, Phosphorus, and Potassium
NPV	Net Present Value
NSPO	National Service Projects Organization
NSW	National Single Window
NTRA	National Telecom Regulatory Authority
NUCA	New Urban Communities Authority
OECD	Organization for Economic Cooperation and Development
OEM	Original Equipment Manufacturer
PC	Product Complexity
PCI	Product Complexity Index
PETROJET	Petroleum Projects & Technical Consultations Co.
PMR	Product Market Regulations
PPD	Pharmaceutical Product Development
PPP	Public-Private Partnership
PSA	Peugeot Société Anonyme
PTA	Public Transport Authority
PVC	Polyvinyl Chloride
PVTD	Productivity and Vocational Training Department
QIZ	Qualified Industrial Zone
RCA	Revealed Comparative Advantage
RMG	Ready Made Garments
RORO	Roll-on-Roll-Off
SCA	Suez Canal Authority
SCZ	Suez Canal Zone
SKD	Semi-Knocked Down

SME	Small to Medium Enterprise
SOB	State-Owned Bank
SOE	State-Owned Enterprise
SPS	Sanitary and Phytosanitary Measures
TAYSAD	Association of Automotive Parts & Component Manufacturers
TBT	Technical Barriers to Trade
TCF	Textile Consolidation Fund
TE	Telecom Egypt
TPA	Third-Party Access
TRAINS	Trade Analysis Information System
TVET	Technical and Vocational Education and Training
UAE	United Arab Emirates
UHI	Universal Health Insurance
UHIA	Universal Health Insurance Agency
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
US	United States
USD	United States Dollar
VAT	Value-Added Tax
VC	Value Chain
VDSL	Very Highspeed Digital Subscriber Line
VW	Volkswagen
WB	World Bank
WBES	World Bank Enterprise Survey
WBG	World Bank Group
WDI	World Development Indicators
WITS	World Integrated Trade Solution
WRTR	Wholesale, Retail, Trade and Repair
WTO	World Trade Organization
YTD	Year to Date

EXECUTIVE SUMMARY

REALIZING THE FULL POTENTIAL OF A PRODUCTIVE PRIVATE SECTOR IS CRITICAL FOR JOBS AND ECONOMIC INCLUSION IN EGYPT

Following a successful and hard-earned macroeconomic stabilization, Egypt's economy is at a turning point. In 2016, following several years of political instability and exposure to domestic and external shocks, Egypt launched a bold and important reform program to improve macroeconomic stability, restore confidence in the economy and enhance socioeconomic conditions. The exchange rate was liberalized, and a sizable fiscal consolidation was undertaken. A series of new laws were adopted to improve the legislative framework and address long-standing challenges in the business environment. Public investment was expanded to develop or modernize road infrastructure for better connectivity and to boost supplies of electricity and gas. The adopted reforms have reflected positively on the economy with higher growth rates and narrower fiscal and external deficits, and helped resolving the foreign currency shortages that were paralyzing the economy.

The strengthened macroeconomic fundamentals have restored confidence in the economy, but the reforms have yet to trigger a marked and sustained increase in non-extractives private investment and exports. In recent years, the share of private investment in the economy has started to grow. Yet, it remains below its historical average and considerably lower than in peer countries. The large depreciation of the Egyptian pound after flotation helped improve the trade deficit, but export competitiveness remains weak and export proceeds are well below those of comparator countries. The number of exporting firms is critically low (only 9 percent of manufacturing firms export directly),¹ with wide spatial disparities in the firms' engagement in exporting (see section 1.2 on the Private Sector Landscape).

Egypt's participation in global value chains (GVCs) is also low compared to its peers², as exports are mainly centered around primary commodities and less sophisticated products. Moving upstream to higher value-added complex manufacturing activities in Egypt is hindered by the cost and lack of availability and quality of critical inputs and technology and efficient transport and logistics services. Consequently, despite Egypt's growing domestic market and proximity to international markets, Egypt is yet to attract strong FDI inflows aiming to harness either its large domestic market or to connect Egypt in the GVC-based international trade that is impactful in reducing poverty and creating productive jobs.

The COVID-19 pandemic and its disruptive repercussions are intensifying many of the above-mentioned challenges and creating new ones. At the macroeconomic level, fiscal targets and external balances are being affected by the slowdown in economic growth, increased spending on health and social protection, and lower tax revenues. The drop in essential sources of foreign currency, notably from tourism, Suez Canal revenues, and remittances from the oil-exporting countries of the Gulf Cooperation Council (GCC) will worsen the country's external position, at least in the near-term. Financing needs have increased, putting upward pressure on the elevated government debt. Many firms are also affected by shocks to both supply and demand with a negative impact on their balance sheets, and some may be pushed to bankruptcy as operations get disrupted and demand contracts. Informal firms and workers are particularly vulnerable, with few buffers to protect them from health and income shocks. To mitigate the outbreak's effects, the government has undertaken several measures, including a large cut in key policy interest rates, deferred tax payments for affected sectors and expanded coverage of social assistance to vulnerable groups.

Pre-existing structural challenges were exacerbated by the COVID-19 pandemic. Private investment is picking up but remains below the historical average. The underperformance of critical foreign income-earning activities (exports and FDI) and rampant informality contribute to high unemployment and underemployment. An estimated 800,000 graduates enter the job market every year, yet the employment rate among working-age people fell from 44.2 to 38.9 percent between 2010 and 2019. It has further declined to 35 percent in the second quarter (Q2) of 2020 (CAPMAS, Quarterly Labor Force Survey). Unemployment had declined to 8 percent prior to the crisis but has increased to 9.6 percent in Q2-2020. Female and youth unemployment are significantly higher, at 20 and 27 percent respectively, as of end-2019. A significant share of the private sector is informal,³ and much of the informal sector operates without any fixed business premises and work in jobs that provide low pay and lack of a productivity ladder. Growth and jobs are key to improving people's incomes and alleviating poverty, which had reached 32.5 percent in 2017/2018—with striking geographical variations.

Despite these challenges, the COVID-19 crisis reveals priorities for advancing the reform agenda in support of reaching the country's fundamental development goals. For instance, the crisis is demonstrating how critical is the availability of information and communication technology (ICT) services to support the work of frontline health and government workers and to mitigate the economic impact of social distancing measures. Teleworking has become vital to maintaining essential government services, allowing businesses to continue to operate, and enabling students to continue to obtain an education. Existing efforts to strengthen the digital infrastructure for teaching and learning and to facilitate the transition to distance learning can be accelerated with faster and more reliable internet service. In agribusiness, the supply chain could be strengthened and export capacity enhanced, by removing trade barriers and distortions such as import bans, and improving the adoption of food standards and certification to enable the country to be more food secure. In health care, the government could develop local supply chains for health equipment and accelerate private sector participation in diagnostics and testing, efforts which would need a blend of domestic and international capabilities and standards.

The Country Private Sector Diagnostic (CPSD) analyzes some of the challenges Egypt continues to face, and highlights opportunities for private sector-led economic development, investment and job-creating growth. Extensive consultations held with experts, private sector stakeholders, and development partners have identified trade and logistics, the role of the state, competition and commercial justice as critical areas in need of reform. The CPSD complements existing and upcoming World Bank analytics on important issues such as investment climate, access to land and access to finance.⁴ The report also assesses some of the key sectors, considering government priorities: Agribusiness, Manufacturing, and ICT. Within manufacturing, it undertakes a more disaggregated assessment for the chemicals, textiles, and automotive industries.⁵ In the Egyptian context, these sectors represent significant opportunities for growth and expansion, and global evidence suggests they can have significant impacts on an economy's employment and exports. Education and health, two key enabling sectors that have come under further pressure since COVID-19, are explored through the lens of opportunities for private sector participation.

WHAT IS HINDERING THE EMERGENCE OF THE PRIVATE SECTOR AS A COMPETITIVE FORCE?

Trade barriers due to policy and facilitation, and inadequate transport and logistics contribute to Egypt's performance in exports and FDI in non- extractive sectors. - which are highly interlinked and are both below potential. While the country has considerable potential to be a regional trade and logistics hub with easy access to major markets, the export potential at the sector level is largely impeded by a wide range of nontariff barriers. These include the cumbersome customs clearance process, poor connectivity and logistics and limited domestic competition. For instance, waste in agricultural products caused by inadequate transport facilities, insufficient bonded warehousing capacity, and weak cold-chain infrastructure is estimated at 15 to 20 percent for nonperishable crops and 25 to 50 percent for perishable crops. Trade policy also creates challenges for agribusiness, with high and sometimes unpredictable import tariffs on food products, manufacturing inputs, and instances of export duties and bans. In the textiles sector, Egyptian exports also lag behind those of comparator countries and have not reached their potential in nearby markets such as the European Union. Such tariff and nontariff barriers to exports distort incentives for local firms to compete in global markets.

In recent years, perceptions of a growing and privileged role of the State in economic activities and concerns around competing on an uneven playing field have deterred private and foreign investment. For the purpose of this report, State-owned enterprises (SOEs) are those that are controlled by the State, are legally and financially autonomous, and operate in a market for goods or services that could, in theory, be provided by a private firm. The presence of SOEs in almost every sector feeds a perception of widespread activity and even overstretch, while the multitude of governing laws and ownership frameworks under which they operate makes their identification difficult and complex. In the absence of public financial information on State-controlled companies, it is difficult for investors to form an accurate understanding of their weight in the economy, their market share, and whether they operate under the same conditions as private sector firms.

Fair and efficient functioning of markets necessitates that all firms face the same set of rules, regardless of ownership. A preliminary analysis suggests that a number of regulatory gaps challenge the implementation of competitive neutrality principles in Egyptian markets. For instance, there is no obligation on SOEs to separate their commercial and noncommercial or public service activities, and no explicit requirement to generate a positive rate of return on their commercial ones, which may undercut private firms competing in the same market. Certain exemptions under the tax, competition, and procurement laws provide special privileges to public incumbents operating in key sectors and feed the perception of an uneven playing field. Although the Competition Law established key ingredients to foster competitive markets, limitations in the competition regulatory framework hinder their effective enforcement and affect the playing field.

The lack of clear separation between the State's regulatory, policy, and operational bodies in certain markets creates an inherent conflict of interest. In the ICT sector for instance, the incumbent operator Telecom Egypt (TE) - which holds a dominant market position - and the National Telecommunications Regulatory Authority (NTRA) - the regulator - operate under the oversight of the Ministry of Communications and Information Technology, which is charged with setting the policy for the whole sector. Similarly, in the maritime transport and ports sector, the absence of a clear strategy to prevent conflicts of interest of multiple functions (such as regulator and operator) creates uncertainty for potential private investors. In the chemicals industry, inefficient upstream activity by SOEs dampens the potential for private sector investment along the value chain. In agribusiness, the large State footprint—through food and fertilizer subsidies, tariff protection, export bans, and numerous SOEs—limits the room for private sector participation in certain subsectors. In the automotive sector the key hindrance in terms of the role of the State is the lack of a clear, coherent government vision and strategy for the sector and the private sector role in it.

By international comparison, the performance of the commercial justice system is relatively poor, which increases investment risks and uncertainty, and disproportionately affects smaller enterprises. Egypt suffers from weak enforcement of contracts through the court system—scoring 40 points out of 100 (World Bank 2019) which hamper both domestic and foreign businesses. The weak enforcement of contracts further compounds Egypt’s lack of a transparent, streamlined, and predictable regulatory environment. Bottlenecks include excessive delays in adjudication and enforcement of judgments, which hinder businesses’ ability to claim and enforce their rights relative to other firms and public authorities and affects their confidence in and reliance on contractual agreements. The lengthy process locks assets in litigation, affecting their productive use and leading to losses to both businesses and the economy. Weak contract enforcement also pushes larger companies toward vertical integration or deals with other large firms, thereby hindering the growth of smaller players and weakening backward and forward linkages in the economy. For micro, small, and medium enterprises (MSMEs), resorting to the courts is costly and risky, especially because the Egyptian judicial system does not provide much guidance for self-represented parties or legal aid to establish a level playing field. The COVID-19 crisis will further stress the judicial system, given the expected increase in caseloads caused by the economic downturn, such as insolvencies and debt collection disputes, labor force reduction, and entitlement to benefits.

Human capital is at the forefront of productivity-enabling sectors, as the large and young labor force must be sufficiently equipped with the necessary education, skills and health. The lack of appropriate skills in the labor force is a widely reported constraint facing businesses,⁶ indicating a large gap between educational outcomes and labor market needs. Limited investment in training, coupled with a lack of market information on skills required by employers, adversely affects the private sector’s ability to find employees with the relevant technical and life-skills, and results in extra costs for the training that they provide themselves. In the chemicals industry, for example, a significant share of jobs in plants and related services are skilled or semiskilled because the technology-driven, capital-intensive industry requires highly trained workers for operations, maintenance and for R&D. In the agriculture sector, despite a large pool of researchers at universities and institutions, investment is lacking to develop the local or specialized skills needed to cultivate and process exports.

SECTOR-SPECIFIC BARRIERS TO PRIVATE SECTOR GROWTH

Other sector-specific challenges inhibit private sector growth and job creation in key sectors. For instance, weak domestic supply chains in the agriculture/agribusiness and textiles and apparel sectors impede efficient downstream processing activity and lead to reliance on imports of intermediate inputs. Weak agricultural extension services constrain the skills and capacity of farmers and firms, and inhibit their adoption of innovative processes and ICT-enabled techniques. Lack of business information on export markets and global trends that can help firms make strategic decisions and compete internationally is cited as a key hindrance in the textiles and apparel subsector. Inefficiencies in the upstream refinery sector are a key obstacle to the expansion of critical refining byproducts which are key inputs for the downstream petrochemical sector. The automotive industry is also characterized by a highly fragmented and inefficient supplier ecosystem with limited capacity to meet international requirements. Low labor productivity due to poor technical and managerial skills is another drawback in the automotive sector, and a strong dialogue between the public and private sectors about sector strategy and vision is missing. These and other cross-cutting constraints are reflected on a heat map showing an assessment of the severity of constraints across sectors (table ES.1).

The private sector can play a role in addressing the gaps in enabling sectors but faces several constraints. Entry barriers deter investors from establishing educational institutions, whether universities or vocational colleges. For privately owned universities, community colleges, and technical and vocational training entities, the laws and regulations on establishment and registration are cumbersome. Limited investment in provision of training services, in addition to a lack of market information on skills required by employers, adversely affect the private sector's ability to find workers with the relevant technical and life skills.

As a healthy labor force remains critical for productivity, the private sector can play an important complementary role in addressing health services needs. Health outcomes have improved over the past three decades, but access and quality gaps persist, and the emerging challenge of noncommunicable diseases is poorly addressed. Public spending on health remains low, and the country faces a shortage of important skills across several dimensions, as staff retention remains a challenge. The passing of the Universal Health Insurance Law in December 2017 offers great potential for the private sector to make an important contribution. Yet, regulatory obstacles, in addition to lengthy, cumbersome, and costly processes, impede the entry of private sector players.

KEY ACTIONS FOR THE WAY FORWARD

Egypt's overarching priorities in promoting private sector development should focus on establishing a culture of transparency and a participatory approach in policy making. The lack of intergovernmental coordination and consultation with the private sector is an overarching problem highlighted by the private sector for both economywide issues—such as trade policy formulation and facilitation, business regulations—and sector-specific strategies and regulations. Similarly, private sector players perceive an uneven playing field and unfair competition with State actors. Thus, this CPSD proposes the following overarching priority actions:

1. **Establish a Reform Committee.** To signal ownership for the second wave of reforms, the government should put in place a reform committee with inclusive participation from the public and private sector. Such a committee appears to be instrumental in advancing the regulatory reform agenda (including Doing Business Reform Actions) in a wide range of countries, such as Malaysia, Poland, India, Morocco and Russia. To be successful, international evidence suggests that the committee will need (a) high-level of leadership, ownership, and political support, (b) an inclusive and participatory approach involving key stakeholders from concerned government entities, the private sector, and civil society through regular public-private dialogue and regular extensive communication on the outcomes of such dialogue, and (c) a performance management and monitoring framework with concrete targets and milestones, specific actions to achieve those milestones, and results indicators to assess the progress of reforms.
2. **Develop a Transparent State Ownership Policy and Governance Framework.** In revisiting the role of the State as an enabler of private sector development, an overarching State ownership policy could usefully complement legal reforms and improve the SOE governance framework. Transparency about State economic activity could be enhanced by making available financial and operational information on SOEs to enable the private sector to make investment decisions based on a better understanding of SOEs weight in their respective sectors. Strengthening the legal framework of SOEs is another important step to enhance corporate governance and transparency. In the multitude of laws governing public enterprises, these legal reforms can first be applied to Law 203 of 1991, which governs a large number of SOEs. Ensuring that SOEs work under the same conditions as private sector firms could be done, for example, by (a) establishing the tools to separate commercial and noncommercial activities of SOEs and requiring SOEs to fully recover the cost of commercial ones; and (b) limiting exclusions and exemptions from the Competition Law and other economy-wide and sectoral regulation. It will also require a clear separation of the roles of State actors in key sectors as regulators versus operators.

3. **Improve Commercial Judicial System through Automation and Transparency.** An efficient and effective commercial judicial system is important to create a conducive business climate. Achieving such a system requires addressing the problem of delays in the processing of civil and commercial cases by improving judicial workload management, streamlining business processes, enhancing case management, and supporting enhanced business processes through automation, which will also increase transparency. Significant investments also are needed in the professionalization of human and financial resource management in courts and in the Ministry of Justice. Court user surveys can be used to generate data about users' perspectives and how to improve the efficiency, quality, and accessibility of services.
4. **Reform Trade Policy by Streamlining Tariff and Nontariff Measures, Modernizing Customs and Improving Transport Connectivity.** The growth of the private sector will remain constrained unless Egypt can harness the benefits of its geostrategic position by enhancing its export competitiveness. Key actions for reforming trade policy and facilitation measures include the following:
 - Streamline nontariff measures (NTMs) and improve transparency around them through an online registry, eliminating redundant measures and those that fail to achieve public policy goals.
 - Modernize customs by (a) enacting a new customs law and executive regulations aligned with the Revised Kyoto Convention and World Trade Organization Trade Facilitation Agreement; (b) automating customs, simplifying procedures, and fully implementing an electronic single-window system; (c) introducing a risk-based inspection system; (d) improving human resource capacity; and (e) establishing modern inspection facilities.
 - Improve transport connectivity by (a) implementing a performance scorecard with associated accountability for port efficiency; (b) attracting private investment by reducing regulatory uncertainty and clearly separating the roles of public agencies as regulators versus operators in ports, introducing transparent bidding processes for concessions, and setting up an independent dispute resolution system; (c) accelerating the design and implementation of an integrated multimodal transport strategy; and (d) improving the efficiency and quality of road transport services.
 - Reform the customs tariff by reducing the maximum rate to 40 percent to minimize the most extreme distortionary effects.

To unleash private investment in critical sectors, sector-specific priority actions should be taken along with the overarching reforms described above. A number of key economic sectors that are vital for growth and jobs, such as ICT, agribusiness, manufacturing, health and education suffer from the same constraints of the role of the State and the lack of a level playing field, while some, such as manufacturing and agribusiness, also suffer from trade policy and facilitation issues. The CPSD suggests key sector-specific priority actions, summarized in table ES.2.

COVID-19: NEED AND OPPORTUNITY TO ACCELERATE REFORMS

The COVID19 pandemic underscores the need to accelerate the structural reforms prioritized above to remove impediments to private sector development. The crisis may reopen the debate about the State's role and size and may create or reinforce the inclination for more State interventions in key sectors. While the State has an indispensable role to ensure readiness and sustainability in crises, this can be achieved through its unique position to make policy decisions and to create economic incentives. The government could also act as an enabler to catalyze market players in a way that responds to crisis pressures and undertake policy measures that can help mitigate supply and demand shocks. Tax breaks, subsidies, or State aid to public and private firms may be justified in times of crisis, but transparency and sound competition policy are key to ensuring that interventions cause the least distortion in market outcomes and remain timebound to the current crisis, with the aim of achieving recovery and stronger resiliency.

Amid the pandemic-caused disruptions, the proposed trade-related measures are more critical now than ever. Both trade policy reforms—particularly a streamlined and reduced tariff regime and speedy and automated customs clearance—and trade facilitation measures that minimize physical interactions are critical. For instance, high tariffs on imported critical medical supplies raise domestic prices above international prices, increasing the domestic cost of countering the disease. Temporarily removing tariffs on critical medical supplies and sanitizing products during the crisis would reduce their costs and help prevent infections. Permanently removing tariffs on such products would improve the ability to prevent and respond to future medical emergencies. In this regard, the Ministry of Finance took action in May 2020 to prioritize a list of imported goods in terms of customs clearance to counter the COVID-19 pandemic, including foodstuffs, raw materials used in food production and medical supplies and equipment. Fast-tracking customs processing of raw material imports and manufacturing components would help boost the availability of food items, consumer essentials, cleaning products, and medical and health products.

Although the staple subsectors are well supplied and prices are stable, disruptions in trade and logistics threaten to disrupt agribusiness chains across the world and necessitate greater trade facilitation in Egypt. With weak supporting infrastructure—cold chains and warehousing, roads and irrigation, weak upstream and downstream links—the adverse impact on the flow of goods in non-staple subsectors will deepen. Food losses may increase because of containment measures and reduced demand. Furthermore, labor dislocation is anticipated as the regular movement of people is disrupted. It thus becomes more important to streamline regulatory and border procedures to facilitate access to essential food products and perishables. Internal and external border agencies—for example, customs and agencies responsible for sanitary and phytosanitary (SPS) standards—should work together to design special regimes for expedited clearance of essential food products and farming inputs. Any adverse shock on food imports from disruptions in global food supply chains can be mitigated by greater measures to facilitate trade and improve logistics.

Egypt has an opportunity to leverage its ICT sector as the nucleus of a diverse digital economy to respond to the increased needs and for the long-term benefit of the population. The changes in behavior spurred by COVID-19 are likely to have lasting effects. This is an opportunity for the government to engage in necessary reforms to ease protective policies and the restrictive legal framework, and to accelerate the deployment of fiber networks by encouraging private investment. Developing digital infrastructure is also important for the deployment of education technology in teaching and learning to facilitate Egypt's transition to distance learning, and to innovative health care solutions such as telemedicine. For the post-crisis recovery phase, there is an opportunity to redefine a new balance between SOEs and other market participants while still respecting reasonable national security requirements.

The COVID-19 crisis offers an opportunity for the country to position itself as an attractive location for manufacturing firms as they rethink their investment strategies for the recovery phase. These firms will seek more resilient backwards and forward linkages. In the textiles sector where the impact of the crisis is anticipated to be severe, the government needs to prioritize steps that will attract FDI as firms reorient their post-COVID strategies, which may include regionalizing their value chains. Addressing tariff and non-tariff barriers is also key, as is strengthening those subsectors in which demand is anticipated to increase, such as fibers and apparel. In the automotive sector, it is important that the government outlines a clear vision for the sector to attract FDI in close collaboration with the private sector—this has been a key success factor in countries which have established automotive sectors successfully. For the chemicals industries, the oil price decline is a risk for the country's foreign exchange earnings but also an opportunity to leverage its oil supplies as inputs in the chemicals sector to move to higher value-added products. For several manufacturing industries, the government can provide local firms with support to reach international standards and reallocate workers to scale up/shift production lines to in-demand medical products and devices.

TABLE ES-1 HEAT MAP OF CONSTRAINTS BY SECTOR

		AGRIBUSINESS		MANUFACTURING			ICT	SOCIAL SECTORS	
				TEXTILES	CHEMICALS	AUTOMOTIVE	EDUCATION		HEALTH
CONSTRAINTS	SOEs/State footprint	SOEs in agri-processing (60% of wheat milling; 75% of sugar-refining capacity; 25% of domestic milled rice production); SOEs in production, processing, and marketing of dates, fisheries, and potatoes, creating unfair competition for private operators		Dominance in upstream sectors (fiber and yarns)	Large State presence including in refineries, some of which are inefficient and loss making		Telecom Egypt monopoly on fiber infrastructure.	Rigid admission and enrollment rules	
	Competition/Barriers to entry	Fertilizer subsidies encourages overuse and affects yields; Price controls on wheat and sugar to ensure affordable, available staples.	Interdiction for farmers to sell wheat to private sector; Tariff protection	SOEs not organized as commercial entities; Unlevel playing field, with SOEs receiving financing at low or no cost and other benefits	Close links between policy makers and SOEs, creating an inherent conflict of interest between regulatory, policy and operational bodies	Lack of clear government strategy	Independence of the NTRA; No high-standard data center; CAIX rules barring content delivery network providers	Arbitrary licensing: no clear rules/timing for final approval; Cumbersome regulations on private universities and vocational training; Lack of quality assurance rules and low market transparency.	Lengthy certification; restrictions on private sector ownership, cumbersome and costly licensing procedures, conflicting rules and regulations, erratic fee structures
	Trade & logistics	Protective tariff regime, reducing overall incentive to export; Inadequate transport facilities, limited bonded warehouse capacity; weak cold-chain infrastructure		Tariff and nontariff barriers	Inconsistent application of tariffs to import raw materials in subsectors such as plastics	Trade facilitation issues (Roll-on/roll-off); Inability to establish base for just-in-time delivery; Inverted tariffs.			High protective tariff on COVID19 related health products (soaps, sanitizers, protective gears, etc.
		Export bans; Restricted imports of seed; weak food SPS measures; Use of fresh water for aquaculture prohibited, preventing exports to certain markets		Limited use of Authorized Economic Operator					
	Skills	Poor local training infrastructure for specialized skills for export-oriented cultivation and processing.		Lack of required skills to help move it to higher value-added activities. Outdated curricula in academic institutions.	Lack of access to critical inputs including skills and technology.	Lack of R&D, skills and technology	Digital transformation hindered by the low spread of digital skills to access content and services.	Large gap between educational outcomes and labor market needs	Difficult retainment of medical school graduates, pharmacists, engineers, and skilled technicians; Brain drain Difficulty in attracting skills to underserved locations. Shortages in nursing and midwifery personnel even more serious
Other critical constraints affecting sector competitiveness	Pressure on available land and water resources, inefficient distribution and salinity of water; Limited use of water-efficient equipment and techniques; Misaligned pricing; Agriculture cooperatives law limited in its ability to permit commercially oriented market linkages for small farmers. Agri finance dominated by a State-owned Bank, lack of land-based collateral market, limited role of non-bank finance companies and microfinance institutions.		Lack of quality factor inputs; Lack of social & environmental compliance Difficult access to finance	Fragmentation, with many MSMEs; Lack of access to markets; limited water and energy efficiency	Lack of scale among producers and suppliers	Reliance on fixed broadband on copper; High prices; Short distance coverage; Limited amount of radio spectrum assigned to mobile operators	Vagueness about titled assets (i.e. campuses and land) Ownership only inheritable not transferable; No access to mortgage financing from banks due to title problems	Inadequate Pharmaceutical Product Development (PPD) due to arbitrary payment methods; Delayed payments for outsourced services by private sector; Lack of governing framework to facilitate PPP; Lack of a governance body representing subsector interests	

TABLE ES-2 SUMMARY OF OVERARCHING PRIORITY ACTIONS

PRIORITY ACTION	
Transparency and participatory approach in policy making	<ul style="list-style-type: none"> • Put in place a reform committee with inclusive participation from the public and private sector with: <ul style="list-style-type: none"> – a high-level of leadership, ownership and political support; – an inclusive and participatory approach and a regular feedback-loop involving key stakeholders from concerned government entities, the private sector and civil society; – a performance management and monitoring framework with concrete targets and milestones.
Trade facilitation and trade policy	<ul style="list-style-type: none"> • Streamline NTMs and improve transparency around them through an online registry, eliminating redundant measures and those that fail to achieve public policy goals. • Enact a new customs law and executive regulations aligned with the Revised Kyoto Convention and WTO Trade Facilitation Agreement. • Automate customs, simplify procedures, and fully implement an electronic single-window system. • Introduce a risk-based inspection system and establish modern inspection facilities. • Step up human resource capacity. • Reform the customs tariff by reducing the maximum rate to 40 percent to minimize the most extreme distortionary effects.
Connectivity and logistics	<ul style="list-style-type: none"> • Implement a performance scorecard for port efficiency. • Attract private investment by reducing regulatory uncertainty and clearly separating the roles of public agencies as regulators versus operators in ports. • Introduce a transparent bidding processes for concessions, and set up an independent dispute resolution system. • Accelerate the design and implementation of an integrated multimodal transport strategy. • Improve the efficiency and quality of road transport services.
Fostering domestic competition and levelling the playing field	<ul style="list-style-type: none"> • Adopt an overarching State ownership policy to complement legal reforms and improve the SOE governance framework. • Making available financial and operational information regarding SOEs to enable the private sector to make investment decisions. • Strengthen corporate governance and transparency of SOEs. Start with Law 203 of 1991, which governs a large number of SOEs. • Establish the tools to separate the commercial and noncommercial activities of SOEs and requiring SOEs to fully recover the cost of commercial ones. • Limit exclusions and exemptions from the Competition Law and other economywide and sectoral regulation. It will also require a clear separation of the roles of State actors in key sectors as regulators versus operators.
Reforming the commercial justice system	<ul style="list-style-type: none"> • Improve judicial workload management, streamline business processes, enhance case management, and support enhanced business processes through automation. • Significantly invest in the professionalization of human and financial resource management in courts and in the Ministry of Justice. • Use court user surveys to generate data about users' perspectives and how to improve the efficiency, quality, and accessibility of services.

TABLE ES-3 SECTOR-SPECIFIC POLICY RECOMMENDATIONS

SECTOR	PRIORITY ACTION
Agribusiness	<ul style="list-style-type: none"> • Improve intergovernmental coordination to address sustainable water resource management in irrigation and agricultural land issues. • Strengthen food safety standards by building capacity at the National Food Safety Authority (NFSA) and establishing a private sector partnership for developing laboratories and an accreditation mechanism easily accessible by micro and small enterprises (MSEs). • Enhance private sector partnership for developing laboratories and accreditation mechanism easily accessible by MSEs. • Enhance agricultural extension services with a focus on promoting R&D and ICT-enabled extension services with private sector participation. • Assess the fiscal/financial cost-benefit of different (often ad-hoc) actions affecting this sector for increasing viability for private sector participation and for government fiscal effects such as: export bans, import restrictions, and tariff changes; SOEs' and State participation in agribusiness activities; fertilizer subsidy; rice policy, expanding the smartcard-based system for bread subsidies to reduce leakages. • Expand access to finance for the sector through trade financing and through micro-credit and micro-leasing facilities for the MSEs.
Chemicals	<ul style="list-style-type: none"> • Identify pathways and approaches (public and private sector solutions) to increase energy efficiency in the production of raw materials to improve the sector's competitiveness. • Expand refinery capacity potential through (a) adoption of market prices for petroleum products and chemicals, (b) open access to the domestic gas market, (c) alignment with international gas markets, and (d) an updated master plan for downstream industries, designed in collaboration with the private sector. • Conduct a feasibility analysis to evaluate alternative solutions to the inefficiencies due to expansive State footprint (including impact of improving corporate governance of SOEs in this sector versus monetization).
Textiles & apparel	<ul style="list-style-type: none"> • Improve the corporate governance and business strategy of SOEs in this sector (e.g., reform board structures, make financial statements and SOE strategies public periodically). • Address the skills gap by engaging the private sector in curricula development and training delivery in line with industry standards. • Address trade barriers by standardizing custom procedures across all ports and strengthening the implementation of Authorized Economic Operator (AEO). • Conduct fiscal/ financial assessments on the following for impact on private sector viability and government finances: (a) cost-benefit of tariffs, export rebates, and trade barriers affecting the competitiveness of this sector. (b) value-chain analysis of new and emerging subsectors such as technical textiles.
Automotive	<ul style="list-style-type: none"> • In coordination with the private sector, design and clearly outline the government's vision and concrete policy actions for this sector, to help firms make long-term investment decisions and work to upgrade the sector. • Help establish an optimal and efficient original equipment manufacturer (OEM) base by attracting efficiency-seeking FDI. • Strengthen the local supplier ecosystem through support mechanisms to increase technology adaptation and R&D to successfully integrate this sector into GVCs.

Education	<ul style="list-style-type: none"> Amend regulations so as to attract private investment in this sector including those related to (a) the inability to transfer ownership of education institutions; (b) the vagueness around title to assets (i.e. campuses and land), which inhibits access to finance for educational institutions; and (c) the laws regarding dividends policy, which cause university owners to avoid formal dividend declarations.
Health	<ul style="list-style-type: none"> Attract private investment by (a) simplifying contracting regulations for greater efficiency and speed, particularly related to primary care, specifically chronic disease management, diagnostics (imaging/labs), specific secondary and tertiary treatments, and amend licensing law for medical providers; (b) adopting modern quality standards and developing a clear monitoring and evaluation system, (c) building capacity of medical personnel and exploring approaches to improve efficiency (for example, pay for performance incentives); and (d) strengthening the PPP framework.
ICT	<p>Regulatory Reforms</p> <ul style="list-style-type: none"> Promote competition in the sector by (a) strengthening the independence and authority of the NTRA, (b) separating the functions of regulation, policy making, operation, and investment; and (c) promoting cooperation between the NTRA and the Egyptian Competition Authority (ECA) for enforcing antitrust regulations. Implement ex ante regulation, including a set of predetermined rules and remedies imposed on market players that dominate specified markets to ensure fair and transparent access to essential infrastructure on equal terms for any downstream provider of services. Consider a functional or structural separation of TE. <p>Digital Infrastructure</p> <ul style="list-style-type: none"> Deploy more fiber-optic cable through actions such as providing open access to TE's fiber network at cost-based prices. Liberalize licensing of next-generation infrastructure to allow other operators to build, operate, and commercialize their own infrastructure. Consider licensing an independent wholesale operator to provide open cost-based access, while creating competition in wholesale access with TE. Improve the viability of broadband projects in challenging areas by allowing private investments and infrastructure sharing. Quickly develop and communicate a plan with a clear timetable for assigning additional 4G spectrum and the first 5G frequencies at affordable prices. Acceleration of these plans would put Egypt in a much better situation to respond to the COVID-19 crisis. Facilitate the deployment of mobile towers and allow the entry of new private sector operators with demonstrated financial capability in the market for construction of telecommunication towers. Incentivize operators to cooperate by leasing towers instead of owning them. Facilitate licensed service providers in obtaining all required permissions in a fast and cost-effective manner, by bundling different permit agencies into a "one-stop shop".

1. COUNTRY ECONOMIC CONTEXT

Given Egypt's young and rapidly growing population, the private sector plays a key role in driving the economy and creating decent jobs. About 76 percent of Egypt's population is under the age of 40, with 27 percent between ages 15 and 29 (CAPMAS 2019). An estimated 800,000 graduates enter the job market every year. The share of private sector jobs is 78 percent (well short of the global average of 90 percent), but 76 percent of those jobs are informal, low-quality jobs that provide low productivity and low pay. A productive private sector is critical for Egypt's agendas on jobs, inclusion, and growth, as evidence from around the world shows that more productive firms tend to create more jobs (World Bank 2012).

To promote the private sector, Egypt initiated a series of bold reforms in 2016. They include exchange rate liberalization, fiscal consolidation measures, and a targeted social protection program. A series of legislative reforms has been undertaken to improve the investment climate (with a focus on areas measured by the World Bank's annual Doing Business survey) and to encourage private investment. These reforms include the introduction of laws on investment, bankruptcy, and companies, to improve the business environment; a single-window initiative to facilitate trade; an industrial licensing law; and a mechanism for allocating industrial land. In the Doing Business indicators that benchmarks countries' regulatory environment, Egypt scores 60.1 points out of 100, compared to 59.54 points out of 100 in 2015. Noticeable progress was made in the areas of starting a business, obtaining construction permits, protecting minority investors, and getting electricity (World Bank 2019). Yet, trading across border, paying taxes and enforcing contracts are areas where Egypt's position remains behind regional peers and other classic comparators.

Despite the adoption of important reforms, private investment remains modest. Overall, Egypt has made significant improvement since 2016 across a range of investment climate indicators: regulatory environment, infrastructure, the rule of law, and bribery. These improvements are evident in World Bank Enterprise Survey 2020 for Egypt. An improved investment climate, along with the first wave of transformative reforms since 2016, has improved the private sector's confidence in the economy. Improved confidence has also translated into job creation, increased capacity utilization, and a significant increase in the incidence of R&D spending. Private investment, however, has yet to pick up.

Addressing these challenges requires a transformational shift in Egypt’s commitment and actions to enable the private sector. It entails a fundamental shift away from the traditional role of the State as an economic actor and provider of employment toward a role as a creator of conditions and incentives for the private sector to invest, grow, and create jobs. The next phase of reforms should reflect this commitment and the actions needed to address the structural bottlenecks in private sector development.

This report addresses issues that are essential to pursuing private sector-led development objectives. This chapter highlights the main macroeconomic developments, the private sector response, and the remaining challenges. It also explores the private sector landscape and the private sector’s contribution to GDP, employment, and sectoral outputs.

1.1 MACROECONOMIC DEVELOPMENTS

A Story of Successful Macroeconomic Stabilization

Egypt’s macroeconomic stabilization efforts have improved economic outcomes. Real GDP growth has accelerated, and drivers of growth have recently started to shift toward investment and net exports. On the sectoral side, natural gas and tourism have become the largest contributors to growth since FY2018,⁷ after being a drag on growth in the previous period. While this is a positive development, these two sectors remain vulnerable to external shocks, as demonstrated by the early economic implications of the COVID-19 outbreak. The government has paid special attention to transforming the energy sector and developing the road infrastructure, given their key roles in economic activity. On the fiscal side, a large consolidation effort has reduced the fiscal deficit and put public debt on a downward path. The external accounts have also improved, driven by increasing capital and financial account surplus and services receipts, especially from tourism. In 2019, Egypt started to see—for the first time since 2013 - instances of surplus in hydrocarbon trade, helped by the increased natural gas production from Zohr and other large gas fields. Net international reserves increased significantly, reaching a high of US\$45.5 billion in February 2020, covering more than eight months of imports. Yet these reserves also face pressure from the disruptive repercussions of the pandemic, falling to US\$36 billion in May, before recovering to US\$38.3 in July.

While necessary, the macroeconomic stabilizing reforms were not without costs to the private sector, notably because of the resulting high inflation and associated tightening of monetary policy. Large spikes in inflation rates that exceeded 30 percent were driven by the combined effect of exchange rate depreciation, upward adjustments to energy prices, and the introduction of a value added tax. Egyptian firms reported inflationary pressures as one of the top constraints facing their businesses in FY2019 (ECES 2018, 2020). Moreover, the sharp increases in prices have also affected households' real income and consumption, as nominal wages did not catch up with the widespread increase in price levels. In response, the Central Bank of Egypt (CBE) raised policy rates by a cumulative 700 basis points to contain inflation, but high interest rates have also discouraged investors and pushed up the cost of starting or expanding a business. A monetary easing cycle started in February 2019, and key policy rates were lowered by 300 basis points in mid-March amid concerns about the expected slowdown caused by the pandemic, followed by another cut of 50 basis points in September 2020.

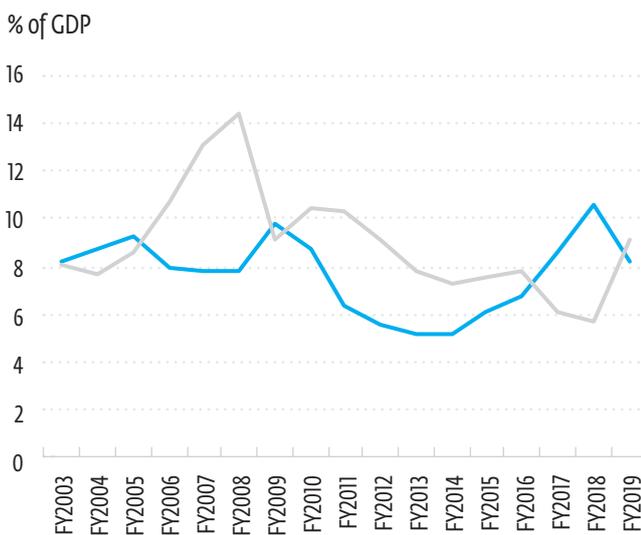
With major economic implications of the pandemic, the government faces the challenge of responding to the crisis while preserving the gains of its economic reforms. Fiscal targets will inevitably be affected, with the expectation of lower tax revenues and increased spending, notably on health and social protection. Tourism and Suez Canal revenues will receive hard blows from the massive disruptions in travel and trade activities, while the sharp drop in oil prices may have implications for remittances (which constitute about 8 percent of Egypt's GDP in FY2019) from oil exporting GCC countries. A growing trade and current account deficit (12.6 and 3.6 percent of GDP, respectively, in FY2019), together with large outflows of foreign investments in Egyptian treasury bills (US\$ 12.8 billion between March and May 2020) will exert pressure on the exchange rate. In the first two months of the crisis, Egypt's net international reserves declined by US\$8.5 billion, with the biggest monthly drop on record being in March. With its worsened external position, Egypt's financing needs are expected to increase, putting upward pressure on debt.

