EGYPT

PROMOTING POVERTY REDUCTION AND SHARED PROSPERITY

A Systematic Country Diagnostic (P151429)

September 2015

Middle East and North Africa Region

World Bank Group



Acknowledgements

This Systematic Country Diagnostic report was prepared by a team led by Tara Vishwanath (Lead Economist GPDVR), with a core team comprised of Sara AlNashar (Economist, GMFDR), Kevin Carey (Lead Economist, GMFDR), Edouard Al-Dahdah (Senior Economist, GGDDR), Jacob Goldston (Consultant, GPDVR), Gabriel Lara Ibarra (Economist, GPDVR), Ahmed Kouchouk (Senior Economist, GMFDR), and Thomas Blatt Laursen (Lead Economist, GMFDR). While the analysis was completed in December 2014, the report contains updates on certain policy developments in Egypt since then.

The team relied substantially on sector-specific expertise and inputs from the MNOC3 program leaders Sahar Nasr, Gustavo Demarco, Balakrishna Parameswaran, and Dhalia Khalifa (Head, CMEDR) as well as many across the Bank's global practices (GPs). The table below identifies team members representing each of the GPs, with specific knowledge of and experience in Egypt who played an important role in providing expert input throughout the SCD process.

The authors wish to thank the Government of Egypt for their helpful comments during the preparation of this report. In particular, the team wishes to thank staff from the Ministry of International Cooperation, the Ministry of Finance, the Ministry of Planning, Monitoring and Administrative Reform, the Ministry of Social Solidarity, and the Central Bank of Egypt. The team also wishes to thank various development partners and other stakeholders who participated in consultations.

The authors also wish to thank peer reviewers Sudhir Shetty (Chief Economist, EASPR) and Phil Keefer (Principal Advisor, Institutions for Development, Inter-American Development Bank) for very useful comments and suggestions. Thanks are also due to Hafez Ghannem (Vice President, MNAVP), Shantayanan Devarajan (Chief Economist, MNACE), Hartwig Schafer (Vice President, OPSVP), Ana Revenga (Senior Director, GPVDR), Asad Alam (Country Director, MNCO3), Bernard Funck (Practice Manager, GMFDR), Christina Malmberg-Calvo (Practice Manager, GPVDR), and Ambar Narayan (Lead Economist, GPVDR) for advice and support.

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EXECUTIVE SUMMARY

EVALUATING EGYPT'S PROGRESS TOWARD THE TWIN GOALS OF POVERTY REDUCTION AND SHARED PROSPERITY

Egypt is a country with a distinctive geographic and demographic structure that poses unique challenges, with poverty concentrated in Upper Egypt and a double youth bulge. Egypt is one of the most agglomerated countries in the world, with 95 percent of the population living on only five percent of the land, almost entirely along the Nile or in the Nile Delta. Economic activity and opportunity are also highly concentrated in a few metropolitan areas. The poverty rate in the remote area of rural Upper Egypt was more than 40 percentage points higher than in metropolitan Egypt. In addition, Egypt not only has a large "boom" generation currently in their mid-to-late 20s, but also an even larger "echo" generation below age 10 that will begin to enter the labor market in the near future. These features mean that Egypt can benefit by immediately beginning the process of creating fundamental reforms that can spread prosperity and create a labor market capable of absorbing the next generation.

The recent direction of policy has been promising in several ways. Over the past ten years, Egypt has been actively moving away from a public-sector-dominated economy. In 2004 the government resumed privatization, deepened customs liberalization, and adopted key tax and administrative reforms. It also launched several strategies for private sector development that constituted the core of industrial policy between 2004 and 2011, and began introducing one-stop shops for business registration in the late 1990s with expansion continuing into 2013. More recently, starting in 2014 the government began to tackle important structural challenges including energy subsidy reform, improving the efficiency of social safety nets by adopting cash transfer programs, and broadening the narrow tax base.

In order to document Egypt's progress in poverty reduction and identify priorities for reform, this Systematic Country Diagnostic draws on multiple data sources largely covering the period up to 2014. The good news is that Egypt has made great strides along a number of important dimensions in the past three decades. Some of the most important human development indicators have shown dramatic improvement, including child mortality, life expectancy, and educational attainment. Gender gaps in education have been closing in the urban areas and regional gaps in education and health outcomes have been narrowing.

Unfortunately, Egypt's economic growth was neither sustained nor inclusive, and even periods of rapid growth have not resulted in poverty reduction or improvements in shared prosperity. Between 2005 and 2010, the poverty rate increased by nearly 5 percentage points and the income of the bottom 40 percent shrank by 1.3 percent even though the economy was growing rapidly. This suggests that the gains made from the short-lived growth episodes did not result in lasting income gains for a large segment of the population and highlights the vulnerability of many Egyptian households in the absence of effective social safety nets. The current generation of young men and women are the most educated in history, but they cannot find secure and stable jobs and women

are increasingly shut out of the labor market entirely. The government's pro-business reforms that were pursued during period 2005-2010 have been incompletely implemented. This, along with uneven enforcement, has meant that entrepreneurs face an uncertain business regulatory environment. As a result Egypt has a low rate of formal firm entry and existing firms grow very slowly. This SCD highlights the potential gains available if Egypt can effectively tap into its natural resources and human capital of its population. The government can facilitate this process by engaging in deep structural reforms that promote private sector job creation, reduce spatial disparities, solidify gains in human capital, protect the poor and vulnerable and ensure a prosperous future for all Egyptians.

From a macroeconomic perspective, Egypt has long-standing structural deficits in its budget and trade balances and persistently high inflation. This is partly the consequence of using inefficient and distortive fiscal tools such as energy subsidies and high levels of government consumption to limit growth volatility without a sustainable recipe for increasing trend growth. Energy subsidies and policymakers' focus on selective opening to foreign capital inflows made growth episodes highly dependent on investment in capital-intensive sectors. Investment policies which opened opportunities to investors through zones and megaprojects increased the risk that politically-connected firms could gain unfair advantages over "outsider" and smaller firms, undermining competition. In turn, growth driven by short-lived investment surges was insufficient to generate structural transformation given its limited impact on employment. Since labor could not be absorbed by an emerging—and formalizing—export-oriented sector, Egypt has instead transitioned from informal rural employment to informal urban services.

