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CONTENTS

FIGURES

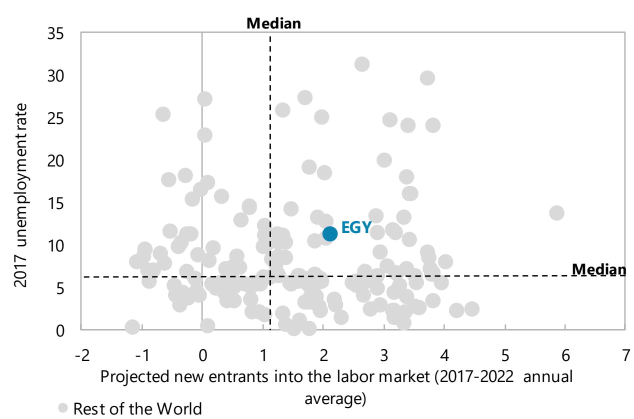
UNLOCKING HIGHER AND MORE INCLUSIVE GROWTH[1]

Like some other emerging market economies, Egypt faces the challenge of raising growth and creating more jobs to improve the living standards of its young and growing population. The analysis in this paper shows that past growth was characterized by a suboptimal allocation of the factors of production and a lack of dynamism in the private sector. By identifying the main constraints to private sector-led growth and higher employment generation, it suggests policies to further shift Egypt's economic model towards increased private sector participation and integration into global value chains. To this end, reforms should aim at removing the distortions to the optimal allocation of resources in the economy and equip the labor force with the skills needed to benefit fully from future job opportunities. These reforms would also help better integrate women and youth into the job market. The authorities have embarked on a reform program to address these challenges and important steps have already been taken. Improved macro-stability and a strong political commitment to reforms present an opportunity to further structural reforms that intensify private sector-led growth and job creation and strengthen trade integration.

A. Introduction

1. **About 3.5 million Egyptian are projected to join the labor market over the next five years.** The working-age population has increased by almost 40 percent since 2000 and it now accounts for about 60 percent of the population. 34 percent of Egypt's 95 million people are under the age of 15 and around 700,000 people will join the labor market every year in the foreseeable future, adding to those already seeking a job (Figure 1).

Figure 1. Projected New Entrants into the Labor Force and Total Unemployment
(In percent of the 2017 labor force)



Sources: International Labour Organization modeled estimates; and IMF staff.

2. **This demographic trend presents an opportunity for Egypt, but also poses challenges.** The unemployment rate averaged 10 percent over 2000–10 and peaked at 13.4 percent in 2013/14. It has started to decline, but remains high at around 12 percent. Labor force participation is low by international standards, at around 50 percent, against 62 percent for other emerging economies, meaning that a large share of the working age population is without a job.

[1] Prepared by Bénédicte Baduel, Yufei Cai, and Jorge de León Miranda.

3. Going forward, higher growth that is associated with higher private sector participation and job creation will be needed to improve living standards sufficiently. Real GDP per capita growth averaged 2.4 percent annually over 1990–2010, against 3.9 percent in emerging markets (EMs) peers[2] outside the Middle East and North African region. In the context of the global financial crisis and the Arab Spring, GDP per capita stagnated, against a 4.8 percent annual expansion on average for other EMs. The national poverty rate in Egypt is estimated at 27.8 percent in 2015/16, up from 25.2 percent in 2010/11.

4. This paper analyzes the historical drivers of growth and job creation and recommends policies for higher and more inclusive growth. The paper has three parts. First, it demonstrates that an inefficient allocation of production factors and a lack of dynamism in the private sector have resulted in historically low per capita growth and employment ratios. It also identifies the labor supply bottlenecks that have put women and youth at a disadvantage in successfully joining the labor market. Second, the paper identifies the main constraints to private sector-led growth and higher employment generation, which largely pre-date the implementation of the authorities' reform program. Finally, the paper takes stock of recent progress achieved and highlights additional policy reforms, some of which are already being considered by the authorities, to further promote private sector participation and Egypt's integration into global value chains; and to better equip the labor force with the skills needed to benefit fully from future job opportunities.

B. Growth, Private Sector, and Labor Market Diagnostic

Based on cross-country and historical analysis, this section demonstrates that—in the past—the factors of production have not been used efficiently and the private sector has been less dynamic and outward oriented in Egypt than in peers. Consequently, this economic model has not generated enough jobs, particularly for youth and women.

5. Growth in Egypt in past decades has been characterized by an inefficient use of production factors. Per capita growth decomposition[3] shows that capital deepening (measured by the capital- labor ratio) was the main driver of GDP growth over the last two decades (Figures 2–3). It explained about 80 percent of total real per capita GDP growth during the 1990s and 2000s. However, the high contribution of capital to growth was not explained by high investment. The investment-to-GDP ratio has been stable around 15 percent over the last 15 years, lower than in EM Middle East, North Africa, Afghanistan, and Pakistan (MENAP) and in other EMs at 26 and 33 percent respectively over the same period (Figure 4). In addition, over most of the period, it was not associated with total factor productivity (TFP) gains, suggesting that investment was not efficiently allocated to improve within-sector productivity or contribute to structural change through a reallocation towards more productive industries. In fact, TFP contribution to growth became negative during the 2000s,

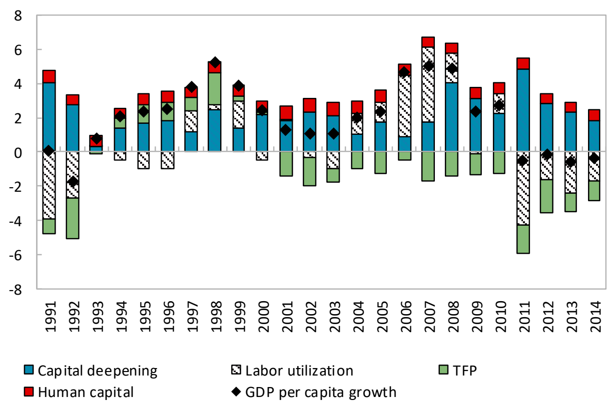
[2] The emerging countries grouping (EM) in this paper corresponds to the World Economic Outlook's country grouping of Emerging and Developing Countries, excluding Low Income Countries. EM MENAP include Algeria, Bahrain, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tunisia, and the United Arab Emirates. Other EMs correspond to EMs as defined above, excluding EM MENAP.

[3] See details and methodology in Annex I.

contrasting with EM peers where TFP gains were a major source of growth. The lack of competitiveness of the Egyptian economy was also reflected in the negative contribution of the external sector to growth over the last few years (Figure 5). At the same time, labor utilization contribution to per capita growth, measured as the change in the employment-to-population ratio, was close to 0 during the 1990s and 2000s. It contributed negatively to per capita growth over 2011–14 (-2.5 percent) highlighting that Egypt was not able to absorb its growing population into employment

Figure 2. Decomposition of Real Per Capita GDP Growth in Egypt

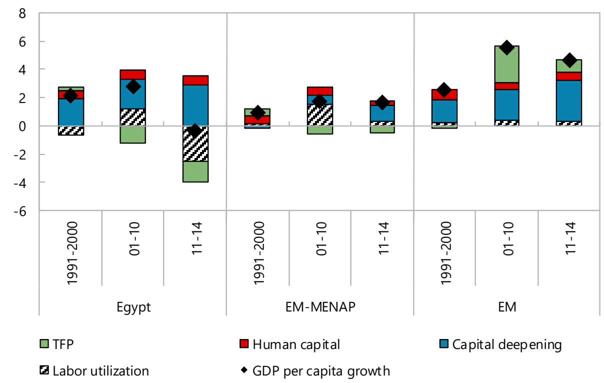
(In percent)



Sources: Dabla-Norris et al., 2013.

Figure 3. Decomposition of Real Capita GDP Growth

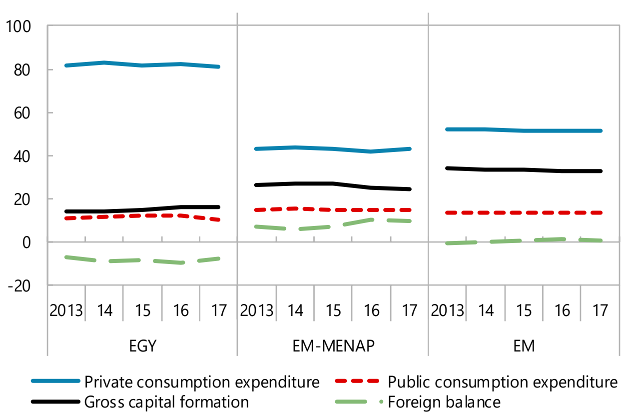
(Annual average in percent)



Sources: Dabla-Norris et al., 2013.
Note: regional aggregates are weighted averages; the country-specific weights correspond to purchasing-power-parity-adjusted GDP.

Figure 4. GDP Components 2013–17

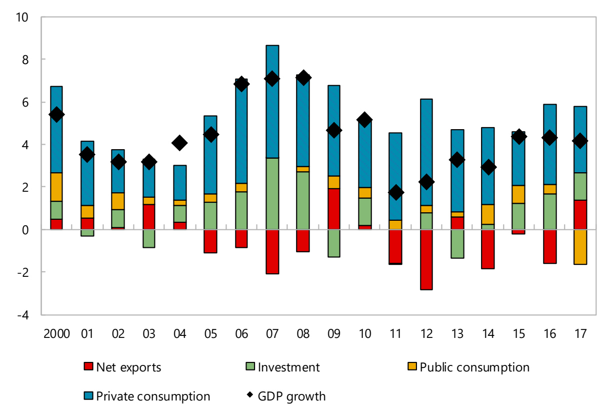
(Weighted averages for aggregates, in percent of GDP)



Sources: National authorities; and IMF Staff calculations.
Note: Country-specific weights correspond to purchasing-power-parity-adjusted GDP.

Figure 5. Contribution to Real GDP Growth for Egypt 2000–17

(In percent)



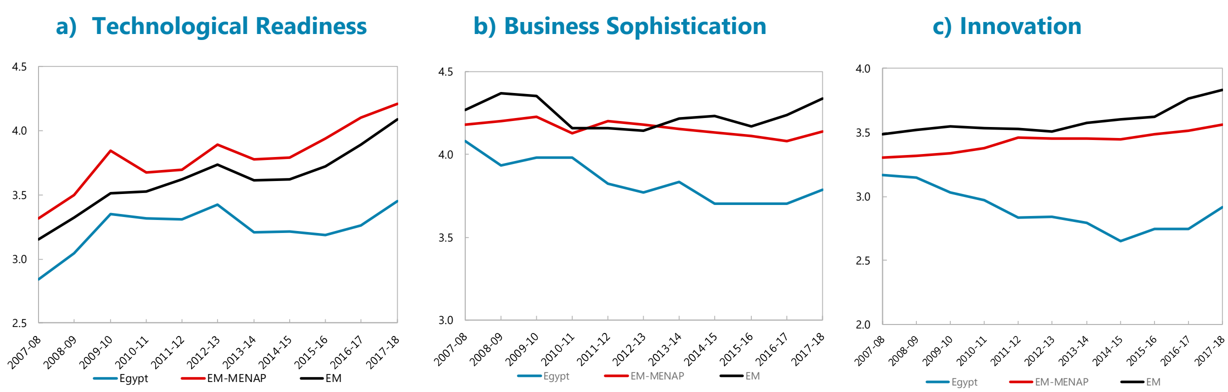
Sources: National authorities; and IMF Staff Calculations.

6. The private sector in Egypt has been less dynamic than in peer countries. Egypt's private sector is relatively small compared to other EMs. Firms' entry density (as measured by the number of newly registered limited liability firms per 10,000 working-age people) has been low. Based on World Bank (2015), it was about 1 against 24 on average across other countries. Associated with relatively low exit rates, Egypt's firms' turnover has been low compared to peers in the past (Schiffbauer and others (2015)).

7. Private sector investment is below peers and innovation and use of technology are limited. Private investment to GDP ratio was 11.4 percent over 2000-16, close to 7 percentage points below other EMs. Egypt had benefited from strong FDI inflows during the 2000s. Net foreign direct investment (FDI) amounted to 4.3 percent of GDP annually on average over 2000–10 above other EMs (1.6 percent for EM MENAP and 2.9 percent for other EMs). However, this declined to 2.3 percent on average over 2014–17. Additionally, FDI inflows were mostly concentrated in real estate and extractive industries (75 percent of total FDI), which limited positive spillovers to the overall economy (Schiffbauer and others (2015)). Egypt scores less well than peers on the Global Competitiveness Index for business sophistication, innovation and technological readiness, below EM peers in MENAP and outside the region (Figure 6a–c). According to the 2016 World Bank enterprises' survey (WBES), less than 15 percent of Egyptian firms had been engaged in innovations to products or processes during the three years preceding the survey. Only 6 percent of firms declared having engaged in formal Research & Development in the previous fiscal year.

Figure 6. Evolution of the Global Competitiveness Index's Pillars

(Weighted averages, score 1–7)

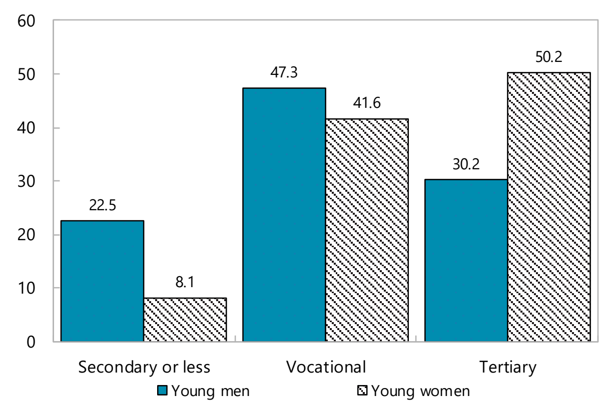


8. Few Egyptian firms export. Only about 5 percent of Egyptian firms are exporters (EBRD (2017)). Total exports of goods and services to GDP ratio averaged 15 percent since 2000 against 42 percent in MENAP EMs and 27 percent in other EMs. Manufacturing exports account for about 53 percent of total goods exports in 2015 against 38 percent in 2000. However, according to the African Development Bank. AfDB (2012), Egypt's manufacturing exports are less sophisticated than those of EM peers and they remain concentrated in a few products. Services exports are dominated by tourism which has been severely affected in the last few years.