The government has enacted measures to mitigate the socioeconomic impact of the crisis using a combination of fiscal, monetary and social measures. A stimulus package of LE 100 billion (about US\$6 billion, or 1.6 percent of GDP) was announced, of which 1.1 percent of GDP was spent as of May 2020 on supporting the health sector (0.2 percent), providing social support to the most vulnerable (0.15%) and financial support to sectors severely hit by the pandemic through tax facilities or additional financing, including manufacturing, aviation and tourism (0.6 percent), among others (MOF, Citizen Budget 2020/2021). The CBE has cut key policy rates by 350 basis points cumulatively between March-September 2020, to help firms weather the storm with easier borrowing terms, and announced support programs for the manufacturing, social housing, and tourism sectors.

A Modest Private Sector Response

Private investment has reacted positively to macroeconomic reforms, but the overall response remains modest. Following a declining trend since FY2016, the overall share of private investment in the economy has begun to increase, reaching 9 percent of GDP in FY2019 (figure 1.1). This positive development comes essentially from the extractive (gas) industries, utilities, and real estate, which have witnessed an increase in private investment.⁸ Yet, the weight of private investment (at 9 percent) is still considerably lower than in peer countries (15.3 percent in Jordan, 23 percent in the Philippines, and 17 percent in Thailand). The share of private investment remains also lower than its historical average of 54 percent in the previous decade, despite its recovery to 52 percent in FY2019 from a low of 35 percent in the previous year. In addition, the pandemic is expected to have large economic consequences for firms, given the combined shock from falling demand, reduced input supply, and increasing economic uncertainty.

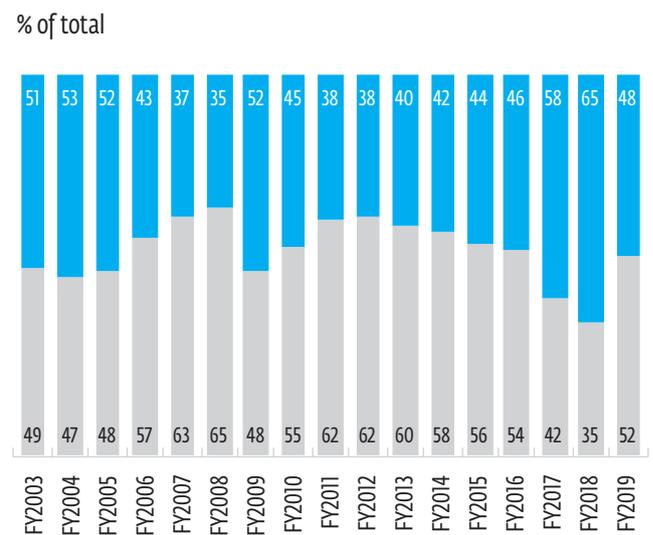
FIGURE 1.1 PRIVATE AND PUBLIC INVESTMENT



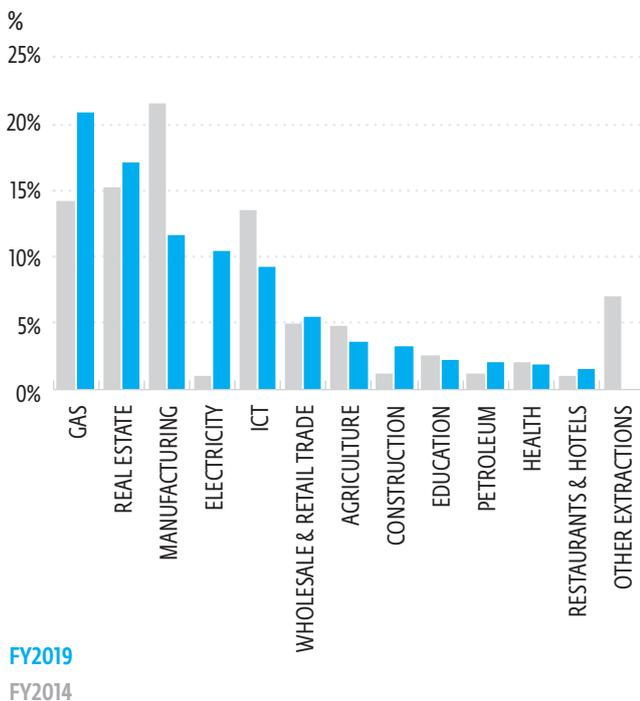
PUBLIC INVESTMENTS
PRIVATE INVESTMENTS

Source: Min. of Planning and Economic Development

FIGURE 1.2 PRIVATE AND PUBLIC INVESTMENT



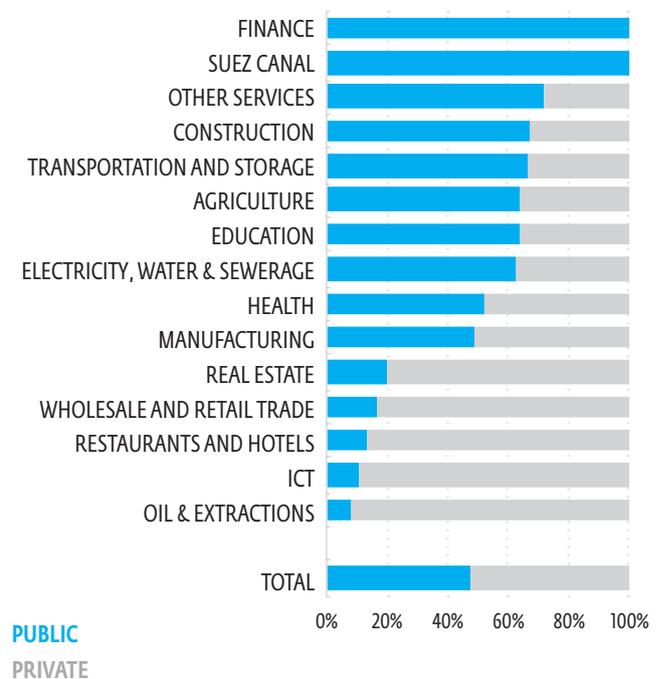
PUBLIC INVESTMENTS
PRIVATE INVESTMENTS

FIGURE 1.3 SECTOR SHARES IN TOTAL PRIVATE INVESTMENT (2014-2019)

FY2019

FY2014

Source: Min. of Planning and Economic Development

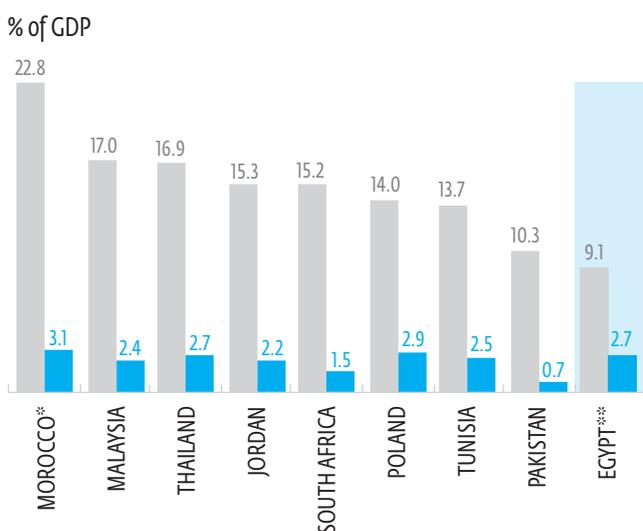
FIGURE 1.4 PRIVATE AND PUBLIC INVESTMENT BY SECTOR, (2019)

PUBLIC

PRIVATE

FDI inflows to Egypt, while the largest in Africa, remain low and are declining. In FY2019, FDI reached 2.7 percent of GDP,⁹ well below its share in the 2000s (Figure 1.6). FDI also remains concentrated in the petroleum sector (74.3 percent of total FDI), which has fewer opportunities for job creation, given its capital-intensive nature. Conversely, the share of FDI in more labor-intensive sectors, such as services, manufacturing, and construction, remained modest at 14 percent, 5 percent, and 2 percent, respectively. Globally, FDI trends have undergone a sizeable decline in 2017 and 2018, but the year 2019 saw a rise, mainly as a result of higher flows to developed economies. Flows to transition economies also increased, while those to developing economies declined marginally (World Investment Report, 2019 and 2020).

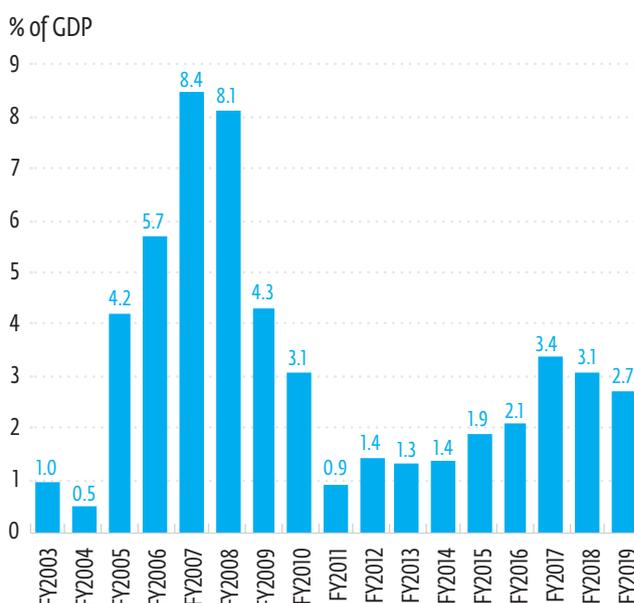
FIGURE 1.5 FDI IN PEER COUNTRIES, 2018



FOREIGN DIRECT INVESTMENT, NET INFLOWS (% OF GDP)
PRIVATE INVESTMENT (% OF GDP)

*Data for private investment as % of GDP reflects the most recent published figures for 2015. ** Data for Egypt reflects 2019 figures. Source: World Development Indicators (WDI) and IMF.

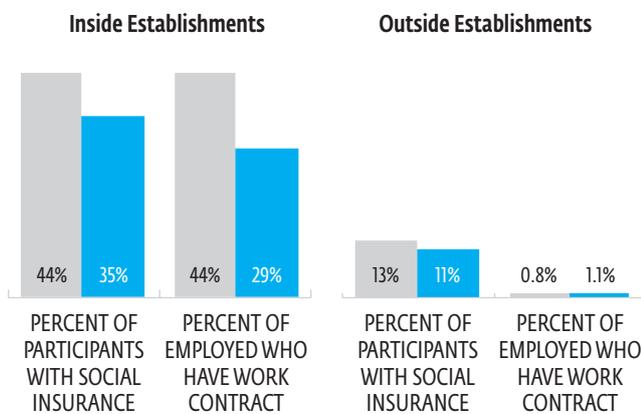
FIGURE 1.6 EVOLUTION OF NET FDI IN EGYPT



Source: Central Bank of Egypt

Recent economic growth has not translated into significant employment creation.

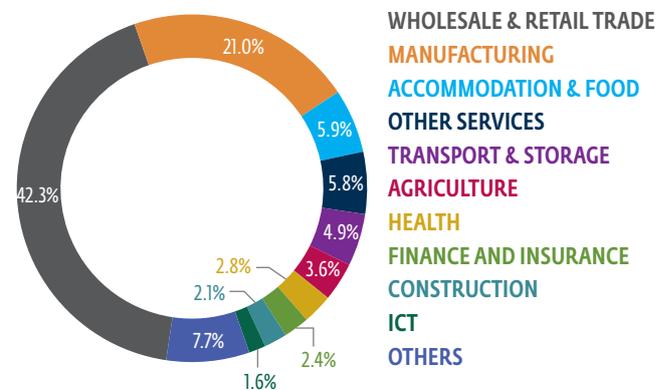
Private sector employment has remained broadly stable, constituting 77 percent of total employment in FY2019. Although the unemployment rate declined to 7.8 percent in the first quarter of FY2020 (Q1-FY2020) after hitting a high of 13.4 percent in Q3-FY2014, this decline partially reflects a decline in labor force participation—explained by demographic factors (lower growth of the working age population) and discouraged job seekers (Assaad 2020; Krafft et al 2019). The employment rate among working-age people has also declined (from 44.4 percent in 2010 to 38.6 percent in 2019, then further to 35 percent in Q2-2020). Female unemployment rates are slowly declining from an average of 23.4 percent during the period 2016-2019, to 21.9 percent in Q2-2020. When the COVID-19 crisis hit, this rate decline substantially to 16.2 percent in Q3-2020, as women were more discouraged during this period. Female employment declined to about 9.8 percent in June 2020, compared with 16 percent in the same period of 2016 (CAPMAS, Quarterly Labor Force Survey). Moreover, the quality of employment opportunities remains poor; jobs that are created are more irregular and informal, and the share of workers with social insurance and an employment contract has declined (figure 1.7). Unemployment rate increased to 9.6 percent in Q4-FY2020, up from 7.7 percent in the previous quarter, implying that around 0.3 million individuals became unemployed over the months April through June 2020 due to the repercussions of COVID-19. The widespread informality of workers’ jobs has proved to be more of a challenge amid the COVID-19 crisis, as the government attempts to scale up efforts to protect irregular workers from the economic shock, especially in lagging regions. Those efforts are constrained by the limited information on workers and the nature of their jobs and by the limited mechanisms for identifying and reaching the large number of workers who could benefit from government support programs.

FIGURE 1.7 WORK QUALITY INDICATORS IN THE PRIVATE SECTOR

FY2019

FY2014

Source: CAPMAS, Quarterly Labor Force Survey

FIGURE 1.8 PRIVATE SECTOR EMPLOYMENT BY ECONOMIC ACTIVITY

Source: CAPMAS, Establishment survey 2017

Exports have not fully benefited from the large currency depreciation in 2016. Non-oil exports have not increased as expected for a multitude of reasons (discussed in Section 3). Factors include a high reliance on imported intermediate inputs, which limited the impact on export prices; appreciation of the real exchange rate; the high costs of trade; tariff and nontariff barriers; poor logistics and connectivity; and gaps in the capability and efficiency of firms.

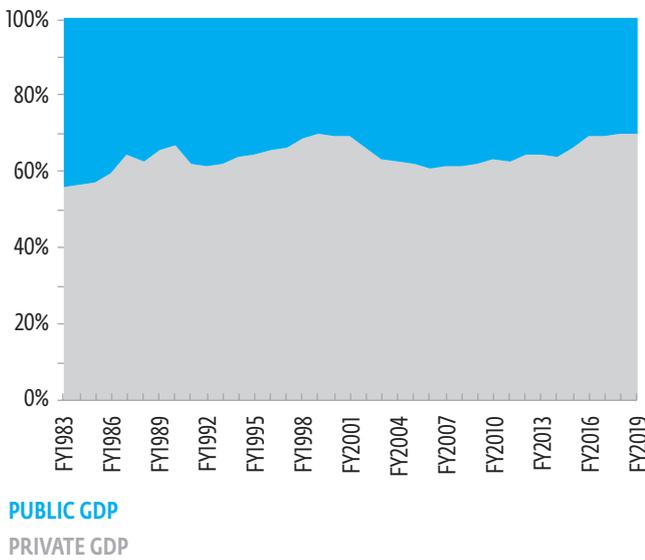
1.2 THE PRIVATE SECTOR LANDSCAPE

The Private Sector Weight in the Economy

The private sector's weight in the economy has gradually recovered in recent years, with major shifts in the sectoral structure. Over the past two decades the private sector share of GDP has averaged at 64.8 percent. The most recent years have seen an increase, reaching almost 70 percent in FY2019 (figure 1.9). This increase is associated with a change in the sectoral structure of private sector output during the past decade, with agriculture and manufacturing industries declining in favor of real estate and construction (figure 1.10). The public sector, in contrast, represents almost one-third of GDP and remains an important player in domestic markets, with a marked presence (measured as share in sectoral GDP) in oil and gas extraction, oil refining, electricity, and water, as well as financial intermediation and insurance.

Growing government financing needs have raised the cost of borrowing and affected private companies' access to finance. Since 2010, the share of credit extended to the private sector has been decreasing continuously, reaching 30 percent in end-FY2020. Within the private sector, the share of credit extended to industries and services has been particularly volatile. Financial inclusion indicators also show a low level of reliance on financial institutions to do business, especially compared with lower-middle-income country peers. For example, the percentage of people who borrowed to start, operate, or expand a farm or business is far below Egypt's peers (figure 1.12).¹⁰

FIGURE 1.9 PRIVATE SECTOR SHARE IN TOTAL GDP



Source: Min. of Planning and Economic Development

FIGURE 1.10 CHANGE IN SECTORAL SHARE IN PRIVATE SECTOR OUTPUT (2010 TO 2019)

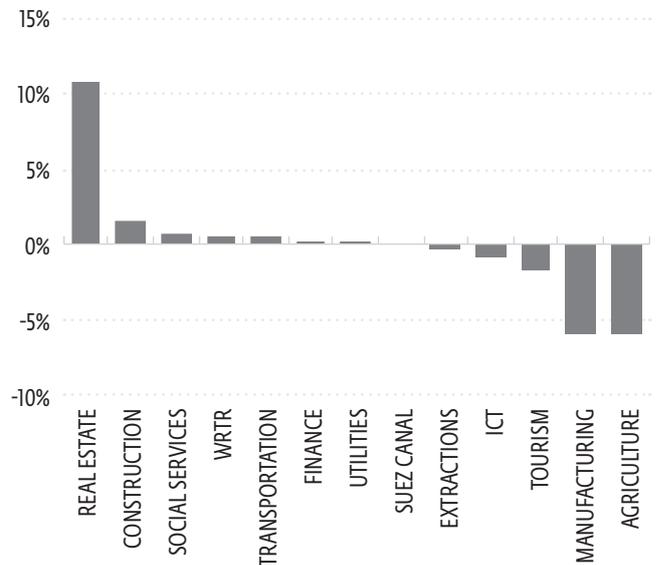
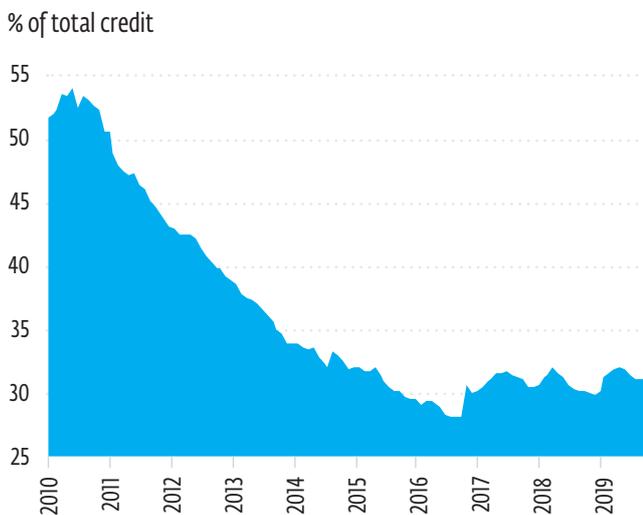
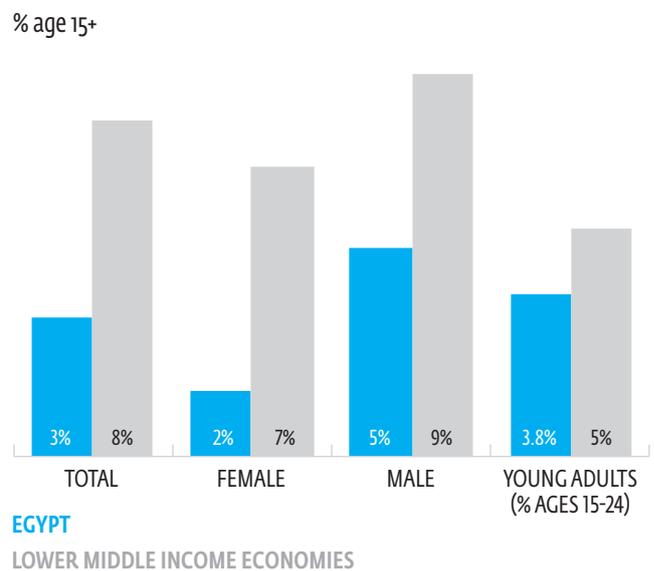


FIGURE 1.11 CREDIT TO PRIVATE SECTOR

Source: Central Bank of Egypt

FIGURE 1.12 BORROWED TO START, OPERATE, OR EXPAND A FARM OR BUSINESS

Source: World Bank, Global Findex 2017

A Snapshot of the Private Sector: Predominantly Small, Informal, and of Low Capability

Most firms in Egypt are microenterprises concentrated in low-skill sectors.¹¹ About 97 percent of firms employ one to five workers, a share that has declined only slightly over the decade. Meanwhile, the share of medium and large firms has remained stable and extremely low, suggesting that Egyptian firms have difficulty growing. More than half of firms conduct wholesale, retail, trade, and repair activity. Manufacturing industries, despite being the second largest sector, account for only 11.5 percent of total establishments. The distribution of employment by economic sector reflects the same profile. More than 42 percent of employment is concentrated in wholesale, retail, trade, and repair activity; manufacturing industries, the next largest activity, provide 21 percent of private sector employment.

The spatial distribution of economic activity shows a high degree of geographic concentration. About 30 percent of private sector firms are located in the three governorates of Cairo, Giza, and Alexandria (figure 1.15), which also absorb almost 40 percent of private sector employment (figure 1.16). This contrasts with the low economic activity and limited employment opportunities in the Upper Egypt governorates, in which poverty rates are among the highest, their share in the number of firms is only 17 percent, and their share in private sector employment is less than 14 percent. Firms in frontier governorates (Matrouh, North and South Sinai, and Wadi Elguedig) make up just 1.3 percent of firms and private sector employment.

The vast majority of firms are non-exporters, informal, and with very low usage of technology. Only 1.1 percent of the surveyed firms export, and this figure is significantly lower than in the public sector (9 percent). More than half of the exporting private firms are in the wholesale and retail trade industries. Manufacturing industries make up the rest, with agribusiness, apparel and textiles, metals, and furniture in the lead (figure 1.18). Exporting firms are concentrated in the Greater Cairo area, and nearly nonexistent in Upper Egypt and other frontier governorates (figure 1.17).

Informality in different forms dominates the private sector, even for firms that are officially registered. About 61 percent of the surveyed firms have no commercial registry, and 71 percent have no insurance number. In the manufacturing sector, 81 percent of private sector firms have no industrial registry. Moreover, 77 percent do not keep regular accounting books, including 46 percent of those that already have a commercial registry (figure 1.19). Individuals and businesses in this group are heavily affected by the economic implications of the COVID-19 crisis but are hard to reach through fiscal and monetary stimulus. They also lack easy access to institutional finance and rely heavily on capital sources from their informal networks. To protect this vulnerable segment, government support measures such as cash transfer, assistance with health costs, and advance purchase options through public procurement need to be explored.

The vast majority of firms report a very low degree of reliance on technology in conducting business. Only a very small number use basic technology as a means that could increase productivity, such as a computer (6 percent) or access to the internet (4 percent). Almost none use email or websites, with a critically low 0.2 percent using one or the other (figure 1.20). This low level of technology adoption necessitates a discussion of the role and place of digitization at this stage of Egypt’s economic development. Expanding access and increasing use of technology are essential to changing the business -as -usual model and creating job opportunities for young people in the coming decades, the era of the “Fourth Industrial Revolution.”

FIGURE 1.13 ESTABLISHMENTS BY SIZE

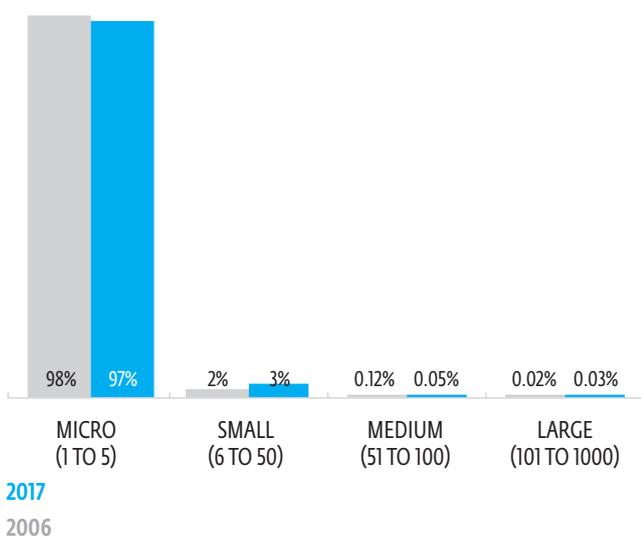
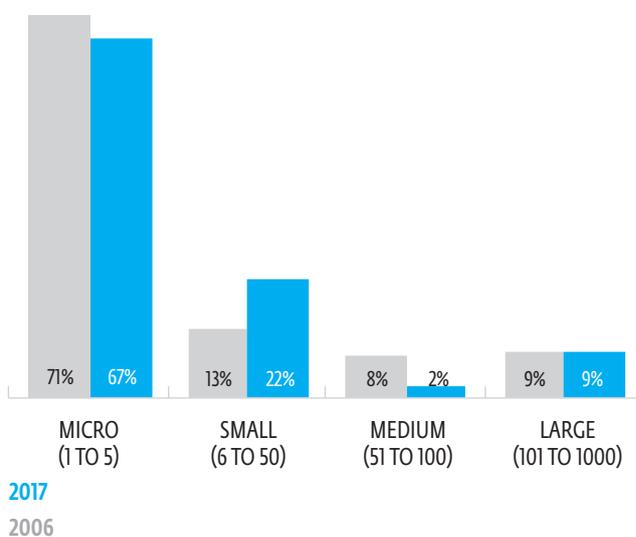
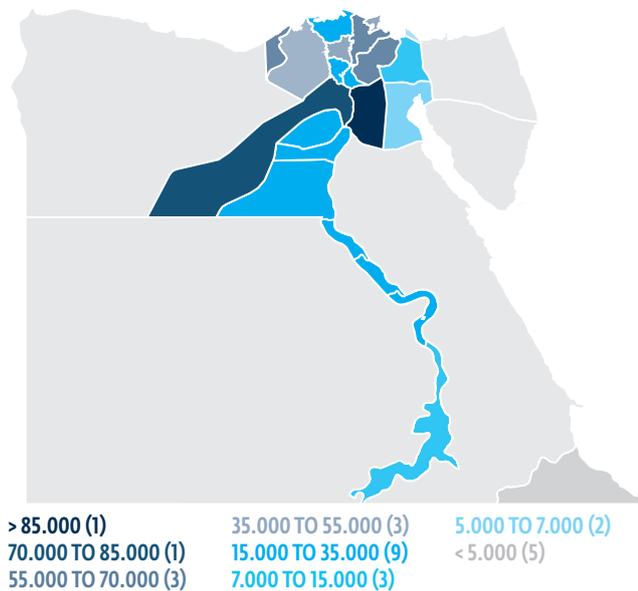


FIGURE 1.14 EMPLOYMENT BY SIZE OF ESTABLISHMENT



Source: CAPMAS, Establishments survey 2017

FIGURE 1.15 SPATIAL DISTRIBUTION OF PRIVATE SECTOR ESTABLISHMENTS, NUMBER OF ESTABLISHMENTS



Source: World Bank staff based on CAPMAS Establishments Survey 2017

FIGURE 1.16 SPATIAL DISTRIBUTION OF PRIVATE SECTOR EMPLOYMENT

% to total private sector employment

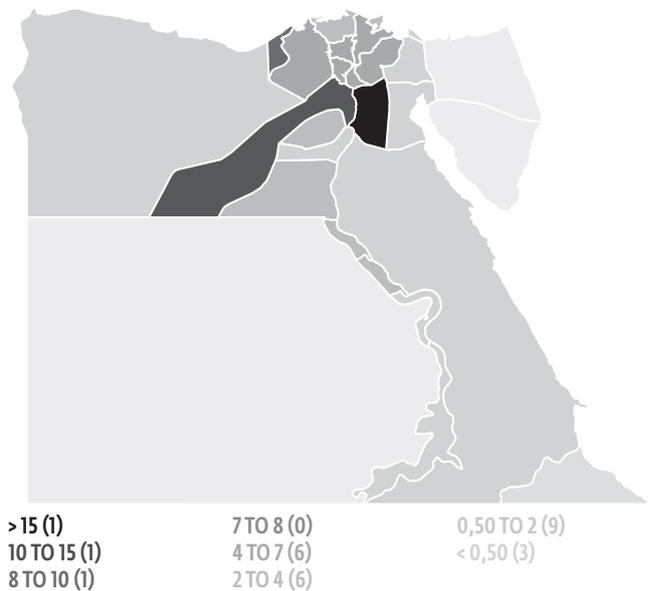
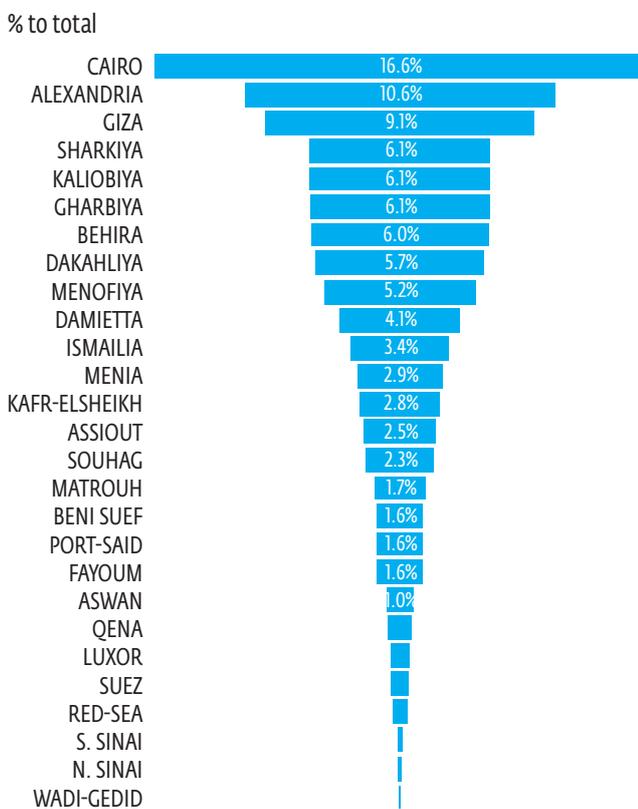


FIGURE 1.17 GEOGRAPHICAL DISTRIBUTION OF PRIVATE SECTOR EXPORTING ESTABLISHMENTS



Source: WB staff based on CAPMAS Establishments Survey 2017

FIGURE 1.18 SUBSECTORS DRIVING EXPORTS IN THE MANUFACTURING PRIVATE SECTOR

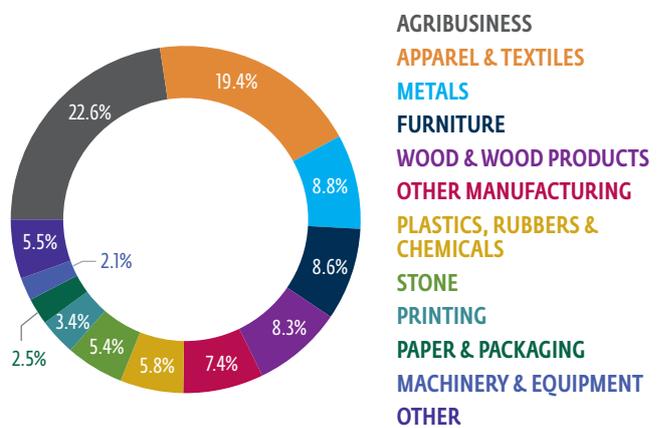


FIGURE 1.19 SELECTED INDICATORS FOR INFORMALITY

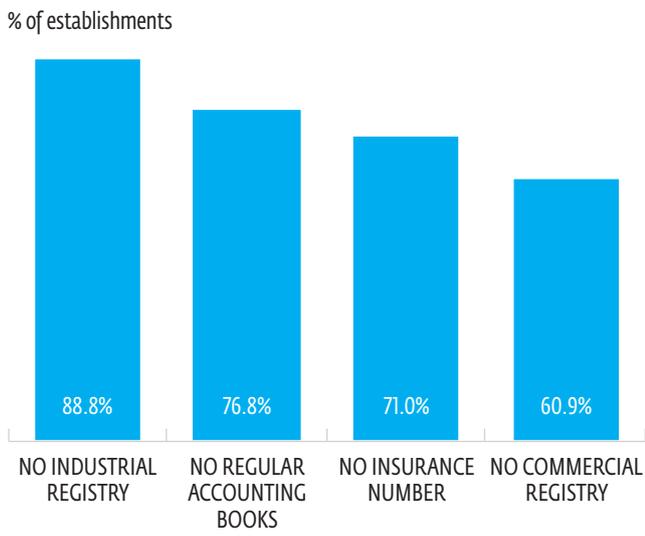
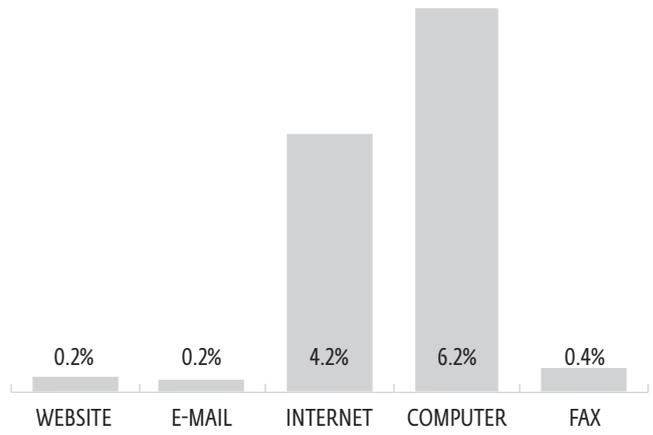


FIGURE 1.20 LOW FIRMS' USAGE OF BASIC TECHNOLOGY



Source: CAPMAS, Establishments survey 2017

2. KEY CONSTRAINTS TO PRIVATE SECTOR ACTIVITY

This section discusses a number of relevant strategic issues that are integral to Egypt's achievement of its developmental goals. It looks into several factors that affect exports performance and, more generally, hinder the competitiveness of the economy. These include a wide range of nontariff barriers, a cumbersome customs clearance process, a protectionist tariff regime and limited domestic competition. Competition, in turn, is affected by restrictive government regulations and the large State role in the economy, resulting in distorted market outcomes. Additionally, domestic firms - especially smaller ones - and foreign businesses investing in Egypt have difficulty using the courts to get public or private sector actors to comply with the applicable legal and regulatory frameworks, as commercial justice bottlenecks and weak contract enforcement can be an important deterrent for private sector and FDI.

The section analyzes these major constraints, which cut across many sectors. The following section on sector analysis confirms how binding these horizontal constraints are. Top constraints were identified using a consultative approach in which World Bank Group economists and experts, private sector firms, representatives of business associations, and policy makers discussed the key challenges and their implications across different sectors.

2.1 EXPORTS COMPETITIVENESS

Exporting is a key vehicle for fostering productivity and growth. Learning by exporting is a development model through which firms identify global opportunities, and are consistently pushed to improve their productivity, develop innovative technology, and grow. It has been instrumental in the "East Asian Miracle" (World Bank 1993) and in many other transition countries. Egypt has considerable room to realize its export potential and benefit from its strategic position to boost its external competitiveness. Exports of goods and services reached 19 percent of GDP in 2018, compared with 30 percent in Turkey, nearly 40 percent in Morocco and Tunisia, over 66 percent in Thailand, and almost 100 percent in Vietnam. Per capita exports of goods and services are US\$440 in Egypt compared with US\$2,700 in Turkey, US\$1,091 in Morocco, US\$1,537 in Tunisia, and nearly US\$4,440 in Thailand. The share of exporting firms in Egypt is critically low, with wide regional disparities.

Weak Export Response to Currency Depreciation

Despite a slight increase in exports since the 2016 currency depreciation, overall export performance remains low. After the more than 100 percent depreciation of the Egyptian Pound in November 2016, exports of goods reached 9.4 percent of GDP in FY2019, up from 5.6 percent in FY2016, whereas services exports rose from 4.8 percent of GDP in FY2016 to 8.1 percent of GDP in FY2019. Yet the share of both goods and services exports in 2019 (17.5 percent of GDP) remains below the level achieved in 2011 (20.5 percent). Just three products—oils (not crude), urea, and gold—account for more than half of the increase in exports since 2015. Their share in total exports increased from 11 to 23 percent between 2015 and 2018. These products have relatively limited employment impact and are often supported by distortionary incentives, such as subsidized energy prices. They are also homogeneous products, so the devaluation impacts are likely to be larger than for more sophisticated products. Services exports are dominated by transportation (primarily fueled by Suez Canal revenues) and travel (tourism services), which together constituted about 87 percent of services exports in FY2019.

The COVID-19 crisis is likely to further dampen export performance, at least in the near-term, in light of the looming global recession. Depressed global demand is likely to reduce demand for Egypt's exportable goods and services and to further intensify competition in international markets. Egypt relies heavily on imported raw materials and inputs for both domestic production and exports (for example, the manufacturing sector imports about 48 percent of intermediate inputs). Thus, disruption in global supply chains, many of which are heavily reliant on Chinese supplies, will also negatively affect domestic production and exports. All of the major services trade sectors—transport through the Suez Canal, travel, and tourism—are likely to have significant impacts from disruptions related to the crisis.

The narrow export base and limited market penetration have resulted in a low export value for Egyptian products. The country's geostrategic location should position it as a regional trade and logistics hub—for its potentially easy access to major markets in Africa, the Arab countries, Asia, and Europe—with considerable room to expand its export market penetration (figure 2.1). Yet Egypt exports a smaller number of products to fewer markets than comparator countries. For instance, in 2018 Egypt exported 2,063 products, compared with Turkey's 4,210.¹² Each product that Egypt exports goes to nine markets, on average, whereas each Turkish export goes to 30. That overseas market penetration is positively associated with a higher export value for Turkish products (figure 2.2).

FIGURE 2.1 INDEX OF EXPORT MARKET PENETRATION

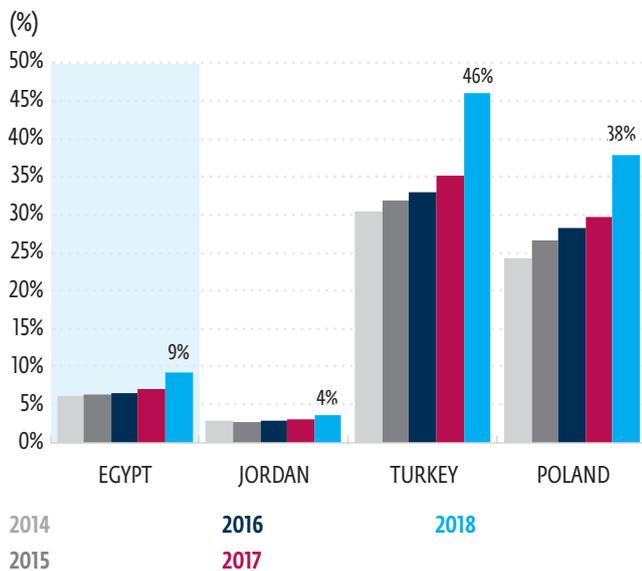
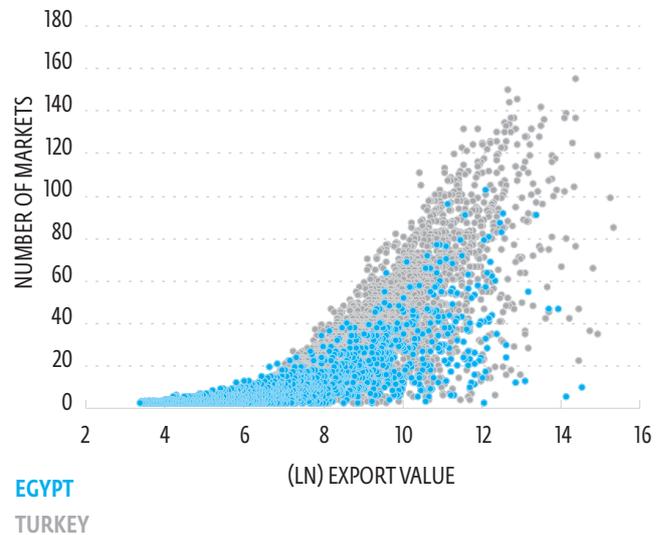


FIGURE 2.2 MARKET PENETRATION AND EXPORT VALUE



Source: WB staff calculations based on data in World Integrated Trade Solution (WITS)

High inflation, which had resulted from several structural reforms, has significantly eroded the benefit of nominal exchange rate depreciation. While the rate of inflation has moderated after the initial spike following the currency depreciation, the continued increase in domestic prices and costs over the subsequent four years has almost entirely eroded the impact on competitiveness. The real effective exchange rate in mid-2020 was only 8 percent lower than the level immediately before the depreciation. The large depreciation had a limited net effect on promoting Egypt's export competitiveness and attracting FDI. Inflation and the removal of energy subsidies raised the domestic cost of production, particularly because subsidies had encouraged capital-intensive production. Because of Egypt's narrow industrial base, limited backward linkages, and dependence on traditional imports, exchange rate depreciation also led to higher costs for imported raw materials and intermediate inputs.

Low Participation in Global Value Chains

Rather than trading only finished goods, firms today move inputs and intermediate products from country to country in global value chains (GVCs). GVCs account for almost 50 percent of global trade. Parts produced and tasks conducted in multiple locations cross borders multiple times before they are assembled as a final product. GVC-dominated trade contributes more to growth and poverty reduction than conventional trade: a 1 percent increase in GVC participation is estimated to boost per capita income levels by more than 1 percent, or about twice as much as traditional trade (World Bank 2019). Productivity, incomes, and jobs (including jobs held by women) are all positively associated with GVC-based trade, as seen from the experience of Malaysia, Thailand, and Indonesia, and, more recently, China, Vietnam, and Bangladesh.¹³

Egypt's rate of participation in GVCs is one of the lowest among its peers. This low rate is due to the composition of the exports basket, mainly primary commodities and less sophisticated products, whereas GVC growth is concentrated in machinery, electronics, and transportation. Between 2009 and 2018, more than half of Egypt's goods exports consisted of primary and resource-based products, and about a quarter consisted of medium- and high-technology exports. By comparison, in Turkey and Malaysia, medium- and high-technology exports account for 42 percent and 58 percent, respectively.