Even this growth model could only be sustained as long as capital flows kept coming. But the domestic financial system was not capable of effective intermediation of savings, and with foreign capital access tied to specific projects (mostly capital intensive) and macroeconomic buoyancy in the GCC, growth episodes ran out of steam quickly—either the banking system couldn't play its financing role, or oil prices would weaken, or both. The combination of external developments and internal constraints was the undoing of the mid-2000s high growth episode, which was ignited by reforms including privatization and tax administration. However, rising inflation exacerbated by the food price shock, the oil price plunge, and the global financial crisis all disrupted investment flows. With limited fiscal buffers, these shocks could only be absorbed for a short time.

Although Egypt's macroeconomic outcomes have been unsatisfactory, the underlying story is not one of simple macroeconomic mismanagement. Egypt's macroeconomic profile bears some resemblance to low-income small economies that are highly exposed to shocks, although it has shown some resilience to the external and domestic shocks that it has experienced over the last decade. While Egypt's growth interruptions look like a classic balance of payments constraint, they actually arise from the confluence of poverty, fiscal policy, and governance issues. By enacting medium-term fiscal and energy sector reforms and creating a more effective social protection system, the government can create sustained improvement in macroeconomic outcomes. The experiences of Korea, Indonesia, and Turkey, all of which established virtuous cycles of inclusive economic institutions and sustainable growth after crises, suggest that it is possible for Egypt to follow a similar path.

Continued energy subsidy reform will pay a triple dividend by improving Egypt's fiscal position, incentivizing labor-intensive production, and reducing insider privileges. Energy subsidies reached over 7 percent of GDP in 2013/14, more than the combined spending on health, education and public investment, and are one of the main sources of the fiscal deficit. On the production side, these subsidies encourage firms to use production techniques that rely on energy and capital rather than labor and are generally exploited by large connected firms, curtailing employment growth and contributing to an anti-competitive business environment. On the consumption side, these subsidies are regressive, with the richest 20 percent of Egyptian households capturing 60 percent of all energy subsidies. The government has begun addressing these problems in FY15 through ambitious energy reforms that increased administered prices of fuel products by 40 to 80 percent, diversified the energy mix towards higher reliance on renewable energy sources, and shifted spending towards infrastructure and social sectors. These reforms, aided by lower international oil prices, led to the energy subsidies bill falling to around 3 percent of GDP and 8 percent of total government expenditures in FY15.

High-quality public governance will be necessary to overcome Egypt's development challenges. Egypt's poor performance in growth, job-creation and poverty reduction over the past thirty years is largely rooted in weak public governance, making this a crucial and urgent area for reform. The public sector in Egypt needs to be more transparent and accountable, public procurement and financial management procedures need to be strengthened, and hiring and promotion need to be merit-based. This would create positive incentives for regulators, bureaucrats, and other public servants, improving the quality of public service delivery and creating a predictable and equitable regulatory environment. This would also help improve public perceptions as polls show that the public has little faith that laws will be implemented fairly or that public officials will be held accountable for misconduct.

Problems of public governance have resulted in poor sectoral governance along multiple dimensions, with numerous harmful consequences. Employment growth and social service delivery have both been compromised by governance challenges. For instance, the generous incentives granted to capital-intensive activities and the arbitrary and complex regulatory environment for the private sector both inhibit job creation. In addition, the environmental enforcement agencies lack the capacity to effectively implement existing regulations and the quality of educational and health services have been lowered due to limited local accountability and control. Throughout the diagnostic and analytical sections of this report, these crosscutting issues of governance appear repeatedly as a drag on inclusive economic growth and poverty reduction. Reforming public governance will make it easier to create and sustain improvements in sectoral governance.

PILLARS FOR PROGRESS TOWARDS THE TWIN GOALS

Private-sector-led job creation, spatial integration, and inclusion are the three pillars that will be critical for progress towards the twin goals. To alleviate poverty, there must not only be growth at the national level but this must also be translated into income for poor and excluded populations

through employment, entrepreneurship, and agriculture. In many ways, Egyptians living further from the metropolitan areas have been left behind by a private sector that is heavily concentrated in Cairo and Alexandria, and their reliance on agriculture increases steadily with distance from these core cities. Improvements along these three pillars will enable a broad transformation of the Egyptian economy that allows for efficient urban growth, improved access to employment opportunities, and enhanced rural incomes.

Both the spread of economic activity between cities and the efficiency of the private sector within cities have been inhibited by Egypt's high logistics costs and the shortcomings of public planning mechanisms. The structural transformation from agriculture towards manufacturing and services has also been extremely inefficient in terms of land usage, as some of Egypt's most fertile land has been lost to urban encroachment. The excessive concentration of employment in the metropolitan areas and long travel times have also had disproportionate effects on women's access to economic activities due to the greater mobility constraints they face. These problems reflect flaws in Egypt's land use, public land management policies, and urban planning processes.

Further outside the core, agriculture is—and will remain—a vital source of income, but it has been constrained by land fragmentation, poor market access, and a failure to diversify into more profitable crops. More than 60 percent of farmers in rural Upper Egypt own less than one feddan of land, which is barely sufficient to keep a typical household above the poverty line even with ideal crop choices. These small plot sizes coupled with the limited opportunities to organize production more efficiently via agricultural cooperatives make it difficult for farmers to take advantage of economies of scale. Beyond this, farmers also have difficulty bringing crops to market and experience inflexible irrigation scheduling and limited access to finance. Government policies that promote wheat and cotton production also distort incentives away from diversification.

While Egypt has made improvements in basic health and education indicators, there are still large regional gaps in health and education and problems with service quality. The secondary graduation rate in rural Upper Egypt is much lower than in metropolitan Egypt and the gender gap is much larger. There are also signs that the quality of education has been diminishing, especially in the more remote areas. Child mortality is also twice as high in rural Upper Egypt than in metropolitan Egypt and child nutritional status has been declining across the nation. Egypt lacks a unified plan to deal with the problems of an aging population such as non-communicable and mental disease, and out-of-pocket health expenses are extremely high due to limited health insurance coverage.

In the absence of adequate income opportunities, Egyptians have had to rely on an inefficient and fragmented social protection system that is largely based on food and energy subsidy programs.

The subsidy programs are inefficient both in terms of targeting and in terms of delivery; leakages in the food subsidy system were estimated at 29 percent in 2009. The remaining programs are highly fragmented. Most social protection programs have low coverage rates and are poorly targeted. For example, Egypt's main cash transfer program reaches less than 10 percent of the lowest income quintile, and less than 25 percent of the program's resources go to this income group. This is in part due to the lack of a unified registry to identify beneficiaries.

Early in FY15 the government took measures to overhaul the food subsidies scheme and modernize the cash transfer program. Food subsidies have been limited to final product and households have been given more flexibility and discretion in purchasing with a direct monthly quasi-cash transfer. The government also limited issuance of new food ration cards to citizens with monthly income below EGP 1500 (USD 210). At the same time, the government has also introduced a national conditional cash transfer program that will eventually cover 1.5 million families.