9. Egypt's economic model hasn't generated enough jobs. The employment elasticity of growth is relatively low. Activity has been concentrated in capital rather than labor intensive industries. Young firms appear to be more dynamic and create more jobs but they face constraints to expansion and remain small. Seventy percent of private non-agricultural employment is concentrated in micro, small and medium enterprises according to Al-Madhi and Nawar (2014). The sectors that have generated most jobs, such as retail trade, construction and transportation have mostly done so in the informal sector. In many cases, these jobs have been characterized by low quality and low productivity.

10. Young people and women have been particularly affected by the lack of job opportunities. The youth unemployment rate is at 31 percent. Based on the 2014 ILO School-to-Work Transition Survey (SWTS),[4] 1 in 4 young people is unoccupied (i.e., not in education, training or the labor force). Highly educated youth are not spared from the difficulties of entering the labor market: about 30 percent of unemployed young men and 50 percent of unemployed young women have tertiary education (Figure 7). Despite Egypt's success in promoting gender equality in primary and secondary education, women's labor force participation rate remains very low at 23 percent (against 76 percent for men). Young women have a lower labor force participation and a higher unemployment rate than young men. Based on SWTS, 1 in 2 young women is unoccupied. The inoccupation rate reaches 80 percent for married young women, highlighting the difficulty for women to balance jobs with a family.

Figure 7. Unemployed by Level of Educational Attainment and Gender
(In percent)



Source: 2014 ILO School-to-Work Transition Survey.

11. A better allocation of production factors would help boost growth and improve living standards faster. Based on the UN population growth forecasts of about 1.8 percent per year over the next 5 years, at the average real per capita GDP growth rate of 2.7 percent over 2000–10, Egypt would need 28 years to achieve the current average income per capita of other EMs. If TFP in Egypt had increased at the same rate as in other EMs over 1990–2014, at 0.5 percent annually, real per capita growth over 2011–14 would have been 1.5 percent instead of a 0.4 percent contraction. If labor utilization had been in line with other EMs, real per capita growth would have been around

[4] The ILO SWTS covers youth aged 15–29 years old compared to 15–24 years old for standard labor market statistics on youth.

2.6 percent over the same period. It would have reached 3 percent if all labor utilization, capital deepening and TFP had been in line with the trend in other EMs.

12. With the continued implementation of reforms, Egypt is moving to a trajectory of faster growth and employment generation. Based on the historical employment-growth elasticity of 0.58,[5] had Egypt maintained its average growth rate of the last 10 years, around 4.3 percent, it would fall short of generating enough jobs to absorb new entrants (Table 1). However, the projected GDP growth rates of around 5–6 percent over the next 5 years would be consistent with absorbing new entrants and reducing unemployment by about 30 percent. Additional reforms to remove the obstacles to job creation, by removing the bias in favor of capital-intensive industries could be associated with even better labor market outcomes, notably an increase in labor force participation.

Table 1. Egypt: Medium-Term Outlook for Unemployment, 2017–2022

2017	
Labor Force (millions)	28.8
Unemployment Rate (percent)	12.2
Unemployed (millions)	3.5
Employed (millions)	25.3
2022	
Labor Force (millions)	32.3
2017 – 2022	
New Entrants to the labor force (millions)	3.5
Total number of currently unemployed and new entrants	7.0
Employment elasticity	0.58
Scenario 1: Absorbing new entrants (percent)	
Annual precentage growth in employment required (percent)	2.6
Annual real GDP growth rate required (percent)	4.5
Scenario 2: Reducing the unemployment rate by 30 percent (percent)	
Annual precentage growth in employment required (percent)	3.2
Annual real GDP growth rate required (percent)	5.4
Scenario 3: Increasing labor force participation to 55 percent with an employment-output elasticity of 0.8	
Annual precentage growth in employment required (percent)	4.3
Annual real GDP growth rate required (percent)	5.4
Average real GDP growth rate, 2007 – 2017 (percent)	4.3

C. Constraints to Higher Private Sector-led Growth

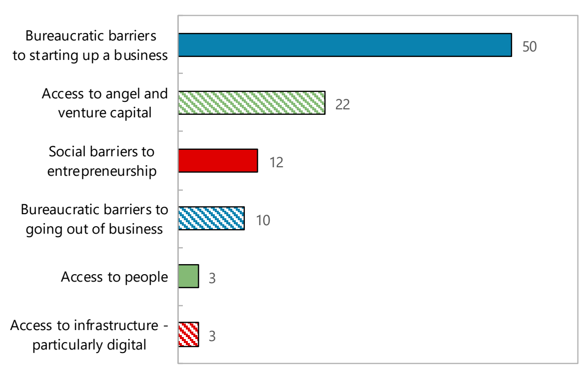
While the build-up of macro-economic imbalances constrained growth in the period following the Arab Spring, the previous section suggests that growth has more broadly been limited by persistent structural constraints. This section identifies factors that have constrained the role of the private sector in the economy in the past. These include difficulties to start and exit a business, lack of competition in several key sectors, perceptions of corruption, constrained access to finance and land, lengthy customs procedures and non-tariff barriers, skill mismatches and labor market segmentation, and

[5] See details and methodology in Annex II.

macroeconomic instability. The section that follows highlights that some of these constraints are currently being addressed by the authorities' reform program.

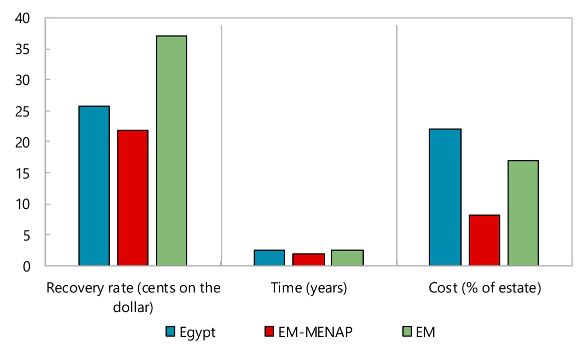
13. In past decades, difficulties to start a business and a rigid exit framework have limited the emergence of young dynamic firms. The time and cost of starting a business are cited regularly as a top constraint for investors. At the most recent Egypt Euromoney conference, 50 percent of polled participants identified bureaucratic barriers to starting a business as the main constraint to foster a start-up culture in Egypt (Figure 8). However, based on the latest Doing Business survey, Egypt has shown progress and now performs better than other EMs. The insolvency regime in Egypt is also constraining and might deter investment and entrepreneurship. According to the Doing Business indicator, the cost of resolving insolvency is high compared to other EMs (Figure 9). Burdensome regulations have constrained firms' activity and development but progress to streamline processes has been seen more recently. Based on the 2016 WBES, it takes about 32 days to obtain an operating license, down from 70 days in the 2013 WBES and 56 days to obtain a construction-related permit down from 90 days in 2013.

Figure 8. Biggest Barriers to Creating a Start-up Culture in Egypt
(In percent)



Sources: Euromoney Egypt Conference, 2017.

Figure 9. Doing Business, Resolving Insolvency
(Unit of measure in parenthesis)



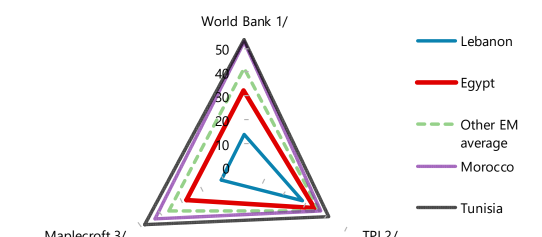
Sources: World Bank Doing Business Report.
Note: For regional aggregates. Country-specific weights correspond to purchasing-power-

14. The lack of competition has distorted the allocation of factors in the economy. Several sectors remain protected and dominated by the public sector or a few politically connected private sector firms. The public sector is particularly involved in extractive industries, manufacturing and the financial sector. Based on official national account statistics, it accounts for 30 percent of total GDP. Even during the period of liberalization in the 2000s, several sectors remained closed to foreign investment, including aviation, engineering services, certain activities in the energy sector, steel, aluminum production, construction, insurance and fertilizers (Schiffbauer and others (2015)). This has generated a concentration of markets among a few players that are insulated from competition. The lack of competition has reduced firms' efficiency and limited the emergence of new more productive firms, reducing productivity, growth and job creation (EBRD and others (2016)). For example, using data for the period 1996–2006, Schiffbauer and others (2015) estimate that the entry of connected firms into previously unconnected sectors was associated with a significant decline in the aggregate employment generation of the sector over the period of study.

15. The public sector and connected private firms have also tended to benefit disproportionately from governments' subsidies. Some government entities enjoy benefits that put private sector competitors at disadvantage such as subsidized inputs (energy) or tax exemptions. For example, based on Schiffbauer and others (2015), only 8 percent of all firms but 45 percent of connected ones operate in energy intensive sectors. This has led to a suboptimal allocation of production factors and government resources to energy intense sectors to the detriment of labor intensive activities.

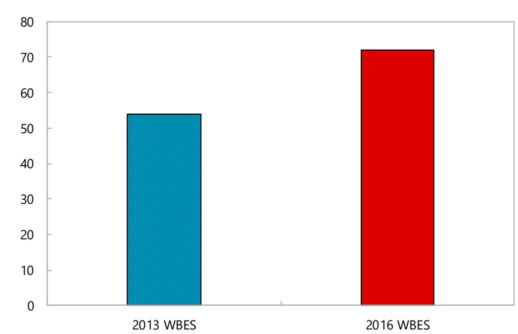
16. Perceptions of corruption may have constrained private sector's development. Perceptions-based corruption indices show high levels of perceived corruption in Egypt compared to most regional peers and other emerging market economies (Figure 10). The perception of corruption is likely to have discouraged domestic investment and constrained growth, in light of findings in the literature. About 70 percent of firms surveyed in the 2016 WBES identify corruption as a major constraint up from about 50 percent in 2013 (Figure 11).

Figure 10. Perceptions-based Corruption Indicators, 2016



Sources: Transparency International, The World Bank, Verisk Maplecroft, and IMF staff calculations.
1/ World Bank control of corruption percentile rank, measuring perceptions of the extent to which public power is exercised for private gain; with 0 corresponding to lowest rank and 100 to highest rank.
2/ Transparency International corruption perception index, measured on a scale of 0 (highest level of perceived corruption) to 100 (lowest level of perceived corruption).
3/ Verisk Maplecroft corruption risk index, measured on a scale of 0 (highest corruption risk) to 100 (lowest corruption risk); rescaled from the original 0-10 scale for comparability with the other indices.

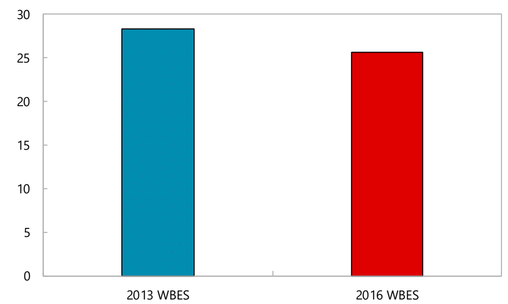
Figure 11. Firms Identifying Corruption as a Major Constraint in Egypt
(In percent)



Source: Staff calculations based on World Bank Firms survey data.

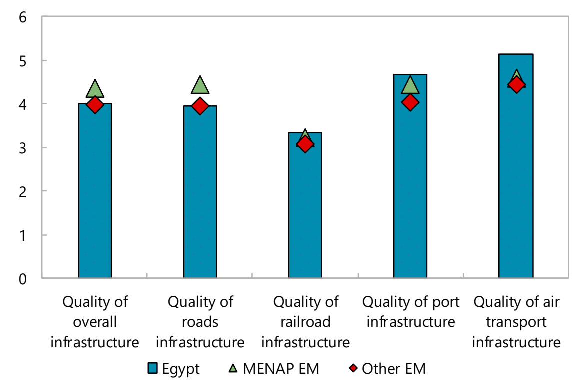
17. Access to finance is low in Egypt and limits firms' development. Based on 2016 WBES, only about 12 percent of surveyed Egyptian firms have a bank loan or a line of credit and use banks to finance working capital. About 25 percent of Egyptian firms surveyed in the 2016 WBES report access to finance as a major obstacle compared to about 30 percent in 2013 (Figure 12). Indeed, credit to the private sector is low in Egypt, at 34 percent of GDP. Historically, the banking sector has concentrated its lending to the government, and private sector credit is mostly directed to a few large firms.

Figure 12. Firms Identifying Access to Finance as a Major Constraint in Egypt
(In percent)



Source: Staff calculations based on World Bank Firms survey data.

Figure 13. Quality of Infrastructures
(Average score)



Source: Global Competitiveness Indicators; and IMF staff calculations.
Note: The scores are standardized between 1 and 7

18. Access to land and property registration are difficult for the private sector. Most of the land in Egypt is owned by the government, and its control is fragmented across different government entities. This makes the process of acquiring land complex. As a result, between 2007 and 2015, only 9.5 million square meters of industrial land have been allocated by the government. However, since 2016, legislative reforms have translated into a notable improvement, with the government being able to allocate 16.9 million square meters of industrial land. Registering private property is also burdensome. According to Doing Business, it requires 8 procedures taking about 60 days against 38 days in MENAP EM and 46 days in other EMs.