Egypt's lack of GVC participation is manifested in the sectoral GVC participation indexes. The sectors in which Egypt shows the highest degree of total GVC participation are (a) metal products; (b) petroleum, chemical, and non-metallic mineral products; (c) mining and quarrying; (d) electrical and machinery; and (e) textiles and apparel (T&A). Nevertheless, the country's degree of GVC participation even in these sectors is lower than Turkey's and Malaysia's. For instance, the GVC index for metal products is just over 50 percent of gross exports in Egypt compared with over 70 percent in Turkey and Malaysia. Electrical machinery and T&A are two key industries in which GVCs have driven export growth in a number of fast-growing developing countries. In these industries, the GVC index for Egypt is just over 30 percent, compared with 50 percent for Malaysia and nearly 40 percent for Turkey. With minimal backward linkages, Egyptian industries must rely on imported inputs. For example, only 20 percent of Egypt's gross exports of electrical machinery are from backward linkages, reflecting Egypt's narrow industrial base, compared with 37 percent for Turkey and 43 percent for Malaysia.

Egypt's limited linkages and GVC participation are also related to the restrictiveness of its services trade. Key enabling sectors—transport and logistics, finance, telecommunications, and energy—are critical to support the growth of multiple export-oriented sectors, such as manufacturing, agribusiness, and services. The ability to move upstream to higher-value-added manufacturing activities is often affected by the cost, availability, and quality of critical services. For example, the lack of fast and reliable transport and logistics hinders the integration into GVCs of firms in industries such as apparel and electronics. Similarly, a lack of cold chain services hampers Egypt's ability to integrate into agribusiness GVCs successfully, and the lack of roll-on, roll-off (Ro-Ro)¹⁴ service limits exports of agribusiness and automotive products to European and Mediterranean countries (see the section “Longstanding Constraints to Exports Performance”). Making Ro-Ro service effective would require making considerable improvements in customs, border management, and logistics capacity and performance (see the section on Logistics and Supply Chain).

Egypt's weak participation in regional and GVCs mean that the country is missing opportunities to boost exports and generate jobs. An investigation suggests that many of Egypt's major exports are subject to declining global demand (Youssef and Zaki 2019). The quality of exported products, particularly in GVC-dominated trade, largely depends on the cost and availability of a wide range of imported inputs, machinery, and equipment. This link is especially important for Egypt, which historically has been dependent on imports. A natural experiment (box 2.1) during India's liberalization of trade provides strong evidence on how making imports less expensive can help the domestic manufacturing sector grow (Goldberg and others 2010).

BOX 2.1 INDIA'S TRADE LIBERALIZATION EXPERIENCE

India slashed tariffs on imports from an average of 90 percent in 1991 to 30 percent in 1997 as a part of a program with the International Monetary Fund. Imports doubled in value over the period—and India's manufacturing output grew by over 50 percent in that time. The growth occurred because the tariff cuts gave Indian manufacturers access to a variety of intermediate and capital goods that had earlier been too expensive. Researchers found that about 66 percent of the growth in India's imports of intermediate goods after liberalization came from goods the country had simply not bought when its trade regime was more restrictive.

Moreover, detailed data linking inputs to final goods showed that the imports led to an explosion in the variety of products made by Indian manufacturers; the average firm made 1.4 products before liberalization, but by 2003, that had increased to 2.3. The increases in variety were largest for industries in which the input tariffs were cut most, and the same industries increased spending on research and development. Overall, the new products that Indian companies introduced were responsible for 25 percent of the growth in the country's manufacturing output between 1991 and 1997.

The Link with Foreign Direct Investment

Trade and FDI are highly interlinked, especially in the GVC-dominated trading context. A positive association exists between increased FDI in countries and their participation in GVCs. Production networks are developed through foreign investment, and many value chains are managed and controlled by multinational enterprises. Both market-seeking investment and efficiency-seeking investment have contributed to the global dispersion of production, which is evident in the growth of FDI both in and out of countries around the world, especially since the 1990s (World Bank 2019).

By promoting export competitiveness and integrating Egypt into GVCs, Egypt could attract efficiency-seeking FDI.¹⁵ This type of FDI is closely linked to a host country's export potential. Such investments facilitate technology transfers, research and development (R&D), economic upgrading, and higher -productivity jobs. The bulk of Egypt's FDI inflows go to extractives, and traditionally, Egypt's large domestic market has been a lucrative feature for market-seeking FDI. However, Egypt's lack of export competitiveness deters efficiency-seeking FDI. This is illustrated by the small percentage of Egyptian firms with foreign ownership, (5 percent report having at least 10 percent of foreign ownership in 2020 (World Bank Enterprise Survey 2020)). This rate is less than half that of firms in some neighboring countries, such as Morocco and Tunisia.

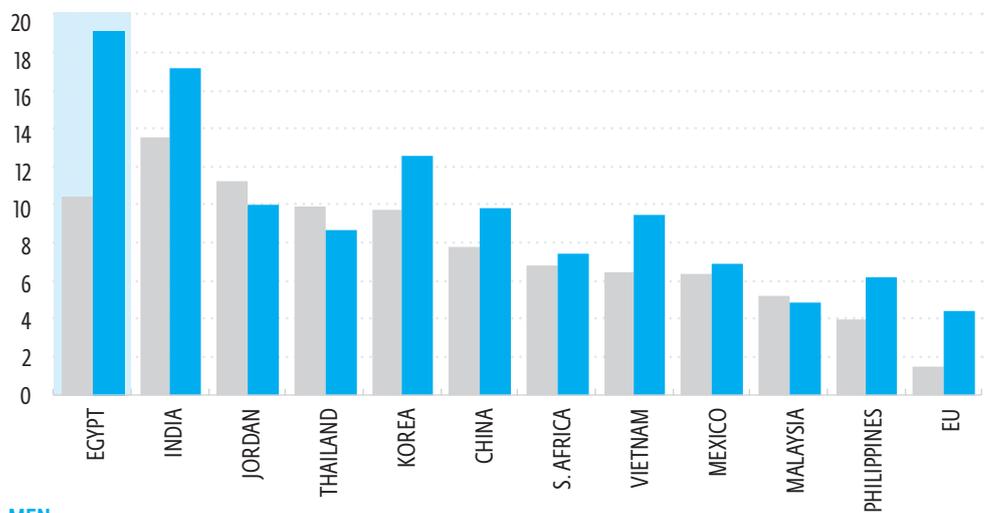
Long-Standing Constraints to Export Performance

A range of factors contribute to Egypt's performance in exports and in the attraction of FDI in non-extractive sectors, which are both below potential. They include a protectionist tariff regime; a wide range of nontariff barriers; poor connectivity and logistics, including a cumbersome customs clearance process; and limited domestic competition.

Tariff and Nontariff Barriers

High levels of trade protection undermine both domestic competition and export competitiveness and reduce welfare for poorer people. Egypt has free trade agreements (FTAs) with key partners, such as the European Union (EU), the Greater Arab Free Trade Area, and Turkey, but maintains high external tariffs. Whereas the overall simple applied average tariff is about 10 percent, the average most-favored nation (MFN) tariff applied to imports from countries that do not have a trade agreement with Egypt is 19 percent. This makes Egypt the second-most-protected economy in the world after Sudan. Protection is highest for domestic industries producing processed food and beverages and essential consumer goods, such as soap and cleaning products.¹⁶ For such lower-value products that are more important in the consumption bundle of poorer households, particularly amid COVID19 pandemic, high protection may limit domestic competition, reduce availability of some of these essential health products and medical supplies, and raise prices, and thus reduce the welfare of such groups amid their reduced household income due to economic disruptions. High MFN tariffs may also distort the incentive to export, either because profits per unit are much higher when selling to the domestic market or because protection limits the impetus to make productivity-enhancing investments that could lead firms to become internationally competitive. Decisions on tariffs seem to be unduly influenced by specific sectors or even specific firms, rather than being taken from a broader perspective of development, diversification, or supply chain development.

Extensive nontariff barriers and associated procedural obstacles also undermine trade. Nontariff measures (NTMs) are policy measures that can have an economic effect on quantities or prices of internationally traded goods.¹⁷ Examples include technical requirements, import bans or export restrictions, sanitary and phytosanitary conditions, and certificates of origin. Although some address legitimate concerns, such as protecting consumer health through standards, certification, and labeling, many others become barriers by adversely affecting international competition while not achieving their intended public welfare goals.

FIGURE 2.3 SIMPLE AVERAGE APPLIED AND MOST-FAVORED-NATION TARIFFS, 2018**MFN****APPLIED**

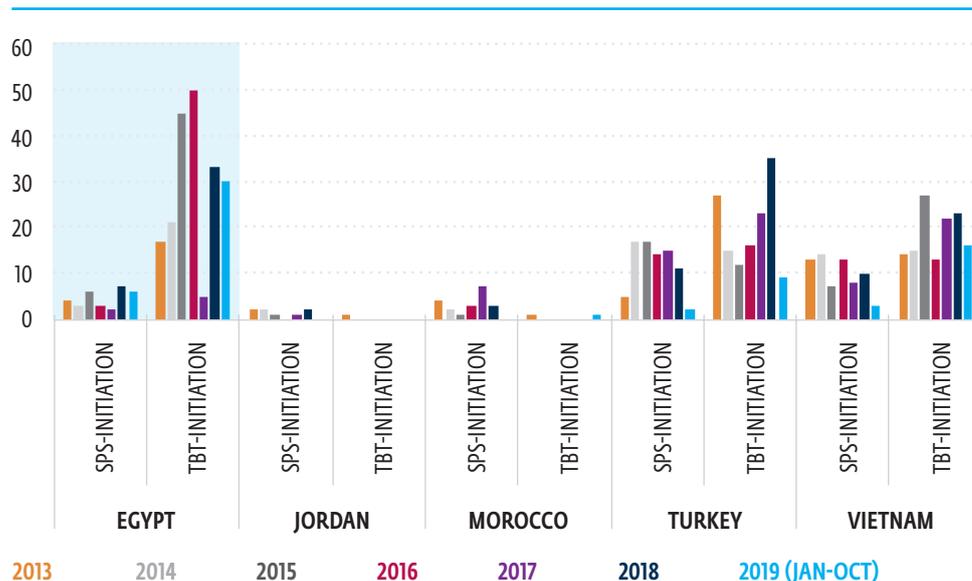
Note: MFN = most-favored nation.

Source: World Bank staff calculations based on data from World Integrated Trade Solution (WITS).

Exporting and importing firms struggle with impeding trade regulations and barriers. The most recent available data (2013) indicate that among developing countries, Egypt had one of the highest frequency indexes and coverage ratios of NTMs, which capture the number and share of products that are subject to NTMs, respectively. Since then, notifications of measures to the World Trade Organization (WTO) indicate that Egypt has been introducing such measures at a faster rate than peer countries (figure 2.4). NTMs include nonautomatic licensing, lengthy and complicated registration, and the duplication of inspections in the origin country and Egypt. They constitute a heavy burden on traders. In addition, Egypt has made increasing recourse to antidumping and safeguard measures in recent years.¹⁸ Though in principle, these measures protect domestic producers from unfairly cheap imports, in practice, they can undermine competition if the measures support only the interests of politically connected businesses. The complex institutional environment, with at least 33 government entities involved in regulating trade, further complicates the process for importers and exporters.

Import-related NTMs also have a negative effect on exports, given their negative effect on intermediate inputs and incentives to export. Egyptian industries rely heavily on imported equipment and intermediate inputs, so imposing NTMs that undermine the timeliness, availability, and cost of imports has a direct impact on the competitiveness of Egyptian firms in global markets. Moreover, the high level of protection encourages producers to focus on domestic markets because of the limited competition from foreign firms.

FIGURE 2.4 INITIATION OF SPS AND TBT MEASURES NOTIFIED TO THE WTO 2013–19



Note: SPS = Sanitary and Phytosanitary Measures; TBT= technical barriers to trade.
Source: WTO Integrated Trade Intelligence Portal (I-TIP).

In addition to the undermining trade barriers, the trade regime is unpredictable and lacks transparency. The decision-making process for imposing tariff and nontariff measures is unclear and not consultative. Previous studies suggest that the implementation of nontariff barriers in the 2000s primarily benefited politically connected firms and that the presence of politically connected firms in a sector strongly predicted the subsequent introduction of NTMs (Diwan, Keefer, and Schiffbauer 2015; Eibl and Malik 2016). This conclusion is linked to evidence suggesting that the entry of politically connected firms into a sector tends to lead to lower productivity and slower employment growth.

Connectivity and Logistics

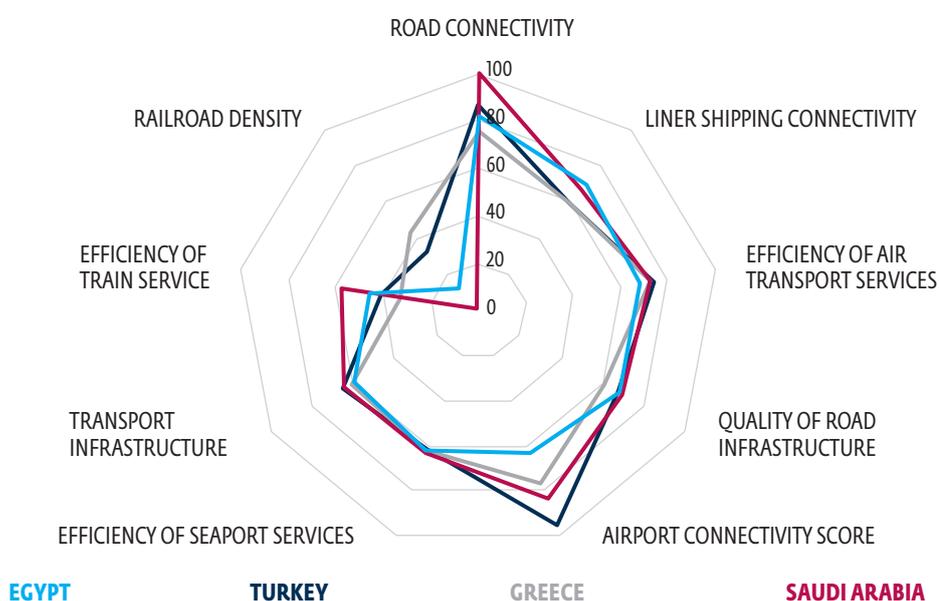
Egypt has the potential to replicate Panama’s operating model as a regional port. What Egypt aspires to become as a logistics hub, Panama has largely achieved because of its access to the Panama Canal. Numbers of container ship deployments to seaports in Egypt and Panama are similar despite the fact that much larger ships can pass through the Suez Canal, even after the recent expansion of the Panama Canal. Yet Panama ranks 29 places higher than Egypt on the Logistics Performance Index. Egypt’s geographic position favors it becoming a trade hub between Asia and Europe via the Suez Canal; between Asia (East, South, and Central Asia), Europe, and East Africa via the Red Sea; between the Mashreq and the Maghreb; and between Europe and the Arabian Peninsula via land. The country has access to two distinct seaport markets, the eastern Mediterranean coastline (gateway and transshipment traffic) and the Red Sea (gateway and interlining). The port of Jeddah is the main competitor with Egypt’s Red Sea for transshipment traffic.

Lack of efficient logistical services and the high cost of doing business have left this potential unrealized. Five factors influence logistics that connect firms to international markets: (a) the efficiency of ports, (b) air cargo capacity, (c) the infrastructure that connects the hinterland to the ports, (d) services to carry the goods from the hinterland to the ports, and (e) border control and management, including customs clearance for trading across borders. Egypt has room for improvement on all these five factors by reducing port inefficiencies, and introducing the roll-on, roll-off (Ro-Ro) services, multimodal connectivity, high-quality logistics facilities, and efficient processes for border management and customs clearance.

After significant improvement in its logistics performance over the past decade, Egypt still ranks below its main port competitors. Greece and Turkey rank higher on each component of the Logistics Performance Index despite their lower shipping line connectivity. Moreover, Egypt has lost its competitiveness since 2016. Of all the eastern Mediterranean and Red Sea countries competing to be a regional hub, Egypt consistently has the highest value on the Liner Shipping Connectivity Index—but its competitors are catching up. Between 2006 and 2019, Egypt’s value increased by 43 percent, while the values of Greece and Turkey increased by 86 and 88 percent, respectively. Egypt’s comparative performance on transport infrastructure and services vis-à-vis those of its peers are depicted in Figure 2.5.

Several factors impede the enhancement of port efficiency, the development of ports and logistics complexes, and the improvement of hinterland connectivity. Such changes alone could add US \$12 billion of exports from Egypt (World Bank 2018). The impeding factors include (a) the limited availability of data on port performance, (b) lack of institutional coordination, (c) the absence of a clear strategy for engaging the private sector, (d) the lack of an independent regulator to settle disputes, and (e) the inefficiency of border management and customs clearance.

Obtaining performance data for Egyptian ports is a challenge. Publicly available objective data on port performance, including the time and cost of hinterland intermodal connectivity and container dwelling time in the port, are important to attract demand to more efficient ports. However, few ports publicly report the inland origins and destinations of containers, the share of containers transported by each mode, or data on intermodal connectivity.

FIGURE 2.5 TRANSPORT AND CONNECTIVITY SCORES, EGYPT VERSUS PEERS

Source: The Global Competitiveness Report, 2019

The fragmented structure of port governance has resulted in overly optimistic port development programs and an inefficient freight transport system. The ports subsector is managed by a mix of public and private actors: public port authorities that report to the Ministry of Transport—the dominant actors, six public companies that report to the Suez Canal Zone, other public companies that report to the Ministry of Investment, and private companies involved in operating services. Each port is responsible for its investments and ancillary services. Each has developed ambitious development programs based on very optimistic traffic projections. All operate without adequate dialogue with the other entities concerned. A 2018 World Bank report noted that growth in cargo has not been strong enough to support all the ambitious port development projects. Effective coordination is critical to make progress on the government’s plan to improve freight transport through the development of dry ports and logistics centers at Greater Cairo Metro Area and Upper Egypt, linked to the Ports Complex through railways and inland waterways. Consequently, nearly all freight is transported by road. Freight transported by road has the highest unit operating costs, the highest fatality rates, and the greatest negative environmental and social impacts (World Bank 2018).

Although the legal framework permits private sector engagement, such participation has been impeded by the lack of a clear strategy to address conflicts of interest and dispute resolution. Under Egyptian law (for example, Law No. 1/1996 and 1998), the private sector, both domestic and foreign, can build private ports and provide an array of port and logistics services. However, without a clear strategy to prevent conflicts of interest of multiple regulator and operator functions of the port authorities and in the maritime transport sector, and without a transparent dispute resolution system, private investment suffers from uncertainty. The lack of an independent regulator to resolve disputes over contractual terms between private operators and the government has resulted in delays or cancellation of concessions in multiple ports, such as Ain Sokhna, Port Said East, and Port of Damietta.

Investments are needed in good-quality infrastructure to support jobs and access to domestic and international markets through the mobilization of public-private partnerships (PPPs). Egypt faces an investment gap of US \$230 billion to develop much-needed, good-quality infrastructure.¹⁹ The transport sector alone faces an investment gap of US \$180 billion. Mobilizing PPPs could be an effective solution, but PPPs are much less common in Egypt than in its peers. The key hurdles include (a) the dominant role of the State in the infrastructure sector (see section 2.2 on competition and State-owned enterprises, or SOEs); (b) the lack of capacity in and coordination between relevant public agencies; (c) the weak financial feasibility of projects, caused by nonmarket pricing and lack of transparency; (d) the absence of a clear and transparent regulatory framework (mentioned earlier); and (e) the lack of access to land and long-term financing (for further details on PPPs, see appendix B).

Roll-on/roll-off shipping (Ro-Ro) connections are a critical missing link. Supply chain connectivity across a short sea distance is often better established through Ro-Ro (or ferry) shipping, which offers considerable flexibility and timeliness, than through container shipping, and Ro-Ro shipping is preferred for integration in regional value chains. Establishing such connections requires a sufficient scale of trade and government commitment to negotiate agreements with other countries. Ro-Ro shipping played a major role in export diversification and the emergence of manufacturing in other regional countries such as Morocco, Tunisia, and to some extent Turkey. For Egypt, Ro-Ro is a natural link to the markets of Saudi Arabia and the GCC. The country just established its first dedicated automotive Ro-Ro terminal at East Port Said in early 2020.

Inefficient border management and cumbersome customs clearance processes exacerbate the connectivity problem. Customs authorities and trade regulations have been identified as significant constraints by 13.5 percent of firms in Egypt in World Bank Enterprise Survey 2020. Globally, Egypt's performance in Trading Across Border Indicator in the Doing Business is one of the lowest, with a score of 42.2 points out of 100.

The institutional governance mechanisms for the national single window are weak. In modern border management systems, this key trade-facilitation instrument requires firms to process import, export, and transit-related regulatory requirements only once at a single-entry point. National single windows can enhance the availability and handling of information, expedite and simplify information flows between businesses and government, and result in a greater harmonization and sharing of relevant information across governmental systems, bringing meaningful gains to all parties involved in cross-border trade.²⁰ Egypt's recently introduced system – Nafeza – is a step toward an effective window, but it suffers from inadequate legislation, weak governance, and cumbersome business processes. Legal instruments are not yet in place to provide a clear line of management, supervision, responsibility, and accountability between the governing entity and the operating entity and between the operating entity and the users. Many businesses complain that instead of being a one-stop shop for customs clearance, Nafeza has turned out to be a one-more-stop shop.

Recently introduced measures to improve customs clearance need to be made effective. For instance, the recently introduced “white list” lacks transparent and clear eligibility criteria for companies. Some of the underlying rationales for the criteria are also unclear. Egypt's current Customs Law, which dates from 1963, falls short of modern international standards and practices; it is being revised.

Development of the airport sector requires greater coordination between independent public institutions. A creditworthy SOE owner-operator model would become feasible with better coordination between the Ministry of Civil Aviation, the Egyptian High Commission for Airports and Air Navigation, and the Ministry of Transport. Further, a speedier implementation of the airports master plan would benefit from stronger governance and a move towards financial independence, accountability, and transparency of the High Commission and its subsidiaries. Leveraging the latest trends in the aviation industry will also help the design of the Master Plan. Private sector participation in the management and operations of the airport network could enhance the network's profitability and efficiency through the introduction of commercial best practices.

Despite the significant recovery in tourism, the SOE owner-operator model has failed to tap into low-cost carrier traffic. Such carriers are recognized as catalysts for growth in traffic to tourism markets. Over the past years they have contributed to the development of air traffic worldwide; however, low-cost carriers have low penetration rates in Egypt compared with other touristic markets (for example, 75 percent in Spain and 50 percent in Greece) despite Egypt's tourist appeal and low airport tariffs (below the regional average). EgyptAir and charter operators dominate the Egypt–Western Europe market although EasyJet has returned to the market recently with significant capacity. New routes in Egypt have developed as direct flights in and out of regional airports instead of hubbing through Cairo. Although developing a decentralized model is important, airports would also benefit from the expertise of private operators in developing and maintaining low-cost carrier traffic through Cairo International Airport (CAI).

Nonaeronautical and commercial offerings at CAI remain less than those of its regional peers. Nonaeronautical revenues are among the main drivers of airport profitability. The [14] million annual passengers at CAI offer an attractive opportunity to maximize nonaeronautical revenues by adapting airport facilities to the latest commercial trends (walk-through, integrated shops and food and beverage areas). However, CAI's retail potential remains untapped because of its product offerings and the limited extent of the retail areas compared with those of its regional peers. This poor comparison also extends to the major international regional airports, such as Sharm El-Sheikh or Luxor. For example, at CAI, which is publicly operated, the number of passengers per square meter of retail space is 3.5, far more than in privately operated airports in the region (at Istanbul it is 1.0, at Queen Alia International in Jordan 1.5, at Dubai 2.3).

Air cargo accounts for less than 1 percent of the total volume of cargo transported in Egypt. Worldwide, air cargo volume is expected to double over the next 20 years, according to the 2016 World Air Cargo Forecast. In Egypt it has grown at 3.4 percent per year since 2004, compared with 5.7 percent per year for the Middle East as a whole. However, the volume remains largely below that of similar countries that have nearby ports and benefit from multimodal transport and cargo -consolidating facilities (for example, in Turkey it is 13.1 percent, in Kuwait 10.8 percent). Some key ways to increase cargo volume include (a) strengthening links to global supply chains and value added services, (b) changing the limited cargo product or route offering of the incumbent airline, (c) improving the quality of cargo handling facilities, (d) increasing the private sector's involvement in airport management to boost efficiency and expand the product offering, and (e) establishing a transparent and competitive process to award concessions for cargo services.

Priority Actions to Promote Export Competitiveness

Egypt can improve its export performance by undertaking the following key trade reforms:

- **Tariff reform:** Reform the customs tariff by setting the maximum rate at 40 percent to reduce the most extreme distortionary effects of high MFN rates, extensive tariff preferences, and the bias against exports in specific sectors. Given the small share in total imports of products subject to duties over 40 percent, the revenue impact will be insignificant.
- **NTM reform:** Establish transparency and streamline NTMs using a regulatory guillotine approach by first compiling (preferably through an online registry) all regulations governing both imports and exports, for transparency; second, validating that the public policy objectives of those regulations are achieved; third, eliminating regulations that are redundant or hinder export competitiveness or domestic competition; and finally, ensuring a transparent and streamlined implementation process by reducing interference with and duplication of activities by different ministries and agencies involved in trade.
- **Connectivity improvement:** First, monitor and improve port efficiency by implementing performance scorecards in the ports and enacting regulatory reforms related to private concessions to (a) reduce the uncertainty of private investment; (b) foster an independent and transparent dispute resolution process on concessions; (c) implement a transparent competitive bidding process for concessions; and (d) implement clear separation of public agencies' roles as regulators and operators. Other key actions include accelerating the design and implementation of an integrated, multimodal transport strategy (aligned with port development master plans), with ports being an integral part of the transport system; and improve the efficiency of road transport services by modernizing fleets and improving quality of service. These improvements would build on the detailed actions that were recommended in previous sector assessments (World Bank 2018).
- **Customs modernization:** Modernize customs by first adopting a new customs law that incorporates international best practices in border management and then enacting executive regulations that enable implementation of the Revised Kyoto Convention and WTO Trade Facilitation Agreement. Next, automate customs, simplify procedures, and fully implement an electronic single window system. Then, introduce a risk-based inspection system. And finally, improve the staff and technical capacities of the customs authority by establishing modern inspection facilities.

Amid the COVID-19 disruptions, the proposed measures to promote export competitiveness are more necessary than ever. Trade policy reforms, particularly a streamlined and reduced tariff regime, along with speedy customs clearance and trade facilitation measures that use automation and minimize physical interactions, will be critical to reduce the spread of the disease. Appendix C provides a trade facilitation checklist on improving health and safety measures related to Egypt's trade. These proposed reforms are also critical to reduce costs and increase the availability of various food items, consumer essentials and cleaning products, medical and health products, and much-needed supplies of inputs and raw materials for domestic production (World Bank 2020a, 2020b).

2.2 THE PROMINENT ROLE OF THE STATE IN ECONOMIC ACTIVITY

In recent years, perceptions of a growing role of the State in economic activities have created confusion about the government's vision of the private sector's role in addressing development challenges. Part of this large role is a legacy from the past. While Egypt has been transiting from a centrally planned to a market economy over the past several decades, the State has remained an important economic actor, at times at the expense of the anchoring and implementation of effective market mechanisms.²¹ Those perceptions of a growing role of the State have been compounded by flaws in the policy framework for competition and ambiguity about whether firms in Egypt face the same set of rules regardless of ownership, resulting in the private sector sentiment that the playing field is uneven.²²

The concerns about an uneven playing field and unfair access are sustained by the sprawl of SOEs and the complex and non-transparent framework in which they operate. In the absence of comprehensive policy on State ownership and of financial information on many State-controlled companies made publicly available, it is difficult for investors to form an accurate understanding of the SOEs' weight in the economy, their market share, or their functioning under the conditions that private sector firms are subject to, including access to factors of production or firms' obligations. This section synthesizes the available information on SOEs, their sectoral distribution, and the legal frameworks that govern their activities. The analysis is based on official reports of the Ministry of Finance (MoF) and other publicly available information on SOEs websites.

SOEs: A Complex and Fragmented Landscape

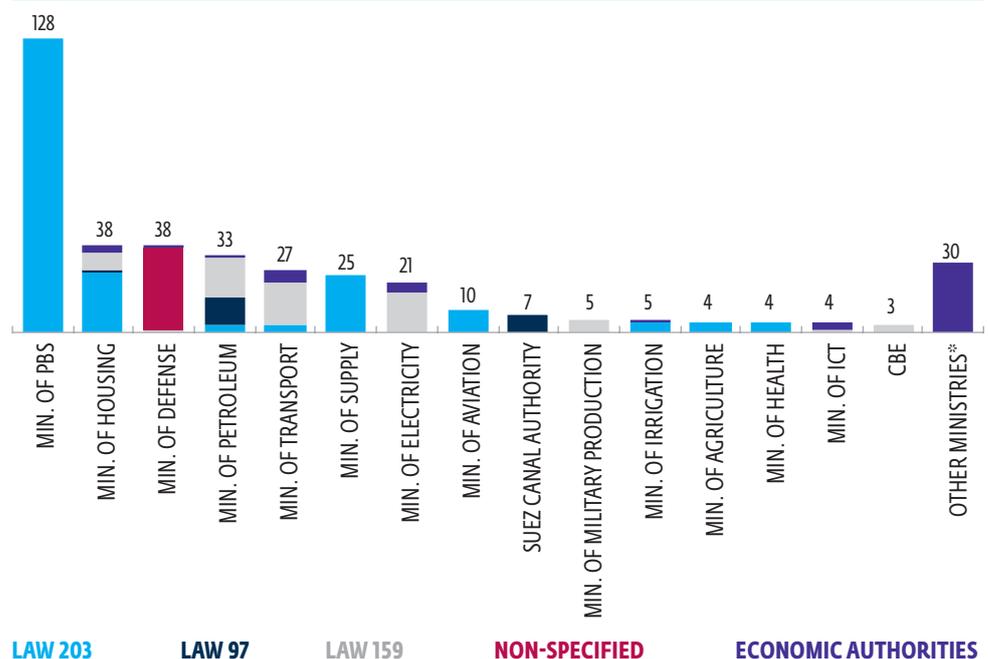
Countries differ with respect to the range of institutions that they consider to be SOEs. For the purpose of this report, an entity is considered an SOE if (a) it is controlled by the State, whether legally, through the ownership of shares, or other means; (b) it is legally and financially autonomous from the State such that it has legal personality, specific rules of operation defined under a legal regime, and its own revenues and sources of funding; and (c) it operates in a market for goods or services that could, in theory, be provided by a private company (World Bank, Integrated SOE Framework iSOEF).

SOEs in Egypt work under a multitude of governing laws and ownership frameworks, making their identification difficult and complex. There is no comprehensive database of SOEs in Egypt. From a legal perspective, the vast majority of SOEs fall under three laws:²³ the general Joint Stock and Limited Liability Companies Law No. 159/1981; the Public Sector Authorities and Companies Law No. 97/1983; and the Public Business Sector Law No. 203/1991. Those SOEs are also fragmented in terms of affiliation, with 15 ministries and authorities having SOEs under their control and with no clear ownership policy (see figure 2.6). Many SOEs operate under authorities affiliated to the Ministry of Defense (MoD) and Ministry of Military Production (MoMP), and their governing authorities are subject to special laws. These include

the National Service Projects Organization (NSPO), the Arab Organization for Industrialization (AOI) and the National Authority of Military Production. Although NSPO was established in 1979, a third of its 32 affiliated companies were established after 2015, suggesting an expansion of NSPO economic activity in recent years, spread across 14 industry groups. State-owned banks are subject to the provisions of the Central Bank, Banking Sector and Money Law No. 88/2003. Meanwhile, the provisions of Companies Law No. 159/1981 also apply to banks as joint-stock companies. Capturing the entire universe of SOEs in Egypt is constrained by this legal and institutional complexity, and by the lack of a comprehensive database.

While unincorporated, many of the 51 economic authorities (EAs)²⁴ should also be considered SOEs. Technically, they operate in markets for goods or services that could, in theory, be provided by private companies. Most are also large employers, with close to 341,000 employees in total (figure 2.8) and many play a significant role in the economy, such as the Egyptian General Petroleum Corporation (EGPC), the Suez Canal Authority (SCA), and the New Urban Communities Authority (NUCA) in the energy, transport, and housing industries, respectively. Most recently, the Egypt Fund was established as a sovereign fund by Law No. 177/2018,²⁵ to make economic development sustainable by optimizing the use of State assets.²⁶

FIGURE 2.6 NUMBER OF SOES, BY AFFILIATION 2017



Note: CBE = Central Bank of Egypt; ICT = information and communication technology; Min.= Ministry; PBS = Public Business Sector. * Other ministries include the ministries of Local Development; Social Solidarity; Trade & Industry; Supply; Agriculture; Interior; Religious Endowment; Health and Population; Planning and Economic Development; Antiquities and Tourism, the Cabinet of Ministers, and other authorities.

Source: Ministry of Finance and public entities websites.

The Sectoral Distribution and Economic Weight of SOEs

SOEs have a significant presence across economic sectors but their size varies significantly. The Ministry of Finance reports²⁷ indicate that a total of 297 SOEs, 51 EAs, and 60 companies affiliated with the Ministry of Defense were found to operate in 19 of the 24 industries of the Global Industry Classification Standards (GICS).²⁸ Together, the different forms of SOEs operate in 23 of the 24 industry groups (figure 2.7). While some SOEs are natural monopolies, others exist to address market failures to ensure that essential items are supplied at affordable prices to a significant part of the population. Nonetheless, there is an unusually high SOE presence in subsectors in which the probability of having an SOE is generally low²⁹, and in which the private sector might be better placed to provide goods and services.

SOEs remain large employers in the public sector, despite a decreasing share in total employment. While employment in SOEs is less than 3 percent of total employment, SOEs and EAs absorb around 1.1 million employees, or 20 percent of public sector workers (figure 2.8). The size of the labor force in SOEs makes the discussion around reforming them a sensitive one, despite the fiscal risks they generate to the State.

FIGURE 2.7 NUMBER OF SOES BY INDUSTRY GROUP

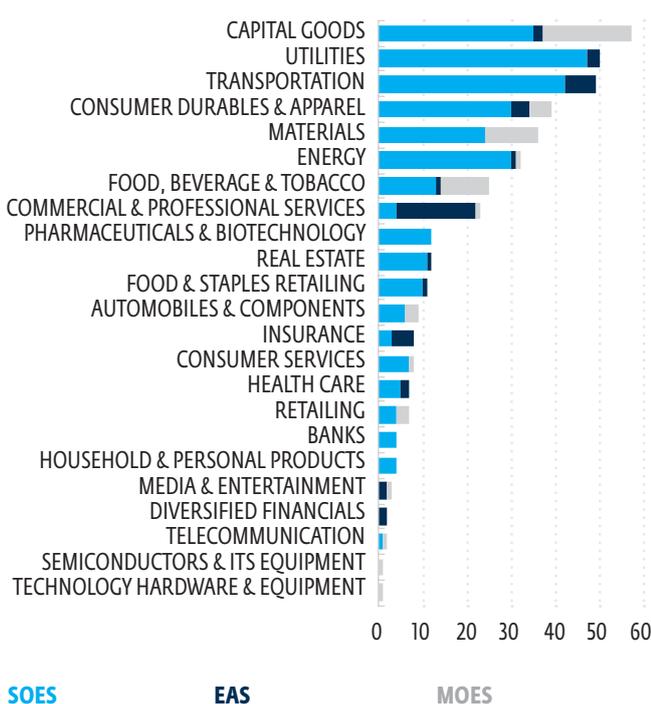
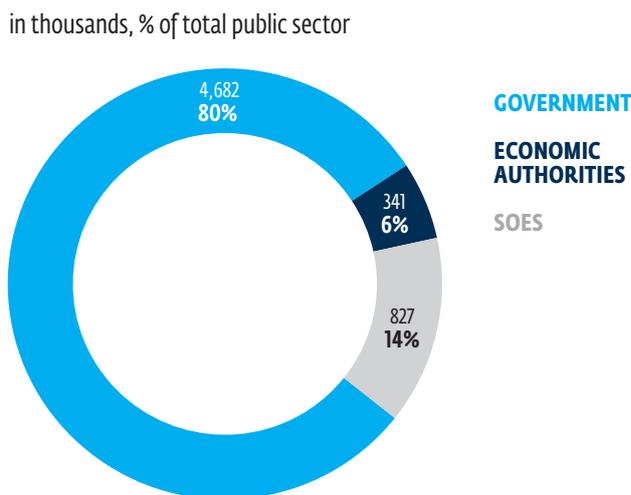


FIGURE 2.8 EMPLOYMENT IN PUBLIC SECTOR 2017



Note: EA = economic authorities; MoE = military-owned enterprises; SOE = State-owned enterprises.

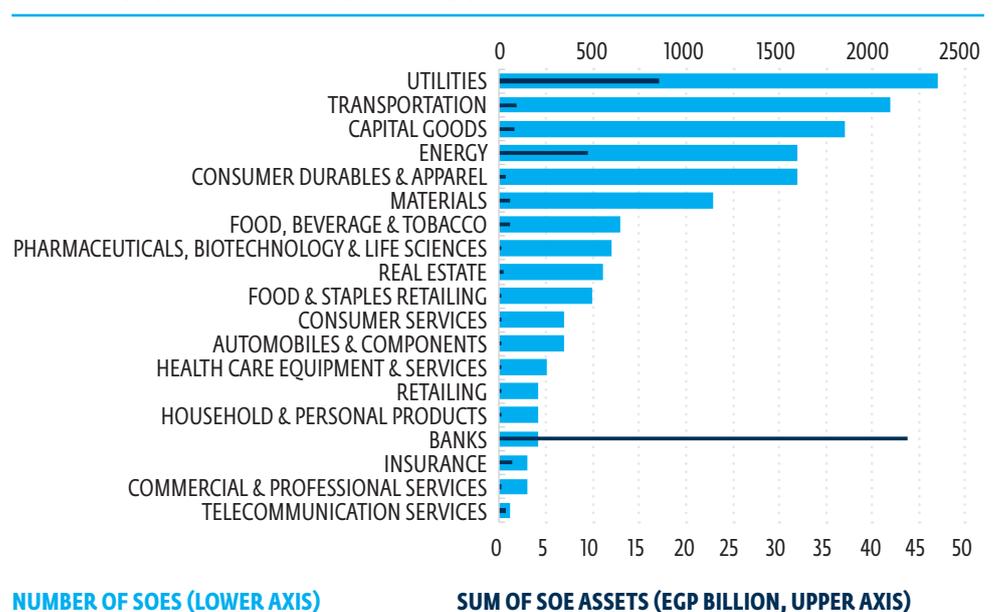
Source: CAPMAS, Annual Report on Public Sector Employment.

Source: Min. of Finance and public entities websites

Incorporated SOEs vary significantly in size and financial performance. For those with publicly available financial information from 2017, the SOEs' total assets are LE 3,978 billion (US\$ 2.5 billion), equivalent to 117 percent of GDP. After excluding banks (for which customers' deposits represent the main source of funding), SOEs' assets are equivalent to 53 percent of GDP. The average assets value of the top 20 SOEs is LE 170 billion (3.3 percent of GDP) mainly in electricity, oil and gas utilities, EgyptAir; water and sanitation, insurance and TE. The average total assets of the smallest 20 SOEs are less than LE 1 billion; they operate mainly in textiles, logistics, automotive, and trading. High-revenue companies operate in a few industries, such as banking, oil and gas, and utilities, in addition to food retail, transportation, telecommunications, and capital goods (construction). According to publicly available information, SOEs' contribution to total tax revenues is about 3 percent, which represents 30 percent of non-sovereign corporate income tax. About 88 percent of SOEs taxes come from the top 20 tax-paying companies.³⁰

Loss-making and highly indebted SOEs create significant contingent liabilities for the State treasury, as the owner. Out of the reported 297 incorporated SOEs, 106 companies have incurred net losses in FY2017 and 73 have negative equity, mostly in the textiles industry. Moreover, out of the top 20 SOEs in terms of revenue, four electricity generation companies reported net losses, in addition to the national airlines company. In addition, 67 SOEs were identified as thinly capitalized, with equity to assets ratio below 20 percent (after excluding banks). Overstaffed SOEs with obsolete assets (for example, in the textiles industry) and economic authorities of significant macroeconomic relevance (EGPC, SCA, or NUCA) can pose significant fiscal risks for the State's budget if not transparently monitored and reported on. Fiscal risks can also emanate from poor risk assessment and provision of below-cost services on the part of State-owned banks. These risks can be particularly large because of the banks' leverage capacity. Direct governmental influence in the management and business decisions of SOEs may also affect efficiency.

FIGURE 2.9 SOE ASSETS BY INDUSTRY GROUP



Source: World Bank, using Ministry of Finance data and public entities websites.

Are SOEs Affecting Competition and Distorting Market Outcomes?