Egypt's highly concentrated population, coupled with sectoral issues in agriculture, inefficient energy subsidies, and poor urban planning, have had serious environmental implications. Air pollution in the Greater Cairo area alone costs Egypt one percent of its GDP from decreased worker productivity due to respiratory disease. Despite an ample supply of water, Egypt suffers from low and declining fresh water availability due to pollution, especially pollution from agricultural sources. Unregulated urban sprawl contributes to this problem as informal settlements frequently deposit waste into canals. This further decreases water quality and has done considerable damage to Egypt's populace, causing more than five percent of deaths and disabilities. Improvements in the agriculture and urban sectors and decreased energy subsidies can do the most to improve environmental outcomes in the short-term. In the long run, sectoral and public governance reforms can work to strengthen the enforcement capacity of Egypt's regulatory agencies and build support from civil society for environmental regulation.

Strengthening the three pillars can help to promote social stability. Social instability can be caused by factors including slow income growth, high inequality, lack of economic security and poor governance. Reforms to boost private-sector-led job creation and to ensure that the jobs created provide working Egyptians with a sense of security will therefore play a crucial role, as will a revamped social security net that provides efficient and targeted social protection. Spatial integration is also an important component as the remote areas of Egypt have fewer economic opportunities, worse social protection, and a larger echo generation.

PRIORITIES IDENTIFIED BY THE SYSTEMATIC COUNTRY DIAGNOSTIC

Based on this analysis, the three highest priorities identified in this SCD are macroeconomic stabilization, continued energy subsidy reform, and improvement in public governance. Progress in these areas may have the potential to improve a very broad range of outcomes. It may also enhance the efficacy of a variety of further reforms and help ensure that those reforms are sustained over time.

Macroeconomic stabilization will require a gradual fiscal consolidation plan that rationalizes spending and enhances revenue generation while balancing the need for continued investments in targeted social safety nets and physical and human capital. Recent efforts to enact a property tax and tax previously exempted capital gains and dividends are steps in the right direction. Following through on authorities' intention to adopt a modern VAT and to revise outdated fees and fines may

also help Egypt's fiscal position. Reducing energy subsidies will also serve to improve government finances but its benefits go beyond stabilization.

The government has taken important steps towards energy subsidy reform and it is essential that these efforts continue. The recent decline in global oil prices presents an ideal opportunity to move forward on this agenda. The next step would be to continue the timely phasing out of energy subsidies and redirect the resulting savings towards more effective development policies. Communicating such a plan effectively and credibly to the public will help retain public support for these politically difficult reforms. These measures will also be rendered much more effective if the government improves the governance structure for the energy and gas sectors. This can be accompanied by compensation measures for the poor and mitigation measures in key economic sectors.

Increasing the accountability, credibility and efficiency of the government through public governance reform would enhance the effectiveness of any further policies and keep them from being reversed or diluted in the future. Specific steps towards this goal include implementing civil service reforms to allow meritocratic hiring, promotion, and firing; bringing the public procurement law up to OECD/UNICITRAL good practices for transparency and disclosure of bidding opportunities; and increasing government transparency both by making more data publicly available and by making progress towards a more comprehensive right to information law. These reforms can help ensure that other reforms are implemented properly by responsible public servants and protect good reforms from weakening or reversal in the future.

Beyond these three top priorities, this SCD evaluates sector-specific policies using the criteria of governance, direct effect on the twin goals, breadth of effect and timeframe. This analysis reveals that concrete sectoral governance reforms are frequently among the most important and urgent. These include improving private-sector competition policy and regulatory transparency; reforming the legal frameworks for agricultural cooperatives and Branch Canal water user organizations; beginning to move towards a long-term urban planning process and public land use policies; and decentralization of public service delivery systems. Many of these are policy and regulatory reforms that could be accomplished quite swiftly given sufficient political will, and will yield great dividends with proper implementation.

There are also other programs with proven effectiveness that could be rolled out or expanded relatively quickly. These include a cash-transfer system and the Family Health Model for basic health service provision. The Family Health Model had a significant positive impact when it was adopted in some governorates in the 2000s, and this experience should make implementation much quicker and easier. Swiftly rolling out a cash-transfer system is a critical reform for sustaining any credible subsidy reform. Once implemented it can, in addition, serve as an impetus to create a unified registry of poor households and may serve as a platform for additional programs such as health insurance or conditional cash transfers.

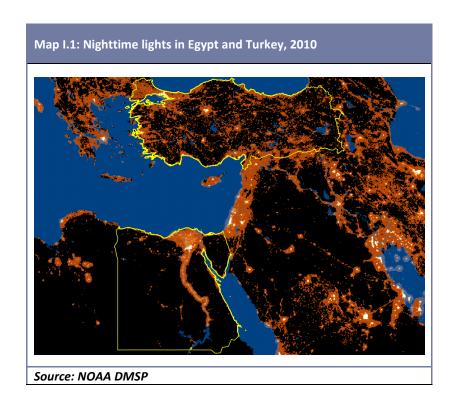
One key to Egypt's future success will be filling the many remaining knowledge gaps. This will require new monitoring systems and experimentation with new anti-poverty programs. For instance,

Egypt has no comprehensive system for monitoring agricultural water usage and thus lacks information on usage patterns. Any policy to improve water efficiency through pricing or other similar measures would require such an information base. As another example, both small entrepreneurs and small farmers have poor access to finance but the international evidence is mixed on whether access to finance alone is sufficient for growth. Egypt can not only draw on cutting-edge research but also engage in rigorous experimentation and evaluation of pilot programs on this and other issues to determine which will be most effective in the Egyptian context. In all cases, making data publically available and readily accessible will allow for evidence-based policy debates, and such transparency can also be a profoundly important accountability mechanism for good policy-making.

The challenges and opportunities posed by Egypt's large echo generation currently below age 10 make this a pivotal moment for Egypt. The burst of population growth will place pressure on Egypt's environment, its social services, and its labor market. It will not be fiscally sustainable to provide Egyptians with economic security through public sector employment or untargeted food and energy subsidies. However, there is a window of opportunity in which to make deep and sustained reforms that take advantage of the increased human capital of Egypt's youth and avert future social instability and depletion of natural resources. Gallup polls in 2013 highlight that Egyptians felt that employment opportunities are poor and they were pessimistic about the future. Still, they expressed hope that the new government could bring about the economic changes that would result in high-quality income-generating opportunities. By moving quickly to enact fundamental reforms, the government can deliver on the hopes and aspirations of the people, especially the young generation, and bring shared prosperity to all.