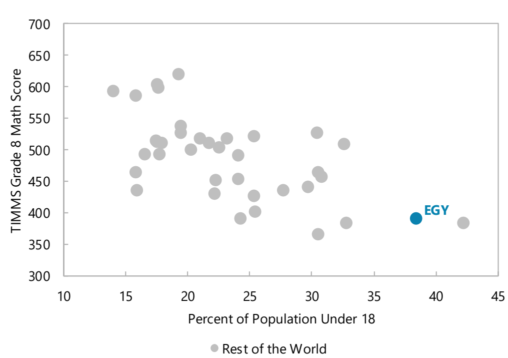
19. Transport infrastructure compares well with peers but connectivity could be improved. Egypt ranks in line or above EM peers on the quality of infrastructure on the Global Competitiveness Index (Figure 13). However, additional investment is needed to further improve transport infrastructure and ensure a good connectivity between ports, airports and markets through well connected roads and railroads networks. The Global Infrastructure Outlook (G20 Initiative) estimates Egypt's cumulated investment gap in transport infrastructure over the next 10 years at USD 70 billion, about 27 percent of current GDP. The lack of an integrated strategy for multi-modal transport logistics have constrained investment and increased the domestic cost of transporting products to markets. Despite important needs and potential, FDI in transport infrastructure and agribusiness logistics (e.g., storage facilities) has been limited by the lack of an integrated strategic and regulatory framework.

20. Engaging in international trade has been constrained by regulatory bottlenecks and the erosion of external competitiveness. Prior to the float of the currency, the appreciation of the Egyptian pound in real terms weighed on Egypt's external competitiveness. In addition, regulatory bottleneck and barriers to trade have made private sector-led trade integration more difficult. Egypt scores 42 over 100 on the distance to frontier indicator for trading across borders in the World Bank Doing Business. Custom procedures are lengthy, and are perceived to lack predictability, which impacts negatively on the time and cost of exporting and importing. Egypt scores 3.7 over 7 in the World Competitiveness sub-index on burden of custom procedures. Nonetheless, some progress has been achieved in recent years. Based on the 2016 WBES, it now takes 14 days to obtain an import license, down from 20 days in the 2013 WBES. While tariffs barriers were reduced significantly in the 2000s, non-tariffs barriers remain widespread. Based on WTO data, Egypt has 274 non-tariff measures, primarily technical barriers to trade and sanitary and phytosanitary measures. All this contributed to limit FDI and trade and thus the productivity gains that could have been derived from deeper integration.

21. There are significant skills' mismatches in the Egyptian labor market. Despite the high unemployment rate, firms regularly report difficulties to fill their positions. Results from the Investment Climate Assessment (ICA) 2008 survey in Egypt showed that 50 percent of the firms interviewed identified worker skills mismatches among their top five constraints to business development (Semlali, and Angel-Urdinola, (2012)). The significant share of unemployed people with advanced levels of education is consistent with the existence of skills mismatches due to inadequate skills (field of study, for example) or low demand for educated workers. The education system has deficiencies: young Egyptians perform below many of their peers in international tests, especially in STEMS (Figure 14). Based on the 2016 WBES, only 21 percent Egyptian firms offer on-the-job training to their employees, which is nevertheless an improvement compared to 11 percent in 2013 (Figure 15).

Figure 14. TIMMS Math Score and Youth Population

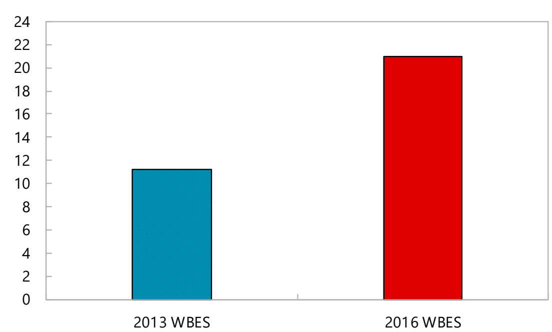
(TIMMS Grade 8 Math score, percent of population under 18)



Source: IEA, ILO, and IMF staff calculations.

Figure 15. Firms Offering Training in the Workplace in Egypt

(In percent)



Source: Staff calculations based on World Bank Firms survey data.

22. The labor market is segmented between the public and the private sectors. The public sector has been perceived as the employer of first resort for a long time. Indeed, during the 1960s–1980s, a public employment guarantee scheme to graduate students was in place (Said (2015)). Although there is evidence of a negative wage premia for public employment (IMF (forthcoming)), the public sector has traditionally offered higher employment security and benefits such as paid leave and sick leave, pensions or maternity leave as well as several non-wage allowances. For women, the wage gap with men is also lower than in the private sector. The World Bank (2014) estimates that the overall wage gap between women and men is about 12 percent and it rises to 40 percent in the private sector. In this context, educated job seekers—especially women—who can rely on family support tend to prefer public sector jobs, rather than take jobs in the private sector that do not meet their expectations or specific constraints. However, the long tradition of the public sector to guarantee employment has proved unsustainable on the fiscal front. As a result, long-term unemployment has been pervasive. Based on SWTS, 36 percent of the unemployed young men and 51 percent of the unemployed young women have been looking for a job for more than two years. Many women also get discouraged and withdraw from the labor force (Krafft and Assaad (2015), Sieverding (2012)).

D. Policies to Foster a Dynamic and Productive Private Sector

This part of the paper takes stock of recent progress in addressing Egypt's challenges. The authorities have implemented several reforms recently, including restoring macroeconomic stability, undertaking energy-sector reforms, reducing the costs of licensing, increasing the allocation of industrial land, improving the investment framework and taking measures to promote youth and women inclusion. This section also lays out additional policies, some of which are already being considered by the authorities, to promote a more dynamic and outward-oriented private sector. Additional needed policies include implementing the insolvency and procurement laws in line with international best practices, improving institutions and governance especially in state-owned enterprises, continuing to improve land allocation processes, strengthening credit bureaus and collateral registry systems, reducing non-tariff trade barriers, revising tertiary education curricula and improving vocational studies in partnership with the private sector to reduce skill mismatches, and promoting women's participation in the labor force through better childcare services and safe public transportation.

23. The Egyptian authorities' reform program aims to foster private sector-led growth and job creation. To achieve this, Egypt needs to increasingly shift its economic model towards more private sector participation and integration into global value chains. It needs to promote the emergence of a pool of young and dynamic firms that create jobs, invest, and raise productivity.

24. Recent progress in restoring macro-stability present an opportunity for higher private sector investment and growth. Over the last few years, the Egyptian authorities have engaged in an ambitious reform program aimed at restoring macro-stability, improving external competitiveness and promoting private-sector led growth and job creation. On the fiscal side, they are moving ahead with a consolidation program based on rationalizing and re-prioritizing expenditures and raising revenues. They have implemented the civil service law which aims to contain the public sector wage bill, hiked energy prices to gradually eliminate the energy subsidy bill and started to improve the targeting and quality of social spending. They have also implemented the value-added tax with a broader coverage and a higher rate than the previous sales tax. On the monetary and exchange rate side, the Central Bank has liberalized the exchange rate, eliminating FX shortages and the overvaluation of the pound, which had been identified as a major constraint on the economy's competitiveness in the past, and it has rebuilt its foreign exchange reserves. All of this has contributed to restore market confidence and ongoing reforms are starting to bear fruit. GDP growth rebounded to 5 percent in Q4 of 2016/17 and there are signs of a rebalancing of growth from consumption to net exports. The fiscal deficit has started to narrow and public debt is expected to start declining in the coming years. Thanks to adequate monetary tightening, inflation has also started to slowdown.

25. The authorities are taking steps to streamline the role of the state in the economy and improve governance. They have started to implement reforms in specific sectors, notably by creating independent regulators. Key steps have been taken in the energy sector (Box 1) and initiatives are ongoing in the health sector and are planned in the transportation sector. The authorities are also planning to publish a report on state-owned enterprises, including their financial performance, activities, ownership, organizational structure and audited reports to improve SOEs' governance, transparency and accountability. They are also planning to divest stakes in 5 to 6 public entities over the next two years to improve governance and financial management and promote private sector's participation in some economic activities.

Box 1. Energy Sector Reform

In 2013/14, after years of underinvestment in the sector, Egypt suffered from gas shortages and electricity blackouts, generating significant social discontent. In the last few years, the Egyptian authorities have engaged in a comprehensive reform of the energy sector to improve production, rationalize consumption, improve the governance and financial sustainability of the sector's SOEs and promote private sector participation and investment. The reforms have started to attract significant investment and electricity outages have been mostly eliminated, removing a key bottleneck to private sector's activity identified in previous years.

The authorities have increased fuel and electricity prices several times as part of a multi-year plan to gradually eliminate subsidies and bring retail prices to cost recovery levels. This will facilitate the elimination of existing distortions to the costs of production factors that have disproportionately benefited energy-intensive industries. It will also contribute to rationalize consumption and improve the financial sustainability of the energy and electricity sectors' SOEs.

The authorities have also implemented several reforms at the regulatory and legislative levels. They enacted a new Renewable Energy Law in 2014 which set up a guaranteed feed-in tariff program for the renewable energy sector to attract private sector investment. This enabled Egypt to reach financial closure with international firms to invest around USD 2.5 billion in Egypt to generate 1.8 GW of solar energy over the next two years. The Electricity Law from 2015 separated the regulation and operational functions, as well as the generation and transmission activities in the sector, paving the way for higher private sector's participation. The Gas Law approved in August 2017 includes the setup of an independent regulator and allows the private sector to import, distribute and export gas and operate pipelines.

The authorities are also implementing measures to improve the financial sustainability of SOEs. They are developing a plan to restructure financially the Egyptian Electricity Holding Company (EEHC). They have also developed a plan to improve the financial position of the Egyptian General Petroleum Company (EGPC) and gradually clear all arears to international oil companies by end-June 2019.

26. Structural reforms recently implemented by the authorities to improve the business environment are encouraging. The authorities have already taken steps to reform the regulatory framework to improve the business environment. They have enacted a new industrial licensing law which aims at easing the time and cost of starting a business. It reduces the number of entities involved and the number of procedures required to obtain licenses to operate businesses. These reforms are starting to bear fruit and the number of newly established companies increased by 36 percent year-on-year over January-August. They are also planning to take measures to streamline import and export requirements. Some measures have also been taken to improve access to land, including centralizing the allocation and management of land allocation under one entity. As a result, the government has granted close to 70 percent more industrial land in 2016/17 than over the previous 8 years. The authorities have also revised the Investment law to strengthen the protection framework for investors and streamline processes and they are planning to revise the Insolvency and Procurement laws next year. They are also taking measures to support SMEs, including the revision of the Companies law (to include single person companies) and measures to foster financial inclusion.

27. However, more is needed to achieve higher sustainable growth rates and generate jobs in the private sector. Reforms should aim at providing a stable, predictable and fairly implemented regulatory environment conducive to private sector activity, removing bottlenecks to higher private sector investment, notably in terms of access to finance and land, promoting domestic connectivity and integration into global value chains. With restored macroeconomic stability and the adequate structural reforms, Egypt has the potential to attract much higher FDI and develop private sector activity in the tradable sector to achieve higher job creation and investment, improve productivity and raise potential growth. Reforms should be directed at:

- **Providing an adequate and stable regulatory regime that guarantees a level playing field for all business participants.** The authorities should build on reforms that are already in progress and ensure that additional regulatory changes are in line with international best practices, notably the Insolvency and Procurement Laws which are in the process of being revised. The authorities also need to ensure that legislative reforms aimed at creating a level playing field are adequately implemented and do not suffer from capture by specific interest groups. For this, the executive regulations associated with legislative changes should be clear and transparent. Better coordination among different state entities, headed by a dedicated unit, would help improve the consistency and efficiency of governments' policy implementation. Additional reforms could aim at strengthening competition, notably by strengthening the role of the Egyptian Competition Authority (ECA).

- **Improving institutions and governance**. Important steps to reduce corruption could include reforms to build greater capacity and accountability in the public administration and improve transparency and information to all citizens. In all economic sectors, setting up independent regulators would reduce the scope for corruption and unequal treatment between public and private sector operators. In addition, more needs to be done to improve SOEs and other public entities' governance to reduce the distortions between public and connected firms and other private sector firms, improve transparency vis-à-vis citizens, level the playing field by providing transparent information to private sector participants on market opportunities and SOEs' activities, and improve SOEs' financial viability.

- **Removing constraints to higher investment by the private sector, notably regarding access to finance and access to land.** Regarding access to finance, fiscal consolidation will generate space for higher private sector credit. Large public sector deficits have crowded out an important share of bank financing that could otherwise have gone to productive private firms. The authorities reform program should contribute to generating space for bank lending for higher private sector investment. In addition, strengthening credit bureaus and collateral registry systems would help include small firms that lack access to finance. Regarding access to land, clarifying land ownership between different state entities would help simplify access. Land allocation could also benefit from a more open and competitive process. Competitive bidding processes and publication of land sales and the use of the proceeds would improve transparency, reduce distortions and generate more revenues for the state. Simplifying property registration could also help stimulate investment and the use of property as a collateral.