Promoting a more effective competition policy framework is key to enabling the private sector to fulfill its job-creating role. Competition and open markets have a positive effect on sustainable economic growth by driving investment and improvements in private sector competitiveness. Two mechanisms contribute to this effect. First, competition shifts market share toward more efficient producers. Second, it induces firms to become more efficient to survive. Empirical evidence shows that the degree of competition in the domestic market is a key determinant of international competitiveness. As firms typically acquire many of their inputs in local markets, lack of competition in upstream goods and services markets reduces their competitiveness compared with foreign rivals.

When coupled with restrictive government regulation, the widespread presence of SOEs across the economy affects competition and distorts market outcomes. Newly available product market regulations (PMR) data suggest that Egypt compares unfavorably on the economywide score, which is higher than that of countries with similar income levels (figure 2.10).³¹ Breaking down that score shows that Egypt's standing is influenced not only by State control, but also by barriers to entrepreneurship (entry and rivalry). State control appears to be driven mostly by public ownership, whereas barriers to entrepreneurship account heavily for the complexity of regulatory procedures as well as regulatory protection of incumbents (figure 2.11). Specific concerns underpinning such restrictive environments may limit or discourage entry, including entry limitations in certain segments of network industries (notably energy, telecommunications, and air transport) and exemptions from antitrust law.

Ensuring that competitive neutrality principles are implemented effectively is important to decrease economic distortions and the risk of anticompetitive behavior. Competitive neutrality is the principle according to which all enterprises should face the same set of rules, and thus that the government's contact, ownership, or involvement in the marketplace does not confer an undue competitive advantage on any market participant, neither de jure nor de facto.³² A preliminary analysis of competitive neutrality as applied to Egypt identified a number of gaps that may affect competition and create an uneven playing field. Those gaps are discussed next, with a synthesis presented in appendix E.

In specific sectors, the lack of clear separation between the State market regulator and State-influenced major players or SOE owners creates conflicts of interest. Independent regulators are required to act as neutral arbiters, particularly when the State controls one or more operators. Yet, as shown in the institutional and legal mapping of SOEs, many remain under the direct supervision of line ministries. This relationship gives SOEs access to information before other market participants or may result in less scrutiny of SOEs' operations, with adverse effects on private sector competitors. For instance, the Ministry of Communications and Information Technology oversees both the National Telecom Regulatory Authority (NTRA) and Telecom Egypt - an SOE that is 80 percent owned by the government and holds a dominant position in the sector - hereby creating a conflict of interests (see Section 3 on the ICT sector). In the financial sector, the CBE acts as a regulator and supervising body of the banking sector, and at the same time is owner/representative of the banks wholly owned by the State, as it owns the majority of shares in a bank³³ in addition to a significant minority in two more banks. Two State-owned banks are the biggest banks in Egypt, capturing 48 percent of customer deposits as of end-June 2019.

Some SOEs and unincorporated economic authorities perform both commercial activities and noncommercial or public service activities, with no requirement to separate the two.³⁴ In turn, costs and revenues generated by the two kinds of activities are not separated, and SOEs are not required to generate a positive rate of return on their commercial activities. This lack of separation is important because SOEs are normally compensated for the provision of public service obligations, whereas revenues they generate through commercial activities that may compete with private operators should typically cover their costs and generate a rate of return. Without this separation, the provision of public service obligations can be over- or undercompensated. Both can create problems, but the private sector would be particularly affected if SOEs were overcompensated, because they could cross-subsidize their commercial activities with public resources.

Public procurement could benefit from enhanced competition. A new public procurement law, issued in 2018, applies to all supply, service, and construction contracts to which a public entity is a party,³⁵ except for SOEs, which are not subject to this law. However, the new procurement law permits direct contracting between two public entities subject to the same law without abiding by the procedures and financial limits set out in the law. In the absence of publicly available information on public procurement awards, it is not possible for investors, analysts, or any other stakeholder to assess the extent of using direct awards and noncompetitive bidding, and the trend of such practices over time. While in certain cases, direct awards may be justified based on reduced costs, greater efficiency, and prompt execution, this option should be narrowly applied with the goal to minimize the use of noncompetitive procurement methods and direct negotiation.

On tax neutrality, SOEs are generally taxed under the same reference system as private operators. However, tax exemptions provided under certain laws provide financial privileges and feed the perception of an unlevelled playing field. These include the exemption of the National Service Projects Organization (NSPO) from income tax,³⁶ the exemption of military-managed facilities from real estate tax,³⁷ and the exemption of railways and petroleum authorities from import duties on equipment and machinery. The latest proposed amendments to the Egypt Fund Law—approved by the Cabinet in December 2019—allow its subsidiary funds and companies with fund ownership exceeding 50 percent to claim a value added tax refund proportionate to the fund’s investment share. The amendment also waived notarizing fees on asset transfers from the State to the fund (or to its fully owned subsidiaries).

Key limitations in the scope of the 2005 Competition Law hinder its effective enforcement. SOEs benefit from certain exclusions and exemptions,³⁸ and the Egyptian Competition Authority (ECA) lacks the powers to control mergers in order to prevent negative effects of market consolidation. Sanctions are issued by courts instead of the ECA. In addition, ECA’s governance structure may affect its independence, especially given the ministerial representation on its board. Draft amendments to the Competition Law to enhance the ECA’s mandate are under parliamentary review (details are provided in appendix G).

Priority Actions to Foster a Level Playing Field and Strengthen Competition

A commitment to more transparency can restore the private sector’s confidence and improve certainty around investment decisions. Making the financial and operational information of SOEs available would enable the private sector to make investment decisions based on a better understanding of an SOE’s weight in a sector. This transparency would include, for example, the timely publication of SOEs’ interim and annual financial statements, including adequate disclosures in line with applicable reporting standards, together with auditors’ reports.

An overarching State ownership policy could also usefully complement legal reforms and promote improvements to the SOE governance framework. Strengthening the legal framework of SOEs is an important step to strengthen corporate governance and transparency. Given the multiplicity of legislation governing public enterprises in Egypt, these legal reforms can first be applied to Law No., which governs a large number of SOEs. That policy should (a) lay out the rationale and strategic objectives of state ownership, (b) define the role of the State in the governance of SOEs, (c) distribute roles and responsibilities between government agencies, (d) specify policy tools to be used for implementation, and (e) call for monitoring of progress and evaluation of results to inform regular policy reviews.

To address potential conflicts of interest, the State’s roles as a sector policy maker and regulator and an SOE owner should be separated. It is important to ensure the independence of regulators by having SOEs under a separate entity rather than under line ministries. This separation is particularly relevant to the ICT and banking sectors.

Effectively implementing the competitive neutrality principle is important to ensure that SOEs work under the same conditions that govern private sector firms. This necessitates the following:

- Establishing tools to clearly identify and potentially separate the commercial and noncommercial activities of SOEs and require SOEs to fully recover the cost of commercial activities. SOE transactions should be benchmarked against private operators' transactions and show a positive net present value for the return on their investment.
- Fostering regulatory neutrality by limiting exclusions and exemptions from the Competition Law and other economywide and sectoral regulation.

Regulatory reforms are needed to increase market contestability in network industries.

Such actions include eliminating protection to incumbents by minimizing barriers to market entry and adopting rules to support private sector access, notably in telecommunications, electricity, and air transport. Reforms also call for restricting the use of price controls, which are established through ministerial decrees or negotiated between ministries and business representatives, to situations addressing specific market failures.

The Competition Law framework could be enhanced to more effectively tackle anticompetitive behavior of public and private companies. This change requires (a) strengthening the ECA's institutional mandate to control mergers so as to minimize potential anticompetitive effects of market consolidation and (b) enabling it to issue fines for anticompetitive violations. In addition, the framework could foster institutional independence by limiting ministerial participation on the ECA's board. The contribution of the ECA in formulating pro-competition regulations can be substantial, particularly on matters such as regulated sectors, State involvement in commercial activities, and price controls.

As Egypt's government takes exceptional measures to mitigate the impacts of the COVID-19 crisis, principles of transparency and competition remain important. Governments around the world are resorting to short-term measures such as tax breaks, subsidies, and price controls. Although the rationales are clear—protecting the vulnerable, ensuring access to basic goods for consumers, and helping firms weather the crisis—these actions may have unintended consequences for market dynamics. Transparency and competition policy are key to making sure interventions do not go beyond what is necessary, pursuing the least distortive alternative in terms of market outcomes and remaining transitory to address the current crisis. In the aftermath, restoring efficient market dynamics will be critical.

2.3 RULE OF LAW AND JUSTICE PERFORMANCE

An efficient and effective commercial judicial system is important for creating a climate conducive to business. A well-functioning, independent, and efficient commercial justice system is one in which decisions are made within a reasonable time and are predictably and effectively enforced, and also one in which individual rights, including property rights, are adequately protected. Empirical evidence shows that the efficiency and effectiveness of the judicial system are essential determinants of domestic and foreign direct investment, and key factors in securing tax revenues and supporting economic growth. Conversely, weak contract enforcement raises the cost of borrowing and shortens loan maturities, with a resulting negative effect on investment and growth. Weak enforcement systems have also been linked to late payments, which can lead to liquidity issues for companies and increase insolvency.

The economic and social crisis that is anticipated to unfold with the COVID-19 crisis will lead to further constraints on commercial justice system performance. First, the crisis's effects on the economy and social stability will hamper the justice system's performance, given the expected increase in cases caused by the loss of businesses and jobs, disputes about insolvencies, debt collection, and labor benefits. Second, economic hardship will lead to a tremendous increase in the need for legal aid in the form of legal counsel and legal representation. Poor and vulnerable populations, including women, will be hardest hit. Micro and small businesses will suffer disproportionately, and so will family businesses in the informal economy. Many of those most severely affected will not be able to navigate the commercial justice system or government services. They also will not be able to afford a lawyer. Yet, the legal aid system is dysfunctional and lacks self-guidance material providing legal information for example, for micro and small enterprises.

How the Judicial System Affects Business Confidence

Egypt suffers from commercial justice bottlenecks that negatively affect domestic firms, especially smaller ones, and foreign businesses investing in Egypt. Problems include excessive delays in adjudication and enforcement of judgments. The quality of judicial services is low by international comparison (scoring 40 points out of 100 in the Doing Business 2020 indicators), especially when it comes to commercial matters. Judges are swamped with an excessive number of petty cases and administrative matters, which distracts valuable judicial time from more complex cases. Access to the courts for micro, small, and medium enterprises is costly with outcomes that are often not sufficiently predictable. These dysfunctions risk worsening in the aftermath of the COVID-19 crisis.

The judicial system does not perform well to enable businesses to claim and enforce their rights vis-à-vis other businesses and public authorities. The performance of the judicial system is poor when it comes to the ease of enforcing contracts through the court system, with Egypt scoring 40 points out of 100 (World Bank 2019).³⁹ Under the Quality of Judicial Processes Index, which measures to what extent Egyptian courts have a number of international good practices in place, Egypt scores as low as 4 out of 18 points, with 0 points for good practices in the areas of case management practices and court automation. Legal uncertainty, weak property rights, and underperforming commercial justice institutions in Egypt also affect the country's performance on various core aspects of the rule of law. In 2020, the Rule of Law Index ranks Egypt 125 out of 128 countries, 29 out of 30 in comparison with countries of a similar income level.

TABLE 2.1 ENFORCING CONTRACTS INDICATORS

INDICATOR	EGYPT	MENA	OECD	OVERALL BEST PERFORMER
Time (days)	1010	622	589.6	120 (Singapore)
Cost (% of claim value)	26.2	24.7	21.5	0.1 (Bhutan)
Quality of Judicial Process Index (0-18)	4	6.6	11.7	-

Note: MENA = Middle East and North Africa; OECD = Organization for Economic Co-operation and Development.
Source: Doing Business 2020 (World Bank 2019)

Weak performance of the judicial system typically negatively affects business confidence and their reliance on contractual agreements. The protection of property rights is undermined by weak contract enforcement, as businesses have difficulty using the courts to get public or private sector actors to comply with the applicable legal and regulatory frameworks. Instead, businesses face delays, high costs, inconsistent application of the law, and selective enforcement, this is an important deterrent for the private sector and FDI, as legal certainty and predictability constitute key conditions for a sound business environment.

Weaknesses in the Rule of Law and Commercial Justice Undermine Contestability

Weaknesses in rule of law and commercial justice undermine contestability and disproportionately affect smaller enterprises. Worldwide, well-connected, well-established, and large firms are less likely to have to rely on the courts to protect their interests in the first place. Instead, as evidenced by international research, weak contract enforcement pushes larger companies towards vertical integration or dealing with other large firms rather than relying on small firms, which hinders the growth of smaller players and weakens the backward and forward linkages in the economy. At the same time, smaller businesses, which are more likely to need the courts, may face challenges using them, because the Egyptian judicial system could do better at providing guidance for self-represented parties or legal aid to establish fair access. Under such circumstances, small businesses avoid entering into contracts with the government. This constraint has a negative effect on private sector dynamism, by leading to lower levels of competition and contestability, reinforcing elite capture, and favoring incumbent firms—be they private or SOE⁴⁰—which leads to rent-seeking.

When micro and small businesses cannot avoid interaction with the courts, they face particular challenges. Generally speaking, disputes involving micro and small businesses tend to be about smaller amounts, so in the absence of effective small claims procedures the costs of litigation are proportionally much higher. Also, when legal certainty and the predictability of the judicial system are weak, this increases the margin for judicial corruption, because in the absence of a general practice of publishing court decisions, there is no publicly known standard that, if deviated from, could otherwise place the judge and the decision under close scrutiny. , Egypt's commercial justice system is characterized by excessively long delays in adjudication and enforcement of decisions. Since 2014, the long duration (1,010 days) and high cost (26 percent of the value of the claim) to process a case from filing to enforcement of judgments remains unchanged (World Bank 2019). Global evidence shows that such delays favor those who can afford them, while putting pressure on the economically weaker party to settle for a fraction of their claim (Hammergren 2014). Rules on adjournments are lax; time standards exist on the books but they do not cover key court events and are not implemented in the majority of cases.⁴¹ Countries with systematic delays create a market for judicial corruption, as parties are incentivized to use bribes to accelerate the processing of cases. Overall, case management in Egypt is very weak, with 0 out of a possible 6 points for this aspect under the Doing Business Enforcing Contracts Quality of Judicial Processes Index, which enables actors in the judicial system to artificially create delays in a system already plagued by delays. Research shows that this can create a market for bribery. Unfortunately, automation to support case management is also largely absent in Egypt, with 0 out of a possible 4 points for this aspect.

Addressing Commercial Justice Challenges Facing Businesses

Addressing these bottlenecks in a systemic way will require large-scale reforms and investments in the commercial and broader justice system. Reforming the system to address delays in general and commercial courts will require investments to put in place an effective case management system that improves business processes and utilizes the full potential of GovTech, which will also increase transparency. The changes could include designing filters that route small claims onto fast tracks to free up judicial time for more complex cases. Backlogs could be reduced using a targeted program to review the stock of pending cases. Significant investments are needed to improve the management of courts' performance, including professionalizing the human and financial resources of courts and the Ministry of Justice. To meet the needs of micro, small, and medium enterprises (MSMEs) in particular, the judicial system needs to have greater capacity to improve the quality and consistency of adjudication. In addition, providing more systematic outreach and awareness campaigns can help make legal information readily available. Finally, gathering data through user feedback surveys can help improve the efficiency, quality, and accessibility of legal services for MSMEs.

Addressing the delays in the processing of administrative, civil and commercial cases is essential for solving one of the core judicial challenges that businesses face. Specific objectives include improving judicial workload management, streamlining business processes, enhancing case management, and supporting enhanced business processes through automation. Other objectives are related to delay but are more cross-cutting, such as strategic planning, data collection, use of data for management purposes, outreach to users and potential users, and capacity building for judges and staff.⁴²

3. SECTOR ASSESSMENTS

The constraints discussed in the previous section are hindering the development of many sectors of Egypt's economy to different degrees. This section focuses on three sectors selected for a more detailed assessment. The selection considered government priorities and was based on extensive consultations held with experts, private sector stakeholders, and development partners in Egypt. The assessment included a comprehensive review of evidence as well as analytical work. The conceptual framework adopted for analyzing sectors used three main filters: the development impact of the sectors, their market potential, and the feasibility of reforms. The three sectors were agribusiness; manufacturing (with a focus on chemicals, textiles, and automotive); and ICT. Global evidence suggests that these sectors can have significant impacts on an economy's employment and exports. In the Egyptian context, the three sectors also represent significant opportunities for growth and expansion. These assessments also illustrate the paradox of how a State's significant intervention in some sectors but not others, including shaping clear policy visions, can hinder private sector development in these sectors.

3.1 AGRIBUSINESS

Sector Overview and Potential

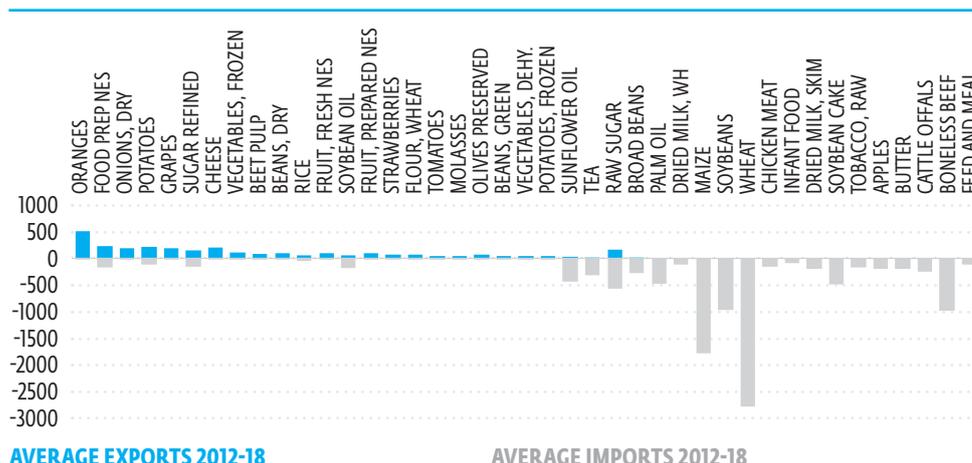
The agribusiness sector is a key contributor to Egypt's GDP, employment, and exports.⁴³ Agriculture accounted for 21.3 percent of employment and 11.4 percent of GDP in 2019. Food exports accounted for 15.0 percent of merchandise exports.

Despite production growth in recent years and a tenfold increase in food exports since 2000, Egypt's trade deficit in food products has widened dramatically over the past two decades. Increased production has been driven by increases in both yields and area under cultivation. Yet a large trade deficit exists, even for agri-products in which Egypt enjoys global leadership, such as oranges. Wheat and maize together represent the greatest share of Egypt's import expenditure, with the country being one of the world's largest importers of both crops. As is the norm for GVC-dominated trading patterns, inputs and raw materials are imported for a large share of exported semi processed and processed agri-products.⁴⁴ This import supply chain of food items as well as inputs is likely to be disrupted at least in the short term during the COVID-19 crisis, while the inefficient trade and logistics system reduces competitiveness for these products. In contrast, Egypt's comparative advantage in this sector is in part artificially inflated by heavy subsidies (those for food alone amounted to 1.6 percent of GDP, or 6.4 percent of total expenditure in FY2019). Those subsidies, along with State control of some products (such as wheat and sugar), enable Egypt to supply these products at relatively cheap prices.

Egypt currently realizes only 30 to 40 percent of its export potential across key agri-commodities. Approximately US \$10 billion in export potential in agriculture and food remains untapped in Egypt (World Bank 2019). Its large domestic consumer market—the largest in the Middle East and North Africa region—is also not fully tapped (figure 3.2). Total annual spending on food is estimated to reach about US\$90 billion by 2021, up by 36 percent from 2016 (World Bank 2018).

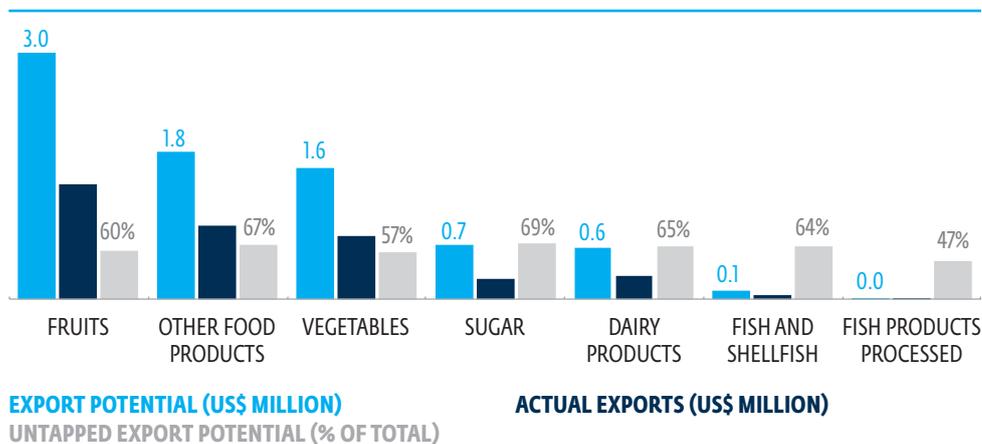
Analysis of agricultural subsectors suggests that horticulture products are most competitive globally. An analysis combining an assessment of on-farm competitiveness (comparison of yields in Egypt versus the world average) with an assessment of export competitiveness (using revealed comparative advantages) shows that the top five products are all horticulture products: dates, sugar beets, olives, onions, and other fruits. The next five products are citrus, dry beans, sorghum, broad beans, and other pulses. The analysis also highlights the cross-cutting challenges of sectors, discussed later (for a brief summary of the analysis, see appendix H).

FIGURE 3.1 TRADE IN PRODUCTS ACCOUNTING FOR 85 PERCENT OF ALL AGRIBUSINESS NET EXPORT AND NET IMPORT VALUES (US\$ MILLION), AVERAGE 2012–18

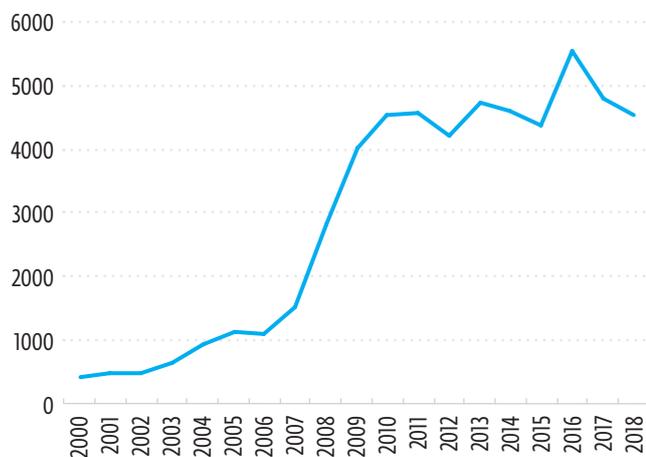


Note: PREP = Prepared; NES = Not Elsewhere Specified; DEHY = Dehydrated; WH = Whole.
Source: FAOSTAT

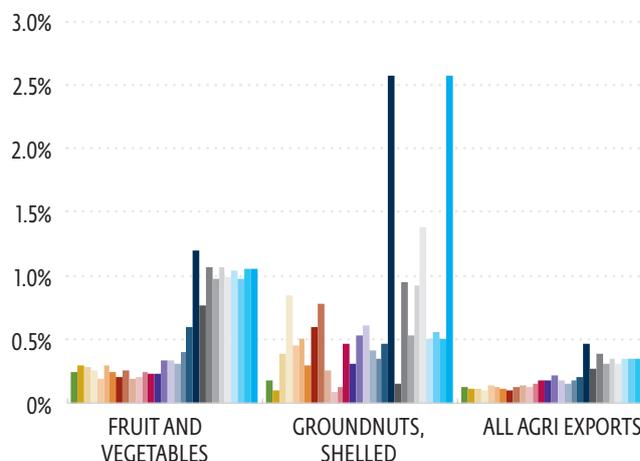
FIGURE 3.2 EXPORT POTENTIAL OF EGYPT'S AGRI-PRODUCTS



Source: ITC Export Potential Map, <https://exportpotential.intracen.org/en>

FIGURE 3.3 EGYPT'S FOOD EXPORTS, US\$, MILLIONS, 2000–18

Source: World Bank Open Data

FIGURE 3.4 EGYPT'S SHARE IN GLOBAL AGRI-PRODUCT EXPORTS, 1990–2018

Source: FAOSTAT

Challenges to Private Investment in Agribusiness

Structural constraints and distortions impede the sector's growth potential. Structural constraints include water scarcity and land fragmentation, which are aggravated by the inefficient distribution system, a distortionary subsidy and pricing mechanism, and substantial waste of final (perishable) products because of poor logistics and connectivity. Over 80 percent of the water supply is used for agriculture, which depends heavily on irrigation (96 percent of land is irrigated). Egypt's fast-growing population of more than 100 million gives rise to tremendous pressure on the limited available land and water resources, not only from agriculture but also from expanding urban development. The Aswan Dam and aquifers allow for long-term water storage and irrigation, distributed by the government, but the availability is constrained by inefficient distribution and water salinity. Rapid depletion of renewable water resources has been compounded by limited use of water-saving equipment and techniques, which lacked incentives because of misaligned pricing (effectively, making the use of scarce water resources free). Similarly, subsidized prices of pesticides have contributed to excessive pesticide residues and related pesticide contamination in the environment.⁴⁵

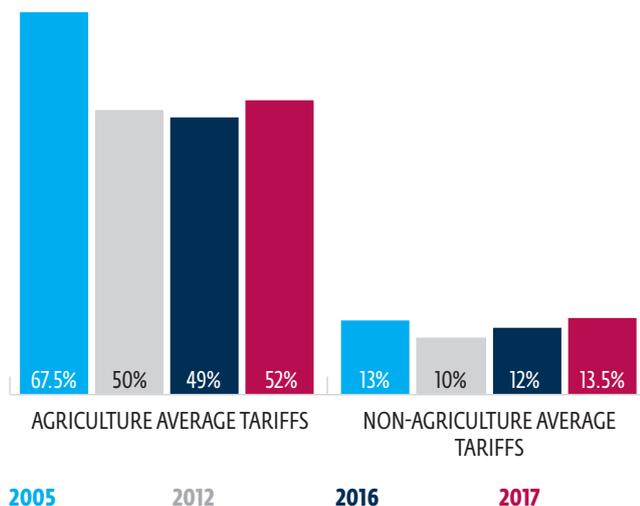
Land fragmentation and the lack of a land titling system constrain agricultural productivity and limit the ability of farmers to realize economies of scale. The average size of farm units is 2.5 feddans (about 1 feddan in old lands and 5 feddan in new lands). Smallholders produce about 47 percent of field crops and a smaller portion of horticultural crops (FAO 2017). Egypt has only a few large-scale farms, which include corporate (local and foreign) and military investments, particularly in reclaimed lands in the desert. This fragmentation discourages investments in revitalization of the land and in mechanization. The short-term land rental agreements create significant disincentives for investments, in addition to raising transaction costs for commercial buyers. Although a law on cooperatives exists, it is restrictive and provides little flexibility to develop self-reliance, create marketing links, or enter into contracts with the private sector. Instead, cooperatives are considered an extension of the government, and their utility is limited to the distribution of subsidized inputs. Some US\$84 billion worth of agricultural land cannot be used for collateral because of the problems of land titling and registration, which impede private investment (World Bank 2018)—a condition that undermines Egypt’s potential to be an agribusiness hub in the region.

The export potential of agribusiness products is constrained by a number of factors, including poor transport and logistics, weak food safety and phytosanitary conditions, and inadequate R&D and skills. As mentioned in Section 2, waste of agricultural products resulting from inadequate transport facilities, insufficient bonded warehousing capacity, and weak cold chain infrastructure is high, estimated at 15 to 20 percent for nonperishable crops and 25 to 50 percent for perishable crops. Egypt has high productivity loss from foodborne diseases (US\$1.75 billion). Among countries with comparable income levels, Egypt also has relatively high rejection rates by the EU for fruit and vegetable exports (Jaffee et al. 2019). Some steps have been taken in the right directions, such as the recent establishment of the National Food Safety Authority, an umbrella organization in charge of food safety. Yet inadequate infrastructure for implementation of global standards, lack of awareness and capacity, and a multitude of laws that govern food safety remain constraints. Despite the large pool of agricultural researchers, the extension system is outdated and has insufficient funds for R&D and innovation.⁴⁶ Also, the local training infrastructure for specialized skills for export-oriented cultivation and processing is poor. Egypt’s spending on agriculture R&D was only 0.44 percent of value added in agriculture, compared with a median of 0.52 percent across emerging economies.

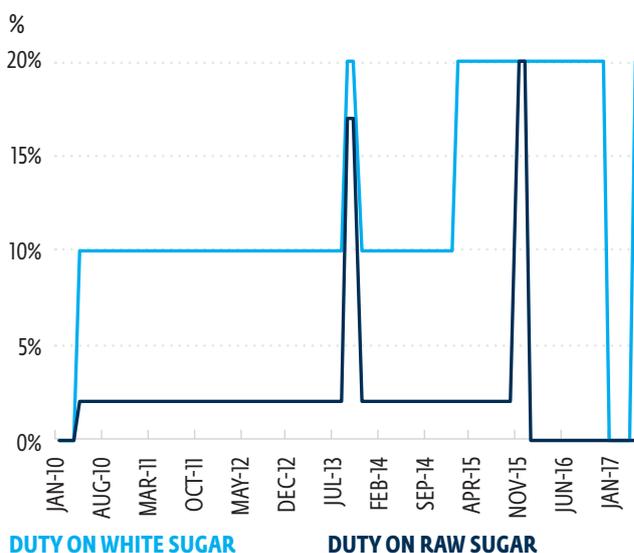
Trade policy also creates challenges for the agribusiness sector, with high and sometimes unpredictable import tariffs on food products and instances of export duties and bans. Import tariffs remain high; for example, in late 2016, tariffs on selected highly processed food items increased by up to 200 percent. As explained in Section 2, this protective tariff regime reduces the overall incentive to export by making the domestic market a lucrative option with limited international competition. Such a shield of protection discourages firms from developing capacity through innovation and R&D, which are critical to being competitive in both the domestic and the international markets. For strategic crops such as sugar, unpredictable tariff changes also lead to disincentives for private participation (figure 3.6). Egypt also remains among the group of developing countries with the highest frequency index and coverage ratio of NTMs. For example, export duties on sugar and feed components are in place, and rice exports are occasionally banned.

FIGURE 3.5 AVERAGE TARIFF RATES

WTO product categories



Source: World Trade Organization (WTO).

FIGURE 3.6 IMPORT DUTIES ON SUGAR

Source: LMC International

The State exercises strong, direct control over several agribusiness subsectors, which constrains efficient market functioning (figure 3.7). To ensure sustained and affordable availability of key staples, the State controls certain subsectors that are considered strategic, particularly wheat, rice, and sugar. State measures include a massive food subsidy system that costs about 1.6 percent of GDP (2019) and covers as much as 80 percent of the population. State controls include tariff protection, fertilizer subsidies, the interdiction of wheat sales to the private sector, numerous agri-processing SOEs, and State-owned retail in the food subsidy system. Subsidized energy (natural gas) allows for cheap production of fertilizers (nitrogen, phosphorus, and potassium) that are sold at subsidized prices to farmers. These subsidies not only encourage waste from overuse, but also negatively affect the yields as well as the environment.⁴⁷

Additional distortionary actions further prevent proper functioning of markets. For example, at the production stage of the value chain, seed imports are restricted, as incentives to encourage planting of some strategic crops (wheat, sugar beet) and curtail planting of others (rice, sugar cane) clash with market trends for these products. Numerous SOEs operate as agri-processing entities, accounting for over 60 percent of wheat -milling capacity, at least 75 percent of sugar -refining capacity, and 25 percent of domestic milled -rice production. The State also operates its own retail operation for the food subsidy system, with 12 percent of total retail sales of bread occurring through government outlets. The current food subsidy system is subject to significant leaks.

The large State role in the agribusiness sector limits the room for private sector participation in the agribusiness sector. Private sector entities operating in these subsectors typically work either in conjunction with the public sector (for example, toll milling of wheat for the government) or in a segment of the market where the State specifically permits private participation through licensing or allocation (for example, sugar beets rather than sugarcane). Policies and actions of the public sector also contribute to market concentration in markets that are open to the private sector.⁴⁸

FIGURE 3.7 MAPPING OF STATE INFLUENCE ALONG THE VALUE CHAIN, PER SUBSECTOR

	INPUT SUPPLY	PRODUCTION/ IMPORTS	PROCESSING	WHOLESALE	RETAIL/ EXPORTS
Wheat	Fertilizer supply dominated by SOEs (Agri-bank and cooperatives); Seeds import restricted State-owned machinery rental	Mandated farm prices: 37% gov't imports	60% SOE milling	14% SOE port-storage: 100% inland	12% bread retail by gov't
Maize					
Rice		Restrictions on area planted, sale*	Some gov't milling	Licensing and stocking limits	Intermittent export bans
Sugar		Restrictions on area planted	High gov't milling share	Subject to gov't controls and SOE involvement	
Fruits	Fertilizer supply dominated by SOEs (Agri-bank and cooperatives) though relatively lesser as commercial production enables greater free-market purchase; Tight control on cotton seeds; Overall seed import restricted Some feed mills are also SOEs				
Vegetables					
Cotton		Restrictions on area planted	High gov't ownership in ginning		
Groundnuts					
Poultry		Multiple SOEs present (e.g., Misr Dairies & Food Company, Misr Dairies & Food Company, Misr Dairies & Food Company among several others)			
Goat & Sheep					
Cattle					
Milk & Dairy					
Marine		SOEs vessel operations			
Acquaculture		SOE farms			
Fertilizers	Subsidized natural gas supply	SOE dominated		Price control	SOE bank & cooperatives

Low/no intervention

Medium intervention

High intervention

Note: Agri finance is dominated by a state-owned bank. *Sale restricted to licensed entities only. Source: Various research and news reports including but not limited to FAO, World Bank (including Markets and Competition Policy team up to 2016).

While most of the nonstrategic subsectors are free from direct government intervention in the value chain, SOEs pose a risk of unequal access to inputs and a lack of competitive neutrality for the private sector. The horticulture sector, which has been free of policy controls and public sector participation, has traditionally fared exceedingly well and received a further boost on the back of the reform process that has been unfolding since late 2016. However, the presence of SOEs adversely affects incentives for private sector investment. There are examples of SOE participation in the production, processing, and marketing of food items such as dates, fisheries products, and potatoes, potentially creating unfair competition for private operators in these subsectors.

The regulatory environment is also challenging for other agribusiness subsectors. Egypt ranks 72 out of the 101 countries in the Enabling Business of Agriculture rankings, with lower performance on access to quality seeds and fertilizers.⁴⁹ Some policy constraints also persist; for instance, despite the reforms introduced in 2014, the Agriculture Cooperatives Law remains limited in its ability to permit commercially oriented market links for small farmers. Cooperative funds are treated as public and employees and boards are considered civil servants; that might impede ability to function commercially. Another example is the Fisheries Law, which does not permit the use of fresh water for aquaculture, thereby preventing exports to certain markets even though fresh water recycled from aquaculture can be beneficial for use in crop cultivation. Access to finance is another challenge, as the penetration of institutional finance in agriculture is low, at 1 percent (partly related to the lack of a collateral market for agricultural land). The roles of nonbank finance companies and microfinance institutions, typical key players in agri-financing, are also limited in Egypt.

Recommendations to Support the Development of the Agribusiness Sector

To address the challenges identified as facing the agribusiness sector, the following actions need to be taken in the short to medium term:

- a. Analyze the rationale and fiscal/financial costs and benefits of ad hoc policy measures to private sector engagement and government. These include, for example, (a) sporadic export bans, import restrictions, and tariff changes; (b) SOE and military's participation in commercial activities to build case for a more strategic approach to food security without limiting private enterprise (c) current actions comparing fertilizer subsidies with the costs of a transition to a market-based fertilizer sector; (d) trade and production policy for rice, to maximize commercial benefits from exports without compromising domestic availability; and (e) expanding the smartcard –based system for bread subsidies to reduce leakages.
- b. Improve adoption of food safety standards. Capacity-building efforts should be deployed by (a) building support for the recently established National Food Safety Authority, (b) supporting agribusiness small and medium enterprises (SMEs) on food safety standards and market requirements, and (c) developing private partnerships for setting up laboratories and accreditation mechanisms that SMEs can easily access.

- c. Expand access to agribusiness finance, for example, by facilitating export financing for SME exporters and setting up microcredit and micro leasing facilities for the micro and small enterprises.
- d. A participatory approach to formulate policies for this sector should be adopted through public-private dialogue.

Further regulatory reforms and financing tools are needed in the medium term. The Fisheries Law should be amended to allow for integrated fish and crop farming, and the Cooperatives Law needs to be reformed to enable greater commercial orientation, with lessons that could be drawn from the dairy sector. Strengthening of this law would help address part of the constraints to efficient use of land- where further land reform is also needed to tackle challenges mentioned earlier such as titling and registration. Both public and private sector financing capacity also needs to be built to deploy agri-finance and risk management tools, which can be learned from international experience.

The sector challenges and priorities recommended in this section are even more relevant in light of the COVID-19 crisis. While the food staple subsectors are well supplied and prices are currently stable, disruptions in trade and logistics threaten to disrupt agribusiness chains across the world, particularly amid the desert locust attack that could lead to a severe food crisis in multiple countries. Countries with weak support infrastructure and upstream and downstream links—cold chains and warehousing, roads and irrigation infrastructure—will also see adverse effects in the flow of non-staple subsectors. Food loss may increase in the wake of containment measures and reduction in demand. Further, labor disruptions are anticipated as the movement of people gets disrupted. Therefore, a priority will be to streamline regulatory and border procedures to ensure access to essential food products and perishables. Internal and external border agencies—for example, customs and agencies responsible for sanitary and phytosanitary standards—should work together to design special regimes for expedited clearance for essential food products and farming inputs.

COVID-19 Challenges and Opportunities

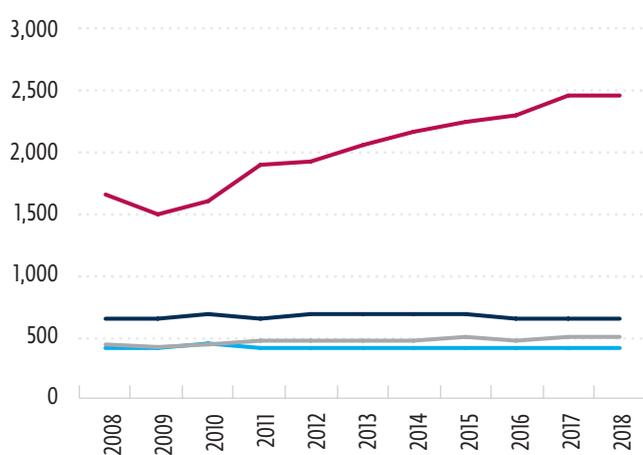
The COVID-19 crisis is putting tremendous pressure on global supply chains, with disruptions in trade flows due to border closures. The disruption in the agriculture sector could likely hit the availability of perishables. Further, Egypt is the second-largest importer of wheat (US\$2.6 billion in 2018). Although wheat prices are stable now, concentration of production and exports among a few countries along with a looming food crisis in different countries due to desert locust attack creates a risk that prices could rise if supplies are restricted, potentially leading to a significant increase in Egypt's wheat import bill. The lack of sufficient warehousing and storage capacity also could lead to increasing food losses.

However, the crisis presents an opportunity for the country to address the gaps in agriculture sector competitiveness. Reforms would enable the sector to be better prepared to address food security and export competitiveness in the future. Egypt could become better prepared by accelerating the recommended steps toward expanding agriculture extension services, improving food standards and certification, removing trade distortions for factor inputs, and improving linkages with upstream production currently dominated by SOEs.

3.2 MANUFACTURING

Egypt's manufacturing sector lags that of its peers. Over the past five years, the sector's average share of GDP and of employment have been 16.6 percent and 12 percent, respectively. Although its manufacturing value added grew from about US\$34.0 billion in 2009 to US\$48.2 billion in 2019, Egypt still has a lot of room to catch up with its peers (figure 3.8). In 2018, its manufacturing value added per capita was US\$420, compared with US\$493 for Morocco, US\$651 for Tunisia, and US\$2,446 for Turkey (figure 3.9).