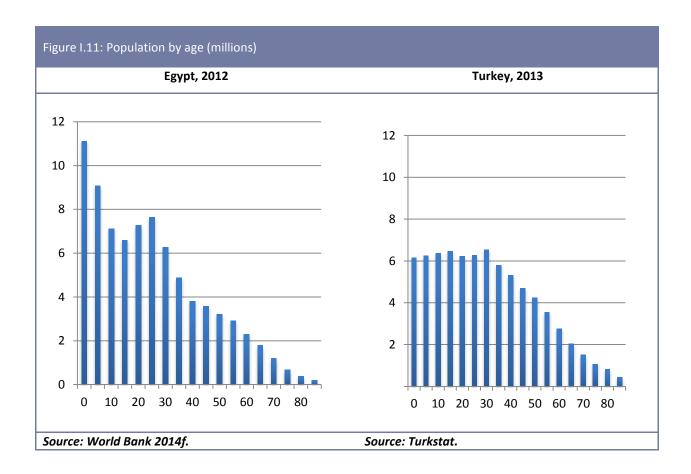
. Country Context

- 1. **Egypt is a country with a distinctive geographic and demographic structure that poses unique challenges.** Egypt's population is highly concentrated along the banks of the Nile River and in the Nile Delta. Egypt is also experiencing a very unusual demographic pattern, with a second boom generation much larger than the first. These features have shaped Egypt's economy and labor market and will continue to do so. Taking them into account will be a necessary component of a truly effective strategy for poverty reduction and inclusive growth.
- 2. Egyptians inhabit and cultivate a small share of Egyptian territory, with approximately 95 percent of the population living and working on 5 percent of the land. The population density of the major urban areas in Egypt is almost triple the global average. Egypt is the 8th most agglomerated country in the world. The Greater Cairo Metropolitan area also dominates Egypt's economy even as the great majority of Egyptians live in rural areas in the Delta or further south in Upper Egypt. Satellite data of nighttime lights, which generally correspond with economic activity, clearly reveals the concentration of Egypt's population and economy. The vast majority of Egypt is unoccupied, unlit desert, with bright lights along the Nile and a brilliant patch around Cairo. Turkey by contrast is more spread out and has multiple centers of economic activity (Map 1.1).



¹ Demographia 2014.

3. Egypt's population is growing much more quickly than anticipated, which has resulted in an unusually large "echo" generation. Egypt's first modern population boom started roughly 30 years ago, a result of declining child mortality rates and steady fertility rates. As is typical in many countries, this boom generation was followed by a later "echo" generation. However, because of a recent and unusual spike in population growth, in Egypt this echo generation has proven to be much larger than the initial boom. In 2012 there were about 8 million Egyptians aged 25-29, the peak of the boom generation, but over 11 million below the age of 5; in Turkey, which has an boom generation that is slightly older than Egypt's, the size of the boom generation is roughly the same size as that of the echo (Figure I.11).



4. Effective poverty reduction in Egypt will require policies that take into account both the centrality of Cairo to the Egyptian economy and the resulting lack of economic opportunities for the many Egyptians in rural or remote areas. The demographic structure of Egypt means that there is a window of opportunity to enact deep reforms before the echo generation begins to enter the labor market in the next 10-15 years. Absent these reforms, however, the Egyptian economy is unlikely to be able to cope with such a large wave of entrants with its current pace and pattern of growth.

LONGER-TERM PERSPECTIVE

- 5. **Egypt has made great strides along a number of important dimensions in the past three decades.** Some of the most important human development indicators have shown dramatic improvement, including child mortality, life expectancy and educational attainment. Gender gaps in education have also been closing, particularly in the metropolitan areas, and regional gaps in education and health outcomes have also been narrowing. The direction of policy has also been very promising: over the past ten years, Egypt has been actively moving away from a public-sector-dominated economy and towards one in which the private sector plays the leading role. In 2004 the government resumed privatization, deepened customs liberalization, and adopted tax and administrative reforms. It also launched several strategies for private sector development that constituted the core of industrial policy between 2004 and 2011, and began introducing one-stop shops for business registration in the late 1990s with expansion continuing into 2013.
- 6. However, growth in Egypt over the past three decades has been moderate, volatile, and insufficient to catch up with more advanced middle-income countries and to absorb the rapidly growing population and labor force. Average per capita growth has been limited to around 2 percent per year since 1980. This reflects a secular decline in investment rates, mainly on account of falling public investment (while private investment has been inadequate and volatile), low and undiversified exports, low labor force participation and formal employment rates (especially among women), weak firm dynamics and job creation with the absence of a growing SME sector and limited productivity growth. While there has been some structural transformation, with resources shifting from lower productivity agriculture to higher productivity manufacturing and services, this has largely stalled and productivity growth within sectors has been negligible. Egypt's economy has become increasingly capital-intensive, with the share of income going to labor at only around 30-40 percent.²
- 7. Though growth accelerated sharply during 2003-08 and remained strong through 2010, this did not prevent a rise in poverty, especially among certain groups of the population. Between 2005 and 2010, poverty increased by 5 percentage points with significant regional disparities being an enduring feature. While the national headcount rate was 24.3 percent in 2010, fully half of Rural Upper Egypt was considered poor. The region was also host to a quarter of the population, but nearly half of the poor. The lowest headcount rate was found in the Metropolitan region (Cairo, Alexandria, Port Said, and Suez) though it increased slightly in the five-year period going from 5.6 percent in 2005 to 7.3 percent in 2010. Poverty rates increased across many groups of the Egyptian population, and remained worryingly high among certain groups. Headcount rates were found to be higher among households with higher dependency rates, households with illiterate heads, or heads employed in the agricultural sector.
- 8. Growth failed to translate into improvements in household consumption as measured by national surveys. In fact, between 2005 and 2010 the income growth of the bottom 40 percent

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² See e.g., Herrera et al. 2010.

(i.e. the shared prosperity indicator) was negative at -1.3 percent, whereas the country's average income fell faster at -1.7 percent. These results explain the slight decrease in the estimated Gini Index in Egypt. The observed increase in poverty and decrease in the income of the bottom 40 percent reflects that GDP growth did not translate into their household income growth in the absence of effective social safety nets. Furthermore, the differences in inflation rates (food and overall) seem to have led to diverging regional poverty trends and lower national poverty estimates in 2012/13, largely due to changes in Upper Egypt. In this region, a significant share of household is situated close to the poverty line and expenditures outpaced food inflation. Thus, this drop may be mainly a reflection of transitory changes in food insecurity rather than a long-term positive effect of economic growth on poverty reduction.