- **Developing better connectivity to improve products market efficiency.** Fiscal consolidation and the reorientation of public spending away from generalized subsidy will free up space for higher public investment. In this context, it will be important for Egypt to have a sound framework in place for the prioritization, selection and appraisal of public investment projects. It should also develop an integral long term public investment strategy to improve Egypt's domestic and international connectivity and create a favorable environment for the private sector that reduces transaction costs and foster access to new markets. To promote private sector investment in infrastructures and logistics, Egypt also needs to develop a sound supervisory framework for overall connectivity infrastructure.

- **Promoting trade integration.** The transition to a flexible exchange rate regime and a monetary framework focused on controlling inflation will help preserve external competitiveness and offers opportunities for higher trade integration. In addition, other measures, to strengthen the benefits of integration into global value chains should include removing legal barriers to FDI and trade barriers (including non-tariff measures).

28. At a time when Egypt is implementing policies to promote private sector's growth and job creation, targeted policies can help ensure that youth and women are not excluded from these new employment opportunities. Policies should be directed at improving the functioning of the labor market and ensure that Egyptians entering the labor force are equipped with the skills needed by employers and that women face equal opportunities to take on jobs.

- **Reforms should address skills' mismatches and ensure that young Egyptians are equipped with the skills needed to make them employable in the private sector and successfully transition to the labor market.** Improving the quality of education, notably by better monitoring learning progress and teachers' performance would help prepare young people to the job market. Adjusting the education curricula, notably tertiary education and vocational studies, in partnership with relevant stakeholders including the private sector, would contribute to better meet private sector's needs and improve returns to education for young graduates. Efforts to provide youth with a broader set of skills, including soft skills and on-the-job training would also help them integrate the labor market, improve labor productivity and help people adapt more easily to rapidly changing economic drivers and transition to new jobs. In some cases, targeted Active Labor Market Policies (ALMPs) such as training, temporary wage subsidies, apprenticeships or job intermediation services can facilitate job search for vulnerable groups. However, such initiatives need to be carefully designed, monitored and integrated with other social policies to yield results. Ex-post evaluation can also help fine-tune programs.

- **Recent reforms that aim at fostering women labor force participation and employment should be further enhanced.** The large share of women outside employment, notably with high levels of education, presents a formidable opportunity for Egypt's potential growth. The Egyptian authorities have already taken important steps. They have increased budget resources to public nurseries last year and they are developing an integral strategy to improve the quality of child care services and facilitate the establishment of new businesses, which would create job opportunities for women and facilitate women integration into the labor market. Developing work arrangements that are more adapted to women constraints, in particular family life, such as part-time jobs, and telework, making use of growing technological opportunities, could help increase women' inclusion into the labor market. Improving social policies targeted to women such as maternity leave, and parental services, as well as child care, notably in the private sector would also promote women' employment. Also, providing safe transportation arrangements for women would help their integration into the labor market as long commutes and pervasive harassment are a major barrier. Recent measures taken by the authorities to improve women' financial inclusion are encouraging. Strengthening women' access to finance would help promote entrepreneurship among women and contribute to their participation in the labor market. It might also foster further job creation for women as recent evidence suggests women employers tend to hire more women (Esfahani and Bahramitash (2015)).

E. Conclusion

29. Egypt's young and growing population present an opportunity for growth. However, to fully benefit from its demographic dividend and raise the living standards of its population, Egypt needs to increase the participation of the private sector in economic growth and job creation. It needs to address the obstacles that have led to a suboptimal allocation of production factors and constrained productivity. It also needs to address bottlenecks that have constrained the matching of labor supply with the existing labor demand, particularly for women and youth to ensure that future growth and jobs benefit all Egyptians.

30. The authorities' reform program sets the basis for a structural change of the economic model towards higher private sector-led growth and job creation. The authorities have taken important steps to restore macro-stability and foster higher and more inclusive growth. They have also taken key steps to remove distortions in the economy: they have started to lift generalized energy subsidies which have biased production and investment towards energy intense activities and they have floated the exchange rate which restored external competitiveness. They have also initiated reforms to improve the business environment and increase private sector's participation in the economy.

31. With additional structural reforms, Egypt has the potential to achieve higher job creation and investment, improve productivity and raise potential growth. However, this requires additional reforms to improve the allocation of resources in the economy. This paper highlights that reforms need to create an adequate and stable regulatory regime that provides a level playing field for all business participants; improve private sector's access to finance and land; improve domestic infrastructure and promote trade integration. Moreover, as more jobs are created, measures should be implemented to ensure that labor supply rigidities are removed, especially for women and youth who have suffered from poorer labor market outcomes in the past.

Annex I. Economic Growth Decomposition in Egypt

For the decomposition of the levels of output per capita, we use the framework presented in Dabla-Norris et al. (2013) based on the methodology of Hall and Jones (1999). Such methodology assumes a standard aggregate Cobb-Douglas production function defined as:

$$Y_t = A_t \times K_t^{\alpha} \times (H_t)^{1-\alpha} \tag{1}$$

where, Y_t is the measure of real gross domestic product in period t, K_t is the stock of physical capital, H_t is the amount of effective labor input, and A_t is the measure of total factor productivity (TFP). Following the methodology of Hall and Jones (1999), α refers to the capital share and 1- α to the labor share and, H_t is defined as:

$$H_t = h_t \times L_t \tag{2}$$

where, h_t is the human capital per person and L_t is employment – the former defined as the number of persons employed (including self-employed) in the labor force. Combining (1) and (2) gives:

$$Y_t = A_t \times K_t^{\alpha} \times (H_t)^{1-\alpha} = A_t \times K_t^{\alpha} \times (h_t \times L_t)^{1-\alpha} \tag{3}$$

Which can be rearranged as the growth rates:

$$gY_t = gA_t + gK_t^{\alpha} + g(h_t)^{1-\alpha} + g(L_t)^{1-\alpha} \tag{4}$$

Then, total factor productivity growth rate can be calculated as:

$$gA_t = gY_t - \alpha \times gK_t - (1-\alpha) \times gh_t - (1-\alpha) \times gL_t \tag{5}$$

In per capita terms, we use equation 3 and population at period *t* to calculate per capita real GDP and defined as:

$$\frac{Y_t}{POP_t} = \frac{Y_t}{L_t} \times \frac{L_t}{POP_t} = A_t \times \left(\frac{K_t}{L_t}\right)^{\alpha} \times (h_t)^{1-\alpha} \times \frac{L_t}{POP_t} \tag{6}$$

$$g\frac{Y_t}{POP_t} = gA_t + \alpha \times g\frac{K_t}{L_t} + (1-\alpha) \times gh_t + g\frac{L_t}{POP_t} \tag{9}$$

So, the growth of the total factor productivity can be calculated as:

$$gA_t = g\frac{Y_t}{POP_t} - \alpha \times g\frac{K_t}{L_t} - (1-\alpha) \times gh_t - g\frac{L_t}{POP_t} \tag{10}$$

The data used for this exercise comes from the Penn World Tables (Feenstra and others (2015) and the IMF World Economic Outlook. The series include (i) real GDP in constant national prices; (ii) employment – defined as the number of persons employed and self-employed in millions; (iv) capital stock in constant national prices; (v) the index of human capital per person, based on years of schooling and returns to education; (vi) the share of labor compensation in GDP at current national prices; and, (vii) the share of capital compensation in GDP at current national prices (calculated as 1 minus the share of labor compensation), (viii) population.

Annex II. Estimation of Egypt's Employment-Output Elasticity

We estimate the employment-to-GDP for Egypt between 1991 and 2017 using the following regression:

$\ln(e_t) = \alpha + \beta_1 \ln(y_t) + \varepsilon_t$ *(1)*

where e_t is the level of employment at time t and y_t is the level of real GDP at time t.

A limitation of country-specific estimations is the limited time series for employment and GDP. However, this problem is mitigated by the co-integration relationship between the two series which implies that OLS estimates converge faster than those based on I(0) series (Stock (1987)).

The regression is estimated using instrumental variables to control for the possible endogeneity of employment to GDP. Two lags of real GDP are used as instruments. To address potential issues related with the small sample size, the equation is estimated using the minimum likelihood estimator.

For robustness purposes, long-term elasticities were also estimated using a specification with lag employment:

$\ln(e_t) = \alpha + \beta \ln(y_t) + \gamma \ln(e_{t-1}) + \omega_t$ *(2)*

where the long-term elasticity

β_2 is equal to ${}^{\beta}/_{1-\gamma}$.

Table 1. Employment-GDP Elasticity for Egypt

	1	2
VARIABLES	Log Employment	Log Employment
Log Real GDP	0.581***	0.278**
	[0.007]	[0.121]
Log Employment (la		0.520**
		[0.211]
Constant	-1.085***	-0.506**
	[0.049]	[0.229]
Observations	26	26
R-squared	0.992	0.993
Robust standard errors in brackets		
*** p<0.01, ** p<0.05, * p<0.1		
	1	2
ß	**0.581**	**0.579**

Source: Author's calculations.

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TAX REVENUE MOBILIZATION[1]

Egypt needs to increase tax revenues to create room for social spending and investment in human and physical capital. In the last decade, tax revenues remained broadly stable around 13 ½ percent of GDP but the underlying composition changed significantly. Benchmarking Egypt's tax revenues with the region and its peers suggest that Egypt's tax revenues are lower than the average of the region and of its peers. The peer analysis and stochastic frontier analysis show that based on its characteristics, Egypt could raise tax revenues by 3 to 4½ percent of GDP. Raising additional tax revenues would require further tax policy and administration reforms such as broadening the tax base of the VAT, increasing the coverage of the personal income tax, reviewing tax incentives and preventing base erosion under the corporate income tax, and strengthening tax administration by fully implementing an integrated, segment-based structure.

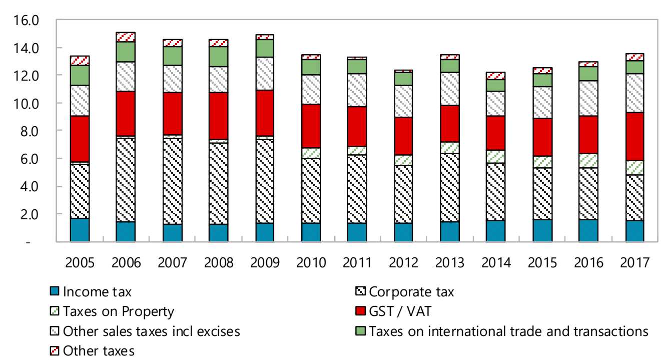
A. Background and Recent Developments

1. To create room for increased social spending and investment in human and physical capital, Egypt needs to increase tax revenues. Large fiscal deficits in the past increased the debt-to-GDP ratio to above 100 percent by 2016/17, and the government is implementing an ambitious fiscal consolidation program by reducing inefficient and poorly targeted energy subsidies, rationalizing the public wage bill and increasing tax revenues through the implementation of the value-added tax (VAT) and tax administration reform. In addition to rationalizing expenditures, there is room to increase the tax to GDP ratio to create fiscal space to invest in infrastructure, health and education and to build a sustainable social safety net to pursue inclusive growth.

2. In the last decade, total tax revenues remained fairly stable. Total tax revenues hovered around 13½ percent of GDP in the period 2004/05 between 2016/17. Tax revenues were around 1.5 percentage point lower in the first half of 2010's compared with the second half of the 2000's. The global financial crisis and the Arab spring led to a small decrease in tax revenues in the period 2009/10–2011/12. But the recent introduction of the VAT and increase of excises on domestic goods—mainly petroleum products—have increased tax revenues to slightly above 13 percent of GDP.

Figure 1. Tax Revenues 1/

(Percent of GDP)



Source: The Egyptian authorities.

1/ The year 2005 in the legend, refers to the fiscal year 2004/2005, the year 2006 refers to the fiscal year 2005/2006 and so on.

[1] Prepared by Emine Hanedar.

3. The composition of taxes has changed significantly. Corporate income taxes showed a sustained decrease over the last decade from a peak of 6 percent of GDP to around 3½ percent of GDP in 2016/17 (Figure 2). The decrease in the corporate income tax was mainly driven by a decrease in taxes from state owned enterprises such as the Egyptian General Petroleum Corporation (EGPC) and the Suez Canal Authority. The general sales tax (GST) decreased gradually until the recent pick-up due to the replacement of the GST by the value-added tax (VAT). The personal income tax remained low reflecting the challenges in tax administration due to the large informal sector and in the taxing of professional income. The introduction of taxes on T-bills created additional revenues that increased over time due to the increase of interest payments on T-bills. However, on a net basis these revenues do not provide additional resources to the government given that there are higher interest payments on the spending side. Custom duties also decreased in this period. While property tax revenues doubled in the last year, its revenues remain very low, at 0.1 percent of GDP.

B. Benchmarking Egypt's Tax Revenue Performance

4. Egypt's tax revenues are low compared to the region and its peers. In 2016,[2] Egypt had a tax to GDP ratio of 13 percent of GDP, well below the average of MENAP oil importers and the average of emerging and developing countries, which are respectively 14.7 and 16.7 percent of GDP (figure 3).[3] Egypt had the fifth lowest tax revenues compared to MENAP oil importers and performed better than Sudan, Afghanistan Pakistan and Syria but had a lower tax-to-GDP ratio compared to peers such as Lebanon, Tunisia, and Morocco. Egypt's tax-to-GDP ratio is in line with the average of MENAP and CCA countries but this lower average is mainly driven by resource rich oil exporting countries that have a low tax-to-GDP ratio.