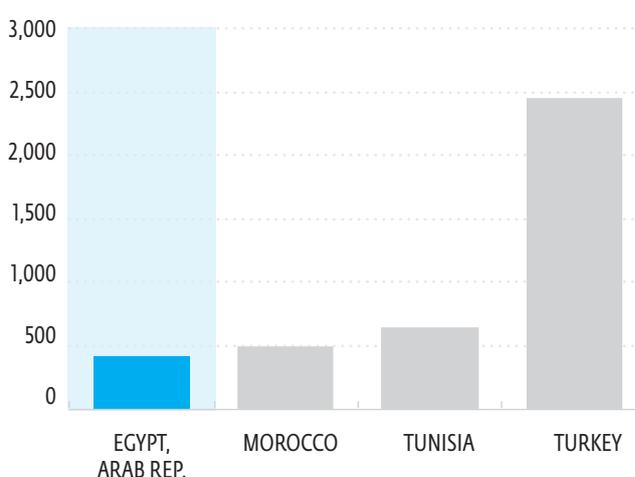
FIGURE 3.8 MANUFACTURING VALUE ADDED, US\$, BILLIONS CONSTANT USD



EGYPT, ARAB REP.
MOROCCO

TUNISIA
TURKEY

FIGURE 3.9 MANUFACTURING VALUE ADDED PER CAPITA, 2018 (USD)

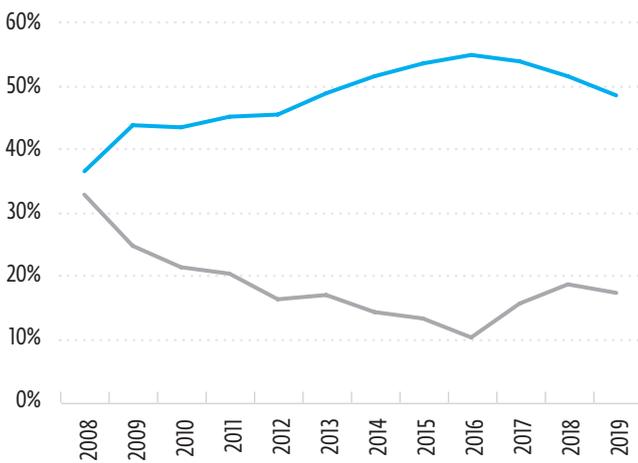


Source: World Bank Development Indicators

Although manufacturing exports have been increasing, manufacturing trade levels are still low, and exports are dominated by low-complexity products. Between 2008 and 2019, manufacturing exports as a share of total exports increased from 36.5 percent to about 49 percent. Per capita, Egypt's manufacturing exports are only US\$ 140 compared with US\$ 564 for Morocco, and US\$ 1,718 for Turkey. Furthermore, manufacturing sector exports as a share of total exports is low compared with Jordan, Morocco, and Turkey (figure 3.11). The country's export penetration (as measured by the export penetration index) has also narrowed marginally over the past five years (from 6.73 to 6.70), while the comparison countries just mentioned have been increasing their export penetration. Furthermore, Egypt ranks low on the Economic Complexity Index, at 66 in 2018, compared with Jordan (51), Morocco (91), and Turkey (40).⁵⁰ The product space map for Egypt shows that its exports of connected and complex products such as transportation and electronics are currently mostly untapped, except for a small percentage of chemical-based exports.⁵¹

However, Egypt has been diversifying its exports into more complex products, which creates an opportunity to expand further, especially in products for which global demand is rising.⁵² Over 2003–18, about 7 percent of the total export share came from new products.⁵³ A number of them are products with higher complexity, specifically in the chemicals and electronics industries. Further, some of these products also show growing global demand, which creates opportunities for Egypt to expand further. For example, demand for motor vehicle parts is expected to grow at 12.5 percent between 2017 and 2022. For the same period, pharmaceuticals are expected to grow at 5.2 percent, and various chemical products, such as plastic plates, vulcanized rubber, and pigments, are expected to experience significant growth. Similarly, global demand for certain fertilizers (specifically, nitrogen, phosphorus, and potassium-based fertilizers) is anticipated to grow by 8 percent between 2017 and 2022 (FAO 2019). Manufactured food products and T&A have growth forecasts of 3.9 percent between 2020 and 2026 and 3 percent between 2019 and 2030, respectively (IGI 2020). Egypt’s revealed comparative advantage has increased from 0.86 to 1.14 in food products and from 2.53 to 3.45 in T&A.⁵⁴

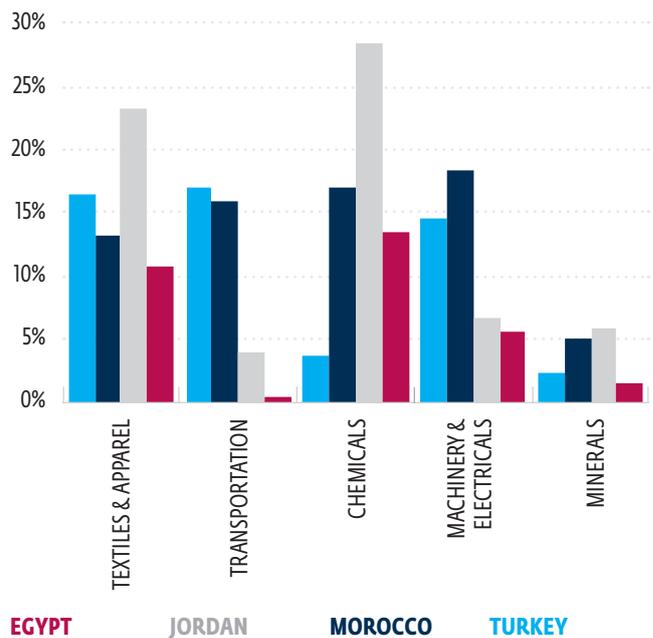
FIGURE 3.10 EXPORTS AND MANUFACTURING EXPORTS



MANUFACTURING (% OF TOTAL EXPORTS)
EXPORTS (% OF GDP)

Source: World Bank Development Indicators, Atlas of Economic Complexity

FIGURE 3.11 SHARE OF SECTOR IN COUNTRY’S MERCHANDISE EXPORTS



EGYPT JORDAN MOROCCO TURKEY

Source: World Integrated Trade Solution (WITS), 2018

GVC participation in Egypt’s manufacturing sector is constrained by several factors, including trade barriers and state involvement in sectors. As discussed in section 2.1, constraints related to trade barriers cause perverse incentives to integrate into global trade. For instance, according to Doing Business 2020, more than 50 percent of firms in the chemicals industry cite trade barriers as key obstacles for doing business, followed by 38 percent in machinery, equipment, and electronics and 25 percent in T&A (World Bank 2019). The government’s presence in many manufacturing sectors creates inefficiencies in the domestic value chain, which has the potential to adversely affect Egypt’s competitiveness in GVCs. Although these barriers also affect traditional trade, their effects get cumulated in GVC-dominated trade because of the multiple rounds of importing and re-exporting processes involved in such trade.

This section reviews sector-specific challenges and opportunities in three manufacturing subsectors—chemicals, T&A, and automotive—because of their potential for growth in GVCs. These subsectors together represent sectors in which Egypt already has a presence in global trade, showing that they have the potential for moving up to more complex products and that they are priority sectors for the government. As mentioned earlier, Egypt has a growing comparative advantage in T&A, with opportunity to move to higher-value-added activities. The chemical industry’s trading potential is underutilized, particularly the opportunity to move to more complex products. Recent changes in policy in the automotive industry place the country at a crossroads for determining the direction and speed of its growth.

Chemicals Industry

Context and Potential

Egypt’s chemicals industry is an important contributor to the economy and to exports, although activity is concentrated in low-complexity and low-value-added products.⁵⁵ The industry accounts for 3 percent of GDP, 12 percent of the industrial sector, and 20 percent of goods exports (Fitch 2019a). There are more than 70,000 chemicals in use today, and at least one of them is used as a direct or indirect input in almost all manufactured goods (including complex goods like aircraft). However, production is dominated by the manufacture of feedstocks and basic chemicals (closer to raw material in the production chain). Chemical exports, valued at US\$5.6 billion in 2019, make up the second largest share of goods after fuels. However, they are concentrated in primary plastic products and fertilizers (mostly nitrogenous), which represent 36 percent and 24 percent of these exports, respectively.⁵⁶ Egypt is an important player globally in some of these products. For example, it was the fifth -largest exporter (by value) of nitrogenous fertilizers, responsible for nearly 6 percent of global exports in 2018, in a market of growing global demand. Europe and Turkey receive approximately 41 percent of Egypt’s chemical exports. In 2019, the Chamber for Chemicals Industries counted just under 9,500 companies, half operating in the sector (Global Markets International 2019).

The chemicals, refined petroleum products, and plastics industry has the potential to generate more and higher-skilled employment and larger salaries (UNIDO). In 2017, it employed 178,600 people. The industry's catalytic effect on the economy is well documented, with multipliers of 15 to 20 for downstream and indirect jobs created, depending on the developmental status of the country. A significant share of the jobs in chemical plants and related services are skilled or semiskilled. The industry is technology driven and capital intensive, requiring highly trained workers for operations and maintenance and for R&D.⁵⁷ Hence, growth in this industry can have a significant positive influence on Egypt's skilled employment numbers.

The two value chains—gas-based and oil-based—exhibit different characteristics in their competitiveness. Gas-based industries are relatively well established, with abundant natural gas reserves giving the country a cheap source of inputs for gas-based downstream sectors. The private sector is active in the upstream exploration and production subsectors, with about 50 active foreign companies conducting 90 percent of all exploration activities, mainly through joint ventures. The gas transmission and distribution networks are also well laid out. This has led to an established fertilizer sector. In contrast, the oil-based value chain is fragmented, with little value-added production. Although Egypt has abundant oil reserves, the capacity of its 11 refineries did not increase between 2002 and 2018; they had a 65 percent utilization rate because of inefficiencies (BP 2019). Therefore, the country exports crude oil that cannot be processed domestically, creating insufficient availability of feedstock for downstream subsectors, which has resulted in importing of both required raw material and finished refined products. To improve the country's capacity and provide the much-needed feedstock to the downstream industry, the government announced plans in 2019 to upgrade six oil refineries at a cost of about US\$9 billion over four years to increase domestic refining capacity from 38 to 41 million tpa. For instance, state-owned Middle East Oil Refinery and ERC are currently undergoing an expansion to increase the country's refining capacity of Euro V refined products and additional projects are under way.⁵⁸

Chemical imports represent a significant share of the total imports in the country. They reached US\$12.4 billion in 2018, representing over 15 percent of fall imports. Some are imports of raw materials needed for downstream subsectors. For example, the production of plastics, which generated an estimated US\$12.5 billion and provided 415,000 jobs in 2017, depends highly on imported raw materials. Local chemical companies provided only 28 percent of the raw material required for plastic production in 2016. The industry also suffers from fragmentation and informality, with an estimated 5,220 plastics converters, of which 72 percent are MSMEs and over 50 percent informal (USAID 2017).

Given the current levels of production, the chemicals industry has room to grow. It produces only 3 percent of GDP, compared with 7 percent in Europe's chemical industry. Egypt's feasibility map reveals several products in plastics and pharmaceuticals that the country could move to, given the current levels of production. As it moves to more activities downstream, the industry can achieve higher and more stable profit margins and become less vulnerable to commodity price shocks. There are three pathways for growth: import substitution, export expansion, and expansion of downstream subsectors such as plastics and consumer goods (figure 3.12).

FIGURE 3. 12 OPPORTUNITIES FOR THE CHEMICAL SECTOR

IMPORT SUBSTITUTION (USD \$4.8 BILLION)	EXPORT EXPANSION (USD \$3.2 BILLION)	DOWNSTREAM SECTORS
 Natural gas based products: USD \$0.8 bn	 Urea: USD \$1.1 bn	 Polymer Market: Led by expansion of consumer goods, construction, pharmaceuticals and automotive
 Customized chemicals (paints, varnishes, plastics): USD \$2.8 bn	 Others with higher product complexity - Medicaments, Polyethylene: USD \$2.1 bn	
 Oil based products: USD \$1.2 bn		

Egypt has the potential to substitute chemical imports worth US\$4.8 billion across three products: natural gas-based products, oil-based products, and customized chemicals. To identify products that the country could explore for import substitution, an assessment of chemical products was conducted, based on production capacity, availability of critical raw materials, and the country's relative complexity in the production process.⁵⁹ In plastics, there is opportunity not only to substitute the current large volumes of imports, but also to use this opportunity to strengthen the value chain sustainably (for example, incorporating concepts of sourcing, efficiency, recycling, adoption of standards, and certification). This focus is important as this market is expected to grow 10 percent annually over the next 10 years, placing Egypt first in Africa in plastics consumption. Egypt has very low levels of domestic consumption per capita today (28 kilograms annually); in comparison, Europe's average is 140 kilograms.⁶⁰ An additional opportunity for import substitution comes from Egypt's emerging technical textiles value chain (USAID 2019). In 2017, the country imported US\$605 million in technical textiles. Capacities already exist in the country, and there is potential for boosting the fast-growing US\$746 million in exports.

Egypt also has an untapped export potential of US\$3.2 billion in chemicals, mostly to the EU, Turkey, the United States, China, and India. This estimate has been calculated using the export potential indicator, which identifies products in which the exporting country already has proven international competitiveness and good prospects of export success.⁶¹ Among products with an untapped export potential of US\$100 million or more, Egypt could increase its exports of chemicals by US\$3.2 billion. Although urea represents by far the largest untapped potential (US\$1.1 billion), medicaments, polyethylene, and mixtures of odoriferous substances used in food and beverages display higher product complexities, with potential to enable faster growth.

Growth in end markets for petrochemicals also represents untapped potential for the Egyptian economy to increase complexity and diversify into sophisticated goods. The domestic polymers market will be led by growth in manufacturing, particularly in consumer products, packaging, and construction (Global Markets International 2019). Egypt's construction market is projected to be one of the best-performing markets over the next five years because of the numerous infrastructure projects under way. Housing construction is also generating strong demand for wall paints, with a projected annual growth for protective paints of 2.1 percent between 2018 and 2023. Development of the local automotive supply industry is expected to increase demand for high-value polymers and rubbers.

Challenges

Large State Presence and Weak Links

The large footprint of the State in the chemicals industry is a key constraint leading to lack of transparency regarding regulations and policies, and inequality of access. At least twelve SOEs manufacture chemical products directly or through a multitude of subsidiaries. Among the 15 major fertilizer producers, nine are directly or indirectly controlled by the State. Through holdings such as Egyptian Petrochemicals Holding Company (ECHEM) and Chemical Industries Holding Company and their subsidiary, the state's footprint covers the chemical-based or oil-based value chains. Moreover, the close links between policy makers and the SOEs under ECHEM and Egyptian Gas Holding Company create an inherent conflict of interest between regulatory, policy, and operational bodies. The presence of politically connected firms that participate in multiple markets through a network of subsidiaries in the chemicals industry can also depress competitive pressures and result in poorer market results. Figure I.1 in appendix I maps the main players and state footprint along the chemicals value chain.

There are private players in some downstream processing activities such as nitrogen fertilizers, but fixed gas prices and the obligation to supply fertilizers at fixed prices for domestic use affect the industry's competitiveness. Competitive pricing for gas (a critical input in the fertilizers industry) would enable private sector companies to compete in international markets. More private investment is likely to develop if product price and supply controls are removed. The institutional setup translates into lack of investment, competitive disadvantages, and hindered financial sustainability. For instance, three of the state-controlled companies in the fertilizer industry had losses in 2017.

The petrochemical refining sector is dominated by SOEs, several of which are inefficient. Ten of the country's 11 refineries are operated by the Egyptian General Petroleum Corporation, which operates under the Ministry of Petroleum.⁶² Egypt's refineries have low complexities and consequently low or negative commercial margins (the Middle East Oil Refinery being an exception). This has also hindered monetization. The government postponed the proposed initial public offering by Alexandria Minerals and Oil Company of 20% of its shares in 2019 because of the company's financial difficulties, as its net profit fell by nearly 70 percent year-on-year by June 2019. Production remains well below the targets set in the master plan, and most producers, mainly subsidiaries of state-owned ECHEM, are producing below capacity. For example, the country's large polystyrene plant, operated by ECHEM's subsidiary E.Styrenics, has suffered significant shutdowns in recent years.

Competitiveness is also impeded by a fragmented sector with lack of access to other critical inputs and weak links. Integration of MSMEs is limited by their struggle to access raw materials because they lack information on sourcing, as well as by the availability of local quality chemicals and inconsistent application of tariffs to import raw materials, as seen in the plastics industry (USAID 2017). Firm -level efficiencies are low owing to lack of skills and technology and to poor governance. Lack of information about export markets—end -market preferences and regulations that need to be met—and limited business contacts have also been noted as a hindrance.

Policy Recommendations

To realize the vast potential of the chemicals industry, there needs to be a shift in the structure of ownership and regulation of activities, in addition to investment in building greater efficiency into processes. Among a number of short-term recommendations, the following priorities stand out:

- **Addressing inefficiencies and the expansive role of the State:** A thorough cost-benefit analysis is needed to evaluate alternative approaches to improving the efficiency of refineries, from improvement of corporate governance to monetization. Experience from other countries shows that where SOEs are corporatized and operate under market principles, with partial or full privatizations, modernization and improved efficiencies result in robust profitability. For example, the Polish chemical industry operates in specialized clusters, with the private sector having a dominant role, and with the government providing incentives for innovation. In contrast, the Nigerian industry remained under state control until the mid-1990s and suffered from inefficiencies and low margins. Since then the industry has been overhauled, allowing for private investors in the gas-based value chain and monetization of petrochemical SOEs. This change led to significant downstream activity, almost all private, including robust MSME engagement brought about by the predictable availability of reliable and good-quality products.⁶³
- **Increasing energy efficiency in the production of raw materials:** Specifically, an assessment of technical solutions and their implementation are needed to increase energy efficiency in refineries, implement the Zero Routine Flaring 2030 initiative, and implement and enforce emission controls. These steps are important because increasingly energy and water efficiency, key components of environmental compliance, are important prerequisites in manufacturing for GVC participation.
- **Expanding refinery capacity:** Expanding capacity could be achieved through (a) the adoption of market prices for petroleum products and chemicals in alignment with international gas markets, (b) open access to the domestic gas market, and (c) an updated master plan for downstream industries, in collaboration with the private sector.

- **Establishing sustainability in downstream subsectors such as plastics:** Other countries' experiences with emerging solutions highlight the types of public and private solutions that should be considered. Banning of single-use plastic by governments reduces consumption. Regulations to strengthen recycling (building safe disposal facilities, removing incentives for creation of landfills) to help encourage reuse. To address waste in packaging, private retail and consumer goods firms are exploring alternative materials, while some governments are (a) imposing taxes on packaging that does not contain enough recycled content and (b) establishing certification and standards for sustainability. Recycling of plastics is leading to the emergence of alternative subsectors like recycled furniture and recovering chemicals from plastics could lead to reduced dependence on oil and gas. In general, this agenda is a growing one and also calls for a collective strategy and vision by both governments and the private sector (see Fitch 2019b; Financial Times 2019; and McKinsey & Co. 2018).

However, given the complexity of the industry in terms of (a) types of chemicals and compounds, and (b) the downstream subsectors (such as plastics, pharmaceuticals, paints), a deeper analysis of its potential is recommended to determine where Egypt could be most competitive and to further identify specific challenges and recommendations.

COVID-19 Challenges and Opportunities

The COVID-19 crisis has the potential to affect the manufacturing sector significantly in the short to medium term with severe disruptions anticipated in global supply chains, contracting demand, and trade and logistics restrictions. In chemicals, the commodity chemicals sector may see further feedstock price volatility and in the longer term may need to find alternatives to reliance on inputs from China. For downstream sectors, falling consumer demand and shifting supply chain trends of moving away from global chains to shorter regional chains will also influence the industries (PWC 2020). For Egypt, this could translate to lower foreign exchange earnings as oil prices drop. There will likely be a delay in execution of planned investments and a drop in demand for chemicals both domestically and abroad.

The crisis underscores the need to address the challenges in the sector quickly to strengthen the linkages and remove the inefficiencies in the sector to be able to withstand such shocks. The price decline in oil is both a risk for the country's foreign exchange earnings, given its exports, but an opportunity to leverage its oil supplies as inputs in the chemicals sector to move to higher value-additive products.

Textiles and Apparel Sector

Context and Potential

The T&A industry is Egypt's second largest industrial subsector after the agriculture and agribusiness sector. It accounts for approximately 3.5 percent of GDP, 34 percent of industrial output, and 14 percent of Egypt's overall exports.⁶⁴ In 2017, textiles accounted for 60 percent of the total value of production, with apparel making up the remaining share. The T&A value chain in Egypt, focused mostly on cotton-based products, is underperforming its peers and competitors. It relies heavily on imported inputs, reflecting little vertical integration and a lack of backward integration.

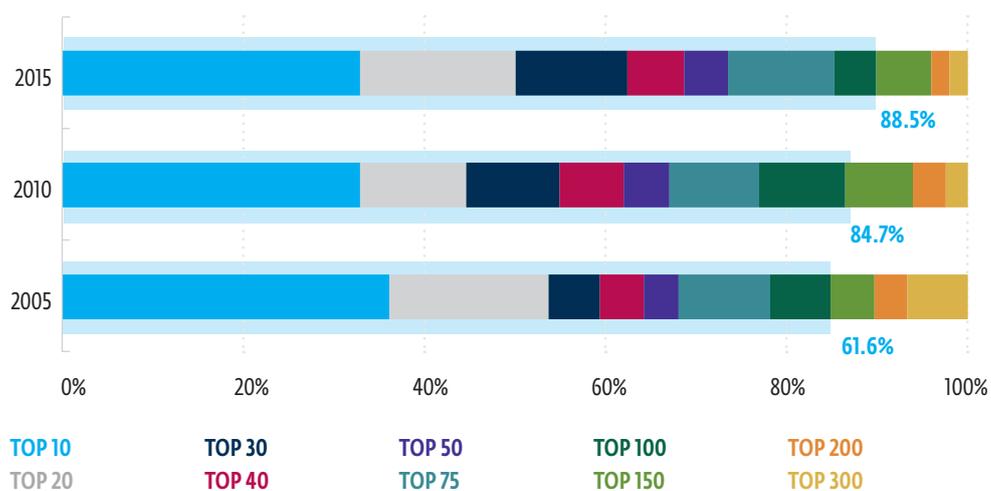
The private sector presence, which consists of about 4,000 companies, varies across the value chain. The private sector role is much more widespread in the downstream subsectors of apparel and home textile manufacturing, whereas large SOEs dominate in upstream fiber, yarn, and fabric production. Under the state-owned Holding Company for Cotton & Textile Industries, 25 affiliated companies cover ginning, spinning, weaving, knitting and dyeing, and finishing. That said, 90 percent of all clothing factories are privately owned.

Less than 20 percent of firms in the industry export. Of the 4,000 firms, only about 700 export. Of those, the top 20 account for 50 percent of total exports, and the top 100 firms hold close to 90 percent. There is no significant presence of SMEs in Egypt's ready-made garment exports (figure 3.13). Exporting companies are relatively well organized compared with most companies supplying the domestic market. The latter are often small companies operating in the informal sector.

Separation of activity between SOEs and the private sector has contributed to a significant disconnect in the value chain between upstream and downstream activities. The public sector conglomerates have not adapted to market forces nor invested to upgrade to new technologies. That has led to inefficiencies in the production of textiles needed as raw material for the downstream apparel subsector, which requires high-quality inputs in order to export; it has therefore had to rely on imports of primary textile products. In 2017, the total value of imported fiber was US\$2.5 billion, and large imports have created a major negative textile trade balance.

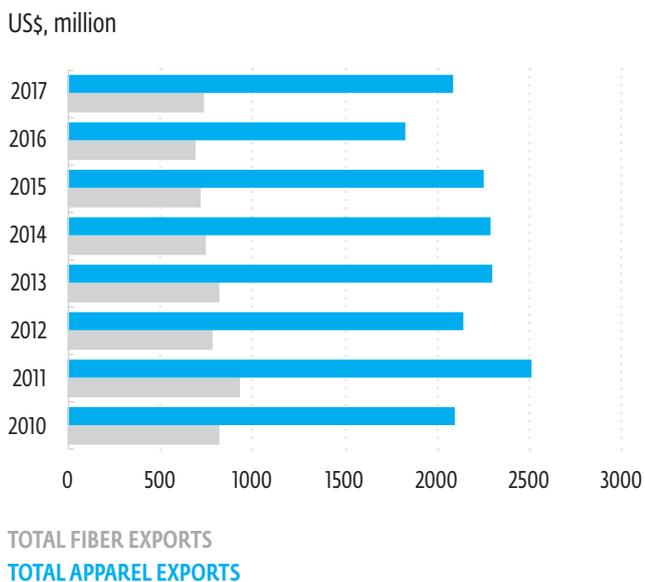
Egyptian T&A exports lag comparator countries and have not reached their potential in markets such as the EU. Overall, Egypt's T&A exports in 2018 were US\$3.2 billion, with apparel representing 50 percent of the share, but they only constituted about 0.3 percent of global exports (World Bank forthcoming). T&A exports to the EU have also been either static (apparel segment since 2014) or declining (cotton), despite shorter lead times and duty-free access. In contrast, regional and international exporters such as Bangladesh, Jordan, Turkey, and Vietnam have been growing their exports to the US and EU markets. Turkey's share of world exports is higher (2.5 percent) despite having a similar size, similar proximity to end-user markets, and similar availability of domestically grown cotton. Furthermore, Turkey exports more despite higher manufacturing costs and the lack of any preferential trade agreement with the United States (China, the global market leader, has an export share of 34 percent). Part of the reason that Turkey's exports are higher is that to gain competitiveness Egypt's textile exports depend on a limited number of exporters in each subsector, low-value-added finished products, and the limited presence of services.

FIGURE 3.13 SHARE OF EXPORTING FIRMS IN TEXTILES & APPAREL



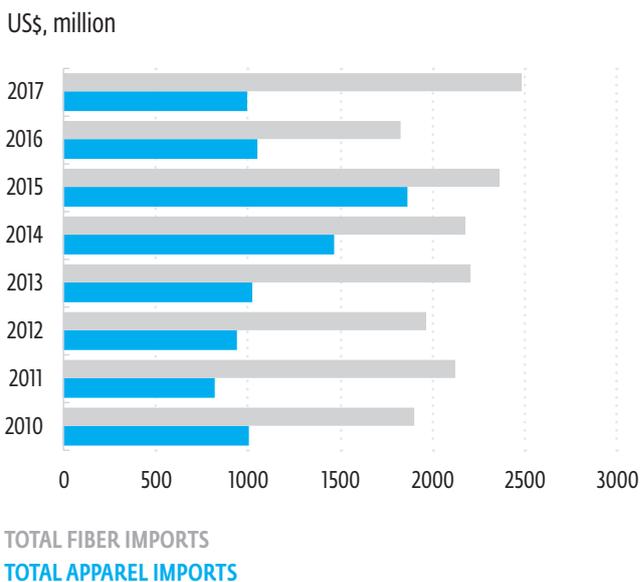
Source: Egypt Textile Strategy

FIGURE 3.14 EXPORTS OF FIBER AND APPAREL



Source: Egypt Textile Strategy, Government of Egypt

FIGURE 3.15 IMPORTS OF FIBER AND APPAREL



Most of Egypt's clothing exports are conducted under preferential trade agreements such as the Qualified Industrial Zone for the US market or under the Partnership Agreement with the EU. Those agreements have been the drivers for these two markets. The United States and Europe are the two largest destinations for exports, with shares of about 56 percent and 35 percent, respectively. Although Egypt is tapping into two of the largest growth markets, there is scope to expand to other growing markets in the GCC, such as Saudi Arabia.

Besides leveraging its geographic location, the role of the FTAs, and the low costs of production, Egypt can take advantage of emerging global trends. The trend toward use of manmade fibers in the apparel global value chain presents an opportunity for this subsector to grow. Polyester has the most significant growth of any man-made fiber (currently, more than 80 percent of all polyester fiber is produced in Asia). Given Egypt's existing chemicals base, establishing local (or leveraging regional) value chains for recycled or virgin polyester fibers or shifting from cotton to manmade fiber production is possible. Additionally, availability of natural gas and high-grade silica creates opportunities for increasing the production of glass fiber yarns and fabrics for technical textiles. Recently, Egypt has been performing well in specific subsectors such as medtech, comprising textile hygiene products and adhesive wound dressings, and sportech, which includes track suits, ski suits, swimwear, tents, and sleeping bags.

Embracing sustainability and transparency will improve the competitiveness of Egyptian textile and apparel manufacturers. European, US, and Japanese markets are looking for sustainable production and processes across the value chain. These include meeting international production standards for water and energy efficiency, labor agreement compliance, reduced use of hazardous chemicals, renewable energy, and wastewater and solid waste management, among others. More recently, brands are seeking sustainable fibers and circular design and production as well. Notwithstanding the need to build capacity and invest heavily in these initiatives, Egypt could leverage its expertise in the textile industry to move to these higher -value-added activities.

Egypt can look at diversifying its export markets, given its geographic advantage. India, China, and Japan are collectively projected to become the biggest market for apparel, overtaking the US and EU markets by 2030. As they continue to penetrate European and US markets for increased share, these markets will provide new opportunities for Egypt to diversify.

Challenges

Role of the State, Trade Barriers, Lack of Skills, and Weak GVC Integration

The dominant presence of SOEs in in the upper part of the T&A value chain has been a major feature of the Egyptian T&A sector. One major criticism has been that these SOEs were not organized as proper commercial entities. Recently the government, launched a major effort to reform and restructure these SOEs. Ministry of Public Business Sector is re-organizing over thirty individual entities into a smaller number of more aligned and integrated units run on commercial lines. To be commercially successful and contributing to the productivity of the T&A sector, these reformed units would need market oriented strategies based on effective **public-private dialogue**.⁶⁵ Additionally, private firms face very high costs of capital, whereas SOEs are being provided public funds at much lower cost or at no cost. Most recently, the government had plans to invest US\$1 billion in SOEs for new machinery. Consultations with stakeholders in the private sector found that they also face challenges in getting tax rebates and duty drawbacks and in getting timely clearance of imports from the ports. They believe that these problems are less for SOEs. For similar reasons, FDI has been limited or nonexistent in the upstream or downstream parts of the value chain. As mentioned earlier, lack of competition in upstream goods and services markets also reduces competitiveness in the sector. Moreover, there is a lack of strategy and coordination between the government and the private sector. Multiple government institutions have overlapping mandates and lack alignment between stakeholders.

Tariff and nontariff barriers have resulted in protected domestic markets and a lack of export competitiveness. Clothing products are typically subject to a 40 percent duty on imports, which distorts incentives for local firms to compete in global markets. In contrast, import tariffs of 10 percent on raw materials for technical textiles impede the acquisition of necessary inputs. Nontariff barriers to exports and inefficient trade facilitation and trade logistics services further increase the bias against exporting. Use of the Authorized Economic Operator (AEO), which could help export competitiveness, has been very limited.⁶⁶

The T&A industry is constrained by a lack of required skills to help move it to higher value-added activities. Recent analysis identifies that besides technical skills, a labor force with governance and management skills is also lacking. Management at all levels is a major weakness of the apparel industry. Private sector companies are too often run as one-person shows without any management structure. Furthermore, academic institutions' curricula are not adapted to the needs of the private sector, reflecting a lack of understanding of market trends, needs and requirements, and the general international competitive environment. The industry's limited expertise in taking over value-adding functions along the value chain indicates that Egypt has not evolved beyond its subcontracting expertise (or outsourcing of simple production). The dominance of the subcontracting business is also a result of a relatively low vertical integration of the industry.

The T&A industry is characterized by a lack of quality factor inputs and supporting infrastructure. Egyptian cotton production has been in decline for more than two and half decades, with a share of less than 20 percent of global production of extra-long staple cotton (compared with 40 percent in 2005). There causes for this include crop contamination, fierce competition from US Pima cotton producers in global fine cotton markets, and the major surge in fine cotton production in India and China. In addition, Egypt does not produce the emerging manmade fibers locally. Polyester fiber textured and filament yarn, spun yarn, and fabric represent 74 percent of Egypt's imports of manmade fiber products. The use of outdated technology and the lack of investment in modernizing upstream activities present a huge challenge. Lack of access to finance and to markets also constrains the value chain, while poor infrastructure increases not only the cost but also the time to market for exports.

Policy Recommendations

A number of actions can be taken in the short term to address the challenges:

- a. **Making SOE activities transparent to build private sector confidence and commitment:** Several specific steps could be taken, including (a) publicizing the strategy for SOE modernization and putting it out for discussion with the private sector; and (b) making financial statements of the SOEs and business strategies public at regular intervals. Furthermore, SOE efficiency could be enhanced through reforming board structures by introducing directors from the private sector, bringing in professionally qualified and competent management cadres to strengthen coordination with the private sector. It is also important to establish a road map for the industry, arising from the textiles strategy. The umbrella association—the Exports Council—needs to be strengthened to enable genuine private sector participation and input into the policy- and decision-making process.
- b. **Addressing trade barriers by standardizing customs procedures across all ports and strengthening the implementation of the AEO:** The implementation of the AEO certification for Egypt's textile value chain could increase competitiveness by lowering financial costs, streamlining delivery lead time, and eliminating negative impacts of smuggling.
- c. **Addressing the skills gap:** Several steps can be taken to revise the academic curricula and develop industry-relevant programs. At the outset, having input and participation by the private sector on the design and delivery of a skills development program would help address this issue. A case for easing the hiring of expatriate management should be assessed to determine the benefits of skills transfer and to address the management skills gap. It is also important to work with technical and vocational education schools, mostly focusing on girls to build their capacities to match the market needs.
- d. **Identifying areas of potential and specific constraints in the industry's export competitiveness:** Two assessments are recommended to identify emerging conditions: (a) a review of tariffs and export rebates across T& A subsectors and (b) a value chain analysis of new subsectors, such as technical textiles. The first would help map out the costs and benefits of the current tariff structure, to enable policy makers to direct specific reforms. The second would be useful to both the private sector and policy makers in highlighting the financial viability of new subsectors, key constraints, and steps to address those constraints.

In the long term, several specific actions are recommended to strengthen value chain competitiveness and support private sector investment. First, agglomeration effects, such as clustering firms through privately developed and managed parks, could be achieved by enhancing the necessary enabling infrastructure (land, utilities, transport, and infrastructure) and customs procedures. Second, the skills agenda needs to be further strengthened by (a) considering appropriate immigration laws to support specific skill gaps, as has been done by other countries; (b) establishing technical and vocational education and training programs for the sector; and (c) developing a digital platform for registration of labor force with textile skills, including comprehensive information on certifications.

COVID-19 Challenges and Opportunities

The impact of the COVID-19 on the T&A sector is anticipated to be severe, as demand drops in major apparel consumption markets like the EU and the United States. Supply chain disruptions are also expected, along with large-scale order cancellations. During the 2008 financial crisis, the value of world apparel imports declined by as much as 11.5 percent when GDP growth in the EU and the United States contracted by 2.5–3.0 percent. Finally, the impact will likely last long after the crisis recedes—as it did in 2009, a year after the global financial crisis, when the value of apparel imports dropped another 12.8 percent. For Egypt, this resultant fall in global demand—specifically in Egypt’s key markets in the EU and the United States—will translate to a decline in T&A exports.

To mitigate the expected impact, Egypt needs to prioritize those steps that will strengthen its sector competitiveness to attract FDI as firms reorient their post COVID strategies. These may include regionalizing their value chains. Addressing the tariff and non-tariff barriers is also key, as is strengthening those subsectors in which demand is anticipated to increase, such as human-made fibers and apparel.

Automotive Industry

Context and Potential

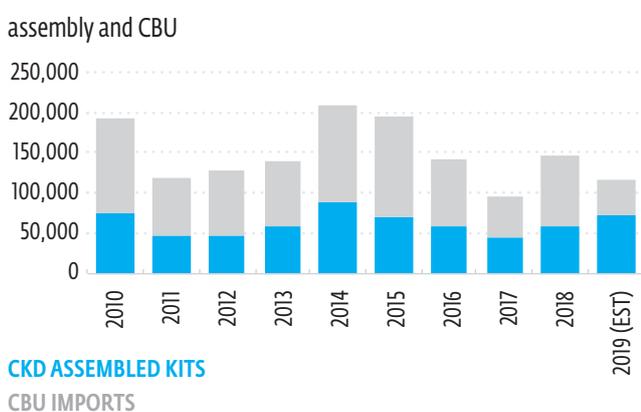
Passenger cars constitute 80 percent of the automotive manufacturing industry by production volume. Cars are produced through assembly of imported parts or completely built-up units⁶⁷ (CBU; see appendix K). Egypt has a significantly large base of suppliers feeding a few assemblers that focus on the production of passenger cars. In 2019, the nine active automotive manufacturers had a total production capacity of up to 350,000 vehicles per year, though plant utilization was at only 30 percent.⁶⁸ Only one global original equipment manufacturer (OEM), Nissan, has operations in Egypt. GM, Suzuki, and Fiat Chrysler operate through joint ventures. In the supplier ecosystem, approximately 500 companies manufacture components and parts to feed these assemblers (mainly exhaust components, air conditioning units, radiators, plastics for interiors, windshields, mirrors, seats, and manufacturer -approved spare parts). Of the 500, there are about 80 Tier 2 suppliers feeding local assembly but only 5 global Tier 1 suppliers.⁶⁹

Imported cars have a 60 percent share of the market, facilitated under several FTAs. Since 2010, Egypt's trade agreements with the EU, Morocco, and Turkey led to a doubling of CBU imports between 2011 and 2015; they now reach US\$6.3 billion. For instance, the EU–Egypt Association Agreement gradually removed customs duties (ranging from 40.6 percent to 135 percent) on some passenger cars between 2010 and 2019. As a result, prices for nonluxury passenger vehicles from the EU dropped by LE 20,000–LE 40,000, while prices for luxury cars dropped by LE 100,000–LE 150,000. The share of car sales of European origin increased from 35 percent in 2016 to nearly 62 percent in the third quarter of 2019, reflecting the potential effects of the final phaseout of customs duties (to zero) on EU car imports.⁷⁰ Turkish imports are expected to grow as the full impact of zero tariffs come into play in 2020. Under the Agadir Agreement, imports from Morocco are also allowed at zero tariffs.

Egypt's automotive exports are dominated by automobile component parts rather than cars. In FY2018, total exports reached US\$562 million, accounting for 27 percent of engineering exports, the largest category following appliances (NGage 2019). However, the industry accounts for only about 2.4 percent of Egypt's total exports and remains far from the government's objective to push these exports to US\$3 billion by 2022.⁷¹ The main export market for Egypt's automotive feeders is Europe, to which 80 percent of locally produced auto parts are shipped, followed by the Arab countries (18 percent) and Asia. In the region, Turkey and South Africa lead the way in terms of export value of vehicles and accessories.

The light commercial vehicle (LCV) market is more developed than the electric vehicle (EV) market in Egypt, which is underdeveloped and faces several challenges. Because of the LCV segment's lower economies of scale and the policy environment, it has matured over the last 35 years such that local content of parts is extremely high. The EV segment, in contrast, is just opening, with a focus on electric buses. However, the legal and regulatory environment necessary for the nascent EV market is weak, as is the infrastructure. International experience shows that subsidies and nonfinancial incentives are critical to establish the market for EVs. The World Bank Group is supporting the government in doing a detailed analysis of the market to determine the exact potential and action steps. An overview of both subsectors is given in appendixes K.1 and K.2.

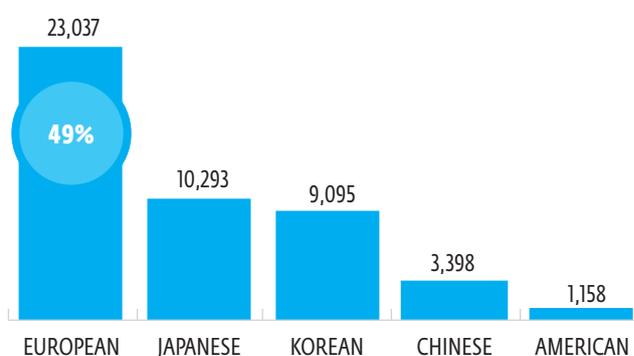
FIGURE 3.16 IMPORTS OF CARS



CKD ASSEMBLED KITS
CBU IMPORTS

Note: CBU = completely built-up units; CKD = complete knock down. Source: AMIC 2019 figures reflect YTD till Q3 2019

FIGURE 3.17 ORIGIN OF IMPORTING COUNTRIES IN EGYPT FOR PASSENGER CARS IN H1 2019



Note: H1 = first half.
Source: El Mal News, August 20, 2019

Egypt can learn from the experiences of other countries, both successful and unsuccessful. For example, India, Morocco, and Thailand have established automotive clusters; Brazil and South Africa have had mixed experiences; and Nigeria's sector has not been successful, as explored here:

- A common theme in success has been support for the establishment of global Original Equipment Manufacturers (OEMs), which have then provided the catalyst for creating a more sophisticated and innovative supplier system. In most cases, this has led to the emergence of a limited number of OEMs in the market, which commit to fast growth in volume and exports.
- In addition to considerations of scale, OEM strategies focus on both the domestic market and volumes of exports from the production base. They also look for a strong supplier base while considering a geographic investment. In Morocco and Thailand, with their small domestic markets, the initial OEM investment was made to leverage the production for regional exports. In India and China, the large domestic market was a key to attracting OEMs. In the latter countries, their governments first focused on an inward-facing policy of domestic production and supply, before turning to a second phase of integration with GVCs.
- Incentives to use local content have been an integral part of the policy environment, though results have been mixed. Both Brazil and South Africa have invested heavily in and significantly protected development of their domestic automotive industries over the past two decades. And yet according to the *World Development Report 2020*, despite the huge costs, the countries struggle to maintain competitiveness, and the long-term sustainability of the industry remains unwarranted (World Bank 2020c). In other countries, such as China and India, governments implemented local content requirements in the initial phases to support the growth of a local auto industry. However, those were phased out as the local sector achieved critical mass and sophistication.⁷² The problem is not with local content policies per se but with the country context in which they are implemented and the sophistication with which they are designed. In the absence of quality local suppliers, the effort to develop backward links between OEMs and local production can backfire.
- A key underlying factor for success is a clear government strategy shaped in partnership with the private sector. Such strategies have included strong bilateral relationships with the OEMs and smart incentive packages to support the industry at the start, specifically for those OEMs and suppliers that reach joint targets for production and exports, allowing economies of scale to replace progressive policy incentives. This strategy has also included early provision of import tariffs on selected vehicle types to support the emergence of a local production system. However, tariffs have favored only OEMs and parts makers that are committed to fast volume growth and those tariffs are conditional on reaching volume objectives over time. In successful cases like that in India, tariffs have been gradually removed to allow for adoption of and convergence with world-class best practices. Appendix K.3 includes a summary of country experiences.