- 9. **Employment quality has been declining steadily since at least 1998.** Egyptians have increasingly been working in jobs with irregular hours and which lack the security of a written contract and social insurance. As the public sector has receded in importance as an employer, the gap has been filled with informal jobs in the private sector: between 1998 and 2012, the share of the labor force that was informally employed rose by nearly 10 percentage points. More recent generations of Egyptians have been particularly hard hit by informality, and are more likely to begin their careers in informal jobs and stay in them compared to older Egyptians. Educated Egyptian women are dropping out of the labor force just as educational attainment among young Egyptians has dramatically increased.
- 10. Reform efforts have generally been erratic and short-lived, while economic policies have not adequately supported macroeconomic stability, growth, and inclusion. The fiscal balance has been in large structural deficit owing to low tax revenues and high spending, in particular on universal, untargeted energy and food subsidies which have exceeded combined spending on health and education and increasingly crowded out spending on human and physical capital development. This in turn has undermined the extension and the quality of social and other public services. At the same time, social safety net spending has been very low, fragmented and poorly targeted. With the size of public debt approaching total GDP, interest payments are also absorbing a large and increasing share of the budget. Financing of the fiscal deficit has relied largely on domestic sources, in particular the banking system, with commercial banks absorbing a large share of what have been mostly short-term debt instruments and the central bank providing monetary financing. This, combined with inadequate investment in key infrastructure sectors and resulting supply-side bottlenecks, has generated high and chronic inflation further undermining poverty reduction and greater sharing of prosperity.

RECENT POLITICAL, ECONOMIC, AND SOCIAL DEVELOPMENTS

11. The Arab Spring that started in Egypt with the January 2011 revolution has been a tumultuous period marked by instability, stagnating growth and per capita incomes, declining job security, and increasing poverty. Former President Morsi, who was elected in Egypt's first democratic elections in June 2012 following 18 months of military rule in the aftermath of the ouster of President Mubarak, failed to introduce a more inclusive political process. Following

large and escalating protests calling for him to resign, he was removed from office and an interim administration was appointed in July 2013, followed by adopting a new constitution through popular referendum and the election of former Field Marshall Sisi to President in May 2014. Parliamentary elections (the final milestone in the July 2013 road map) are expected to be held before the end of 2015.

12. The period since the military intervention in July 2013 has been characterized by political polarization and violence. Muslim Brotherhood leaders and their political allies and supporters have been detained and demonstrations have been restricted following a curfew that lasted during most of the second half of 2013. Opposition and radical groups have responded with acts of violence against the police, the army, the judiciary and civilians. The Muslim Brotherhood has been declared a terrorist organization. The tensions resulting from these conflicts are ongoing, with periodic instances of violence, mass arrest, and death sentences.³⁴

Box I.1: Key Milestones in Egypt's Post-2011 Political Transition

- January 2011: The Egyptian people take to the streets in the second revolution of the Arab Spring, demanding dignity, freedom, and social justice.
- February 2011: After 30 years of rule, President Mubarak is ousted under popular pressure, and the Supreme Council of Armed Forces (SCAF) led by Field-Marshall Tantawi assumes power for a first interim period that lasted 16 months.
- November 2011-January 2012: Legislative elections for the lower House of Parliament yield a large Muslim Brotherhood majority.
- June 2012: The Constitutional Court rules parliamentary elections unconstitutional, prompting the SCAF to dissolve the lower house of Parliament.
- June 2012: In a second round of voting, the Muslim Brotherhood candidate Mohamed Morsi is elected with 51% of the votes and becomes Egypt's first democratically elected president.
- November 2012: President Morsi grants himself sweeping powers and immunity from judicial oversight. This leads to popular protests and contributes to uniting the judiciary, the media, the police, the political opposition, and some of civil society against Morsi's policies.
- December 2012: An Islamist-inspired Constitution is adopted by popular referendum.
- May-June 2013: Protests calling for the departure of President Morsi and new elections escalate.
- July 2013: The army led by General Abdel Fattah Al Sisi assumes control of the country for a second interim period, inserting the head of the Constitutional Court as interim President, putting a new government in place, and announcing a nine month roadmap including the drafting of a referendum on a new Constitution and presidential and legislative elections.

³ Amnesty International 2014.

⁴ Human Rights Watch 2014.

- August 2013: A large-scale Muslim Brotherhood sit-in is dispersed violently with several hundred casualties and thousands jailed and wounded.⁵
- January 2014: Amendments to the 2012 Constitution are approved with an overwhelming 98 percent majority. The new constitution has more liberal overtones than the previous one, strengthens women's rights, and increases the authority and autonomy of the judiciary, the military, and the police.
- February 2014: The government is replaced following mounting social unrest (sixth government since revolution).
- May 2014: Abdel Fattah Al Sisi is elected new President.
- 13. The progressing political roadmap has helped to partially contain the political and social unrest. With the ratification of a newly amended constitution and the election of a president, the political roadmap announced in July 2013 is progressing. However, the final milestone, electing a House of Representatives, is still pending and is expected to be accomplished before the end of 2015. With this progress on the political front protests have started to subside. However, this relative stability is challenged by the ongoing attacks on the police, the military, and the judiciary, and marred by acts of repression against Islamist and secular opposition alike.
- 14. The post-July 2013 governments received large financial inflows from UAE, Saudi Arabia, and Kuwait and embarked on a major economic stimulus program. The three Gulf States pledged US\$24 billion in financial support during FY13-14 and delivered some US\$18-19 billion in the form of CBE deposits, project financing as well as cash and in-kind grants by the end of FY14.⁶ Additional pledges worth US\$12.5 billion were made during the Egypt Economic conference held in March 2015 with US\$6 billion in the form of deposits held at the CBE received by end April 2015.⁷ These has given the government a buffer to scale up public expenditures in FY14 mainly in the form of two economic stimulus packages amounting to a total of 3 percent of GDP. The stimulus has mainly been in the form of investment spending, but also substantial public sector (minimum) wage increases and temporary social measures.
- 15. **FY14 stimulus spending has contributed to early indications of an economic recovery but macroeconomic imbalances remain large.** Average growth during FY14 continued to be subdued at 2.2 percent, similar to the previous three years, but with a pick-up to 3.7 percent during the fourth quarter of the year. This reflected both the accelerated stimulus spending and some recovery in private investment. The fiscal deficit declined slightly to 12.5 percent of GDP in FY14 compared to 14 percent of GDP the previous year, but this was mainly due to the Gulf inkind and cash grants; excluding exceptional receipts, the structural deficit would have reached almost 17 percent of GDP in FY14. As a result of continued high deficits, public debt rose to 97 percent of GDP in June 2014. Likewise, net international reserves started to recover slightly to

⁵ Human Rights Watch, August 12 2014: "All according to plan"

⁶ Central Bank of Egypt, Ministry of Finance, and author's calculations

⁷ http://www.nytimes.com/2015/03/14/world/middleeast/3-persian-gulf-nations-pledge-12-billion-in-aid-for-egypt.html? r=1

reach US\$16.8 billion by end-September 2014, still critically low but US\$2 billion higher than at the end of FY13 before the Gulf inflows started trickling in.