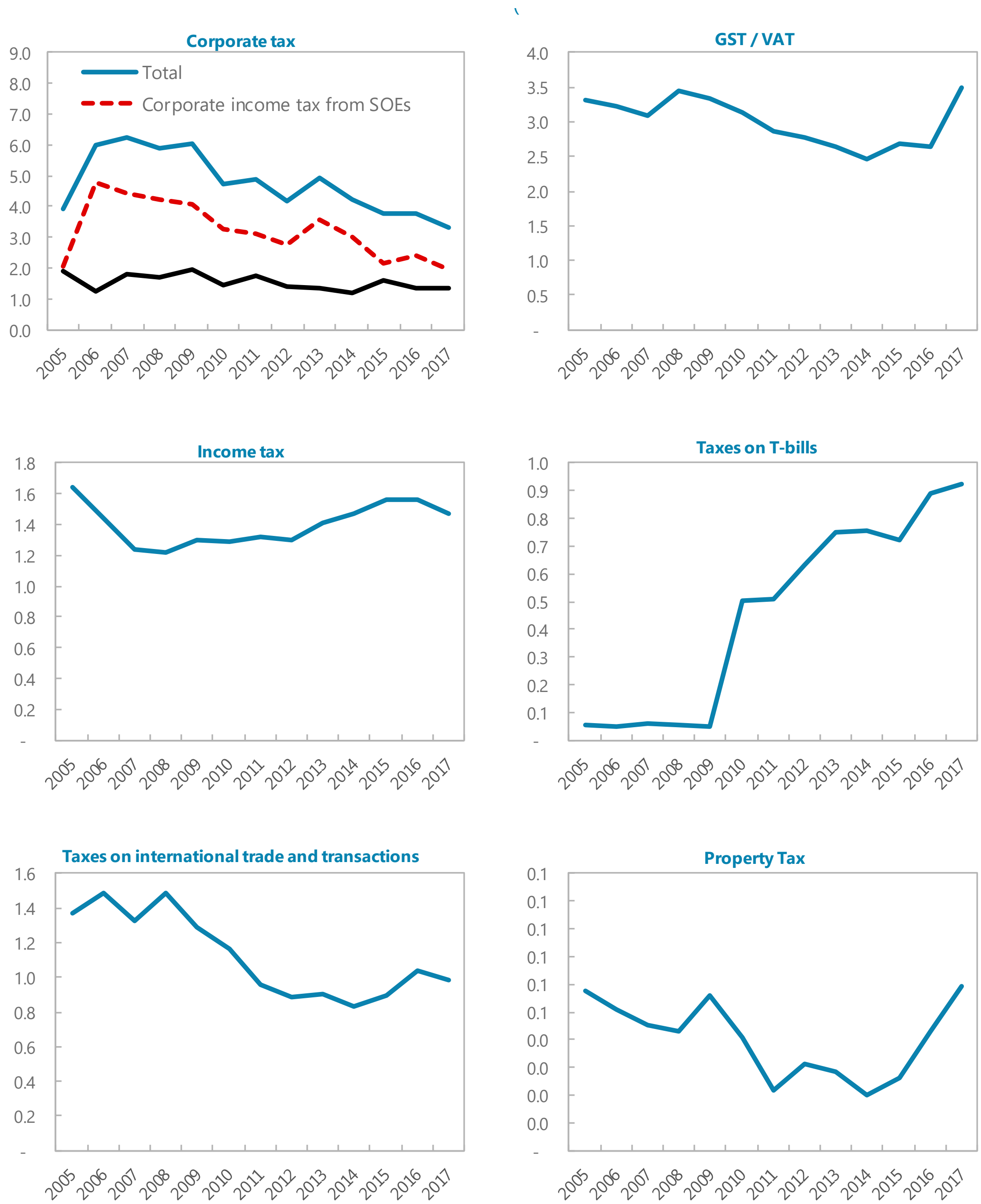
5. Revenues from the sales tax are significantly out of line with peers in the region. Tax revenues from the GST were around 2.6 percent of GDP compared to an average of 6 percent of GDP in the region and an average of 5.7 percent of GDP in emerging and developing countries. Lower sales tax revenues were mainly driven by the small tax base that did not include services and the large exemptions in items such as basic goods, aimed at protecting the most vulnerable. In addition, the GST rate of 10 percent was relatively low compared to the region. While the introduction of the VAT could increase revenues significantly over the medium term, Egypt's revenues from the VAT will likely remain below the average of its peers.

[2] For comparability across countries the benchmarking exercise uses the Government Finances Statistics and World Economic Outlook databases which records tax revenues based on calendar-years instead of fiscal years.

[3] The benchmarking is based on data from the Government Finances Statistics and World Economic Outlook databases and reflects data for general or central government depending on data availability. The average of MENAP oil importers and MENAP and CCA region is based on the sample as shown in the charts for countries for which data was available.

Figure 2. Development of Tax Revenues 2004/05–2016/17 by Tax Type 1/

(Percent of GDP)



Source: Egyptian authorities.

1/ The year 2005 in the legend, refers to the fiscal year 2004/2005, the year 2006 refers to the fiscal year 2005/2006 and so on.

6. Despite the significant decrease over time, corporate income tax revenues are above the regional average. Corporate income taxes are around 3½ percent of GDP in 2016. This is well above the average of MENAP oil importers and the average of emerging and developing markets with respectively 2.8 and 2.9 percent of GDP. Around 60 percent of the corporate income tax stems from state-owned enterprises such as Egyptian Petroleum Corporation Company (EGPC), the Suez Canal Authority and the Central Bank of Egypt.

7. Personal income tax, excises and custom duties are slightly lower compared to the region. Personal income tax is around 1.6 percent of GDP in 2016 and slightly lower than the average of MENAP oil importers and emerging and developing countries where it is 2 percent of GDP and 2.6 percent of GDP respectively. The low personal income tax reflects the challenges Egypt and the region share in taxing personal income tax and the large share of the informal market in these economies. Trade revenues, which mainly reflect customs duties, are 0.9 percent of GDP in 2015 compared with 1.5 percent of GDP for the region. Limited data on excise revenues for the region shows that Egypt's excise revenues are broadly in line with the average of the region.

8. The benchmark analysis shows that Egypt's tax revenues are lower compared to peers but does not take into account Egypt's tax capacity. The benchmark analysis provides useful insights into how Egypt compares to the region and to countries at a broadly similar stage of development. However, it does not fully correct for country specific characteristics which could explain the performance of tax revenues. Therefore, the next section will use an econometric approach to take these differences into account and estimate Egypt's tax capacity based on its country specific characteristics.

C. Estimating Egypt's Tax Capacity

9. This paper uses two methods to estimate tax capacity: "peer analysis" and "stochastic frontier analysis." Both analyses rely on a panel regression and use observable country specific characteristics that may change over time to explain tax performance. The predicted tax revenues based on the econometric model are an approximation of the tax capacity. The *tax capacity* is an estimate of the level of tax revenue that a country can collect given its economic, social, institutional and demographic characteristics (Fenochietto and Pessino, 2010). The difference between the tax revenue and tax capacity of a country is the *tax gap*. The tax gap can be explained by the tax policy gap and the tax administration gap. The *tax policy gap* refers to the design of tax policy via (reduced) tax rates, exemptions, tax deductions, etc. The *tax administration gap* is explained by the performance of the tax administration and is the difference between the tax potential (tax owed according to the tax legislation) and the actual tax revenue (tax paid). Sources of the tax administration gap are non-compliance, underreporting and underpayment.

Figure 3. Cross-country Comparison of Egypt's Tax Revenues 2015–2016

(Percent of GDP)

Sources: Government Finance Statistics, World Economic Outlook, Egyptian authorities.

10. Peer analysis compares a country to the average in the sample while stochastic frontier analysis compares a country to the frontier in the sample. Peer analysis compares how a country performs relative to the average country in the sample given its characteristics. By construction therefore some countries will be below their tax capacity and some countries above their tax capacity. Tax frontier analysis is an extension of the standard regression model based on production frontier analysis (Aigner, Lovell, and Schmidt 1977). Tax frontier analysis estimates the maximum output—in this case the maximum level of tax revenue—that a country can achieve considering a set of inputs (characteristics) compared to the frontier in the sample. In addition, tax frontier analysis explicitly models the inefficiency that is associated with country-specific characteristics that prevents a country from achieving its maximum tax revenues (see Annex 1 for details on stochastic frontier analysis).

11. The large empirical literature shows that tax revenue depends among other things on the income level, the degree of openness of an economy, the level of education of a country, and institutional factors such as corruption and governance. The level of income per capita is assumed to be a proxy for the degree of overall economic development and assumed to be positively correlated with tax revenues (Tanzi 1987). Trade openness is also associated with higher tax revenues in high and middle income countries (Keen and Simone 2004 and Baunsgaard and Keen 2010) as in the medium term, it is expected that collection increases for more revenue from more economic activity. The quality of institutions and a low degree of corruption is also positively associated with tax performance (Tanzi and Davoodi 1997, Davoodi and Grigorian (2007), Ghura 1998 and Bird and others, 2004, Pessino and Fenochietto (2010)). Finally, public spending on education which is a proxy for the level of education is also positively associated with tax revenues. More educated people can understand better how and why it is necessary to pay taxes which will strengthen tax compliance.

12. The models are estimated using a sample of emerging markets with panel data covering 2000–2014. The sample includes 103 emerging markets wherein net oil exporting countries are excluded, following the literature[4]. The data are averaged over 3 and 4 year periods to reduce short term fluctuations due to business cycles.

The model specification is as follows for the peer analysis:

$$T_{i,t} = \alpha + \beta x_{i,t} + e_{i,t}$$

and as follows for the frontier analysis:

$$T_{i,t} = \alpha + \beta x_{i,t} + e_{i,t} - u_{i,t}$$

[4] The high level of oil revenue as a percent of total GDP makes it difficult to compare resource rich countries' tax capacities with those countries without natural resources given that the total tax capacity of natural-resource dependent countries usually depends on the level of reserves and oil production, while tax capacity in countries without natural resources depends on different factors as described in the main text (See Pessino and Fenochietto, 2010 and 2013).

where $T_{i,t}$ represents tax revenue to GDP ratio for country i at time t; α refers to the constant term, $x_{i,t}$ is the vector that represents variables affecting tax revenue for country i at time t; $u_{i,t}$ represents the inefficiency, the "failure" to produce the relative maximum level of tax collection or production; and $e_{i,t}$ is the statistical noise. The country specific characteristics used in the estimation are the income level, the degree of openness of the economy, the level of education, and institutional factors such as corruption and governance (see Annex 1 and 2 for details on model specification and data description). Based on the Hausman test, the fixed estimator specification is used for the "peer analysis" and the Mundlack version of the random-effects model originally proposed by Pitt and Lee (1981) for the "stochastic frontier analysis".

13. The results show that given Egypt's characteristics, Egypt can raise revenues by 3 to 4½ percent of GDP if strong tax policy and tax administration reforms are implemented. Based on the results of the panel regression the predicted tax capacity can be estimated (Table 1 and 2). The peer analysis shows that Egypt's estimated tax capacity is around 16.8 percent of GDP compared to the average in the sample. Compared to the actual tax revenue in the sample period the tax policy and administration gap is therefore around 3 percent of GDP. The stochastic frontier analysis shows that Egypt's tax potential compared to the frontier in its sample is around 18.2 percent of GDP, which implies a tax policy and administration gap of 4½ percent of GDP.

Table 1. Egypt: Regression Results of the Peer Analysis

Dependant variable: Tax revenue/GDP	Coefficient	P-Value
GDP per capita (log)	2.57	0.270
Trade Openness	0.63	0.001*
Share of agriculture in value-added	-0.06	0.384
Old-dependancy ratio	-0.17	0.004*
Corruption	2.23	0.093*
Public Education Spending	0.56	0.006*
Constant	2.64	0.911
Number of observations		172
Number of countries		103
R-squared		0.44
Egypt's estimated tax capacity (percent of GDP)		16.80
Tax Policy and Administration Gap (percent of GDP)		3.10

* Significant at 1, 5 or 10 percent level

Source: Author's estimate.

Table 2. Egypt: Regression Results of the Stochastic Frontier Model

Dependant variable: Tax revenue/GDP	Coefficient	P-Value
GDP per capita (log)	0.07	0.243
Trade Openness	0.02	0.001*
Share of agriculture in value-added	-0.01	0,000*
Old-dependancy ratio	-0.01	0,000*
Quality of institutions	-0.29	0.029*
Corruption	0.16	0.007*
Public Education Spending	0.05	0,000*
Constant	3.14	0,000*
Number of observations		222
Number of countries		103
Egypt's estimated tax potential (percent of GDP)		18.20
Tax Policy and Administration Gap (percent of GDP)		4.50

* Significant at 1, 5 or 10 percent level

Source: Author's estimate.

D. Options for Increasing Revenues

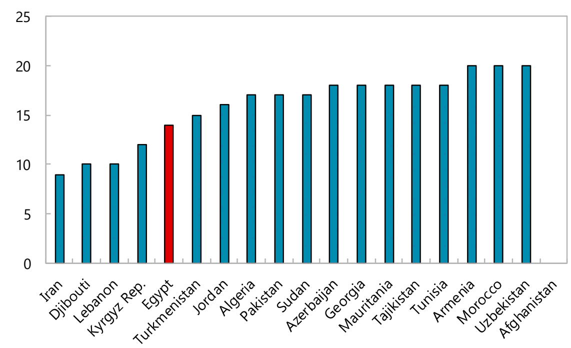
14. The government implemented various tax policy and administration reforms but raising revenues further requires additional tax policy and tax administration reforms. The analysis in the previous section shows that there is significant scope to increase tax revenues. However, the analysis does not identify whether the tax gap is related to tax policy or tax administration gaps. This section identifies options for tax policy and administration to increase tax revenues.