Egypt has many advantages that it could use to build its automotive industry. It offers scale, an existing supplier ecosystem and OEMs, low labor costs, and government commitment, all of which create potential for growth. Local demand is still small, but latent demand and the large Egyptian population suggest long-term potential.⁷³ Higher levels of car ownership in other countries in the region suggest that the Egyptian market has room to grow. Although Egypt has 45 vehicles per 1,000 people, Turkey has 140 and Jordan has 165 (Ghabbour 2019). In addition, Egypt has access to growing markets along the Nile corridor and in the GCC countries. The Middle Eastern and African markets (excluding South Africa) are expected to reach 4.5 and 1.0 million units, respectively, by 2030. Egypt's extremely low labor costs in the industry—12 times cheaper than in Europe—provide a significant competitive advantage.⁷⁴ Further, the industry is one of the priorities outlined in the government's manufacturing strategy, which envisions the manufacture of 500,000 cars annually by 2022, of which 100,000 will be exported—an annual growth rate of 400 percent over the next three years. The goal is to increase investments by automotive feeding industries by US\$5 billion and generate US\$3 billion in exports by 2022. A complexity analysis of the transport sector also identifies manufacturing car parts as adding greater complexity to the export basket of Egypt than any other product in the vehicles category except for railway carriages.

The most appropriate path for the country depends on several factors and merits further analysis. As mentioned earlier, countries have followed different trajectories depending on country context, market structure, and basic economics of production. Similar government policies have yielded different results. Identifying the optimal way forward for Egypt requires a detailed cost-benefit analysis of alternatives over the medium and long terms in the context of shifting global trends. However, there are some necessary conditions for the sector to flourish regardless of the way forward.

Challenges

Unclear Policy, Trade Distortions, and a Weak Supplier Ecosystem

One of the biggest challenges for the industry and for private investment is the lack of a clear government strategy. Unlike in other sectors, the passenger car subsegment is dominated by private players. However, global experience shows that, unlike in other sectors, the automotive industry requires a deliberate government policy that creates clear incentives to support an ecosystem of OEMs and suppliers. Discussions with industry players have identified a lack of government vision outlining the policies that will support creation of the local supplier eco-system and the strategy for attracting OEMs that will enable the private sector to create their business plans for investment—this is a key deterrent to investment in a country that otherwise has high potential for investment at a larger scale. The policy regime has been relatively static over the past 20 years. For example, the localization rules have hardly changed since they were first established. The government announced an automotive directive in March 2020, which is a step in the right direction, but its implementation and implications are unclear. Furthermore, there has been limited dialogue between the public and private sector; government engagement with the private sector has been ad hoc and selective. For example, there has not been a consistent dialogue regarding the automotive directive. Additionally, the assemblers have no formal body to represent them. Part of the reason is the absence of a strong and effective business association. The Automotive Marketing Information Council (AMIC) of Egypt represents the sector but has limited capacity, while the Egyptian Automotive Feeders Association supports only the suppliers.

Fragmented domestic production has resulted in undeveloped economies of scale and low localization rates. OEMs currently operate at a capacity utilization rate of about 30 percent (low average). The larger manufacturers produce about 20,000–30,000 units a year, while the smaller ones produce 2,000–5,000 units (AMIC 2018, 2019). Lack of economies of scale means manufacturers are unable to compete on costs either domestically or for exports. That low capacity utilization has also resulted in low localization rates (17–25 percent), which do not meet the requirements of 45 percent calculated by common rules of origin in FTAs. A weak supplier base and an outdated methodology for calculating localization have also contributed to the low percentage.⁷⁵ Exports are therefore hindered.

The supplier base is highly fragmented and inefficient, which impedes the creation of stronger relationships with OEMs.⁷⁶ The local supplier ecosystem is underdeveloped, with limited capacity and ability to meet international standards and low R&D capabilities. Because many models are assembled in Egypt, suppliers cater to many segments and numerous producers, resulting in inefficient economies of scale. Every assembler deals with at least 30 local suppliers who provide components such as glass, tires, and upholstery. In comparison to countries such as Morocco and South Africa, the overall ecosystem is small. Besides being financially unviable and risky, fragmentation also disincentivizes expenditure on costly productivity programs and R&D, both essential to move up the value chain.

Tariff and nontariff barriers exist. Although import duties on CBUs have been phased out under the FTA, imported parts for local assembly continue to be subject to duties averaging 5 to 7 percent.⁷⁷ Egyptian exporters face nontariff barriers. Production scale for exports to member countries of the Common Market for Eastern and Southern Africa is not yet large enough, as most countries in this region (barring Sudan and Egypt) use righthand drive. Therefore, vehicles require an adaptation that is not justified by the size of the market.

Despite its low costs of labor and energy, Egypt's competitiveness is negatively affected by low labor productivity and the lack of efficient transport and logistics infrastructure. Labor in Egypt is about one-third less productive than in Turkey, and in the global auto industry, increase in labor productivity in existing plants can be a major source of value-added growth. The cost of material (60 percent of total costs) is similar across countries because of common sourcing, so the lower labor productivity in Egypt could be the result of a lack of technical and managerial skills. Furthermore, because of its weak transportation and logistics systems compared to neighbors in the region who can reach auto markets faster and at less cost, Egypt's automotive sector has a challenge to strengthen its base for just-in-time delivery of consistent and quality parts. Compared with the Balkans, where delivery time is 20 hours by truck to Europe, Egyptian transit time is 5 days by sea freight or 40 hours by Ro-Ro freight (see Section 2).⁷⁸ Speed of transport is necessary because engineering changes and upgrades are frequent, and OEMs need to react quickly to make those changes. Therefore, having suppliers located beyond a 40- to 50-hour radius is not feasible in most cases. Egypt's exports of auto parts so far have been possible because they are limited to the more labor-intensive parts, such as wire harnesses, where the labor cost advantage outweighs logistics costs for the OEM.

Policy Recommendations

Steps are needed to both strengthen the current supplier base and encourage OEMs to produce more efficiently. Because the steps largely involve the role of the government and its policies in providing support to the industry, they would require more thorough assessment in the context of the broader analysis to determine the viability and scope of the policy change needed. Appendix K.4 presents unsuccessful government policies to keep in mind while making the assessment. The following steps should be taken:

- **Help establish an optimal and efficient OEM base:** That base can be determined by assessing possible incentive programs that provide benefits to OEMs in return for achieving targets of production, exports, and localization. Lessons from other countries highlight the strong package of fiscal, tax, and trade incentives provided to attract global OEMs. Business plans and breakeven points of OEMs and their assumptions about parts-maker localization, which are tied to targets of production and exports in line with the government strategy, would make up the package. It is also important to attract the right FDI, because foreign investors differ in their ability to deliver benefits for the local economy. This step could include assessing the motivation of FDI—whether the investors are seeking exports, markets, or efficiency; their technology contribution; and their ability to interact with domestic investors, among other things (Taglioni and Winkler 2016).
- **Strengthen the local supplier ecosystem by supporting the adoption of technology and skills.** As the industry achieves scale, suppliers will increase investments in the adoption of new technology and systems, which will feed a virtuous cycle by which the industry becomes more sophisticated. To facilitate and accelerate those changes, the industry can look at experiences from other countries, which have adopted several approaches. One is to explore fiscal incentives for firms that are developing technology-related products or having R&D projects, with customs duty exemptions on imported equipment used in R&D activities. Scholarships also could be given to researchers to work on R&D in relevant firms. Finally, a technological foundation fund could be created to provide financial support to innovative projects proposed by firms or groups of enterprises in the R&D sector. Another step in this direction, and one that strengthens the industry at large, is for the private sector to create a strong business association. That can (a) play a vital role in supporting this agenda, (b) strengthen and unify the voice of the private sector in policy dialogue, and (c) support firms with services such as market intelligence, skills and capacity building, and data analytics. Other countries have very strong associations of this type, such as the Association of Automotive Parts and Component Manufacturers in Turkey and the Moroccan Association for Automotive Industry & Trade.
- **Both of these steps require an extremely well thought out, clear, and consistent vision and a policy action plan by the government.** As mentioned earlier, one of the key underlying success factors in countries such as India, Morocco, and Turkey has been the government's very clear and decisive policy action plan (with phases of varying incentives to steer the industry). That plan created not only confidence for the private sector but also clarity in undertaking investment decisions. It is imperative for the government to signal a clear long-term vision for an industry for which the policy must offer a degree of flexibility. The industry must be able to respond to changing market needs yet be predictable and consistent toward the long-term goal, which remains to build a globally competitive auto industry platform in Egypt. A strong collaboration with the private sector is important to allow this to happen.

COVID-19 Challenges and Opportunities

The automotive industry has been one of the most severely affected by the COVID-19 crisis. Many OEMs have shut down assembly across Europe, North America, and parts of Asia. Unemployment is expected to rise considerably across the world, hitting demand for vehicles beyond the short term, even as business starts to return to normal activity. Eighty percent of the auto value chain is connected to China. China's anticipated quicker recovery will help countries that have a heavier automotive industry footprint in China, compared with those linked to Asia, the EU, and the United States, where the recovery will likely be slower and delayed.⁷⁹ As firms use capital to shore up existing operations, R&D initiatives may be delayed, and those companies may decide to exit unprofitable markets.

In this emerging scenario, it is imperative that Egypt give priority to strengthening the local supplier ecosystem. This task will help the country position itself as attractive to automotive manufacturers as they rethink their investment strategies in the post-COVID-19 scenarios of potentially shortening value chains. Further, it is even more important that the government outlines a clear vision for the sector to attract FDI in close collaboration with the private sector. In the short term, this may include converting automotive assembly lines to the manufacturing of critical medical supplies, as is being done in other countries.

3.3 INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Egypt is well positioned to become a regional digital hub for the Middle East and Africa. It is strategically located where multiple regional and international fiber-optic submarine cables crisscross. ICT is the core sector of the digital economy, but the digital economy also encompasses the digitization of other sectors. With 40.9 million internet users in 2019, Egypt leads the Arab world and is second in Africa, after Nigeria. Yet, despite progress in advancing its digital economy, Egypt is not fulfilling its potential. The use of digital technologies across different economic sectors is comparatively low, the level of fixed broadband is behind where it should be, and the country has lagged in the introduction of mobile broadband technology. This hinders its aspirations to be a leading regional digital hub characterized by widespread use of the latest digital technologies by citizens and businesses.

The COVID-19 pandemic is demonstrating how critical is the availability of ICT services to deal with the public health crisis. Connectivity is the only means to support the work of the first-line health and government workers, but also to mitigate the effects of social distancing measures. Teleworking, in particular, has been very important to maintain essential government services, allow businesses to operate, and enable students to continue to attend classes and receive tuition. Online and social media became the principal communication channels.

Sector Overview and Potential

Egypt's ICT sector is one of the largest in the region. The sector value added of the three main ICT industries—manufacturing, telecommunications, and information technology (IT)—reached LE 137 billion (US\$7.8 billion) in FY2019.⁸⁰ This is equivalent to about 2.9 percent of GDP, which falls below the 2017 world average of 3.8 percent (UNCTAD 2019) and makes ICT only the 11th largest sector in the country. Within the ICT sector, telecommunications are the largest contributor, accounting for 44 percent of the ICT sector value added, and information technology and other services account for 30 percent. ICT manufacturing makes up the remaining 26 percent, which is significant, as most developing nations outside of East Asia produce little ICT equipment. According to data from the Ministry of Communications and Information Technology (MCIT), the sector employed about 209,000 workers in FY2018. Egyptian universities produce about 500,000 graduates annually, of which over 200,000 go into outsourcing -related fields and about 50,000 go into IT-related fields.

Industry demand for telecommunications is quite low, accounting for only 5 percent of sector output. This low demand is also evidenced in the very low reliance of firms on technology in conducting their businesses (see Figure 1.20 in Section 1.2). As shown in Figure 3.18, business use of telecommunications output in Egypt is far lower than in peer countries, with the exception of Morocco. Households, in contrast, account for 91 percent of sector output. This means there is a substantial potential for increased productivity if businesses start harnessing the benefits of new technologies.

In addition to the ICT sector, the digital economy encompasses digitization of other sectors. In Egypt, this is particularly notable in ICT-enabled outsourcing services and digital platforms. Egypt's IT and ICT-enabled services industry (IT/ITES) is significant; numerous firms have established operations in the country, including national IT companies and large IT multinationals. According to MCIT data, outsourcing industry exports from Egypt amounted to US\$ 2.4 billion in FY2019. The IT/ITES industry absorbed an estimated 292,000 workers in 2017 (IDC 2018).

Egypt is no stranger to digital platforms, with global, regional, and local companies operating in the country. Digital platforms electronically link providers of goods and services to consumers. Ownership of the platforms can be public or private, with the former generally providing online e-government services. Millions of Egyptians are using digital platform apps for shopping, ride hailing, food delivery, and social media. Apart from the convenience and lower costs for consumers of using digital platforms, there are other benefits. Ride hailing apps, for example, could help alleviate Egypt's notorious traffic congestion, including through adding buses to their portfolio to tap into the demand for public transport.

Key Challenges in the ICT Sector

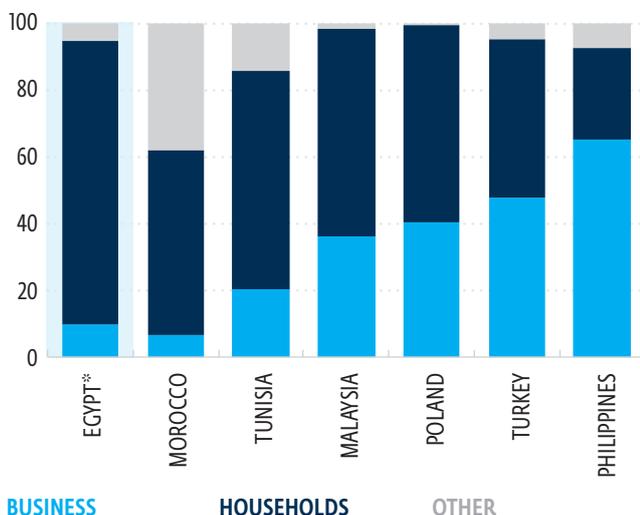
Infrastructure Challenges

Egypt has been slow to launch new generations of mobile technology. Egypt launched 4G relatively late in 2016, some seven years after the technology was first commercially deployed. Connectivity is not a luxury service, yet 40 percent of the population does not have access to 4G. To fully benefit from 4G performance and capabilities and to improve its coverage, the government needs to assign additional spectrum, which would at the same time allow mobile operators to prepare for the deployment of 5G. This is a general-purpose technology (GPT) that can significantly affect and support economic growth and transform both the life of individuals and the ways in which firms conduct business. As of December 2019, some 342 operators around the world had invested in 5G networks, and 56 had launched such networks in 32 countries (GSA 2019).

The absence of unlimited offer and short-distance coverage constrain the use of high-speed fixed broadband. Egypt's fixed broadband access network still largely consists of legacy copper wire. The gap between actual and income-related broadband penetration has grown over time (figure 3.19). Although speeds have gradually improved by bringing xDSL equipment and fiber-optic cable closer to premises, this is a stopgap measure until fiber-optic cable is placed in homes and businesses. Average fixed broadband speeds more than doubled between 2014 and 2019, albeit from a very low base, reaching 8 Mbps in June 2019 (figure 3.20). Between June and December 2019, download speeds increased by just over 250 percent, to 26 Mbps, expectedly following Telecom Egypt's investments in fiber to the cabinet (FTTC) and the National Telecommunications Regulatory Authority (NTRA) decision mandating that all operators provide a minimum speed of up to 30 Mbps on VDSL. There are continuous improvements of the download speed as evidenced by recent Ookla results at 31.33 Mbps. Yet, the performance of fixed broadband in Egypt is constrained by the usage of copper, and remains lower than the world average of 84.33 Mbps (figure 3.21) and far behind economies using fiber optics such as world-leading Singapore (218 Mbps). Speeds up to 100 Mbps are available in Egypt, but prices are exorbitant (about one-fifth of GDP per capita), and customers must be within one kilometer of copper length. In addition, fixed broadband penetration has consistently been less than it should be (4.7 per 100 people compared with 8.3, as predicted on the basis of per capita income).

In the early stages of the COVID-19 crisis, the average increase in internet traffic reported by mobile operators ranged from 30 to 50 percent. A particular load was exerted on locations where people are confined, such as residential areas, where network congestion was observed. The government has taken actions to enhance the capacity of international gateways by about 50 percent. Yet the efficiency of the mitigation measures (zero rating to education sites, data quota multipliers) was hampered by bottlenecks present in the middle mile and last mile because of restricted access to fiber infrastructure (that is, Telecom Egypt's monopoly), the reliance of fixed broadband on copper, and the limited amount of radio spectrum assigned to mobile operators.

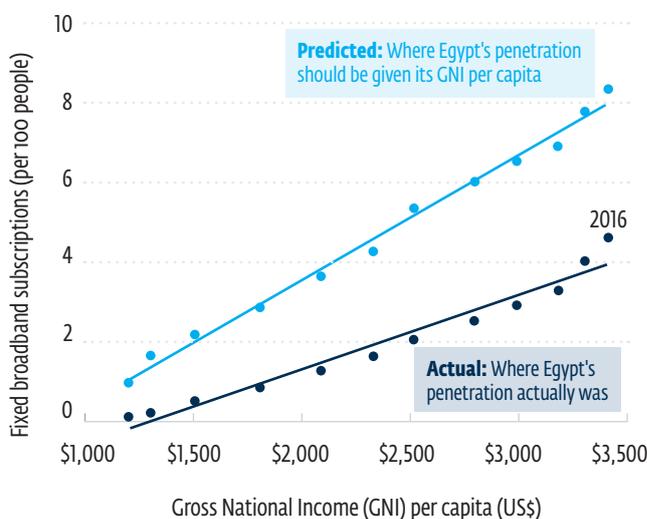
FIGURE 3.18 SHARE OF TELECOMMUNICATIONS SECTOR OUTPUT (%), 2015



Note: Egypt's data reflects 2017 figures for information and communication sector as updated from CAPMAS's input-output tables for 2016/2017. Other includes trade, capital expenditure and government consumption.

Source: CAPMAS input-output tables for 2016/2017 and OECD Input Output Tables.

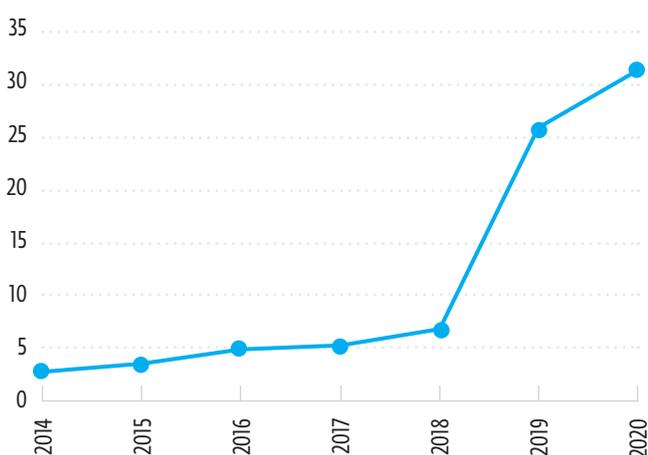
FIGURE 3.19 PREDICTED VERSUS ACTUAL FIXED BROADBAND SUBSCRIPTIONS (PER 100 PEOPLE), 2002-2016



Note: Predicted penetration based on linear regression for each year for all economies with data. Each circle shows the value for each year between 2002 and 2016.

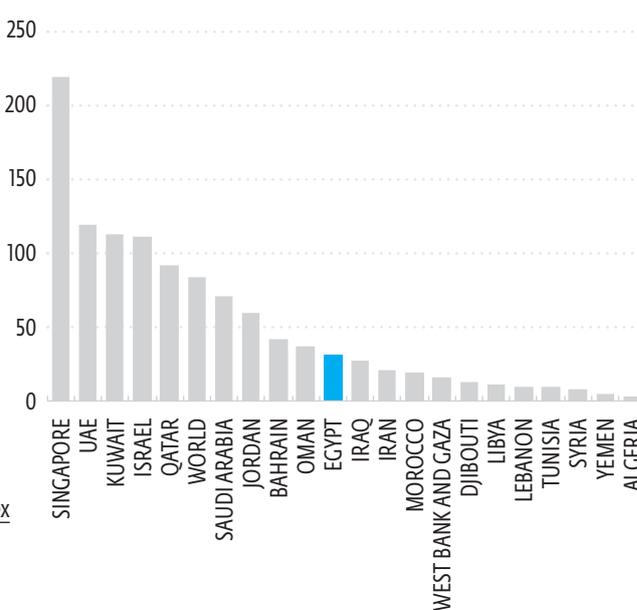
Source: World Bank, World Development Indicators.

FIGURE 3.20 EVOLUTION OF FIXED BROADBAND DOWNLOAD SPEED IN EGYPT (MBPS)



Source: Ookla, "Speedtest Global Index" <https://www.speedtest.net/global-index>

FIGURE 3.21 FIXED BROADBAND DOWNLOAD SPEED (MBPS) – INTERNATIONAL COMPARISON



Mobile towers are an important element for mobile broadband services, but Egypt's tower infrastructure is considerably under par. Towers define the reach of deployment and thus are needed to expand mobile coverage. When there are few towers, cells are large and cover many people; they become congested, affecting the quality of service. Egypt averages 4,545 subscribers per tower, compared with a global average of 2,400. High-quality mobile broadband connectivity requires that towers be connected to fiber-optic backbones, yet less than 10 percent of towers are. Sharing towers among operators lowers costs, but only 15 percent of towers are shared. The World Bank estimates the need for 16,900 additional towers and 20,000 small cells if Egypt is to match the global average for subscribers per tower (World Bank 2020). That expansion would require an investment of about US\$2.7 billion, along with US\$680 million in additional capital expenditure to connect half of the existing towers to fiber. The low or declining average revenue per user (ARPU) levels of about US\$2 per month in Egypt means that a mobile operator's ability to invest in network infrastructure expansion is very limited. The government has decided to create a TowerCo LLC market that uses independent companies to deploy and operate towers on behalf of mobile operators to address the sector's growing need for capital expenditure. Sharing towers will lower the cost of investment by an estimated US\$400 million. The intended model is to set up an SOE to build the infrastructure and partner with one or several private investors, including international investors, to operate the company and bring knowledge and efficiency.

Internet exchange points (IXPs) are important for exchanging traffic between internet service providers (ISPs), so that ISPs do not have to use expensive and slower international links. In addition, IXPs can be used to deliver content efficiently; with one connection to an IXP, content can be delivered to all ISPs attached to it. This system is important because video is the largest data traffic stream provided by content providers such as Google, Facebook, and Netflix. If content providers are not located on the IXP, then their data must be retrieved from overseas data centers, incurring costs for international bandwidth and reducing performance.⁸¹ Egypt has a long-standing IXP, Cairo Internet Exchange Point, which was established in 2002. Today, there are six members, including all the major ISPs. However, average traffic is relatively low, less than 3 GB. In contrast, the DE-CIX IXP in Istanbul has 30 active members generating over 90 GB of traffic. In addition, no content delivery network providers—international or local—are allowed to connect to the Cairo IXP, hindering the availability of content in the country.

Role of the State and Competition

Sector reform remains incomplete. Telecom Egypt, the incumbent operator, still holds a dominant position. It is the only owner of five submarine cable landing stations, which are the backbone capacity to deliver traffic into the country. As a result of Telecom Egypt's market power, Egypt has one of the highest costs of international capacity among a number of countries benchmarked, and the lowest usage (Table 3.1). Telecom Egypt also dominates the fixed broadband market. It owns 45 percent of Vodafone, the largest mobile operator.⁸² The government owns 80 percent of Telecom Egypt's capital, and the incumbent operator is under the oversight of the MCIT, which is in charge of setting policy for the sector. Although the NTRA was set up as an independent regulator, fulfilling that role requires a clear separation between its powers and that of the ministry. According to Egypt's Telecommunication Regulation Law (No. 10/2003, the Telecom Law), the NTRA is subordinate to the minister, who also acts as the chairman of the NTRA.

TABLE 3.1 COST OF INTERNATIONAL CAPACITY, EGYPT VS. PEERS

	EGYPT	MALAYSIA	MOROCCO	PORTUGAL	RUSSIA	SAUDI ARABIA
Bandwidth capacity (Bits per Internet user, 2018)	24,900	72,051	64,600	68,283	n/a	248,839
10 GigE (Price/Mbps/Month, 3/18)	74.26	24.51	74.26	3.43	3.43	39
10 GigE (Price/Mbps/Month, 3/19)	66.38	7.41	n/a	0.81	1.33	13.5

Note: GigE = gigabit Ethernet; Mbps = megabytes per second; n/a = not applicable. Source: ITU and Telegeography

Priority Actions to Support the Development of ICT

Technologically advanced, open, and competitive digital infrastructure is critical to enable the digital transformation of Egypt. That transformation is essential to foster higher contestability and productivity gains in key sectors, including finance, agriculture, energy, and manufacturing. Digital transformation also carries the promise to promote the growth of SMEs and young digital entrepreneurs, support domestic firm capabilities, and improve government service delivery. Forward-looking, pro-competitive policies need to be established to ensure that digital transformation will allow businesses to adopt and better utilize ICT. The ICT transformation also needs to be fully inclusive, to enable every citizen—regardless of location, income level, gender, and socioeconomic condition—to go online and have the digital skills to access content and services. Furthermore, drafting updated regulations that are technologically neutral for the labor market and other economic sectors is essential to harness digital transformation in Egypt.

Regulatory Reforms

Building this modern digital infrastructure involves shifting the role of the State in the sector. Strengthening sector and antitrust regulation can alleviate constraints on competition, which is essential for reliable and affordable high-speed broadband services. Strengthening the powers of the NTRA, which is currently subordinate to the MCIT, can be done by revising Article 3 in the Telecom Law. Regulation, policy making, operation, and investment functions for the sector need to be separated. In the short run, the government ownership of Telecom Egypt should be moved from the MCIT to an entity such as the Ministry of Public Enterprises or the MoF.

The regulation of digital infrastructure in Egypt is preventing the acceleration of the transformation of the country into a digital economy. Since 2007 no progress has been made to improve the capacity of the NTRA to act independently from the Ministry and in transparency. For the 2019 ITU ICT Tracker index, Egypt's regulatory environment has further deteriorated by 3 points compared to 2018, with regards to a) the regulatory authority (further moving away from the 2007 situation) and b) the regulatory mandate, and by 2 points on the regulatory regime. This calls for the Government's attention to take the necessary actions to improve the autonomy, governance and capacity of the NTRA.

Established regulations must be transparent and equitable. Telecom Egypt remains dominant on all levels of the digital infrastructure value chain: backbone network, middle mile, fiber access networks, and international gateways. Regulatory actions are required to ensure that the vertical integration of Telecom Egypt does not pose constraints on access to essential infrastructure and does not favor any downstream provider of services. Those actions include the implementation of enforceable service-level agreements for the existing and future Telecom Egypt fiber-optic wholesale services. They also must consider licensing an independent wholesale operator to provide open cost-based access, while the same time creating competition in wholesale access with Telecom Egypt. Competition policy would be reinforced by strengthening cooperation between the NTRA and the Egyptian Competition Authority.

Developing the ICT sector as a prerequisite to enabling a digital economy will affect regulatory authorities responsible for other sectors. Because other sectors—such as energy, electricity, banking, industry, and transport—will be affected, comprehensive regulatory reform should introduce sector-specific digital expert units, as well as a common digital transformation unit, to coordinate policies and regulations with the national legislation.

Digital Infrastructure

Several measures are needed to upgrade Egypt's digital infrastructure. More fiber-optic cable needs to be deployed through actions such as providing open access to Telecom Egypt's fiber network at cost-based pricing. Liberalizing licensing of next-generation infrastructure would allow other operators to build, operate, and commercialize their own infrastructure without relying on Telecom Egypt. The viability of broadband projects in challenging areas can be improved by allowing private investments and infrastructure sharing. The government was successful in attracting key international mobile operators Orange, Etisalat, and Vodafone; however, it is not fully benefiting from the investment capabilities of those companies because of the complex rules and licensing limitations that prevent companies from deploying their own infrastructure, in particular, fiber.

Mobile broadband needs to be enhanced by optimizing use of the spectrum. A plan should be quickly developed and communicated with a clear timetable for assigning additional 4G spectrum to improve data speed and quality of service and for bringing online the first 5G frequencies at affordable prices. The acceleration of these plans would also put Egypt in a much better situation to respond to the COVID-19 crisis.

A key obstacle to developing infrastructure is the difficulty of obtaining rights of way. For example, permissions are needed to dig up streets to lay cables or put up mobile base station towers on buildings. All different permits required by agencies should be bundled into a "one-stop-shop" to make it easier for a licensed service provider to obtain all the required permissions quickly and cost-effectively.

The deployment of mobile towers should be facilitated. Policy should allow entries of new private sector firms with demonstrated financial capability telecommunications towers construction market. Policies should also add incentives for operators to cooperate by leasing towers instead of owning them, to complement the efforts of the government in extending the infrastructure reach in a pro-competition, efficient (sharing), fair, and transparent model.

The Cairo IXP should be opened to content service providers. This will lower costs and improve the performance of the internet and also allow Egypt to serve the region. Attracting world-class, carrier-neutral data centers is a critical factor if Egypt is to become a digital hub in the region. Although a number of data centers operate in Egypt, several appear to be carrier data centers. Large data centers built for and by the large internet companies, as well as large carrier-neutral data centers, are missing. To enter the Egyptian market, they would need government incentives.

COVID-19 Challenges and Opportunities

The mitigation measures implemented by governments to combat COVID-19, are **putting pressure on broadband networks and digital services**. As travel restrictions and social distancing require many economic and social activities to be carried remotely, teleworking, online conferencing, and remote learning became essential. There is also an expected shift in consumption behavior in certain areas, in favor of electronic commerce, payment, and entertainment. Digitally developed countries are less vulnerable to the human and economic consequences of the pandemic. Yet, a significant divide remains even within those countries between people who benefit from good quality and affordable internet access at home and those who do not.

The government of Egypt needs to draw the necessary conclusions from the unfolding crisis to **accelerate the implementation of a diverse digital economy for the long-term benefit of the population**. The above-mentioned gaps and barriers, ranging from infrastructure, services, and skills, are often the result of protective policies and restrictive legal frameworks. As an illustration, by making public networks rely solely on the fixed fiber infrastructure of Telecom Egypt, Egypt is cutting itself from private investments to accelerate the deployment of its fiber networks. By contrast, alternative operators in Europe account for 56 percent of the total fiber expansions.⁸³ Additionally, in terms of network reliability, this exclusive reliance is a single point of failure should an incident occur within Telecom Egypt's infrastructure. The changes in behavior spurred by COVID-19 are likely to have lasting effects. This is an opportunity for the government to engage in necessary policy reforms as recommended here and to redefine a new balance between SOEs and other market participants while still respecting reasonable national security requirements.

4. THE POWER OF ENABLING SECTORS

The analysis on the status of the private sector and the challenges facing businesses have shown that skill deficits and an inadequate labor force impair private sector competitiveness. Human capital is at the forefront of these productivity-enabling sectors, because the large young, dynamic labor force must be sufficiently equipped with the necessary education, skills, and health, as they are connected to vibrant areas of economic activity. Human capital is also key to fostering the economic, social, and spatial inclusion of the large portions of the population who are prevented by Egypt's wide regional disparities from participating in and benefiting from economic opportunities.

4.1 EDUCATION AND SKILLS: ENABLERS OR BARRIERS?

Educational institutions at all levels are not set up to prepare graduates for the labor market. Graduates of tertiary education institutions, in particular, face a high unemployment rate, especially among women. Compounding this problem is the fact that new technologies have emerged and are changing the nature of work. Given the challenging economic climate and changing business realities, many firms believe that adopting such technologies is fundamental to their long-term survival (PWC 2019), and that most of today's jobs will disappear in the future. That points to the need to give students, and all workers, a solid foundation of basic skills and knowledge to enable them to handle new situations.

Skills Mismatch and Education Reforms

The lack of suitable skills in the labor force indicates a large gap between educational outcomes and labor market needs. Egypt ranks 133rd out of 141 countries for the skill sets of graduates (Schwab 2019). About 20 percent of surveyed firms in 2016 reported the "inadequately educated workforce" as a very severe or a major obstacle to their operations (World Bank 2016). Despite the persistent unemployment rates and significant rates of informality of jobs, employers find the lack of skills the key barrier to their competitiveness and growth. Many feel they lack the right in-house talent to realize the full benefits of digital efforts. Yet their investment in training is generally very low, and firms express difficulties in retaining trained staff. Low salaries, poor work environments, the lack of a human resources culture, and minimal gains in labor productivity compared with faster-growing emerging economies have all exacerbated this challenge.

Education is one of the most powerful instruments for transforming societies and building dynamic private sectors that generate growth and jobs. Yet Egypt scores 0.49 on the Human Capital Index, which means that a child born there today will be 49 percent as productive when grown than a child who enjoys complete education and full health. A child in Egypt who starts school at age 4 would technically complete 11.1 years of school by age 18; however, in terms of the quality of education, the child would have completed only 6.3 years. Egypt's low score, mostly driven by the poor quality of education, significantly hinders labor productivity as well as private sector investments in the Egyptian market.

For decades, Egypt's education system has faced **significant challenges in delivering the learning outcomes, skills, and competencies necessary for transition to the job market.** Limited access to good-quality early education, especially in disadvantaged areas; poor-quality pre-tertiary teaching focused on rote learning; and the high-stakes school exit examination and associated private tutoring that drives the system have all contributed to poor learning outcomes. Across all education levels starting from basic to postsecondary, students are not acquiring skills that make them employable.

The Ministry of Education and Technical Education (MoETE) has launched reforms to enhance the quality of education and prepare school graduates for the job market and for life. The program, launched in September 2018, aims to improve school readiness by targeting foundational skills in the early years. It also is revamping the assessment system, starting with rote learning and the school exit process, so as to develop higher-order skills that will improve graduates' employability and readiness. Some efforts in scaling up technology-based learning are now visible in the Egypt Knowledge Bank. Those efforts include the use of digital learning resources mapped to curricular objectives, the use of tablets in secondary education (grades 10–12), improved connectivity in secondary public schools, and computer-based testing that offers an innovative approach. Continuous professional development is considered pivotal in improving teaching practices—moving away from teaching through memorization and introducing digital literacy to improve the graduate's relevance to the job market.

The MoETE reforms also include partnering with private sector employers to establish new technological schools that are relevant to labor market demands. To lay the groundwork for the reform program, the MoETE is collaborating with several private sector firms, including international publishers, developers of teachers' continuous professional development programs, and enablers of new technology, to develop and administer the new computer-based graduation system. In the higher education sector, three new technological universities were established to create open pathways for graduates of technical secondary schools. These recent developments in technical and vocational education and training address two critical elements: employers' limited influence in shaping and implementing workforce development and the limited pathways for skills acquisition (World Bank 2014). Further analysis is needed to assess the education system's reform efforts, including technical and vocational education and training, relevance to the job market, and benefits to graduates.

Challenges for Private Education

Private sector institutions have a role to play in education by providing adaptability, efficiency, and financial sustainability. The employment rate of graduates of private sector universities is as high as 95 percent. One main reason is that students at private universities are mostly enrolled in fields of study that are relevant to the market. Moreover, these institutions instill in their students' skills that improve employability, such as learning, communication, and collaboration skills, in addition to language and computer skills that are essential to most private sector companies.⁸⁴ The agility of the private sector also means these institutions are better positioned to respond to disruptive technologies in the field. Parents are also acutely aware that a good education is the passport they can give their children to a better life.⁸⁵ It is important to note here that the implementation of relevant accreditation and quality control mechanisms is required for quality assurance of private providers.

Despite the benefits that private education can bring, it remains quite limited. In elementary and secondary education, private schools represent 15 percent of all schools.⁸⁶ In addition, one in two children hire private tutors, and tutoring gradually increases as students advance to higher grades.⁸⁷ Tutoring in Egypt is primarily a function of teachers offering support classes to their own students, creating a multitude of perverse incentives and enhancing the shadow education system. For example, by holding back instruction of key material, or providing exam questions only in tutoring sessions, teachers guarantee the additional remuneration at the expense of student learning. The lack of alternatives undermines parents' willingness to circumvent the shadow system offered by private tutoring. In tertiary education (universities and other institutes), the share of private enrollment is 16.5 percent, compared with an average of 21 percent in the Middle East and North Africa region, 52 percent in Asia, and 50 percent in Latin America. Private universities (excluding other institutes) only constitute 4 percent of post-secondary education in Egypt.

Entry barriers deter investors from establishing new educational institutions, whether universities or vocational colleges.⁸⁸ The laws and regulations for establishing and registering privately owned universities, community colleges, and technical and vocational training centers are cumbersome. Some state regulatory decisions are discretionary and might increase the cost to investors and create uncertainty. For example, after approval by the Supreme Council of Private Universities, the final approval for private and nonprofit university establishment is to be granted by the minister of higher education, the cabinet, and the president, with neither clear rules nor timing specified.⁸⁹ Private postsecondary institutions are underfinanced, with few incentives for investment or ongoing support from the state, such as tuition subsidies, scholarships, tax holidays, or provision of land at no charge or a discount. Rigid admission and enrollment rules prevent the expansion of the industry. The number of students a university can admit is regulated by the Supreme Council of Private Universities through criteria that are not publicly available; additional limitations on number of students enrolled are set by syndicates.⁹⁰ Flexibility to define curricula is controversial, with the private institutions claiming they have to mirror public

institutions to gain approval, and the Supreme Council of Private Universities stating this is the primary choice of providers to get faster approval. Furthermore, different ministries have executive authority over different aspects of education and training, resulting in a lack of coordination, market confusion, and general administrative inefficiencies. In addition, a lack of quality assurance rules and low market transparency, including no requirement to disclose information, further prevent the private sector from filling clear implementation gaps. These entry barriers deter private investors who are trying to access the middle-income market, experimenting with new business models, and possibly making tuition more affordable.

Priority Actions to Overcome the Skills Challenge

Overcoming the skills mismatch requires a comprehensive approach that goes beyond educational reforms. For education to fulfill its potential, enhanced sector governance, improved access to information, and a focus on public expenditures management are all key ingredients.

Education technology could be used by the private sector to enhance graduates' readiness and relevance for private sector jobs. Digital skills training is required at all levels of education to provide digital literacy, provide skills to develop new content and services, and adopt and adapt to new technologies across industries. This was further demonstrated by the schools' and universities' closure amid the COVID-19 pandemic, where the MoETE's response was anchored in the use of education technology in teaching, learning, and student assessment. Better job -matching systems are also needed to facilitate the school-to-work transition.

Amending regulations to ignite private investment in education should be a priority. At least three need to be amended. First is the inability to transfer ownership because presidential decrees to establish a university are issued to an individual, and ownership is only inheritable. Second is the vagueness around title to assets such as campuses and land. That leads to campuses' inability to be mortgaged or seek access to finance from commercial banks, which shy away from long-term unsecured financing. Third, the vague laws regarding dividends policy cause university owners to avoid formal dividend declarations, even though private universities are established as for-profit entities. Further analysis is needed to assess in more detail the impact of the education system (including TVET) reform efforts made to improve relevance of education system to the job market among graduates (including TVET graduates); especially given the TVET issues related to the governance, quality, relevance and links to the labor market. Meanwhile, the MOETE is in the process of developing an accreditation body for technical schools and it is not likely to cover other type of TVET institutions.

COVID-19 Challenges and Opportunities

With the spread of COVID-19, education systems are facing a new crisis worldwide. School closures may not only cause loss of learning in the short term but may also cause further loss in human capital and diminished economic opportunities over the long term. The MOETE's efforts over the past two years to develop the digital infrastructure and deploy education technology in teaching and learning has facilitated Egypt's transition to distance learning upon the closing of schools. For instance, the infrastructure and tools were leveraged to quickly expand distance learning opportunities through digital learning resources, educational TV channels for those students with no access to computers and the internet, and platforms for virtual classrooms in 55,000 public schools, all of which enabled teachers and students to interact, upload materials, and provide feedback.

Despite the Government of Egypt's commitment to take timely action on learning during the pandemic, key issues need to be considered when designing appropriate responses to the unfolding crisis. These include (a) concerns around the access of vulnerable students to education, especially those with no access to digital devices and/or internet; (b) risks related to increased school drop-out rates, especially among those vulnerable students; (c) schools' and teacher's preparedness to address the ongoing crisis; (d) preparedness for accelerated learning when classes resume; and (e) availability of data to strengthen the evidence base on roll-out and implementation of distance learning.