- 16. **Growth momentum continued from late FY14 into FY15, reaching 4.3 percent.**^{8,9} This was primarily driven by a recovery in tourism and manufacturing, while other important sectors such as mining and agriculture have yet to fully recover. On the demand side, the economy continues to benefit from resilient consumption and government stimulus, supported by large financial inflows from Gulf States. Higher growth has contributed to a 0.5 percentage point reduction in unemployment from March 2014 to March 2015.¹⁰
- 17. Since 2011, following the economic downturn, overall socio-economic conditions have been deteriorating, with more job market entrants drifting towards informal and subsistence jobs and others dropping out of the labor force. According to the Central Agency for Public Mobilization and Statistics (CAPMAS), during the last quarter of FY14 out of the 3.7 million currently unemployed persons some 70 percent are between 15 and 29 years old, making youth unemployment the main challenge for economic inclusion and stability. ¹¹ The poor are concentrated in Upper Egypt, in particular rural areas where the poverty rate is 50 percent, with limited options to work outside subsistence agriculture.
- 18. The government took important steps in early FY15 to launch critical reforms and begin fiscal consolidation, including increasing existing taxes, enacting new ones, and streamlining electricity and fuel subsidies. These measures should bring the fiscal deficit down to around 11-11.5 percent of GDP in FY15. Of the realized fiscal savings, some EGP27 billion will be directed to enhance spending on health, education, scientific research, and to strengthen social safety nets. At the same time, the government scaled up capital expenditures in FY15 and widened their geographical reach, with additional capital spending from non-budgetary public sector entities carried out, notably the expansion of the Suez Canal.
- 19. **Higher energy prices have added to existing inflationary pressures.** Annual urban headline inflation was already elevated at just over 10 percent in FY14, and energy price hikes further increased headline inflation to 11 percent as the energy price hikes fed into almost all commodities (most notably food and transportation). The depreciation of the Egyptian pound and persistent supply bottlenecks also contributed to inflationary pressures in FY15. Following the fiscal consolidation measures of July 2014, the CBE hiked all its key policy rates by 100 basis points, but policy rates remain below their June 2013 levels. Similarly, Treasury bill rates have inched up to follow policy rates but remain more than 2 percentage points lower than at end-FY13.

⁸ Because FY15 falls outside the analysis period of this SCD, the data for this paragraph was taken directly from government sources without further calculations by the authors.

⁹ http://www.mof.gov.eg/MOFGallerySource/English/Reports/monthly/2015/August2015/a-b.pdf

¹⁰ CAPMAS Labor Force Survey

¹¹ CAPMAS Labor Force Survey

¹² The CBE administered three successive policy rates cuts in the first half of FY14 to stimulate economic activity.

- 20. While recent years have been tumultuous, there are a number of cases globally where economic crisis and abrupt political change eventually set the stage for sustained growth and poverty reduction. In particular, crisis-induced "resets" of trade and investment policy to support an export orientation and enabling environment for investment have been seen in Korea, Indonesia, and Turkey. In each case, despite their origins in a narrowly based political coalition, these countries were effective in mitigating the governance pitfalls of top-down regimes. The key was to deliver "good enough" regulation, public services, and a stable enabling framework for the private sector that limited the risk of government predation. Certainly, Egypt has had past crises that might have also featured such a reset. However, Beblawi (2008) suggests that Egypt's first "Open Door" reforms of the 1970s were more about attracting GCC money into certain sectors dominated by large and politically connected firms rather than about genuine private sector development. During the various reform episodes since then, the incentives and vested interests of powerful constituencies have likely played a large role in the reform process. It is worth noting that the 2004 reforms were not prompted by an external crisis, but rather by internal frustration with the pace of change. However, global shocks and difficulties in implementation and monitoring have undermined these reforms. With senior officials in Egypt now explicitly calling for an "economic revolution," the need for sweeping improvements in economic governance has come to the fore.¹³
- 21. It is in this broader context that a Systematic Country Diagnostic (SCD) is being prepared to underpin the development of the World Bank's new Country Partnership Framework with the Government of Egypt. The overarching objective of the SCD is to identify the most significant constraints to accelerating sustainable progress towards ending poverty and boosting shared prosperity. As the government is devising, announcing, and implementing a new reform agenda, the SCD is timely in providing evidence-based analysis of the critical reform areas for enhancing the welfare of the poorer segments of the Egyptian population. The remainder of this report begins by describing the overarching governance constraints and their manifestations that have impeded growth, job-creation, and poverty reduction (Chapter II). This is followed by a detailed discussion of the structural impediments to the pace and pattern of growth and its impacts on poverty and shared prosperity, which highlights the critical importance of addressing macroeconomic risks to sustained poverty reduction (Chapter III). Chapter IV discusses long-term risks to environmental sustainability. Chapter V is a detailed analysis of the factors that are constraining poverty reduction in Egypt, viewed especially through the lens of income generation and social protection; here, the fundamental nature of specific governance reforms will emerge as an essential component of poverty reduction and mitigating risks for social stability. Finally, in the concluding chapter the SCD identifies the principles and top priorities for policy reform. Across the board, there are governance constraints that can be addressed in the short term that will enhance the impact of Egypt's further efforts to reduce poverty and increase shared prosperity.

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¹³ Reuters 2014.

22. The SCD was informed by consultations with key stakeholders in Egypt. Separate sessions were conducted with the government, private sector, and a group of academics, think tanks, and civil society. The main purpose of the external consultations was to seek their insights and inputs into the diagnostics and assess the way they portray the emerging reform priorities for broader improvements in growth and welfare in Egypt. The external consultations were preceded by a retreat with the broader Cairo-based World Bank Group team, including program leaders and specific thematic leads to validate the diagnostics and discuss emerging priorities. Overall, there was wide agreement on the importance of carrying out such diagnostic exercises and many participants were particularly satisfied with the objectives, especially going beyond growth to emphasize poverty and employment as key development goals. The specific issues discussed included the weak incentives and low capacity of public sector workers; rent extraction by connected individuals and firms; and agricultural sector constraints such as the current cooperative law and high transportation costs. More broadly, participants viewed corruption as an important cause of Egypt's slow-growing formal private sector and felt there were potential benefits from implementing a better industrial framework for the economy at large. Annex I provides a brief summary of these discussions.