Tax Policy

15. The introduction of the VAT is a very welcome step in increasing revenues but the base of the VAT is still relatively low. The replacement of the general sales tax with the VAT was accompanied by an increase of the tax rate from 10 percent to 14 percent. In addition, services that were not subject to the GST are included in the tax base of the VAT. However, many goods that were exempted under the GST such as food, electricity and natural gas are exempted under the VAT as well. While the exemptions benefit the poor, they are not well targeted and a larger share of the benefits are accrued by higher income households. The VAT rate is not particularly high compared to the region but the main challenge for the VAT is to broaden the tax base by including the exempted goods into the tax base. To mitigate the impact on the most vulnerable a portion of the revenues could be used to increase targeted social assistance programs.

Figure 4. VAT Tax Rates, 2016

(Percent)



Source: Global Finance Statistics.

16. While the progressivity of the personal income tax can be improved, the main challenge would be to include more individuals in the base of the personal income tax. The personal income tax is imposed on wage earners and professional income (self-employed) such as doctors, lawyers and accountants. Compliance is low due to the large informal economy and cash payments whereby the compliance on professional income is in particular low given the absence of withholding. In addition, the progressivity of the income tax could be strengthened by increasing the top rates, tax credits for low incomes, widening tax brackets and allowing for automatic indexing of the tax brackets. The recent increase in the tax credit for low incomes is a good step in this direction.

17. The corporate tax is structurally sound but the main weakness lies in the extensive tax incentives and avoidance that lead to base erosion. Ample tax incentives exist under the Investment Law, such as the Free Zones (FZ). Information on the costs of the various incentive regimes and their potential benefits is difficult to find. The intention of the exemptions is to promote exports and attract FDI, but companies under the exemptions often produce for the domestic market as well, which distorts competition and prevents a level playing field. The new investment law is a welcome step as it restricts the eligibility criteria and increases the fee for firms operating in the FZ regime. Another important step is the provision of income statements for companies under the FZ regime to the Egypt Tax Authority. Nevertheless, eliminating the free zone regime to new entrants and developing options to phase out FZ regimes for existing companies is desirable in the future. Measures such as transfer pricing regulations, rules against debt shifting, and measures against treaty shopping help prevent base erosion and profit shifting (see further the Selected Issues Paper on "International Taxation").

18. Simplifying the tariff structure for customs duties, eliminating discretionary power to grant exemptions, and reviewing the role of customs duties to encourage domestic production could promote revenues and economic efficiency. The tariff structure for customs duties is complex with tariffs varying significantly depending on the commodity group. Tariffs are highest for final products produced in Egypt and on some products that are more likely to be imported by more well-off households. The use of customs duties as a policy tool to restrict imports could be reviewed, as it can undermine economic efficiency. In addition, transparency and revenues could be improved by eliminating customs exemptions provided on a discretionary basis.

19. Property tax has a large potential to raise revenues and increase the progressivity of the overall system over the medium term but assessing rental values remains challenging. Property taxes doubled from 2015 to 2016 but with a very low level of 0.1 percent of GDP they remain largely underutilized. The property tax, often a large portion of wealth, can compensate and complement weak personal income tax systems. It also has the benefit that it is more difficult to evade given the immobility of the tax base. However, administering and implementing the property tax in Egypt requires significant investment in establishing comprehensive cadasters and other administrative infrastructure.

20. The regime for small and micro enterprises could be simplified not to raise revenues directly but primarily to prevent larger firms from masquerading as small. The current law is complex and underperforms in this regard. The use of several criteria to classify enterprises in one of the three regimes means that the system is demanding in information which imposes administration and compliance costs. The system underperformed also in terms of equity since most taxpayers are misclassified due to underreporting of turnover. Given the low revenues from small and micro enterprises, the main objective is to have these enterprises engage in the tax system by filing taxes and to protect the tax base by preventing larger firms disguising themselves as small firms. Using a single indicator such as the turnover for the tax base and providing simple rules for both the taxpayers and the tax administration will help in this respect. The aim of the new SME regime tax law which the government is planning to implement, is to address these issues.

Tax administration

21. There is room to strengthen the tax administration over time in order to generate significant and sustainable increases in revenue. The Egyptian Tax Administration (ETA) has responsibility for both direct and indirect taxes, but tax administration is not yet fully integrated at the operational level. The ETA is largely structured by tax type under a headquarters structure with separate field office networks for direct tax and VAT that utilize separate IT systems, resulting in duplication of core functions, and separate performance reporting. Core operational processes are generally less strong than is desirable. In addition, the ETA has an extensive field office environment with many small offices and a large workforce. As a result, this could lead to risks in tax compliance, institutional management, service delivery, and monitoring and efficiency of filing and payment.

22. Fully implementing an integrated and segment based structure supported by reformed IT systems and processes should be the medium-term goal. While the large tax office (LTO) is generally better integrated across tax types, and performs more in line with good practice, segmentation has not been rolled out to taxpayers below the large taxpayer turnover threshold. Alongside policy reforms, consolidating the number of offices, adopting a function-based approach rather than tax-type operations in medium and small taxpayer offices and rationalizing staffing should form the basis of reforms under a medium-term revenue strategy (MTRS). It is desirable that the LTO office operations has high-skilled subject matter experts to manage the business complexity surrounding the largest taxpayers and prevent tax-avoidance. The MTO office could benefit from high quality services, good auditors and debt collection staff to maximize compliance and prevent tax-evasion and non-payment. While the revenue contributions from the small taxpayer offices (STO) are generally low, as they are in most tax administrations around the globe, the number of taxpayers is large. For this segment simplified taxes and reporting obligations are recommended.

23. In the short term, and as a step towards the medium-term reform vision, strengthening existing IT systems, building risk assessment programs and combining databases and improving information for decision making could start to improve tax compliance and raise revenues. Building risk assessment programs by segment is important to identify the main risks to the revenue basis and improve taxpayer compliance. Modernizing the IT-system and linking databases will support cross-checking information and detect discrepancies across tax types for each taxpayer. Establishing stable and implied tax codes such as the new SME law, unifying tax procedures and treatment will improve tax compliance. Finally, improving taxpayer information and clarifying the law and regulations in some areas will help to eliminate room for disputes and reduce potential governance issues.

Annex I. Stochastic Frontier Model

The stochastic frontier model of Aigner, Lovel and Schimdt (1977) is applied in this paper. A panel version of this econometric model can be written as

$$T_{i,t} = \alpha + \beta x_{i,t} + e_{i,t} - u_{i,t}$$

where:

- $T_{i,t}$ represents the log tax revenue to GDP ratio for country i at time t
- $x_{i,t}$ is the vector that represents variables affecting tax revenue for country i at time t;
- α is the constant term
- β is a vector of unknown parameters
- $u_{i,t}$ represents the inefficiency, the "failure" to produce the relative maximum level of tax collection or production. It is a non-negative random variable associated with country-specific factors which contribute to country i not attaining its tax capacity at time t.
- $e_{i,t}$ is the statistical noise (the disturbance or error term). It is a random (stochastic) variable which represents the independent variables that explain the dependent one but are not explicitly taken into account as well as measurement errors and incorrect functional form; $e_{i,t}$ can be positive or negative and so the stochastic frontier outputs vary on the deterministic part of the model.

It is assumed that:

- $e_{i,t}$ has a symmetric distribution, such as the normal distribution,
- e_i and u_i are statistically independent of each other.

$u_{i,t} > 0$, but $e_{i,t}$ may take any value.

The analysis aims to predict and measure inefficiency effects. To do so, we use the tax effort, defined as the ratio between actual tax revenue and the corresponding stochastic frontier tax revenue (tax capacity). This measure of tax effort has a value between zero and one.

$$TE_{i,t} = \frac{\tau_{i,t}}{\exp\left(\alpha + \beta^{\tau} x_{i,t} + e_{i,t}\right)} = \frac{\exp\left(\alpha + \beta^{\tau} x_{i,t} + e_{i,t} - u_{i,t}\right)}{\exp\left(\alpha + \beta^{\tau} x_{i,t} + e_{i,t}\right)} = \exp\left(-u_{i,t}\right)$$

Annex II. Data Description

Tax revenue as percent of GDP is tax revenues as percent of GDP excluding social security contributions. Source: World Revenue Longitudinal Data (WoRLD).

GDP per capita (log) is the GDP per capita in log using purchasing power parity constant 2011. Source: World Bank World Development Indicators (WDI).

Quality of institutions is the predicted effectiveness of government based on political stability, regulatory quality, rule of law, and voice and accountability. Source: World Bank World Development Indicators (WDI).

Corruption is the control of corruption which captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Source: World Bank, Worldwide Governance indicators.

Trade Openness is trade revenues in percent of GDP. Source: World Revenue Longitudinal Data (WoRLD).

Public education spending is the total public expenditure on education as percent of GDP and is a proxy for the level of education. Source: World Bank World Development Indicators (WDI).

Share of agriculture in value-added is the value added of the agriculture sector as percent of GDP. Source: World Bank World Development Indicators (WDI).

Old-dependency ratio is the ratio of older dependents--people older than 64—to the working-age population—those ages 15–64. Data are shown as the proportion of dependents per 100 working-age population. Source: World Bank World Development Indicators (WDI).

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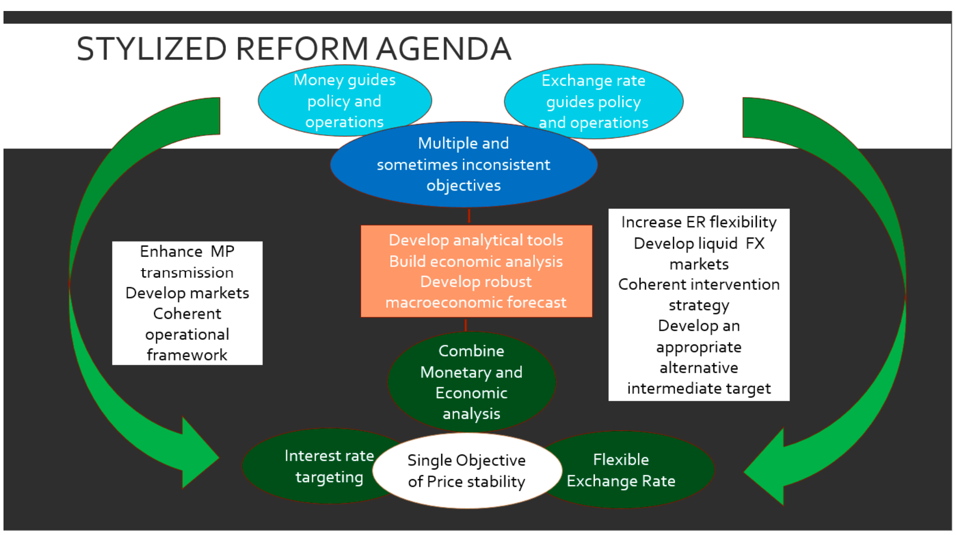
MODERNIZATION OF THE MONETARY POLICY FRAMEWORK[1]

Together with the floatation of the exchange rate, Egypt has embarked on the important transition to a modernized monetary policy framework with price stability as the primary objective of monetary policy. This chapter lays out a roadmap for policymakers in Egypt to adopt a fully-fledged inflation targeting regime, drawing on the experience of other countries that have successfully made this transition.

A. Egypt's Transition to a New Monetary Anchor

1. **Following Egypt's move to a floating exchange rate regime, a forward-looking approach to monetary policy with interest rates as the primary tool would achieve the policy objective of price stability**. Establishing a new nominal anchor to replace the exchange rate is essential for price stability. The Egyptian authorities have taken important steps towards such a transition, in line with the stylized reform agenda derived from the experiences of other transitioning countries (Figure 1).

Figure 1. Monetary Policy Reform Agenda



[1] Prepared by Carlos de Barros Serrao.

2. The major objectives of Inflation targeting (IT) regimes are reducing inflation and its costs, limiting business cycle volatility, and anchoring inflation expectations.[2] The central bank is given a clear mandate to focus on achieving an explicit inflation target as the overriding objective of monetary policy, in the context of a high degree of transparency of monetary policy and accountability of the central bank. Key advantages of IT include low and predictable inflation rates, reduced uncertainty for price and wage setters, enhanced financial deepening, lower inflation taxation, and a key role for the exchange rate as a shock absorber. Such a monetary policy framework facilitates long term growth through more efficient resource allocation.

B. Prioritizing and Sequencing the Transition

3. The transition to IT is typically gradual as it hinges on an institutional transformation that requires broad consensus and stakeholder buy-in that goes beyond the central bank. Key elements of the monetary policy reform agenda along this transition include the following:

- the primacy of price stability as the key objective of monetary policy;
- operational independence of the central bank to pursue that goal;
- transparency and accountability of the central bank in the conduct and evaluation of monetary policy actions;
- stable macroeconomic conditions, especially the absence of fiscal dominance.

4. Full IT is a medium-term goal for Egypt. The recent improvement in economic conditions, continued reforms, and progress in implementing the current economic program are moving Egypt forward towards meeting the conditions for full-fledged inflation targeting (FFIT), although some challenges remain. Growth is picking up, an ambitious fiscal adjustment plan has been put in place, the exchange rate has been allowed to adjust and is flexible, and inflation is declining (although it remains in double digits). However, the outlook remains subject to risks and the reform agenda requires continued political will. In particular, high public debt and still persistent inflation make any near term move to FFIT undesirable.