4.2 HEALTH AT THE HEART OF HUMAN CAPITAL

Given Egypt's high population density, the health care system is under great pressure to effectively prevent, control, and respond to public health emergencies in a timely manner. The first COVID-19 case in Egypt was diagnosed on February 14, 2020. The crisis could further stress a system with inadequate funding and inefficient use of facilities, both of which have led to a significant decline of health care provision in public hospitals over the years. These limitations were also not fully offset by an increase in private provision. A healthy labor force is essential for the efficient and effective functioning of any private sector enterprise. Theoretical and empirical studies suggest that chronic illnesses have a negative and significant effect on labor force participation. Chronic diseases can also increase workers' absenteeism, impede their full participation in the workforce, and affect overall productivity. The passage of the Universal Health Insurance Law holds great potential for the private sector to make an important contribution to the Egyptian health sector by complementing the public sector and contributing to better value for money throughout the health system.

Overview of the Health Care System

Gaps in access to care and quality of care persist. Health outcomes have improved over the past three decades. Yet although the country has provided access to clinics, the health care authorities have neither addressed concerns about quality of care nor overcome funding challenges. Inadequate funding and inefficient use of facilities have led to a significant decline in the number of hospital beds provided in public hospitals—declines not offset by the increase in private hospital beds. The projected large increase in Egypt’s population suggests that substantial investment, more than US\$10 billion, will be needed for hospital beds alone. Low -quality health services also have resulted from acute shortages of primary care physicians in Upper Egypt and border governorates. There is also a significant gap in nursing and midwifery staff, which must be filled with workers from abroad (Bulgaria, India, and the Philippines).

The private sector has been steadily growing in importance in the health sector.⁹¹ It has established and manages a growing number of private clinics, polyclinics, and specialized hospitals—estimated at 1,000 in 2016—more than the number of clinics in the public sector. However, public facilities still provide the majority of overall bed capacity. The segments with the largest private sector presence are the laboratory and imaging services, amounting to about 5 to 7 percent of total health expenses. Despite some consolidation, the hospital market is still very fragmented, with the three top firms controlling barely 4 percent of the total number of beds (HSBC 2018).

To promote the health of its citizens and reduce their financial burden from health care, the government passed a law to implement a universal health insurance system. The system will be funded through taxes, employer premiums, and subscription fees, with subsidies for the poorest populations. The law, which was passed in December 2017, will be implemented in six phases over a 15-year period by three agencies in charge of the related elements: (a) health service provision; (b) insurance and procurement; and (c) quality supervision, assurance, and accreditation. These functions will be carried out by the Universal Health Insurance Agency (the purchaser), the Health Care Organization (the provider), and the General Authority for Healthcare Accreditation and Regulation, respectively. In addition, the Egyptian Authority for Standard Procurement and Medical Technology Management (EASPMTM) will prepare plans for standard procurement, implement a national system and IT infrastructure to conduct health technology assessments, and follow up in real time on the needs and uses of equipment and pharmaceuticals.

Opportunities for Private Sector Participation

The implementation of the universal health insurance system could be a catalyst for creating PPPs for improved health outcomes. If the policy reforms are designed correctly, the private sector could have incentives to innovate and develop facilities that can serve greater volumes of patients, provide better quality care, and lower costs. Although a detailed assessment of specific areas of private sector engagement is required, stakeholder consultations and country experiences point to some areas where the private sector could play an important role.

Egypt could design systems by reviewing other countries' health system models for public and private collaboration. Countries that use direct contracting of preventive and curative health services could be used as examples. Some of those include Brazil, Colombia, Georgia, Indonesia, South Africa, Thailand, and Turkey. In particular, areas with noteworthy private sector participation have included diagnostic services, treatment of chronic diseases (Mexico), specific surgical treatments such as for cataracts (India, Mexico), third-party administration of health insurance claims and payments (Colombia), medication supply chains, and the ramp-up of IT infrastructure (Estonia). Also, government funds can be preserved through appropriately planned PPPs in physical investment (Brazil, Canada, Peru, Portugal, Spain, and the United Kingdom) or in the supply, installation, and servicing of medical equipment and related staff training (Kenya).

Key Barriers to Private Sector Participation

Egypt's incomplete regulatory regime produces obstacles, in addition to lengthy, cumbersome, and costly processes that impede the easy entry of private sector participants. For example, Law 153 of 2004 restricts the ownership of outpatient clinics to certified physicians only; therefore, only organizations that are 100 percent owned by physicians can license a clinic. Exceptions are made only for charities or companies that are opening clinics to serve their own staff. Other licensing regulations require clinics to receive multiple licenses from different agencies, a number of which can be applied for only after the clinic has been built. Egypt's provision of primary health care services is dominated by the Ministry of Health and Population. Licensing a new health care provider, such as a hospital, is a lengthy, cumbersome, and costly endeavor. The cycle of approvals and paperwork involves at least nine government agencies, and entities are subject to conflicting rules and regulations mandated by different regulators, along with various fees and payments.

The country faces a shortage of important skills across several dimensions. Medical school graduates, pharmacists, engineers, and skilled technicians are being trained in the country, but retaining them is a challenge, even for work in private sector clinics, because of the low earnings compared with opportunities outside the country. Also, secondment opportunities within the public sector are often seen as more prestigious than working in underserved locations. Shortages in nursing and midwifery personnel may be even more serious. Care for women also is affected by the scarcity of female doctors, which discourages many women from seeking care.

Policy discourse on increasing private sector participation in health care is weak and sometimes often overlooks private firms' capabilities. Although the public sector has concentrated on regulatory reforms and improving government capacity, engagement with the private sector to strengthen their role has historically been weak and processes to evaluate firms' capabilities, both in general and in the health sector, are lacking. For example, Egypt's private sector may not have capability in the design of hospital management models that allow inpatient care providers to expand into Tier 2 and 3 cities, the development of outpatient services, the conception of innovative financing and servicing schemes for medical equipment, and training on clinical guidelines.

Private sector interaction with government programs is weak. Multiple complexities are disincentives for seeking PPPs between the government and the private sector. Some examples include (a) arbitrary and circumstantial payment mechanisms; (b) delayed payments for outsourced services rendered by the private sector, undermining the liquidity of private providers; (c) the lack of a governing framework that would support PPP opportunities; and (d) lack of a governance body that adequately represents the interests of the different subsectors.

Awareness of what constitute good health care practices is scarce. Reliance on tried-and-tested branded medicines, rather than generics, is a cultural obstacle that discourages patients from purchasing lower-priced, but equally effective, pharmaceutical products. Egypt is yet to have a high hospital-centered curative utilization rate. Recently, public health campaigns focusing on early detection and prevention of the major disease burdens (for example the 100 million healthier lives campaign) have been steadily on the rise. The objective of such efforts is to improve the prevention and early detection of the known risk factors for NCDs, early detection for common communicable diseases such as Hepatitis C, and commonly occurring tumors such as cancer breast, in addition to reversing a trend of increasing risky habits including smoking, consumption of sugary drinks and obesity. Patient awareness is therefore crucial to bolster demand for preventive diagnostic services and innovative health care patterns such as telemedicine.

Priority Actions to Foster a Modern Health Care Sector

To foster a modern and dynamic health care sector, two steps can be taken in the short term. First, regulations regarding contracts for services need to be simplified or introduced. The current law for licensing medical providers needs to be amended, and contracting requirements could be simplified to incentivize the private sector to operate. Health care services also have yet to benefit from a one-stop shop, or single-window solution, for speedy and efficient contracting of services. A formal mechanism for redressing grievances needs to be scaled up, and a medical liability law should be explored. Second, building the capacity of medical facilities and staff, and exploring incentives for improving efficiency (such as pay-for-performance) is vital. It is also important to develop, apply, and monitor uniform quality standards across all health care facilities.

In the medium term, private sector engagement could be strengthened by other steps. For example, the PPP regulatory environment needs to be strengthened through a combination of activities, including building capacity to assess and regulate PPPs and creating models that address private sector bankability, user affordability, and fiscal sustainability. Different private sector models need to be assessed, such as the hub and spoke model to tackle the challenge of expanding commercially viable ISPs into Tier II and III cities. A deeper analysis should be done to assess a potential phased approach to allow private sector engagement in services with the largest gaps. Finally, patient awareness needs to be addressed through appropriate knowledge campaigns.

COVID-19 Challenges and Opportunities

The pandemic has tremendous economic repercussions, but the health crisis and the urgency of a health response by governments is the most crucial. Countries with weak and inadequate health systems are not able to respond to the crisis, in terms of having sufficient health infrastructure and medical personnel. Moreover, countries are also putting in place export bans on medical devices, leaving other countries the only alternative: producing critical supplies such as masks and ventilators locally. In this situation, the role of the private sector in helping to fill this gap is crucial. Several actions

Many of those who continue working frontline jobs during the pandemic are women, working long hours and exposing themselves to considerable stress and health risks. For example, women make up around 42.4 percent of doctors and 91.1 percent nursing staff who are working for the Egyptian Ministry of Health. Additionally, around 73 percent of nursing staff in hospitals and therapeutic facilities in the private sector are women. As the pandemic spreads, the toll on female health workers' mental and physical health, as well as their ability to find childcare solutions amidst school closures, will be significant. The gendered nature of the health workforce not only poses a risk to the health of these women but also to the robustness of the health workforce.

There could be several steps that could be taken to facilitate not only the short-term response to this crisis, but also use this shift in production and distribution as an opportunity. Examples include to (a) provide technical assistance to manufacturing firms to pivot production from their sectors (auto assembly lines, electronics component manufacturers) to medical devices; (b) provide time-bound and targeted support to help medical device and equipment suppliers diversify their portfolio to required medical devices; (c) establish a task force with key stakeholders (domestic manufacturers of medical suppliers, buyers, and government health agencies) to devise an action plan, including a procurement strategy, to streamline the production and availability of these essential items.

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APPENDIX

APPENDIX A. POLICY RECOMMENDATIONS TO UPGRADE FIRM CAPABILITY

Egypt's efforts to increase private sector development have concentrated primarily on regulatory reforms, with less emphasis on encouraging and enabling firms to upgrade their capabilities. Firm innovation in Egypt has been low and even declined between 2013 and 2016. Firm capability is critical in the current technology-driven era and in an international trade environment dominated by global value chains. As determined by the World Bank analysis on Egypt's investment climate, more guidance and international benchmarking are needed to help Egyptian firms in areas such as entrepreneurial capability, management practice and talent, skills, capital quality and IT capital, innovation, and technology adoption. The share of firms' spending on R&D is four to five times higher in comparator countries in the Middle East and North Africa and in other lower -middle-income countries than it is in Egypt.

Firms need public support in the form of incentives to upgrade capabilities. Like many developing countries, Egypt faces an innovation paradox: despite the high premium for adopting technologies that are already available in advanced countries, few firms innovate; that is, they do not invest in the necessary technologies and skills to improve their productivity. A firm may not invest in its workers or managers, for example, if they may be easily hired away by other firms. A firm may be unable to afford a significant up-front investment in innovation, or it may be discouraged by the riskiness of such an investment. Government incentives can compensate for such concerns. Innovation inputs (such as skills) or outputs (such as domestic or international markets) are lacking.

Egypt's existing programs to increase firms' capability must be followed by analysis of the effectiveness of the interventions. Despite Egypt's long tradition of offering publicly supported programs, little good evidence and analysis are available on the impact of the programs. The following standards could be used to assess effectiveness: (a) whether the current programs reflect rigorous global evidence on entrepreneurship and business training; (b) whether the selection and operating mechanisms of the programs provide for shared risk between the public and private sectors and ensure opportunities for less sophisticated potential beneficiaries; (c) whether the programs are well balanced to different segments of the private sector, such as necessity versus high growth potential entrepreneurs and startup firms versus established firms across different sectors; and (d) whether the programs effectively target the key capability drivers of productivity amid the fourth industrial revolution.

A better-targeted program would focus on managerial capability, innovation, and technology adoption to realize the promise of the digital economy. Upgrading firm capability is necessary to sustain both domestic and international competition and to internalize the knowledge gained through learning from exporting and FDI. In ensuring access to new technologies, Egypt's priority should be the diffusion of improved production processes and innovation and R&D to promptly catch up with and adopt the available technology at the frontier—a key channel for productivity and jobs. Improving managerial capability is the backbone of this process.

Drawing from the lessons of Egypt's existing firm-support programs, the essential elements of its next-generation program should emphasize the following:

- **Design and implement the program using lessons from international good practices.**⁹² Specifically, ensure that the program has (a) a competitive, transparent, and fair process of selecting beneficiary firms (for example, through a mechanism such as a business plan competition); (b) an appropriate risk-sharing mechanism between the government and beneficiaries; (c) performance-based outcomes (government support is contingent on firm performance); (d) a rigorous monitoring and evaluation process; and (e) inclusion of existing SMEs across different sectors, because high-growth firms are not specific to any particular age or sector.
- **Motivate Egyptian firms to benchmark their management practices** against international comparators. Benchmarking could be an eligibility criterion for acceptance to the proposed firm capability upgrade program.
- **Provide relevant instruments to upgrade the capabilities** of the beneficiary firms. The program must have tools for diagnosing and improving the key gaps in management, technology, skills, and innovation capabilities.

The productivity agenda is more important now than it has ever been to create jobs, reduce poverty, create new markets, and promote shared prosperity. These priority actions, along with Egypt's ongoing reform efforts, should help Egypt achieve a productive private sector as the key engine for more and better jobs and inclusive growth.

APPENDIX B. THE ROLE OF PUBLIC -PRIVATE PARTNERSHIPS (PPPS) IN EGYPT

The introduction of PPPs —as an alternative to developing, enhancing, and financing large-scale public infrastructure and utilities projects—benefited from the adoption of a PPP law in Egypt in 2010. The PPP Law enabled (a) the establishment of a reference regulatory framework for the procurement of projects under a PPP, (b) the establishment of a PPP Central Unit under the Ministry of Finance, and (c) the introduction of a Supreme Committee for Public Private Partnership Affairs. Some projects have been successfully tendered since then, such as the New Cairo Wastewater PPP, which reached the financial close stage in 2011. This raised positive anticipation and interest from investors in the Egyptian PPP market. That interest naturally dissipated as the country went through a period of political and economic unrest throughout the period 2011 through 2013. Since then, however, the political environment has stabilized and the macroeconomic context has improved, thereby creating opportunities for attracting private sector participants through PPPs, with investors benefiting from eased access to finance with lower costs.

However, very few PPP transactions closed in Egypt over the past few years, and few projects have been initiated or identified. Despite the improved macroenvironment, in the water sector, for example, private sector participation in meeting required investment targets over the short term is estimated at only about 15 to 20 percent and is limited to asset procurement. Similarly, in the transports sector, none of the highway and transit projects were considered for PPP delivery.

Several key constraints prevent the wider use of the PPP framework in Egypt.

These constraints include the lack of deep political commitment; large institutional challenges, including lack of cross-sectoral capacity; and regulatory challenges.

- **First, line ministries lack incentives to seriously consider PPP models as part of their capital planning.** One of the reasons for the limited momentum toward the adoption of PPPs is the apparent absence of political enthusiasm to rely on PPPs as a key infrastructure delivery mechanism. This constraint may be driven by the government's eagerness to deliver projects within highly compressed timelines, in contrast with the long timelines involved in the preparatory due diligence and planning required for successful PPPs. Furthermore, there is no systematic requirement, such as through a policy directive or by regulation, to test major infrastructure projects for PPP suitability.
- **Second, a combination of financial, legal, and contract management skills are needed to fully understand the risks.** The complexity of PPP projects, combined with the long-term commitments required to develop them, requires highly skilled, well-staffed, and dedicated PPP teams embedded in a cross-sectoral ministry to coordinate PPP development. The PPP Central Unit, under the Ministry of Finance, has been envisaged to play this role. However, as it currently stands, the PPP Central Unit would need to be reenergized and its role clarified for it to be more effective in promoting PPPs throughout the government landscape and to act as an enabler of PPP projects.

- **Third, regulatory challenges mean investors lack a clear legal and regulatory system to undertake PPPs.** Although the PPP Law has recently been amended with some improvements, the following constraints persist:
 - i. The PPP Law coexists with other laws. Although the law applies to all PPP projects in Egypt, it has not abolished the application of previous laws, including the Concession Law (No. 129/ 1947) and the new Public Procurement Law (No. 182/2018, which replaced the Tender Law No. 89/1998). These laws also coexist with some sector-specific concession laws. Therefore, administrative entities tend to still grant concessions on the basis of the 1947 Concession Law, the Public Procurement Law, or sector-specific laws. The new Public Procurement Law of 2018 refers to PPP projects and the PPP Law, which may cause confusion and uncertainty in the contracting agencies and result in unwarranted challenges and disputes.
 - ii. Dispute resolution mechanisms are unclear. The PPP Law mandates dispute resolution through the Petition Committee, whose decisions are final and binding. This may be read as precluding arbitration and other forms of dispute resolution, though arbitration and other nonjudicial means of settling disputes in contract execution may be agreed upon when allowed by the supreme committee for PPPs. If arbitration and other forms of dispute resolution are not the default option, it may add an element of uncertainty and be seen and calculated as a risk by the private parties.

Strengthening the environment for PPPs in Egypt is important, given the opportunities that exist to implement them. From a sectoral point of view, the ongoing reforms of core SOEs could generate significant opportunities for PPPs in Egypt. In the power sector, on top of the development of further IPPs under a PPP model and the concession of transmission lines, private actors could be mobilized to take over distribution on some specified areas. Health and education sectors could also benefit from the development of further PPPs. Aside from this, other sectors, such as Waste (for the investment in and operations of landfills), water (for distribution, wastewater treatment, and potable water provision), and transport (for the development, operation, and maintenance of ports and airports), could benefit from the introduction of private sector investors. Furthermore, national-level programs with significant requirements for greenfield infrastructure, such as the development of new urban centers, the Suez Canal Economic Zone, or the 1.5 Million Feddan Project, could act as avenues for reengaging the private sector in the provision and management of infrastructure.

Recommendations for strengthening PPPs include the following. The private sector could play a greater role through a well-crafted PPP environment. Steps to creating that environment include (a) removing duplication of laws caused by overlapping jurisdiction, such as between the new Public Procurement Law, which refers to PPP projects, and the PPP Law; (b) introducing stronger provisions in both laws related to transparency, record of procurement proceedings, procedural safeguards for the use of registers of suppliers and contractors, and the requirement to publish a notice of award; (c) clarifying dispute resolution mechanisms available through the PPP Law and those designated by the central PPP unit; and (d) increasing the technical and physical capacity of the central PPP unit.

APPENDIX C. TRADE FACILITATION CHECKLIST FOR COUNTRY RESPONSES TO COVID-19

1. MEASURES TO SUPPORT BUSINESS CONTINUITY AND FRONT-LINE STAFF

Protection of front-line workers

- ✓ Are offices being sanitized and precautionary measures issued by health authorities followed?
- ✓ Are customs officials using hand sanitizers, frequently handwashing, and wearing personal protection equipment, including protective gloves and gowns where necessary?
- ✓ Are quarantine measures or segregation spaces in place for potentially ill passengers?
- ✓ Are staff trained to assess passengers for illness and to take measures to avoid contracting the disease?

Support to business continuity

- ✓ Are ICT systems ready to support remote work?
- ✓ Have flexible working conditions been considered?
- ✓ Have schedules been staggered to limit the number of workers on shift at the same time and to increase the physical distance between workers?
- ✓ Have border agency working hours been extended to accommodate social distancing among border officials?
- ✓ Have remote work features of existing automated solutions been considered?
- ✓ Are online and telephone appointment management systems and scheduling being used to limit the physical presence and interaction of logistics workers at buildings, facilities and border crossing points?
- ✓ Has presence at enquiry points been ramped up to address as many issues as possible through distance communications, including telephones, SMS, webchat, online forms, electronic payment, and email?
- ✓ Has available trade-related information on websites been increased (such as Trade Information Portals - TIP, direct mailings, routine video conferences, etc.) regarding changes to procedures related to facilitating trade and reducing the risk of transmission?
- ✓ Has a contingency plan been developed to address staffing shortfalls?

2. MEASURES TO FACILITATE SAFE BORDER TRADE

Handling of emergency/relief consignments

- ✓ Have the recommendations contained in WCO Communique (March 9, 2020) been considered?

Enhanced use of risk management

- ✓ Have risk management measures been implemented to prioritize border activities for imports and exports and to allow low risk critical supplies to bypass clearance controls? Have the measures been combined with reasonable random audit procedures to confirm compliance with requirements?
- ✓ Has the enhanced use of pre-arrival processing and post-clearance audit methods been established for critical commodities to achieve higher level of release for low risk consignments?
- ✓ Have accredited importers or exporters been established based upon compliance records to allow critical need articles to be expedited (establish audit procedures that validate ongoing compliance)?
- ✓ Have policy priorities and the levels of inspection been reviewed in view of lower workplace attendance?

Increased internal and external border agency collaboration

- ✓ Can information technology tools be used to stimulate workplace collaboration?
- ✓ Are Customs and Sanitary and Phytosanitary (SPS) agencies working together to identify critical need products and facilitating the entry and clearance of critical supplies (for example, medicines, perishable foods, foods required for a potentially extended period of quarantines testing kits, clothing, etc.)?
- ✓ Are SPS agencies working with regional and international trading counterparts to identify those items certified under equivalent regimes or produced under similar production systems that could bypass entry controls?
- ✓ Have border agencies identified critical imports that receive pre-exit testing equivalent to or are mutually agreeable with import requirements so that they may bypass clearance procedures or may be required to undergo fewer clearance activities at entry?
- ✓ Are border agencies and the private sector working together to undertake pre-assessment of imports through advance screening of documentation to identify and prioritize import activities prior to commodity arrival?
- ✓ Are government authorities working closely with the private sector to identify service standards and precise inspection procedures for critically needed items, so that the private sector can better anticipate and sequence logistics?

APPENDIX D. THE LEGAL AND INSTITUTIONAL FRAMEWORK OF SOES IN EGYPT



Public Sector Authorities and Companies Law 97 of 1983. Joint stock companies that undertake economic projects in line with state public policy & economic and social plans (examples include the Arab Contractors and the twelve petroleum companies). A company is considered public if a public person owns 51% or more of a company.



Public Business Sector Law 203 of 1991. A relatively large number of what were formerly "government units" have been corporatized as Public business sector companies. A company is under this Law if it is at least 51 percent owned by a holding company; some of these companies are 100 percent controlled by the state and operate under the authority of line ministries. They include companies considered "strategic" in sectors such as aviation and petroleum.



Joint Stock and Limited Liability Companies' Law 159 of 1981. This is the general umbrella law that covers all companies not established according to other specific SOEs laws. State-Owned banks (SOBs) are subject to its provisions as joint-stock companies.



Military-Owned Enterprises. Entities operating under authorities that are governed by special laws or created under the private companies' law and are affiliated to the Ministry of Defense (MoD) and Ministry of Military Production (MoMP).



Economic Authorities. There are 51 EAs, established pursuant to a Presidential Decree following Law no. 61 of 1963. Certain EAs are engaged in commercial activities and should be considered as unincorporated SOEs (examples include EGPC, the Suez Canal Authority and NUCA), while others perform non-commercial functions such as sector regulators (NTRA in ICT) and should be included as a State-budget entity.

APPENDIX E. COMPETITIVE NEUTRALITY ANALYSIS APPLIED TO EGYPT

COMPETITIVE NEUTRALITY GAP ANALYSIS

	STREAMLINING THE OPERATIONAL FORM OF GOVERNMENT BUSINESS	IDENTIFYING THE COSTS OF ANY GIVEN FUNCTION	ACHIEVING A COMMERCIAL RATE OF RETURN	ACCOUNTING FOR PUBLIC SERVICE OBLIGATIONS
Egypt	<ul style="list-style-type: none"> • Non corporatization of Economic Authorities delivering goods and services • No distinction between commercial vs. non-commercial activities (e.g. network industries) • 'Public Service' entities aim to realize public interest objectives, may realize profits though its not their primary objective. 	Lack of accounting separation/cost allocation	<ul style="list-style-type: none"> • No express requirement to achieve commercial rate of return. • Absence of obligation on SOEs to cover direct costs using internally generated revenues and no systematized benchmarking of SOEs transactions against similar transactions of private operators. 	Lack of transparent and objective criteria in the compensation of public service obligation (PSO) delivered by SOEs.
Benchmark	Legislation requires business separation of SOEs.	<ul style="list-style-type: none"> • Accountancy for separating commercial and non-commercial activities of SOEs. • SOEs objectively assessed based on transparent performance reports. 	SOEs commercial operations and investments are required to have positive NPVs, market consistent rates of return, and to being measured based on private sector performance.	<ul style="list-style-type: none"> • Compensation paid to SOEs for the provision of PSOs is based on transparent accountability and objective criteria. • Cross-subsidization is avoided.

Firm-level principles: Separation of SOE commercial and non-commercial activities

COMPETITIVE NEUTRALITY GAP ANALYSIS

	REGULATORY NEUTRALITY	PUBLIC PROCUREMENT	TAX NEUTRALITY	DEBT NEUTRALITY AND OUTRIGHT SUBSIDIES
Egypt	<ul style="list-style-type: none"> Exclusion and exemption from competition law for certain SOEs. Sectoral regulatory privileges exist e.g. telecom and aviation. Lack of clear separation between role as market regulator and operator e.g. NTRA and CBE 	<ul style="list-style-type: none"> Agency to agency procurement with the approval of the competent authorities. Challenge: implementation of the new procurement law to ensure competitive market outcomes 	SOEs are, in principle, subject to full tax liability under the same reference tax system, whether income or sales tax, as the private sector, but some exceptions prevail e.g. importing equipment by rail and petroleum authorities.	<ul style="list-style-type: none"> Preferential access to finance through State-Owned Banks. Direct monetary support via subsidies. Indirect subsidies through mandatory state purchasing of goods and services. MoF loans or loan guarantees to SOEs. Preferential access to inputs. No rules on subsidy design to minimize competition distortions.
Benchmark	<ul style="list-style-type: none"> Companies compete on a level playing field, with no trade protection and market-based competition for rights to invest in state assets. Sectors where competition is feasible are open to private sector investment. 	<ul style="list-style-type: none"> Market based competition in public procurement. Bids/auctions designed to reduce the risk of bid rigging. 	Tax exemptions, subsidies, and debt guarantees granted following competitive neutrality principles	

Principles embedded in cross-cutting regulatory framework and sectoral policies

Source: WBG Markets and Competition Policy team

APPENDIX F. COMPETITION CONDITIONS IN SELECTED NETWORK INDUSTRIES

Newly available PMR data indicate that SOEs maintain a particularly dominant role in Egypt's network industries, which play a critical role as inputs into other sectors. Regulatory protection of incumbents, entry limitations in certain segments of regulated sectors, subsidies, price controls, and exemptions from antitrust law may limit or discourage entry in SOE-dominated sectors.⁹³

In the electricity sector, despite the ongoing reform, significant state participation throughout the value chain remains a key challenge to fostering private sector participation. Law 87/2015 regulates entry in electricity production, distribution, and sale activities under the related licenses (Article 13). However, the government has 100 percent stake in the largest company in the sector, the Egyptian Electricity Holding Company (EEHC), which controls, through its subsidiaries, the generation, transmission, and distribution of electricity. This can create an uneven playing field and displacement of the private sector. Furthermore, high market concentration is associated with high market power and the possibility to foreclose competitors, especially in the presence of vertical integration. Currently, private sector participation is mainly in the form of (a) build, own, operate, and transfer (BOOT) contracts with the Egyptian Electricity Transmission Company; and (b) off-grid projects supplying energy to industrial consumers and touristic projects. Nevertheless, private participation is expected to increase thanks to the ongoing reform process, especially the implementation of the explicit obligation to grant third-party access at nondiscriminatory conditions, in line with most countries surveyed in the PMR database (see figure 2.10).

In the gas sector, the dominant presence of state-owned enterprises and high entry barriers appear to inhibit competition. Gas is used for final consumption and as an input in other sectors, including the electricity sector and various manufacturing industries, such as the production of nitrogenous fertilizer. At present, however, the gas sector is a monopoly in Egypt, with the state-owned company GASCO being active at all stages of the value chain. GASCO's shares are entirely owned by other SOEs: 70 percent of the shares are held by the Egyptian Gas Holding Company (EGAS), and the remaining 30 percent are equally divided between the Petroleum Projects & Technical Consultations Co. (PETROJET) and Egypt Gas. In addition, although entry of new competitors had been limited until recently, third-party access is now allowed under Law No. 196 of 2017 (figure F.1).

In transport, the railways sector is characterized by the presence of a publicly owned primary operator and high barriers to entry. At present, Egyptian Railways, which is publicly owned and managed by the Egyptian Railways Authority (ERA), is the only operator in the rail network. However, Law 152 of 1980 gives the ERA the right to grant private investors (both foreign and domestic) concessions to build new railway tracks through competitive and transparent bidding, provided that they do not compete with the government-controlled network. Barriers to entry in the railway services are also present in the form of legal conditions: in particular, new operators are required to obtain a concession. There currently is no vertical separation between the operation of railroad infrastructure and the provision of railway services.

In the aviation sector, competition restrictions on airlines reflects both the presence of publicly managed operators and the existence of strict regulation regarding entry and provision of services. Economic regulation is carried out by the Ministry of Aviation with the aid of the Egyptian Civil Aviation Authority established in 2010 as part of the ministry. The number of players is limited through a license system, as Law No. 56 of 2002 mentions that among the tasks of the ministry is to set civil aviation charges, in collaboration with the competent bodies, and issue licenses to establish aviation companies. Despite some steps toward liberalization, the aviation sector also remains highly concentrated. In particular, the national carrier, EgyptAir, which was restructured as a wholly state-owned holding company with a number of subsidiaries, dominates the activity on both domestic and regional levels without facing real competition from other operators. Moreover, EgyptAir is shielded from competition because of both regulatory restrictions and preferential treatment in relation to air transport services. For example, decree no. 934/2001 stipulates that regular domestic or international flights cannot be operated in the same operating time as EgyptAir. The company also enjoys preferential fuel pricing and preferential payment conditions of fuel price and airport fees. Also, the government is liable for losses made by airline SOEs, which is an exception in PMR countries (see figure F.2).

The water and wastewater sector is characterized by state ownership, and price regulation is in place. The Government controls the Holding Company for Water and Wastewater (HCWW), which operates under several organizations supervised by the Ministry of Housing. Prices are regulated by the Egyptian Water Regulatory Agency, however, the HCWW participates in the assessment of proposals for tariff adjustments alongside the Ministry of Housing and the Cabinet. Despite the extensive state involvement, private sector participation has been increasing in recent years through PPP projects for water desalination and wastewater treatment.

FIGURE F.1 HOW ARE THE TERMS AND CONDITIONS OF THIRD-PARTY ACCESS (TPA) TO THE ELECTRICITY TRANSMISSION GRID DETERMINED?

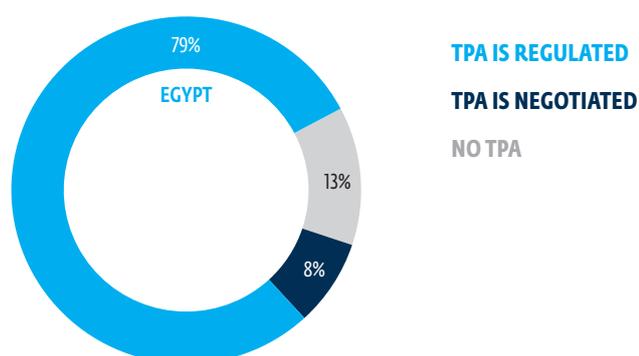
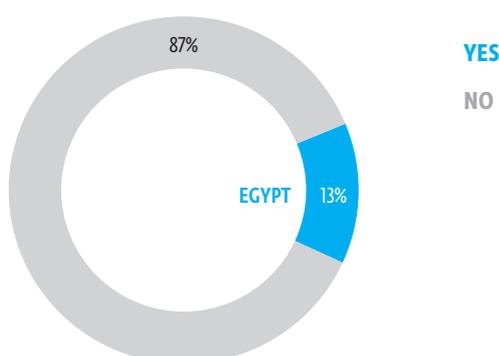


FIGURE F.2 DOES ANY GOVERNMENT HAVE ANY LIABILITIES FOR LOSSES MADE BY AN AIRLINE COMPANY?



Source: PMR questionnaire for Egypt 2017. OECD PMR dataset for OECD countries and OECD/WBG dataset for non-OECD countries.

APPENDIX G. LIMITATIONS IN THE CURRENT COMPETITION LAW

Egypt's Competition Law established key ingredients to foster competitive markets in Egypt through both enforcement and advocacy. The Law on Protection of Competition and Prohibition of Monopolistic Practices in Egypt (Law No. 3/2005) established the Egyptian Competition Authority (ECA). The Competition Law, amended in 2008 and 2014, covers both private and public operators and prohibits anticompetitive agreements, concerted practices, and abuses of dominance. In the past few years, there has been an increase of almost 70 percent in the number of decisions against anticompetitive practices issued by the ECA. Moreover, the ECA's efforts to embed competition in markets was also strengthened by the ability to review new laws and regulations that may hinder competition. Other practical measures, such as the inclusion of an ECA representative on the board of the Egyptian Electric Utility and Consumer Protection Regulatory Agency (EgyptERA), have allowed the ECA to take an active role in the government's efforts to embed competition in key sectors. However, key limitations in the scope of the law's application may hinder effective enforcement.

First, exclusions and exemptions from antitrust law can hinder the implementation of the competitive neutrality principle under which all operators, whether public or private, should compete on a level playing field. Article 9 of the Competition Law excludes public utilities managed directly by the state from the scope of application of the law. The same article allows the ECA to grant specific exemptions to companies indirectly managed by the state for practices otherwise considered anticompetitive. Even though these exemptions are conditional to achieving public interest and/or benefits to consumers that outweigh restricted freedom of competition, they remain somewhat uncommon and do not reflect good practice.

Second, lack of control of anticompetitive effects of mergers and acquisitions may exacerbate negative effects of market consolidation. The Competition Law establishes only an obligation to notify certain mergers ex-post and does not require economic concentrations that may hinder market dynamics to undergo a preliminary competition assessment. Although the ECA lacks authority to prohibit or curb mergers, companies are still required to go through costly merger notifications, but only after the merger has occurred. Notwithstanding such limitations, ECA has issued several high-profile decisions targeting mergers ex-ante by treating them as potential anticompetitive agreements among competitors. While this approach has allowed to fill the existing gap on merger control, it hinders legal certainty regarding planned economic concentrations.

Third, the need for courts to issue fines for anticompetitive behavior disincentivizes compliance and may affect the technical quality of decisions. The current text of the law proposes criminal enforcement for anticompetitive infringements wherein the ECA can establish the existence of violations, issue cease and desist orders against anticompetitive practices, and even reach extrajudicial settlements with infringers. However, only criminal courts may impose fines for antitrust violations. This approach does not only disincentivize compliance by lowering the probability and immediacy of receiving a substantial fine but may also affect the quality of the decisions.

Fourth, the lack of independence of the ECA can limit effective enforcement against anticompetitive behavior. The ECA's decision-making board includes representatives from the General Federation of the Chambers of Commerce, the Egyptian Federation of Industries, the General Federation for Consumer Protection, the administrative court (State Council), independent experts, as well as representatives from the Ministry of Commerce and Industry, the Ministry of Supply and Internal Trade, and three other members representing federations and unions. Potential conflicts of interests between these institutions and decisions presented to the board may affect the ECA's ability to issue impartial decisions. Similarly, limited autonomy for the ECA to manage its assigned budget may also limit effective enforcement.

Draft amendments to the Competition Law to enhance ECA's mandate are under parliamentary review. The proposed amendments aim at enhancing the independence of the ECA by establishing an impartial board that features the ECA's chair and two senior technical staff, judges, and academics rather than the current arrangement that includes representatives of government ministries as well as associations that include potential violators. The amendments also place the ECA under the President's reporting line (rather than under the minister of Trade and Industry) and allows more budgetary autonomy in line with the governance arrangements of other autonomous bodies in Egypt that were established under the Constitution. In addition, the amendments will empower the ECA to sanction anticompetitive practices (currently a task of the courts), establish a committee to ensure adjudicatory efficiency during the investigations, and increase the transparency of the ECA through enhanced publishing obligations.

APPENDIX H. THE AGRIBUSINESS SECTOR

Summary of Analysis for Prioritization of Agriculture Sub Crops

A recent World Bank Group deep dive of the agriculture sector undertook an analysis of several sub crops to prioritize them for greatest opportunities in the future. That first step in the analysis was based on a composite score comprising rankings on several parameters across four main pillars: (a) competitiveness, (b) economic impact, (c) development impact; and (d) additional qualitative prioritization factors. The different parameters are given in appendix table H.1, with an explanation. Based on rankings against parameters for the first three categories, the following scores for the sub crops emerged.

TABLE H.1 COMPOSITE PRIORITIZATION INCORPORATING COMPETITIVENESS, ECONOMIC IMPACT, AND DEVELOPMENT IMPACT **

1	Sugar beet	0.48	17	Grape	0.3	
2	Dates	0.48	18	Maize	0.29	
3	Olives	0.46	19	Mango	0.29	
4	Onions	0.44	20	Other vegetables	0.29	
5	Other fruits	0.41	21	Broad beans	0.29	
6	Dry beans	0.36	22	Other livestock	0.29	
7	Beef	0.36	23	Goat	0.28	
8	Citrus	0.36	24	Other pulses	0.28	
9	Wheat	0.35	25	Groundnut	0.28	
10	Sorghum	0.34	26	Banana	0.28	
11	Fisheries	0.33	27	Seed Cotton	0.27	
12	Milk	0.33	28	Eggs	0.27	Prioritization scores*
13	Other oilseeds	0.32	29	Chicken	0.26	Horticulture 0.86
14	Sheep	0.31	30	Apple	0.25	Food grains 0.56
15	Paddy	0.31	31	Other Cereals	0.25	Livestock 0.44
16	Potatoes	0.3	32	Tomatoes	0.24	Oilseeds 0.43

Sources: FAOSTAT, UNCOMTRADE, various research reports.

* Ranking based only on development impact parameters assessed qualitatively with a score assigned on a scale of 1 to 10 on assessment of parameters under Development Impact.

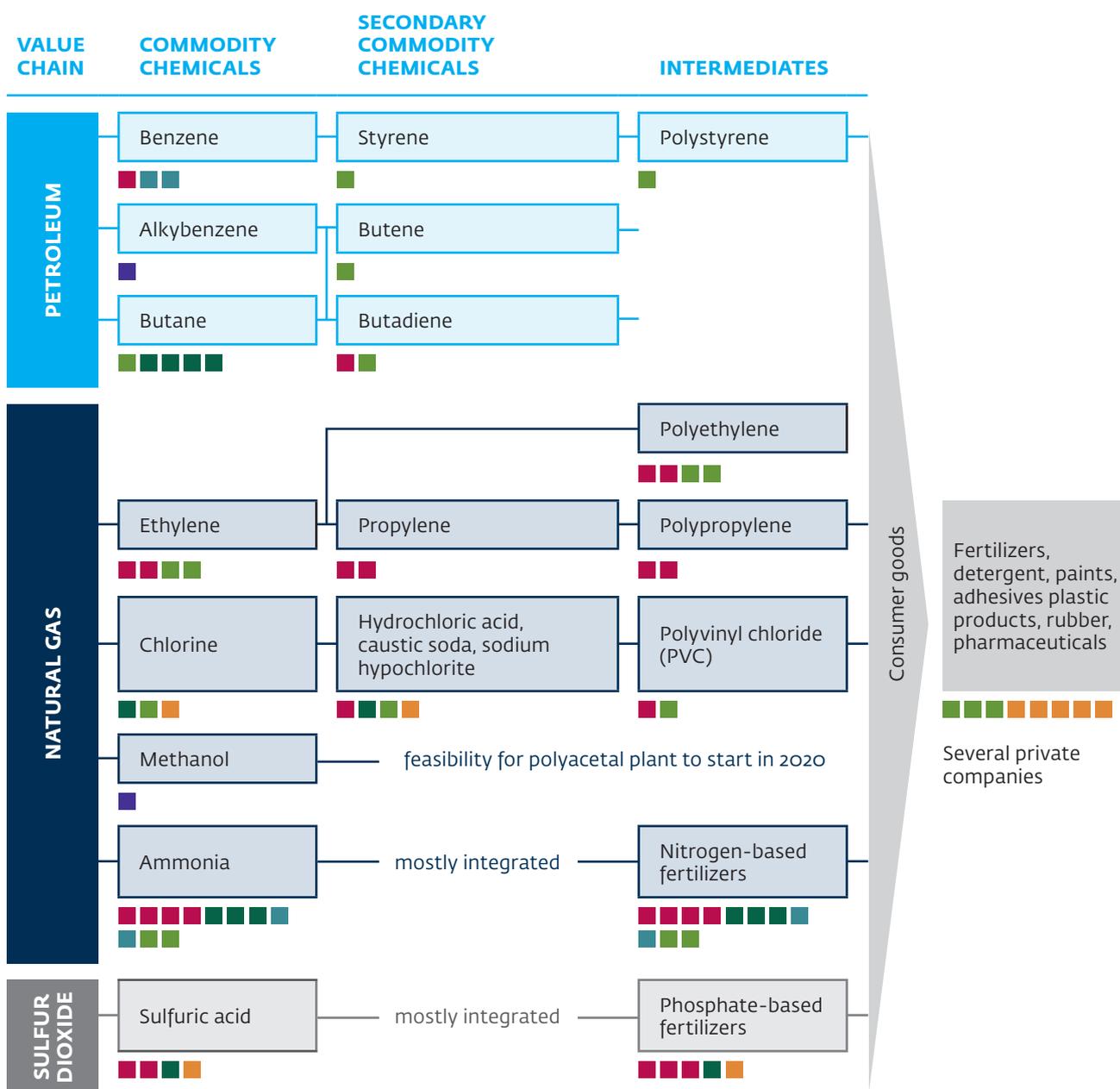
** Ranking based on 50 percent weightage to competitiveness, 30 percent to economic impact, and 20 percent to development impact parameters.