II. Egypt's Public Governance Challenge

- 23. Egypt's poor performance in growth, job-creation and poverty reduction over the past thirty years has been largely rooted in weak public governance. This manifests itself in both the processes of policy formulation and policy implementation. Entrenched constituencies with vested interests have influenced the policy-making process in order to maintain and expand their collective privileges. These powerful constituencies are elaborate networks of patronage and clientelism spread across the civil service, various government entities, and the private sector and seek to maintain an institutional environment that is conducive to the perpetuation of their rent-seeking behavior. As to policy implementation, even when the Egyptian government succeeded in adopting important reforms, a lack of effective oversight and poor incentives for public sector employees often resulted in irregular and in some cases prejudicial application of these policies.
- 24. Public governance challenges in general stem from the weak incentives experienced by policy-makers, regulators, bureaucrats, and other public servants. Creating a new incentive structure will be necessary to improve the efficiency and effectiveness of the public sector. These incentives include meritocratic selection and advancement in the public sector, increased transparency and public dissemination of laws and regulations to ensure fair and uniform implementation, and both the perception and reality of increased accountability among public servants. In addition, policy-makers need to be given stronger incentives to create policies that promote broad-based growth rather than serving the narrow interests of powerful constituencies. Good public governance would establish an incentive structure that leads public servants to act consistently, credibly, fairly, and effectively.
- 25. There are least three pathways from public governance to growth and shared prosperity. First, better public governance contributes to the effective delivery of public goods that are necessary for both businesses and citizens, including healthcare and education as well as infrastructure and a legal framework. Second, reducing the outsized influence of powerful constituencies and increasing the public accountability of policy-makers make it more likely that effective pro-social policies will be put into place. Finally, better public governance through improved incentives and regulatory transparency increases the likelihood that reforms on paper are correctly implemented and translated into real positive change. Public governance serves as the foundation upon which further reforms and programs can be built.
- 26. The design and implementation of development policies and the enforcement of the laws and regulations are induced by political economy incentives. ¹⁴ If a policy outcome goes against powerful political interests, the rule or regulation that underpins it may be either prevented from being adopted in the first place or, if it is adopted, it may be prevented from being uniformly implemented or enforced. Conversely, if a policy, a rule, or a regulation provides concrete benefits to entrenched political stakeholders, it is more likely to be systematically

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¹⁴ See World Bank 2012a.

implemented.¹⁵ For instance, an amendment of Egypt's procurement law (Law 89/1998) allowed the use of direct contracting for government contracts in "emergency cases." Since its adoption, this amendment has been used at least six times to grant large public contracts to the military and its Corps of Engineers. ^{16,17,18}

EGYPT FACES GOVERNANCE CHALLENGES

27. Egypt scores poorly on international measures of regulatory implementation and enforcement, extremely important components of public governance. ¹⁹ Egypt ranks in the bottom tier of countries in terms of the effective enforcement of government regulations across the board (Figure II.1). Egypt is also one of the MENA countries with the largest gap between the quality of rules and regulations on paper and their enforcement in practice (Table II.1). The enforcement of regulation is guided by discretion rather than rules, with Egypt placing among countries where the enforcement of taxes and customs regulations is least uniform and most discriminatory. ²⁰ Data from the World Justice Project also shows that Egypt trails most comparable developing countries in terms of respect of due process in administrative proceedings, which is another proxy measure of government arbitrary and uneven implementation of rules and regulations (Figure II.2). Complex, unpredictable, and opaque government procedures make it difficult for Egyptian citizens and businesses to access government services. This is especially true of social services and law-enforcement services.

¹⁵ This diagnostic takes a political economy perspective to focus on the main drivers of poor governance in Egypt. In political economy literature, several factors conspire to affect government's willingness or the incentives of leaders to pass and enforce policies, rules and regulations: one of these factors relates to the nature of the regulatory agency and the type of service it delivers: the international visibility of the enforcement agency is likely to drive effective enforcement. Similarly, its location in the policy domain is expected to lead to better implementation. If the agency governs an economic sector perceived as vital for the state, applicable laws and regulations are more likely to be systematically enforced. Another set of factors is political survival considerations and regime type: in non-democratic regimes, incumbents need to reward key elites in order to stay in power; therefore, the regulatory enforcement of policies/laws that generate rents to core political supporters or prevent threats from opponents is likely to be more systematic.

¹⁶ List of projects available at http://eldahshan.com/2014/01/03/army-contracts/

¹⁷ Ahmed 2014.

¹⁸ Joudeh 2014.

¹⁹ Drawn from: World Justice Project 2012 (hereinafter WJP 2012); Information and Decision Support Center Social Support Center and World Bank Institute 2009 (hereinafter IDSC/WBI 2009); and Global Integrity Indicators 2010 (hereinafter GII 2010).