5. Establishing the preconditions needed to support a smooth transition for FFIT also have near-term benefits. A formal matrix for assessing readiness and prioritizing preparations can rationalize and assist in the process. Based on the experience of other countries, such a matrix should be built around the degree of conformity with the basic building blocks for effective monetary policy: (i) the institutional set up for the central bank, most notably a governance framework with price stability as the *de jure* overriding objective of monetary policy; (ii) macro and

[2] Inflation targeting involves the public announcement of medium-term numerical targets for inflation with an institutional commitment by the monetary authority to achieve these targets. Additional key features include increased communication with the public and the markets about the plans and objectives of monetary policymakers and increased accountability of the central bank for attaining its inflation objectives. Monetary policy decisions are guided by the deviation of forecasts of future inflation from the announced target, with the inflation forecasting acting (implicitly or explicitly) as the intermediate target of monetary policy.

financial development and stability, including a clear separation between monetary and fiscal policy, the ability to articulate the role of the exchange rate in a flexible exchange rate regime, and a stable financial sector; and (iii) the technical and organizational capacity of the central bank.

6. **The Egyptian authorities have already formally announced a numerical target for inflation at the end of 2018, and progress is being made on the implementation of a fully-fledged inflation targeting framework.** The CBE has put in place a commendable set of reforms to enhance its monetary policy framework. This includes the move to a flexible exchange regime following a significant effort to improve its technical and operational capacity in the areas of monetary policy implementation, economic research and financial sector. Of particular note, the CBE and the MoF have collaborated to strengthen the autonomy of the central bank and curtail fiscal dominance and strengthen the CBE capacity to implement monetary policy independently.

7. **Continued implementation of the authorities' reform program would create conditions to support FFIT.** Continuing to meet the authorities' economic reform program's objectives is an integral part of preparation for FFIT. Based on staff assessment of Egypt's current conformity with the best practices for effective monetary policy, the following roadmap for the move towards IT prioritizes the important next steps:

Institutional Framework

8. **The central bank in an IT regime should have a clear mandate for its operational goals and operational independence to pursue these goals.** This mandate should be set in the law. Given a clear goal, operational independence, and appropriate transparency arrangements, the central bank should be accountable for fulfilling its objectives. Notably, clarifying that price stability is the overriding objective provides a focal point for policy deliberations and helps ensure that policy decisions are consistent with this overriding objective.

9. **Law no. 88 of 2003 of the "Central Bank, Banking Sector and Monetary System" entrusts the CBE with the formulation and implementation of monetary policy**. A new Law of the CBE is being drafted and ensuring the CBE's autonomy to implement monetary policy independently is paramount. Other efforts may be needed, particularly to ensure clarity of the CBE's objectives, safeguard its independence, strengthen its decision-making process and ensure proper oversight and accountability. Also**,** cooperation and consensus with the government, economic ministries, and other bodies should be formally established in the transition to FFIT.

10. **Additional efforts to curtail fiscal dominance are desirable.** While an arrangement that limits the CBE to extend financing to the government has already been in place for a while and has been strictly observed since the inception of the reform program, the earlier excessive utilization of this mechanism and the maintenance of an arrangement with some space for monetary financing may lead to lingering perceptions about the central bank's financial and operational autonomy. It is critical to free the CBE from the pressure to provide resources to the Government on non-market terms. In addition, given the possible impact of FFIT on the CBE's profitability and balance sheet, a

more formal arrangement with the MOF on preserving an adequate financial position of the central bank is recommended.

11. The CBE should streamline its involvement in areas beyond the scope of its core objectives. The pursuit of multiple objectives complicates policy design and has often been a source of policy slippages in other countries. At times, concerns over the nominal value of other variables, such as the exchange rate or the level of credit to specific sectors of the economy, may be perceived as taking precedence over price stability considerations.

Exchange Rate Flexibility

12. The authorities have moved away from a managed exchange regime as an important step. Given the long tradition of the managed exchange rate regime, maintaining the commitment to a flexible exchange rate is essential. Developing a more liquid FX market would help ensure that moderate fluctuations in demand and supply can be handled without central bank intervention. In this vein, it would be recommended that the involvement of the CBE in the FX markets through direct sales to the government as well as through the repatriation mechanism be reduced in order to facilitate the move to FFIT.

13. Capacity of market participants to manage exchange risks and of the regulatory bodies to regulate such risks is critical. Market participants need to continue to further enhance analytical capacity to measure and manage FX risks**.** Increasing the provision of hedging tools will improve the ability of firms to deal with increased exchange rate movements. While the CBE has already introduced some measures to improve market infrastructure, progress in these areas is still needed and the involvement of the CBE is desired, in particular in the provision of adequate infrastructure (i.e., trading platforms and helping in the implementation of master agreements among market participants) and robust regulation.

Monetary Policy Operational Framework

14. The modernization of the operational framework typically involves moving away from quantity based operating targets to interest based frameworks. The CBE currently operates a hybrid system with an interest rate as an operational target and a reserve money indicative target. In 2005, the CBE moved from a quantitative operational target to a price target (overnight inter-bank rate), and launched an interest rate corridor system. Steering the overnight interbank rate within the corridor is currently the stated operational target of the CBE. Since floating the currency in November 2016, the CBE also uses a monetary targeting framework to ensure price stability. In addition to the NDA cap and the NFA floor aimed at controlling credit to government and banks, the CBE has adopted an indicative target limiting the reserve money expansion. Despite the complexity of this operation, the CBE manages to successfully accomplish the reserve money path and control short-term interest rates volatility.

15. The operational target of monetary policy should be redefined to strengthen the CBE's commitment to maintain the overnight rate close to the policy rate. To achieve a full-fledged interest rate based framework, it is preferable to position the target rate in the middle of the interest rate corridor with standing facility rates moving in tandem with the policy rate rather than the current objective of having the overnight rate within the corridor.

16. The development of money markets is also critical to increase the effectiveness of the transmission of the monetary policy. The CBE should continue its efforts in fostering the development of money markets with initiatives such as the consolidation of the Central Depository of Securities in one environment which will enable the usage of Treasury Bonds as collateral pledged in repo operations. In addition, and consistent with such efforts, the CBE is developing a primary market auctioning system, a collateral management system and an electronic trading platform for government securities aimed at boosting liquidity in the secondary markets.

Enhancing Forecasting and Policy Analysis

17. Enhancing central bank analytical capacities is instrumental in the modernization process. This process usually involves: (i) developing a reporting, database and near-term forecasting system based on available set of variables; (ii) updating and monitoring the database on a timely basis; (iii)developing simple projection model of the economy that embodies policymakers' views about the transmission mechanism and the standard set of shocks that affect the economy; (iv) developing a consistent model-based macroeconomic forecast; (v) developing measures of uncertainty in the forecast; and (vi) studying specific risks in the baseline forecasting.

18. The Monetary Policy Sector at the CBE has made an outstanding effort to improve its analytical capacity. Hiring and training qualified staff and investing significantly in IT resources are among the initiatives undertaken to support an effort in producing better estimates of several economic variables. As in most central banks this effort is an ongoing endeavor and should be maintained and improved continuously. While there is tangible evidence of the improved quality of the models used, a continuous effort towards improving the accuracy and adequacy of the models and existing capacities is warranted.

19. Systematic surveys of inflation and other variables market expectations are desirable. This is work in progress and should be strengthened further as market expectations play a prominent role in IT regimes. Otherwise, the CBE would face challenges in managing and anchoring inflation expectations.

Communications

20. While communication is in general a key component of central banking, it is particularly important during the modernization of the monetary policy framework. Communication brings transparency with regard to monetary policy and enhances central bank accountability. It also helps to shape the expectations of economic agents, which can build confidence and contribute to price, output, and financial stability. As central bank credibility is consolidated, communications can substitute to some degree for the disproportionately stronger policy actions that a less credible central bank would need to take.

21. The CBE has made important strides in improving policy communication. In addition to the creation of Communications Department, the CBE has started to publish a Quarterly Monetary Policy Report and all Monetary Policy Committee meetings are followed by the release of a statement explaining the reasons for the decisions taken. CBE officials maintain continuous contact with market participants and the informational content of CBE website has been improved.

22. Strengthening central bank communication is a continuous process. This includes refinements to: ensure that communication follows a long-term planned approach, including a calendar of public appearances and media contacts for high level officials; strategic communications policies supported by clear, consistent, and policy-focused messaging; and, a continuously evolving approach to media engagement and crisis communications. Further strengthening the CBE's institutional capacity in this area would support these refinements.

C. Conclusions

23. As Egypt makes a transition from using the exchange rate as the nominal anchor to one that relies on inflation, the lessons from other countries that have successfully made the transition can be instructive. The CBE has already made notable progress along the path to an inflation targeting regime, and continuing efforts in line with the experience of other successful IT adopters will help ensure that the objective of low and stable inflation over the long term can be attained. This will support the authorities' overall goals of high and inclusive growth, accompanied by higher living standards and job opportunities for its growing population.

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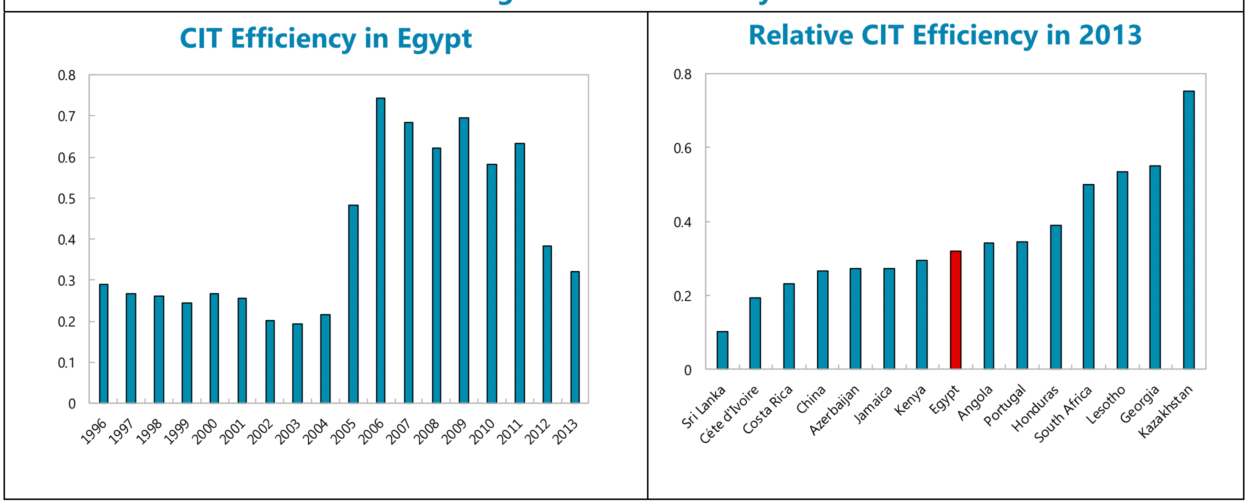
MODERNIZING EGYPT'S INTERNATIONAL TAX REGIME[1]

International tax policy must strike a balance between offering an attractive environment to foreign investment and securing revenue, including by protecting the tax base against tax avoidance. Egypt has recently pursued a strategy of creating a competitive tax system with reasonably low tax rates. This is combined with the adoption of newly established international standards to address tax avoidance, which are modified to Egypt's own circumstances. This paper evaluates this strategy and concludes it is generally appropriate, although some options are identified to enhance the trade-off between revenue mobilization and investment. In several respects, Egypt's approach could serve as an example to other countries in the region.

A. Balancing Revenue and Investment

1. **While corporate income tax (CIT) revenue in Egypt is comparatively high, there are indications of significant base erosion.** Over the last few years, CIT revenue declined from 5 to less than 3.5 percent of GDP, mostly due to lower revenue from the Egyptian General Petroleum Corporation. Still, this ratio is higher than in many peers, where it is often below 3 percent of GDP. Looking deeper, however, there are indications of considerable erosion of the CIT base in Egypt. For instance, CIT efficiency[2] is relatively low and has declined markedly since its peak in 2006 (after the new income tax law was enacted) (Figure 1). Low CIT efficiency is indicative of a relatively narrow tax base, caused by e.g. income tax incentives provided in free zones (FZs) and/or excessive use of deductible payments (such as interest and service fees).

Figure 1. CIT Efficiency

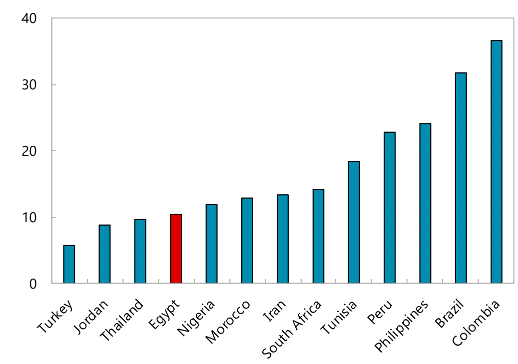


[1] Prepared by Ruud de Mooij, Sebastian Beer, Geerten Michielse and Peter Harris.

[2] A measure of CIT performance, whereby actual CIT revenue is expressed as a ratio of the product of the CIT rate and gross operating surplus.

2. FDI has shown a strong recovery over recent years, but its direction suggests presence of tax avoidance risks. Egypt's statutory and effective corporate tax rates are competitive internationally and conducive to foreign investors (Figure 2). The aggregate stock of inbound FDI is close to 30 percent of GDP in recent years, higher than elsewhere in the region. A significant share of this FDI originates from jurisdictions with a very low CIT rate and/or very low cross-border withholding tax (WHT) rates on dividends, interest and royalties. This is often suggestive of aggressive tax planning, as MNCs may indirectly channel their FDI through those jurisdictions to benefit from low taxation (IMF 2014). Firm-level data obtained from the ORBIS database by Bureau van Dijk further suggests that three out of ten Egyptian companies with a foreign subsidiary have a direct relation with a low-tax jurisdiction—another indication of tax planning risk.