In a second step, the commodities within the top 66 percentile (scores 0.33 and above) were subjected to an assessment of other factors that are not amenable to quantification, that is parameters under the fourth category. The following table shows the results.

		Composite prioritization score	Other factors that influence ability to create impact through the respective commodity value chain	Takeaway for prioritization
1	Sugar beet	0.48	High priority (and intervention) from government, low donor activity	Dropped due to political economy
2	Dates	0.48	Stated high priority for government, low donor activity, high existing private sector activity	Shortlisted as first priority
3	Olives	0.46	Adjancies with Dates (Horticulture)	
4	Onions	0.44		
5	Other fruits	0.41		
6	Dry beans	0.36	High priority (and intervention) from government, high donor activity (IFAD, FAO, USAID among others)	Dropped due to political economy
7	Beef	0.36	High priority from government, low donor activity	Fisheries identified as higher gvt priority
8	Citrus	0.36	Adjancies with Dates (Horticulture)	
9	Wheat	0.35	High priority (and intervention) from government, high donor activity (IFAD, FAO, USAID among others)	Dropped due to political economy
10	Sorghum	0.34	High priority (and intervention) from government, high donor activity (IFAD, FAO, USAID among others)	Dropped due to political economy
11	Fisheries	0.33	Stated high priority for government, low donor activity, high existing private sector activity	Shortlisted as second priority
12	Milk	0.33	High priority from government, low donor activity	Fisheries identified as higher gvt priority

APPENDIX I. THE CHEMICALS SECTOR

FIGURE I.1 STATE FOOTPRINT ALONG THE CHEMICAL VALUE CHAINS IN EGYPT



PRIVATE COMPANY

PRIVATE COMPANY/EICHEM 50:50 JOINT-VENTURE

COMPANY AFFILIATED TO THE MILITARY

COMPANY DIRECTLY OR INDIRECTLY CONTROLLED BY THE STATE, MAINLY THROUGH EICHEM

COMPANY DIRECTLY OR INDIRECTLY CONTROLLED BY THE STATE, MAINLY THROUGH CICH

COMPANY DIRECTLY OR INDIRECTLY CONTROLLED BY THE STATE, MAINLY THROUGH EGPC

Source: Companies website.

BOX I.1 METHODOLOGY TO ASSESS UNTAPPED EXPORT POTENTIAL

Decreux and Spies (2016) assess countries' export potential using an econometric model inspired by a gravity model specified at the product level. The total export potential in value is computed combining three components: supply capacity of the exporter, demand at the product-level and ease of exporting between the exporter and the importing market. The calculated export potential can be compared to actual exports to identify the scope for export growth.

- **The supply component** is based on the projected market share in the absence of re-export and tariffs. Thus, the component includes the share of a country's exports in total exports of a given product, multiplied by the exporter's expected GDP growth rate relative to other exporters of the same product, to capture the relative increase in overall supply capacity. This indicator is corrected for possible re-exports and for market access.
- **The demand component** is based on projected imports, thus the market's demand for a given product, augmented by expected population growth (with a unitary elasticity) and expected growth of GDP per capita (subject to estimated revenue elasticities of import demand per capita at sector level). The indicator also considers the tariff advantage in the target market and the bilateral distance as compared to the average distance over which the target market usually imports the product.
- **Ease of exporting** is based on a ratio of actual trade between the exporter and the market for products with potential relative to their hypothetical trade if the exporter had the same share in the market as it has in world markets. If the country finds it easier to trade with the market than with world on average, it can result for instance from the two countries being located in proximity, sharing the same language or culture or having established commercial links in the past.

Source: Cheong et al., 2018.

APPENDIX K. THE AUTOMOTIVE SECTOR

FIGURE K.1 MAPPING THE VALUE CHAIN IN THE AUTOMOTIVE SECTOR

	RAW MATERIAL SUPPLIERS	TIER 2+ SUPPLIERS	TIER 1 SUPPLIERS	ASSEMBLY	OEMS	RETAIL	OTHER CONSUMER SERVICES
	Suppliers for steel, Rubber, Plastics, Fibers, Aluminum to produce parts	Manufacturers of auto parts for assembly. Tier I suppliers supply parts directly to OEMs through established relationships. Tier II suppliers usually supply to Tier I suppliers and could supply to OEMs directly also. Tier II suppliers sometimes also manufacture non-automotive parts		Contract manufacturers of CKD units	Vehicle manufacturers	Dealers, Online Auto Services	Service & Maintenance, Auto stores, Financial Services... etc.
EGYPT	Approximately 500 suppliers in the market supporting the 9 assembly plants, of which: <ul style="list-style-type: none"> • 5 global Tier I suppliers (Valeo, Suminoto, Leoni, Boysen, Pirelli) • 80 Tier II Egyptian suppliers • 60 suppliers who export, though over 400 registered to do so 			<ul style="list-style-type: none"> • 1 Global OEM: Nissan • 3 JVs: GM, Suzuki, FCA • 5 local assemblers 		Many importers of vehicles such as Toyota, Peugeot, Opel, Renault, Kia, Mitsubishi, Mercedes, BMW, VW, etc. with an extensive network of distribution.	Hundreds of independent service and auto parts distributors. Banks and insurance companies offer financial services to the sector.
Global energy markets, country infrastructure, domestic content regulation, tax and trade, financial markets, fuel economy regulations							

Source: Team analysis from several sources.

FIGURE K.2 TOTAL PRODUCTION OF AUTOMOTIVE AND PASSENGER CARS IN EGYPT



*Annualized figures as at YTD Sept. 2019. Source: AMIC

Appendix K. 1. Electric Vehicles Market in Egypt

Summary

The electrical vehicle (EV) market is just opening, with a focus on electric buses that have been procured by the government for plying in Alexandria. The e-mobility strategy envisions establishing assembly of electric buses under the supervision of the Ministry of Military Production. Given the high level of pollution in Egypt, and the greater reductions in greenhouse gas emissions that EVs allow, there is a strong case for growing this market. EVs also exhibit a stronger viable business model and are more inclusive, covering a wider population. However, the necessary legal and regulatory environment for the nascent EV market is weak, as is the infrastructure. International experience shows that subsidies and nonfinancial incentives are critical to establish the market for EVs. Further, the cost -competitiveness of the country is unclear, and operational costs are prohibitive. A detailed assessment of the market would be necessary to determine the market's potential and action steps.

Context

Developing the EV market for commercial vehicles is highly desirable for several reasons:

- Higher impact on pollution: The reduction in greenhouse gas emissions when replacing a bus is equivalent to replacing 54 cars or 530 motorcycles.
- Stronger business model: Public e-transport is closer to cost parity (electric cars are expected to achieve cost parity with their fossil fuel counterparts within a decade). E-vehicles are very costly because of high up-front capital expenditure, which gets offset only marginally by lower energy costs. Higher mileage and fuel consumption of buses compared with cars make the electric option more viable.⁹⁴
- Simpler business model: The charging infrastructure required for public buses is simpler to establish, and given its collective nature, further helps drive down the costs of operations. Depending on the architecture of the optimal energy storage linked to a bus route and load profile, public bus charging happens at depots and fixed points on bus route. These charging points require more power but can be much less numerous than for the individual home charging stations or public charging stations used by private EV cars (on a passenger-km basis).
- More inclusive: Making electric transport available to the wider population is more inclusive than focusing on the more affluent personal car owners, in particular, as public subsidies are necessary expenditures in building this sector.

Currently the role of the private sector in this segment is limited, though the government would like to attract private investment. The government is actively pursuing a strategy for e-mobility that is focused on buses to begin with. The government has begun with procurement of a small pilot fleet of 15 buses from a Chinese firm that will operate in Alexandria. It plans to assemble 500 e-buses in the country, and the Ministry of Military Production will take charge of developing production capacity for EVs. In April 2019, Egypt's Military Factory 200 signed a partnership agreement with Foton Motor Company of China for the joint manufacturing of 2,000 electric buses within four years (the Egyptian component

represents 45 percent). Nearly 99 percent of electric buses manufactured globally in 2018 (460,000) were manufactured in China. Other manufacturers, such as Daimler, have expressed interest in partnering with the government on producing EVs in the context of the planned new smart cities.⁹⁵

Revolta is the only local charge point operator (CPO) providing charging stations in Egypt. A domestic manufacturer, Darshal, announced plans in 2018 to assemble small electric pick-up trucks, with a local production content of 70 percent, in cooperation with Dongfeng and Vasworld Power Corporation, both Chinese companies. The second phase of their road map is focused on electric buses.

A thorough assessment of this subsector will need to be conducted to determine whether the country has the ability to leverage this opportunity for greater investment.

Challenges

The necessary legal and regulatory environment for the EV market, as well as the infrastructure, are undeveloped and weak. The Ministry of Military Production is in charge of establishing the market. Although details are not known (a) the e-mobility plan is to be designed in coordination with the Ministry of Electricity and Renewable Energy; (b) the Ministry of Petroleum governs Wataniya, the petrol station responsible for placing chargers for EVs; and (c) the Ministry of Housing oversees new spatial development to incorporate operation of public transit EVs. An efficient market would require (a) designing a policy framework governing licensing, registration, importation, local assembly, manufacturing, and charging; (b) determining the use of (dis)incentives for production; and (c) coordinating policies with other sectors. Most notably, power sector coordination is critical to ensure that electricity is available at required stations at affordable costs and in line with consumption peaks of the power grid. The nascent stage of the industry poses additional regulatory challenges. For example, EVs are not categorically recognized in the customs regime and lack a clear licensing mechanism. Recent attempts by the General Traffic Directorate resulted in inaccurate and inconsistent fees, in the view of many importers and customers. The lack of a regulatory framework for the electricity requirements, pricing, and other operational features of electric charging is also a challenge.

Egypt's cost-competitiveness in the EV sector is unclear and has yet to be assessed. Batteries in EVs make up about one-third share of the total production costs. The electric motor is another critical component, and the competitiveness of importing versus producing also needs to be assessed. Further challenges come from the lack of an industrial infrastructure and limited financing options because lenders are uncomfortable with using the vehicle as collateral and unfamiliar with the concept.

Although the need to change to vehicles that do not rely on fossil fuels is clear, the case for whether Egypt will enter into manufacturing and assembly of this segment is not. As with conventional vehicles, the scale and localization of production in this new market play a huge role in making industrial investments economically viable. If local demand is insufficient, competitive exports become vital. A detailed assessment of cost-competitiveness of manufacturing and assembly options for EVs at the segment level would help identify the opportunities and constraints.⁹⁶

Appendix K.2. The Light Commercial Vehicle (LCV) Market

Summary

Unlike the passenger car segment, this segment continued to be protected by high tariffs on imported units, coupled with continuous incentives and reductions in customs duties to encourage localization, which was easier to do given lower economies of scale. The sector thus came to be dominated by one original equipment manufacturer (OEM), GM, which allowed for the expansion of a deep supplier sector. Financing was also provided from other sources (such as the EU, for SMEs) to develop suppliers that enabled the sector to adopt new processes and technologies, which led to increasing sophistication.⁹⁷

Context

In the 1980s, the expansion of new residential and industrial cities, the growth in the tourism sector from Upper Egypt to Sinai, and the increased transportation of agricultural products across the country fed the demand for commercial vehicles, including pick-ups, light and heavy-duty trucks, and buses.

At that time, the government provided an incentive scheme to strengthen the local sector through local content regulations (Article 6) that included continuous incentives and customs duty reduction on the imported completely knocked down (CKD) in return for deeper localization of components. With the evolution of quality control systems, the major participants conditioned new business going to the local suppliers on their ability to upgrade their quality control systems through any of the accredited certification bodies. Moreover, with EU funds going to develop the SMEs, OEMs stretched their requirements and started to enforce efficient manufacturing processes in the shop floor of the local suppliers.

Over the past 35 years, the local content development in the commercial vehicles evolved to the level that only the power train (engine, transmission, and differential) is imported and the rest of the components are locally manufactured in full or with a considerable amount of local added value. The investment in quality, technology, and know-how acquired by the local suppliers paid off by getting Egypt a major bus exporter to Europe, along with components of commercial vehicles for export to other countries that produce similar platforms, such as South Africa and Ukraine.

Light commercial vehicle production should be viewed in context; that is, the relatively small domestic market and high barriers to entry have limited competition. Also, a lack of pick-up production in other regional markets resulted in a market that was dominated by a single manufacturer (General Motors Egypt), enabling production to have relatively high levels of localization. The drawbacks of that system are that the dominance of a single manufacturer and product also leads to longer production runs, resulting in significant cost advantages and productivity gains. Although these are all essential elements of a successful automotive manufacturing program, the lack of competition invariably leads to other suboptimal conditions. As production runs are elongated, innovation and reinvestment are deferred in favor of retained profits under low-risk conditions with low competition. Similarly, technology and quality standards stagnate. Suppliers are tied to one customer and limited product, unable to expand.

Ultimately the market is doomed to inherit old technologies as they become redundant in other developed markets. The result is manufacturing with a domestic market focus, using inferior technologies and delivering low quality compared with other developed markets. In comparison, the passenger cars segment was exempted from Article 6, which allowed automakers of passenger cars to get the maximum benefit of duty reduction once they attained higher local content. This exemption was never waived and became a parallel avenue to mainstream law.

However, wherein Article 6 was initially effective in establishing local companies and initiating domestic production, failure to adapt and modify its thematic elements severely limited the ultimate levels of local added value for the entire industry. The automotive industry is dynamic, and therefore requires automotive policy to be similarly responsive and adaptive. This is where many policies fail, as they neglect to anticipate these changes. Additionally, manufacturers tend to quickly find optimum regulatory balance when left unchecked, leading to stagnation in progress.

Opportunities

Commercial vehicles require fewer economies of scale compared with passenger vehicles. For example, the market can absorb 20,000 LCV units from GM from one platform. However, with market growing, and there is potential for other OEMs to operate. Other differences between this segment and passenger cars also give it an advantage in terms of ease of production, localization, and competition, include the following:

- ✓ Fewer players, few models, less competition, higher margins both for OEMs and for suppliers
- ✓ Longer model lifetime (10–15 years for LCV versus 5–6 years) with facelifts
- ✓ Voluminous, comfortable, and luxurious enough to replace passenger cars for private use
- ✓ Can be driven both for the transport of passengers and for commercial purposes
- ✓ Easier and cheaper to maintain
- ✓ Easier to localize because of the lower technical requirements and standards
- ✓ Shared common platforms of various OEM (many models share, such as PSA and Fiat, Opel and PSA, VW and Ford)
- ✓ Less investment needed for distribution and service networks for OEMs
- ✓ Reasonably less production automation needed to produce at lower cost for competition at international level
- ✓ Ability to circulate in city center with passengers, goods, and cargo, replacing heavy vehicles
- ✓ A target for electrification by many manufacturers because the electrical engine can fit much easier without a big modification
- ✓ Fewer environmental regulations in force, making the choice of engine and driveline easier

Appendix K.3. Global Experience and Lessons Learned in the Automotive Sector

1. Rationalization of number of OEMs that can be accommodated in the market is necessary to justify the large capital costs of manufacturing. The automotive industry is capital intensive and requires long-term programs to make it viable and sustainable. Economies of scale are central to the operation of the industry. According to industry experts, a minimum threshold of production is estimated to be around 100,000–200,000 units. Having too many players in the market will result in fragmentation of scale.
2. Scale also matters for localizing equipment makers, hence the need to limit the variety of parts to be delivered to local OEMs. Local supply will reduce the initial fixed costs faced by equipment makers for each vehicle model. OEMs can initially produce a limited number of different vehicles or models using a number of common components or common platforms.
3. In Morocco, for example, once a large OEM (Renault) set up significant and export-focused production capacity in the country, it acted as a driver both to attract global equipment makers and to grow the scale of the already localized suppliers. Once this ecosystem is established, other OEMs (in this case, Peugeot) could benefit from that ecosystem: each component maker has already reached a viable scale and can provide even relatively marginal quantities or parts economically to the newcomer. Morocco has deployed a production of 404,000 units in less than 10 years by focusing on only one OEM, whereas South Africa has taken several decades to reach a volume only 50 percent higher because it took a more fragmented approach from the beginning and is still struggling to increase its local content of automotive components.
4. To achieve such a scale, a manufacturer will base investment plans on a long-term export strategy if the domestic market is small. This has been the model in Morocco, which has a small domestic market but has automotive exports of US\$24 billion (2018), the largest share of the country's exports. Exports must be developed based on long-term partnerships with a limited number of OEMs that would benefit from generous governmental incentives in exchange for long-term commitments for sizable local production. Global Tier1 suppliers to these OEMs can also be attracted by incentives until their local operations similarly reach a scale that makes them internationally competitive. For Egypt, logistical access to markets, particularly Europe and East Africa, is a comparative advantage to attract investments in automotive manufacturing.
5. The challenges of developing such a complex industry mean that a smart strategy to attract the appropriate manufacturers in the country is essential. This strategy requires an intelligent partnership between governments, national investors, and the global OEM. The partnership needs to rest on a package of incentives to encourage localization and on agreements between stakeholders (either commercial or bilateral between governments) that are mutually beneficial. This type of agreement has been the case in both Turkey's and Morocco's path to becoming automotive sector hubs (Turkey with the EU, and Morocco with Renault and now PSA). Besides the production, and as a natural addition to the automotive ecosystem, the sector can grow auto or component R&D centers that can benefit from high-level engineering skills when locally available. Most common forms of incentives are land allocation, tax holidays, and both human and hard infrastructure development. These incentives are usually negotiated with regional rather than central governments because the employment and financial benefits are often localized.

TABLE K. 3.1 SUMMARY OF GOVERNMENT POLICY ACTIONS FOR THE AUTOMOTIVE SECTOR IN SELECT COUNTRIES

	TURKEY	MOROCCO	SOUTH AFRICA	INDIA
Sector Strategy	Significant domestic market and export potential in EU. Initial approach focused on targeted JV agreements with limited OEMs that allowed scale and establishment of supplier ecosystem.	Small potential domestic market-focus on exports. Initial deliberate focus on only one OEM with very few models produced to reach scale. Then progressively let other OEM's enter as the ecosystem was up and running.	Relatively small domestic market and focus on a mix of exports and domestic sales. Attracted several OEMs at same time. This resulted in fragmentation and difficulty to reach scale and increased localization rate.	Very large potential domestic market. Phased opening of sector. Initial phase inward-focused with limited number of manufacturers (Maruti Suzuki and Hyundai) offering low cost models for domestic production and then exports which allowed to reach scale and expand localization rate progressively. Progressive liberalization followed that attracted FDI to market and established supplier ecosystem.

INCENTIVE PACKAGES (SOME SELECT METRICS)

Investment/ Infrastructure (loans at subsidized rates, coverage of investment costs, dedicated infrastructure)	<ul style="list-style-type: none"> Subsidized interest rates for loans not exceeding 75 pc of investment > 20 pc of investment cost covered by govt Free land allocation 	<ul style="list-style-type: none"> 25-30% of investment cost covered by government Automotive industrial free zones 10% of equipment costs 	<p>Cash Grants</p> <ul style="list-style-type: none"> Vehicle Assemblers - 20% to 30% of investment value in qualifying productive assets Component Manufacturers - 25% to 35% of investment value in qualifying productive assets <p>Duty Credits</p> <ul style="list-style-type: none"> % of local value add for local tool manufacturing <p>Infrastructure support</p> <ul style="list-style-type: none"> Regional and local government expansion programs and Special Economic Zoning (SEZ) <p>Proposed from 2021</p> <ul style="list-style-type: none"> Technology related investment support up to 55% of investment, split between cash grants and corporate tax credits. 	<ul style="list-style-type: none"> State level financial incentives-eg: financial assistance of 50 percent of fixed capital investments, rebates in land costs, concessional rates on loans, tax incentives Demo-cum experience centers set up for promoting smart and advanced manufacturing for SMEs Introduction of regulatory framework on safety standards, fuel and emission norms to global standards. Support to Automotive specific infrastructure (dedicated berth facilities, faster clearance for automotive imports at ports/inland waterways policy for automotive logistics)
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Appendix K.4. Lessons from Failure of Government Policy Relevant for the Auto Sector

1. **Indiscriminate subsidies.** Granting subsidies without conditions increases the risk of adverse selection of beneficiaries and the development of assistance-dependent behavior among firms. Such a policy rarely translates into productivity improvements.
2. **Never-ending support.** The absence of sunset clauses (a provision that if a contract is canceled, neither buyer nor seller shall be subject to penalty) in support programs to companies discourages efforts to increase productivity.
3. **Prevention of competition.** Although the creation of new activities and industries may require support in the early stages (the traditional “infant industry” argument), gradual exposure to internal and external competition can ensure that those activities grow in a productive way.
4. **Bureaucracy -led priorities.** This type of policy cuts the chances of generating the information flows and trust essential to get the private sector to commit to investing in innovation and production.
5. **Capture by incumbents.** Consultations with the private sector often end up being led by incumbents, but innovation and production diversification also depend on the creation and expansion of new firms. Targeted mechanisms to encourage the creation of start-ups are needed to avoid the risks of policies that will only help to maintain the status quo instead of catalyzing dynamic change.
6. **Short-term horizon and annual budgeting.** The creation and strengthening of domestic scientific, technological, and production capabilities take time, so industrial policies with short-term horizons and based on annual budgets tend not to be credible. Multiyear plans and budgets are necessary to achieve results, but they require robust monitoring and evaluation (M&E) to correct failures during implementation.

NOTES

- 1 More indicators on exporting firms in manufacturing can be found in World Bank 2020d.
- 2 Throughout this report, three sets of peer/comparator countries are used where possible: regional comparators include Morocco, Tunisia and Jordan; structural comparators are those with similar per capita income and economy size or structure and include Turkey, Thailand, South Africa and the Philippines, in addition to aspirational peers including Malaysia and Poland.
- 3 Latest estimates suggest that more than 60 percent of the firms and more than 70 percent of the workers in the private sector are informal.
- 4 The CPSD complements the existing World Bank analytics, such as Investment Climate Assessment, Enabling Private Investment and Commercial Financing in Infrastructure, Doing Business report and Assessment of Land Governance and the ongoing work on Systematic Country Diagnostic; World Bank (2020c) assesses the legal and institutional frameworks surrounding land governance in Egypt and recommends crucial reforms on the allocation of state land to the private sector. The issue of access to land and finance have been discussed in certain sectoral assessments in the CPSD.
- 5 Two other important sectors—infrastructure and finance—are not included in the present report. Infrastructure investment needs and opportunities are analyzed extensively in World Bank 2018, including on constraints to expanding commercial finance and private investment in energy, transport, agriculture, and water and sanitation. Also, a Financial Sector Assessment Program (FSAP) is currently in the pipeline, which will focus on the stability and soundness of the financial sector and assess its potential contribution to growth and development.
- 6 See Krafft et al (2019), European Training Foundation (2019); World Bank (2019a); Assaad et al (2018), Krafft (2018) World Bank (2013).
- 7 Sectors contribution to growth is calculated using growth rates and weights in GDP, using Ministry of Planning and Economic Development data.
- 8 For instance, with Law 87/2015 put into effect, private investment in the electricity sector reached LE 50 billion during FY2019, compared with a cumulative LE 4.5 billion in the past 15 years. Private sector investments in natural gas have also increased to 21 percent of total private sector investment (up from 14 percent in FY2014), reflecting the sector reforms of 2017.
- 9 The Central Bank of Egypt, with the technical support of the United Nations Conference on Trade and Development (UNCTAD), has updated FY2019 figures to reflect a newly adopted methodology for calculating FDI. The revised figure for net FDIs in FY2019 is 2.7 percent of GDP. However, the new methodology was not applied to the old series and should not be used to compare with historical trends.
- 10 A Financial Sector Assessment Program (FSAP) is in the pipeline and will look at the gaps in access to finance.
- 11 The CAPMAS Establishments Census of 2017 was used to analyze the private sector landscape in Egypt. Out of a sample of 772,736 surveyed establishments, 97.6 percent are private sector.
- 12 Turkey is used as a comparator on trade as it is a large economy with a similar degree of proximity to markets in Europe and also has a preferential trade agreement with the European Union.
- 13 This is because GVC-based trade exerts constant pressure on firms to upgrade their productivity drivers, such as technology, skills, and management practices to remain competent in their specific positions as suppliers or producers of specific components in the GVCs. This in turn contributes to higher overall productivity and economic growth in countries participating in the GVCs. Finally, higher economic growth leads to reduced poverty.
- 14 Roll-on, roll-off (Ro-Ro) ships are vessels designed to carry wheeled cargo that are driven on and off the ship on their own wheels.
- 15 Dunning (1980) provides a useful typology to differentiate between FDI. They are (a) natural resource-seeking, (b) domestic market-seeking, (c) strategic asset-seeking (which takes place through mergers and acquisitions), and (d) efficiency-seeking. In FY2019, net FDI inflows to Egypt amounted to 2.7 percent of GDP, slightly lower than the 3.1 percent received in the previous year.
- 16 For example, tariffs of 60 percent are levied on prepared fruits and vegetables, perfumes, soaps, suitcases, carpets and floor coverings, footwear, glass and glassware, stoves and cookers, a range of electrical appliances, furniture, and pens
- 17 UNCTAD (UN Conference on Trade and Development), "What Are Non-Tariff Measures?" <https://unctad.org/en/Pages/DITC/Trade-Analysis/Non-Tariff-Measures/What-are-NTMs.aspx>
- 18 WTO Integrated Trade Intelligence Portal (I-TIP).
- 19 The investment gap is calculated as the funding needed for maintaining and upgrading the infrastructure minus what the government can reasonably finance from its budget, given its debt level and other financial parameters. For further details, see World Bank (2018).
- 20 United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).
- 21 During the central planning era in the 1950s and 1960s, Egypt's government had accumulated hundreds of SOEs by nationalizing foreign and domestic private sector enterprises as well as establishing new ones to promote self-sufficiency and import substitution. Notwithstanding the privatization waves of the 1990s and 2000s, the government still owns a large number of SOEs.

- 22 This perception was reflected in WB staff consultations with private sector firms as well as in international press articles on the Egyptian economy.
- 23 The term “incorporated” is used hereafter to designate those SOEs established as joint-stock companies under one of the three laws, as opposed to other categories or legal forms of SOEs, such as economic authorities or military-affiliated business units.
- 24 Economic authorities are established pursuant to a Presidential Decree, following Law No. 61 of 1963.
- 25 In December 2019, the cabinet approved amendments to the law, changing the fund’s name to Egypt Sovereign Fund for Investment and Development.
- 26 Other public bodies undertaking commercial activities can also take the form of special funds, such as the Tahya Misr fund, which was established in 2014 to receive private donations to support the economy. The fund essentially undertakes development projects, but some analysts argue its activities are also combined with commercial ones.
- 27 A 2018 Ministry of Finance report on the SOE portfolio on different categories of SOEs does not cover all the SOEs under the Companies Law No. 97. Those not covered include large ones such as the New Administrative Capital, E-finance, the National Investment Bank and its subsidiaries, as well as enterprises controlled by the MoF (for example, Misr Technology Services, the national single window operator). The report also excludes economic authorities, state-controlled media companies, and military-affiliated enterprises such as the subsidiaries and companies of the National Service Projects Organization (NSPO) or the Arab Organization for Industrialization (AOI). After the identification and elimination of duplicates, the final dataset with accessible information includes 297 incorporated SOEs.
- 28 The Global Industry Classification Standard (GICS), an industry classification system, was used to assign each SOE to a specific subindustry in a structured manner, after obtaining a basic understanding of its main line of business.
- 29 This is based on the overall analysis of the OECD and OECD-WBG PMR dataset regarding presence of SOEs in certain sectors/subsectors of the economy. For a detailed coverage of the PMR dataset see figure 2.10 and see <https://www.oecd.org/economy/reform/indicators-of-product-market-regulation/>
- 30 Only 256 of the 297 SOEs mentioned in the MoF report had tax expense data. Of those, Banque Misr and National Bank of Egypt (NBE) contribute the greatest share. The remaining SOEs’ tax payments amount to 1.1 percent of total tax receipts and 11 percent of non-sovereign corporate income tax.
- 31 The Product Market Regulation (PMR) methodology explores three main aspects that affect competition in markets: the extent of state control, the presence of barriers to market entry and rivalry, and the presence of barriers to trade and investment. The combination of these aspects shapes the competitive environments that enable firms to enter new markets, invest, and expand.
- 32 OECD (2012) provides best practices from OECD member countries and should serve as a point of inspiration for regulators and policy makers.
- 33 The CBE acquired and merged three insolvent private banks. While this acquisition was meant to be temporary, the CBE still owns the merged bank.
- 34 Public service is defined as activities public entities perform to achieve public interest objectives and for which the realization of profits is not their main purpose, although they may still realize a profit. For more details see Raslan (1999), 247.
- 35 Law No. 182 of 2018 Regulating Public Procurement.
- 36 Article number 47 of the Income Tax Law No. 91 of 2005.
- 37 Minister of Defense decree number 68 of 2015 lists exempted properties, including recreational facilities (clubs, hotels, resorts, cinemas, and theaters), as well as buildings and other services facilities.
- 38 Article 9 of the Competition Law.
- 39 It takes 1,010 days to enforce a contract through the court system, a performance far longer than the already poor Middle East and North Africa average of 622 days. Although filing and service can be done in only 20 days, the phase from trial to judgment takes 720 days, and the time from judgment to enforcement takes 270 days. Enforcing contracts also comes at a high cost, with 26.2 percent of the value of the claim (18 percent for attorney fees, 1.3 percent for court fees, and 6.9 percent for enforcement fees).
- 40 Specialized military courts oversee military-affiliated companies. These courts have jurisdiction over any unjust enrichment and illicit earnings for active servicemen.
- 41 According to the Quality of Judicial Processes Index of Doing Business 2020, Egypt has passed some laws to set standards for the overall time allowed for key court processes in a civil case (World Bank 2019). However, these time standards do not relate to at least three key court processes and, more often than not, they are not respected.
- 42 Objectives are based on analytical work carried out by the World Bank with the Ministry of Justice, which was carried out for a comprehensive Five-Year Justice Reform Implementation Plan published in 2019.
- 43 The sector encompasses all firms involved in input supply and commercial agriculture that involves some transformation activities. It includes smallholders and microenterprises in food processing and retail to the extent that they are market oriented. See World Bank (2013b).

- 44 In GVC-based trade, the incidence of importing and re-exporting is much higher in the process of making the final product, which primarily separates GVC-based trade from the conventional trade between countries on final output. Because each country specializes in only one particular segment of the value chain (that is, it's linked to both downstream and upstream chains in the whole process of making that product), the negative effect of costly and cumbersome trading across borders, along poor logistics, gets cumulated in GVC-based trade compared with traditional trade. The importance of rule of law, policy predictability, and property rights is also more salient in GVC-based trade, because this trading pattern requires long-term contractual relationships between firms in different countries. See *World Development Report 2020* for further elaboration (World Bank 2020c).
- 45 The challenge of water scarcity could be further impacted by the outcome of ongoing negotiations on the Renaissance Dam and its effects on water availability for Egypt.
- 46 The state-run R&D agency accounts for around 75 percent of institutional research on agriculture and is primarily funded by the government, with 50 percent of its research funding allocated to major crops and only 7 percent going to less-developed yet high-potential subsectors like fisheries.
- 47 According to the International Food Policy Research Institute, only nitrogen fertilizers are subsidized, leading to limited use of other essential phosphorus, potassium, and organic fertilizers.
- 48 For example, only three large private sector entities survived the government's September 2016 decision to disallow private sector sugar distribution in reaction to rising prices and fears of hoarding.
- 49 According to EBA indicators on access to seeds and access to fertilizers, scores depend on the time and cost to register a new cereal variety and a new fertilizer, respectively.
- 50 The economic complexity ranking is effectively a measure of the country's capabilities, on the basis of the diversity of products in the export basket and the complexity or ubiquity of products in that export basket. For more information, see the Atlas of Economic Complexity <https://atlas.cid.harvard.edu>.
- 51 The product space map depicts the connectedness between products, based on the similarities of know-how required to produce them. It shows that countries move from doing things they know how to do to doing things that are nearby or related in requiring similar know-how. Therefore, countries in the dense middle of the product space have many nearby opportunities for diversification, compared with countries at the periphery.
- 52 These forecasts may change with the impact of COVID that are anticipated in manufacturing global value chains depending on the severity and duration of the crisis, as does the response by global players in these sectors. As discussed in each of the sub-sectors, there is a likely move to shorter and regional GVCs as global players seek to diversify risk. Therefore, Egypt still stands to gain by growing its presence in these sectors.
- 53 Egypt has introduced 58 new products in its export basket compared with 22 in Turkey, 18 in Jordan, and 12 in Israel.
- 54 Revealed comparative advantage is not a complete measure of export competitiveness and has to be considered in combination with other metrics to determine the country's future potential.
- 55 The chemicals sector has a sustainable agenda associated with production of several of the downstream sectors, such as fertilizers and plastics. An assessment of this agenda is outside the scope of this analysis but should be included in any in-depth study of the sector.
- 56 Source: ITC based on UN COMTRADE statistics
- 57 The International Finance Corporation's (IFC) experience shows that US\$1 million invested in chemicals creates between 150 and 450 jobs, depending on the region's level of development. A large-scale chemical plant also drives the development of the local community. Smaller firms are significant beneficiaries of chemical industry development and infrastructure and can improve competitiveness in downstream subsectors. Those include farming, plastics production in mass production goods, packaging, transportation, retail, gas service stations, and clothing, carpets, and weaving. Also, an entire ecosystem of support services grows up around that development. According to IFC, each formal job in the chemicals industry can generate between 21 and 32 additional jobs in the wider economy.
- 58 Reuters (2019), 'Egypt to invest \$9 billion refineries' upgrade over four years: minister', January 21. Access: <https://www.reuters.com/article/us-egypt-energy-refineries/egypt-to-invest-9-billion-refineries-upgrade-over-four-years-minister-idUSKCN1PF0TK>
- 59 Detailed estimates of potential are available upon request from the World Bank team.
- 60 Assessment of production in the country needs to keep in mind the changing dynamics in the plastics sector. For more details, see McKinsey & Company (2018).
- 61 Roughly US\$1.5 trillion of chemicals are traded globally, or 9.4 percent of global trade. These prospects are estimated based on (i) supply capacity of the exporter, (ii) demand at the product-level; and (iii) ease of exporting between the exporter and the importing market. See methodology in Box 1, Annex I. Detailed estimates of potential are available upon request from the WB team.
- 62 See: <http://www.egpc.com.eg/Refineries.aspx>
- 63 Both countries present a good example, given their size and availability of natural resources. Poland is also a good comparator for Egypt, given that both have free trade with the EU (Poland being a part of the EU and Egypt through FTAs).
- 64 Ready Made Garments Export Council 2019.

- 65 The Holding Company for Cotton & Textiles comprises 25 affiliated companies comprising ginning, spinning, weaving, knitting, dyeing & finishing, and confection. These have been operating with old technology and poor productivity. More recently, the government has a plan to rationalize these 25 affiliated companies by merging them into 10 new affiliated companies.
- 66 The AEO is a concept whereby a party involved in the international movement of goods would be approved by the Egyptian Customs Authority as complying with the supply chain security standards. This aggregation helps streamline exports.
- 67 Assembly in the automotive sector is based on the number of parts in the kits that are imported: disassembled knocked down (DKD), semi-knocked down (SKD), and completely knocked down (CKD). In Egypt, the CKD units are imported from East Asia and Europe.
- 68 Based on information provided by Directors on the Board of Federation of Egyptian Industries and Engineering Export Council of Egypt, February 2020.
- 69 Tier 1 suppliers are companies that supply auto parts directly to OEMs. They are often dedicated to one or two of them, with arm's-length relationships with others. Tier 2 suppliers also support nonautomotive customers, and though experts in their domains, they are not restricted to production of automotive-grade parts. Tier 3 suppliers refer to suppliers of raw, or close to raw, materials such as metals and plastics and supply all tiers.
- 70 The reaction of CKD assemblers to drops in customs duties is not immediate or short term. Since they have investments in welding lines and jigs and fixtures for a specific model running in their body shop, they run the model for as long as they can (in some cases in the hope that the government will intervene to save them). Over the past two years, auto assemblers have been ceasing their operations. Hyundai Verna and Chevrolet Lanos stopped assembly last year. Chevrolet Aveo and Optra will do so this year. And the largest three volume producers—GM, Nissan, and Hyundai—have expressed their intention not to invest in any new passenger car models.
- 71 ITC calculations based on UN COMTRADE.
- 72 Saraf 2016.
- 73 GM and Nissan, with existing operations in Egypt, estimate a market of 500,000 cars in the next five years (according to interviews with GM and Nissan senior management, January 2020).
- 74 Auto workers in Egypt receive 16.75/hr vs. Euro 200/hr in Europe. Based on interviews with heads of GM and Nissan, in Cairo, November 2019.
- 75 The current calculation method is based on percentages for components or subsystems as percentages of historical car value, even though that value has now changed. This static methodology results in disincentives to add value. The calculation method followed by many countries that have seen significant development in their auto industry base their incentive system on rewarding local value addition.
- 76 While the average size is difficult to estimate given that complexity of components is different, most of the local suppliers have annual revenues in the range of USD 1 million to USD 10 million with an average around USD 5 million. There are two or three who have annual revenues of around USD 20 million and those are usually the ones that are involved in some export activities. By international standards these are small levels of scale to be considered competitive in the global market.
- 77 The customs tariff continues on non-FTA imports for vehicles and fall in two bands: 40 percent if engine size is less than 1,600 cc and 135 percent if engine size is greater than 1,600 cc.
- 78 On Ro-Ro services, see Section 2 on exports competitiveness. Egypt established its first dedicated automotive Ro-Ro terminal at East Port Said in January 2020.
- 79 Dieter Becker, "COVID-19 Impact on the Automotive Sector," KPMG Blog, March 20, 2020 <https://home.kpmg/xx/en/blogs/home/posts/2020/03/covid-19-impact-on-the-automotive-sector.html>
- 80 MCIT data in current prices. Conversion to US dollar based on FY2019 average exchange rate.
- 81 To overcome this situation, operators have implemented cache systems, which means they store copies of recently downloaded data (such as popular video or web pages) to satisfy subsequent requests from the local cache instead of downloading multiple times from a remote server.
- 82 In January 2020, the Vodafone Group signed a memorandum of understanding with Saudi Telecom Company (STC) regarding the possible sale of Vodafone's 55 percent shareholding in Vodafone Egypt.
- 83 FTTH Council Europe 2020 <https://www.ftthcouncil.eu/documents/PR%20Market%20Panorama%202020%20FINAL%202.pdf>
- 84 Source: Survey conducted for E4E Arab Youth MENA program, 2011.
- 85 A study carried out for the Education 4 Employability (e4e) for Arab Youth Initiative (2011) commissioned by the IFC illustrated that one third of the surveyed youth were willing to pay for post-secondary education, whether university or technical institutes, if they thought it would improve their employment opportunities.
- 86 A ministerial decree issued in 2019 limits the foreign ownership of capital of private schools and schools applying an international curriculum in Egypt to 20 percent, with possible exemptions on a case-by-case basis. Further analysis would be required to assess the impact on private investment in the industry.
- 87 These data precede the reforms launched in September 2018, but it is believed that this shadow or informal market for private tutoring would significantly affect analysis of the reforms.
- 88 Further information on regulatory barriers for private investment in vocational training is being clarified.
- 89 Law 12 of 2009, Articles 1, 12.

- 90 Law 12 of 2009, Article 18.
- 91 The private sector consists of for-profit organizations that include traditional private pharmacies, private doctor clinics, auxiliary services (laboratory, radiology, and physiotherapy), and private hospitals of all sizes. The not-for-profit sector is also a participant, especially in underserved areas. In 2013, they were estimated to cover about 4 percent of the population's health occurrences, compared with 11 percent for the public and 85 percent for the private sector.
- 92 Cirera and Maloney (2017) provide a comprehensive analysis of externalities, market failures, rationale, and challenges associated with public policy support for building capabilities of firms. World Bank (2017) is a comprehensive guide for policy makers and practitioners for using instruments to support firm innovation in developing countries.
- 93 Source: Markets and Competition Policy team inputs for Egypt InfraSAP (September 2017); OECD, Product Market Regulation Database 2015; OECD-WBG Product Market Regulation Indicators 2013–2017.
- 94 In the case of Egypt, one may need to take into account the specifics of its climate. Air conditioning is needed in buses all year long, which triggers higher energy consumption per passenger-kilometer than in peer countries and may increase energy needs.
- 95 Electric Vehicles in Egypt Opportunities and Challenges, January 2019, Lynx Industry Notes.
- 96 The European Bank for Reconstruction and Development (EBRD) is advising and supporting the government on the development of an e-mobility strategy, including by offering to hire a consultant to (a) assess the short- to medium-term market potential and readiness to roll out EVs in selected cities and (b) assist in the development and design of the associated charging infrastructure.
- 97 The National Supplier Development Program was engineered, implemented, and financed by the Industrial Modernization Centre, which started as a program funded by the EU and government of Egypt to modernize industry as part of the Egypt/EU Association agreement commitments.

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