Figure 2. METR in 2014



3. Egypt's emerging international tax rules are important, both for mobilizing revenue and attracting foreign direct investment (FDI) by multinational corporations (MNCs). This annex provides a broad assessment of those rules in Egypt and the strategy currently pursued to align them with international practices. Specific attention is paid to the role of tax incentives, tax treaties and anti-avoidance rules in domestic legislation.

B. Tax Incentives

4. Egypt has a long history of granting profit-based tax incentives, which are highly problematic. Most prominent is the investment law of 1997, which provided 25-year income tax holidays and exemptions from duties and VAT under two special free zones (FZs): public FZs were limited to certain geographic areas and specific industries; private FZ status could be given to any eligible corporation with sufficient exports. These FZ's still exist and suffer from well-known problems, such as:

- *Fiscal costs.* The Egyptian Tax Authority (ETA) has no information about the scope and operations in FZs, making it impossible to assess its revenue costs (likely substantial). The benefits are also unclear, but international evidence suggests that incentives are typically not decisive for investment (PCT 2015).

- *Governance.* FZ companies operate outside the scope of the ETA and do not submit income statements. FZs can thus effectively be used as domestic tax havens, enabling tax avoidance and jeopardizing domestic revenue mobilization.

- *Distortions.* Some entities in FZs can sell their goods domestically, thus distorting competition in local markets. Reimport of exported goods, which is difficult to monitor, aggravates this distortion.

5. The recently enacted new investment law of 2017 re-establishes FZs, although with better safeguards than before. It would have been desirable if the new investment law would have eliminated the FZ eligibility for new entrants and phased out the regime for existing firms. Compared to the old investment law, however, the design and governance of FZs has improved. Notably, FZ benefits are now granted at less favorable terms: the fee charged on domestic sales has been increased from 1 to 2 percent (and its revenue is now shared with the ETA); eligibility is constrained to fewer industries and requires cabinet approval; and the exemption is granted to ring-fenced activities rather than entities, which reduces the risk of profit shifting into the FZs. Another important change is that the ETA will obtain access to the income statements of FZ entities, receive information on related-party transactions, and be able to conduct audits. This increases the transparency in FZs significantly and curbs the risk of tax avoidance.

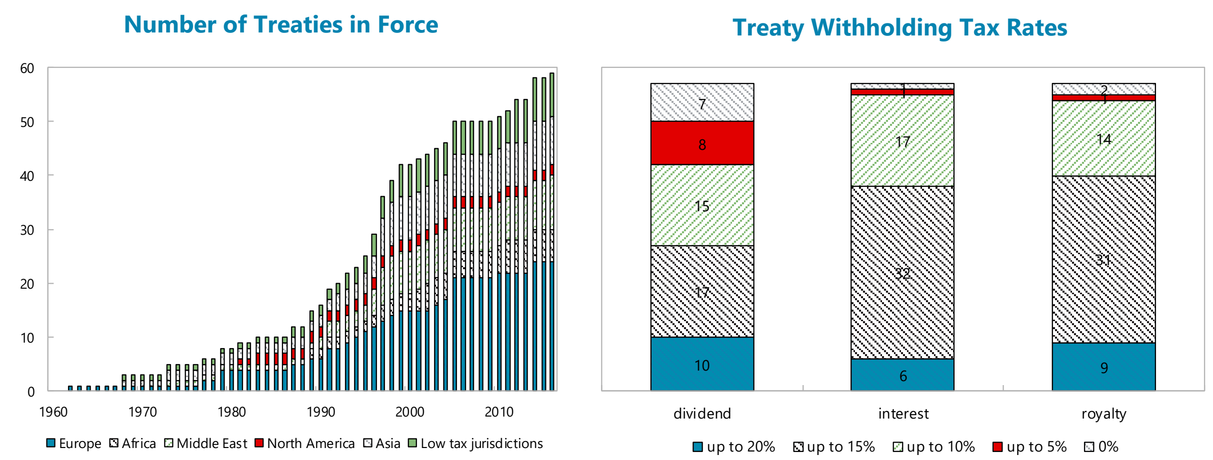
6. The tax incentive for newly established companies seems more cost-effective. The new investment law allows newly established corporations to deduct between 30 and 50 percent of their investment costs from taxable profit (in addition to ordinary depreciation). This stimulates investment by a targeted reduction of the cost of capital. To limit its revenue costs, the deduction is temporary and is granted to entities incorporating within the coming three years, must be used within 7 years, and is capped by 80 percent of the paid-up capital. An evaluation should be conducted at completion to assess the costs and benefits of this incentive scheme.

C. Tax Treaties

7. Egypt rightly takes a cautious approach in signing new double tax treaties (DTTs). DTTs typically aim to alleviate international double-taxation, which is a key concern for MNCs. This means that DTTs may have benefits for countries by attracting greater FDI—although evidence for such effects is mixed (IMF 2014). DTTs also entail costs, however, as they restrict domestic taxing rights. For example, DTTs generally impose maximum applicable WHT rates on cross-border payments of dividends, interest and royalties, usually well below the rates prevailing in the domestic law. In this way, DTTs tend to favor taxation rights of residence countries over source countries. For net capital importers, such as Egypt, source taxation is relatively more important and signing DTTs may lead to revenue loss. Therefore, it may wish to carefully preserve its source taxing rights and be cautious in signing new DTTs.

8. The current strategy of Egypt to renegotiate problematic DTTs is sensible. Egypt has currently 59 DDTs in force (Figure 3). In general, they protect source taxing rights reasonably well, as the maximum WHT rates are typically sustained between 10 and 15 percent. However, older DTTs—some dating back to the 1960s—contain problematic features that erode source taxing rights and aggravate tax planning through treaty shopping. For example, under some of the old DTTs Egypt cannot levy WHT on royalties. Other DTTs limit Egypt's taxing rights on service fees, insurance premiums, branch remittances or dividends. To address those weaknesses, the ETA has made a list of problematic DTTs and developed a renegotiation strategy guided by a well-designed model agreement. The latter is predominantly based on the OECD/UN models, with some noticeable deviations or additions that serve Egyptian interests, e.g. by preserving taxing rights for service and insurance activities and setting sufficiently high WHT rates. Several DTTs are currently in the process of renegotiation or have already been concluded and await ratification.

Figure 3. Double Tax Treaties



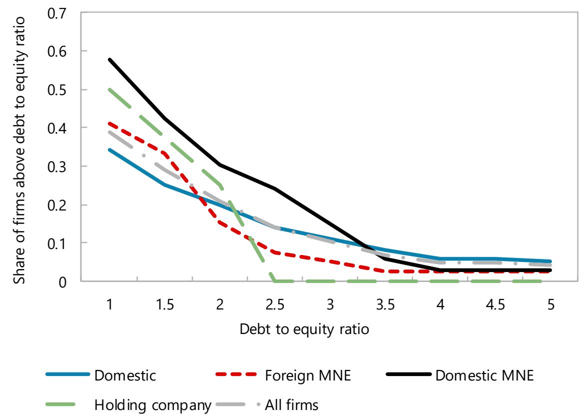
9. The enactment of (renewed) DTTs, as well as participation in multilateral agreements to exchange information, is held up by provisions of Egypt's bank secrecy law. Egypt has recently concluded 5 new DDTs with information-exchange provisions that await enactment; and it has 13 others currently under negotiation. Moreover, Egypt would benefit from engaging in mutual exchange of information with other countries by signing the Convention on Mutual Administrative Assistance in Tax Matters. To be able to access information from country-by-country reports (one of the BEPS minimum standards), moreover, Egypt should also sign the Multilateral Competent Authority Agreement. These bilateral and multilateral agreements, however, require that Egypt can share financial information with foreign tax administrations. Currently, strict bank secrecy legislation prevents the tax administration to access such information, which is a requirement under the international agreements. It is advisable that this law is amended so that Egypt can benefit from information exchange with other countries.

10. By signing the Multilateral Instrument in June 2017, Egypt aims to strengthen some of its source taxing rights in DTTs. For instance, approximately 15 DTTs found a match that adds a provision assigning source taxing right of capital gains on the indirect sales of immovable property (see below).

D. Anti-tax Avoidance

11. Egypt has already adopted several measures to address base erosion and profit shifting (BEPS), such as transfer pricing regulations, rules against debt shifting, a general anti-avoidance rule and measures against treaty shopping. Implementation of these and new international rules conform the approach of the G20/OECD BEPS project should be tailored to Egypt's specific context and circumstances. Moreover, the number of qualified staff dealing with international tax issues needs expansion to effectively address tax avoidance. Also, to strengthen source taxing rights it will be important for Egypt to implement measures not covered by BEPS, such as capital gains taxation of indirect offshore asset sales.

Figure 4. Debt to Equity Ratios for Firms in Egypt



12. Transfer pricing regulation largely follows OECD guidelines, but implementation is challenging. Mispricing of related-party transactions within MNCs—either with foreign affiliates or those in FZs—can create massive revenue losses. Transfer pricing regulation aims to address this form of profit shifting and has been part of Egypt's tax law since 2005. However, implementation has only recently begun. A welcome feature of the Egyptian rules is that they provide a hierarchy in the methods to determine transfer prices. Egypt could further benefit from supplementing the rules with additional safeguards, such as caps on certain deductible payments (akin to the limitation on interest) or through safe harbor rules that simplify compliance.[3] Egypt will soon publish guidelines for advanced pricing agreements, which can enhance tax certainty for foreign investors. Given the limited experience with transfer pricing, however, it would be appropriate to initially limit eligibility for those agreements to a few taxpayers with a solid track record, and limit the period of the agreements to only a few years.

13. Measures against debt shifting need to be strengthened. The creation of excessive interest deductions is a significant risk for the Egyptian tax base, including through transactions with related parties in the FZs. Egypt protects its base against this form of base erosion through various regulations. For instance, it levies a 20 percent WHT on outgoing interest payments (although this rate is often reduced in DTTs); and it disallows deductions of interest payments if debt is exceeding 4 times the equity of a company. This latter 'thin capitalization rule' currently restricts only very few companies and is lax compared to similar rules in other countries. A tighter rule (for instance, based on a debt to equity ratio of 2:1) would limit base erosion more effectively (Figure 4) (IMF 2016). In the medium term, Egypt could also consider replacing the debt-equity rule by a rule that denies a deduction if interest exceeds a certain percentage of profit. Such a rule would have the advantage that it also addresses profit shifting through mispricing of intracompany interest rates. However, it runs the risk of limiting deductions of firms with low profit instead of high interest payments, unless escape clauses are added. The latter add complexity and render this approach not advisable in the short run.

[3] An existing safe harbor rule states that interest rates are arm's length if they are lower than two times the Interbank Offered Rate by the Central Bank—a rather generous rule that might be modified to mitigate revenue loss. The Platform for Collaboration on Tax has recently published a toolkit discussing alternative safeguards: PCT (2017a).

14. **Egypt needs controlled foreign corporation (CFC) rules as a safeguard against tax avoidance through round tripping.** An Egyptian owned company could, for instance, accumulate passive income (such as interest, royalties and dividends) in a low taxed offshore subsidiary to avoid Egyptian tax. CFC rules can counter this by allowing Egypt to immediately bring into its tax base the income earned by those foreign subsidiaries.

15. **Recently adopted measures against treaty shopping could be complemented by additional safeguards in domestic law.** MNCs might structure their operations such that payment of high WHT rates can be avoided. Recent Egyptian DTTs include a beneficial ownership test to limit such 'treaty shopping' by denying treaty benefits in specific cases. However, the test is demanding in terms of information/verification and might not be effective for Egypt. The newly signed multilateral instrument will add another test to existing DTTs, with a similar objective. But the test is of a general nature, referring to concepts such as 'artificial' and 'principal or main purpose', which require legal interpretation by courts. This implies that their practical impact might be very limited for a country like Egypt. Consideration might thus be given to adopting a more specific rule in Egypt's domestic law that limits benefits of a treaty to residents meeting concrete criteria, such as conducting an active trade or business, trading shares on a recognized stock exchange, and having a substantial number of shareholders resident in the home country.

16. **Capital gains can more effectively be taxed in Egypt by implementing specific reforms**, although implementation will not be easy:

- *Offshore relocation*. Egypt might not be able to tax capital gains if an Egyptian shareholder decides to move parts of its assets or the entire company abroad. To address such avoidance, it could introduce an 'exit tax' on unrealized capital gains if assets are taken overseas. Cash flow problems might arise, but these can be addressed by deferring the tax collection to the actual sale of the shares in the future, or by installment payments over several years.

- *Offshore indirect sales*. A specific challenge arises if taxpayers use corporate shells in low-tax jurisdictions to indirectly sell immovable property located in Egypt. To ensure the right of levying Egyptian capital gains tax on such sales, a specific source rule must be included in the domestic tax law; and taxing rights should also be secured in DTTs. Detection and enforcement of offshore indirect sales may still be hard, but provisions should be designed to especially target high-value transactions, e.g. licenses in extractive industries, telecommunication and real estate (PCT 2017b).

- *Domestic sales*. There is currently a pending issue regarding domestic capital gains taxation in Egypt. The law amendment of 2014 repealed the exemption of gains on listed securities and introduced a 10 percent final WHT. However, the amendment has been suspended until 2020; instead, a stamp duty was put in place on all share transactions. Meanwhile, capital gains on unlisted companies are still being taxed as ordinary income at prevailing income tax rates, as well as the stamp duty. The differentiated treatment of capital gains create distortions and arbitrage. The suspension period might be used to come up with a more neutral system with a uniform treatment of different types of capital gains. Moreover, regulations need to be developed for effective enforcement–although this is generally a challenging issue for tax administrations.

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