²⁰ GII 2010

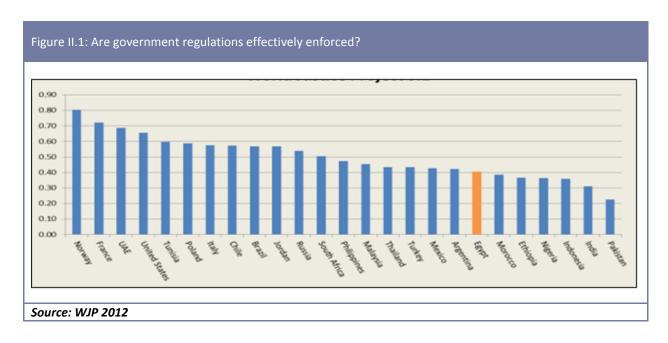


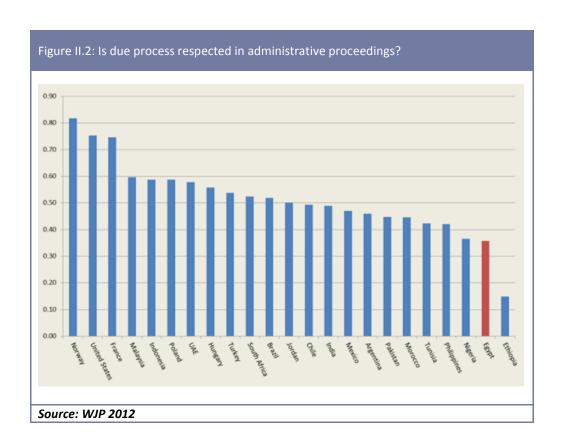
Table II.1: Global Integrity Indicators for MENA					
				Actual	Implementation
Country	Year	Overall score	Legal framework	implementation	gap
United Arab Emirates	2009	68	63	68	-5
Jordan	2011	57	67	46	21
Morocco	2010	56	66	46	20
West Bank	2010	57	73	41	32
Qatar	2009	42	41	38	3
Algeria	2011	54	68	37	31
Egypt	2010	54	70	34	36
Iraq	2008	53	75	32	43
Syria	2009	29	35	16	19
Yemen	2010	33	44	15	29
Kuwait	2008	55	-	-	-
Tunisia	2008	45	-	-	-
MENA average		50	60	37	23
Other developing	2011	67	84	50	34
average					

Note: the implementation gap is the difference between a country's score for its legal framework and its score for actual implementation.

Source: GII 2010

28. Based on survey data, the public appears to have lost faith in the ability of the government to hold officials accountable for their actions and to ensure equitable access to services for all citizens. In 2012, 60 percent of respondents did not think that local officials would be punished if they were caught engaging in corrupt behavior, and 19 percent believed that there

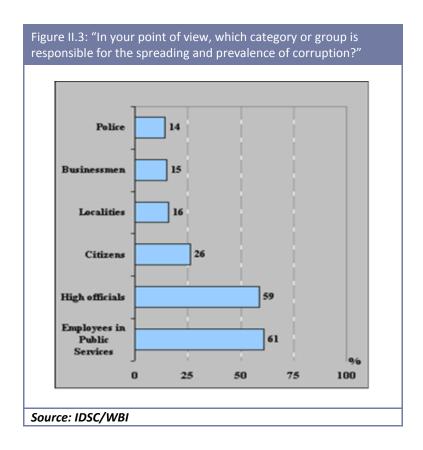
would not even be an investigation.²¹ In 2009, Egyptians singled out public service employees and high officials as the two groups most responsible for corruption (Figure II.3). This creates a vicious cycle, so that half of Egyptians reported having paid a bribe to get a permit or process a government document and 86 percent of respondents believed that paying a bribe is virtually guaranteed to result in receiving a public service or resolving a problem with the government.^{22,23}



²¹ WJP 2012

²² WJP 2012

²³ IDSC/WBI 2009



PUBLIC GOVERNANCE PROBLEMS HAVE HAD FAR-REACHING CONSEQUENCES

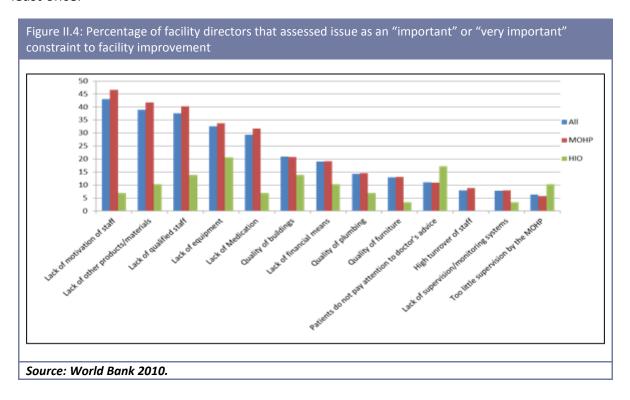
- 29. The poor quality of service delivery in Egypt can be traced in part to the weak incentives experienced by individual civil servants. This in turn stems from the lack of voice for the public and the lack of accountability in the public sector. There are few mechanisms through which private citizens can express their discontent with service provision and bureaucratic behavior or opt out of these systems, especially for the poor. There are similarly few avenues through which civil servants can be held accountable for their actions.
- 30. Primary public education provides one of the starkest illustrations of the weak individual incentives of civil servants to perform the task assigned to them. Public school teachers in Egypt are aware that their legal status as civil servants shields them from being fired or otherwise disciplined for poor performance, which typically manifests itself in chronic staff absenteeism, low levels of teaching time in the classroom, and poor student learning outcomes.^{24,25} They are also aware that the regulations they are governed by, as well as the absence in Egypt of a tradition of organized citizen oversight of public services (such as parent associations) prevents the exercise of internal (by their supervisors) and external (by students

²⁴ Egypt Law No. 47 of 1978

²⁵ World Bank 2014i

and parents) accountability, and greatly reduce the likelihood of administrative or penal sanctions. This low risk of sanctions, low commitment to the job, and self-perception as civil servants as opposed to educators has led many public school teachers to minimize the provision of public goods in the form of in-class teaching, instead maximizing the provision of private goods in the form of private, for-fee individual tutoring lessons after hours. Regular school curricula are dispensed only to those who could afford it, while official test questions and answers would be offered to the highest bidders.²⁶

31. Empirical findings from a survey of primary healthcare facilities in two Egyptian provinces confirm that these problems are present in the healthcare sector as well. Data from this survey indeed show that the top constraint to improving quality of service delivery in primary care facilities is employee lack of motivation due to no eminent rewards for high performance and not an issue of weak capacity (Figure II.4). The same data also shows that these weak individual incentives are reflected in high staff absenteeism rates: on average, on the occasion of three surprise visits, a visitor would find 21 percent of full-time staff and 32 percent of full-time and part-time staff always absent. 52 percent of men and 40 percent of women were absent at least once.



32. The Egyptian bureaucracy is one example of a coherent social group with common policy interests and the ability to shape public policy.²⁷ From 350,000 in 1952, the Egyptian civil service has grown to over six million employees in 2014, one civil servant for every 13 Egyptian

²⁶ World Bank 2014i

²⁷ Adly 2014

citizens.²⁸ Nearly half of these are managers and senior civil servants, who mostly live and work in the Greater Cairo metropolitan area. This group has demonstrated the ability to advance its interests by blocking public sector reforms. In 2005, there were a number of amendments to Egypt's civil service legislation that were intended to make it easier to hire temporary contract employees and discipline poor performing workers. These were met with such strong resistance among civil servants and public employee unions that the government pulled back the amendments for further review and modification.²⁹ As a result, succeeding regimes consistently made it a strategic priority to placate and assuage the Egyptian bureaucracy in a variety of ways. For instance, one of the first policy decisions of President Morsi was to grant salary and Social Security increases to civil servants, and in 2013 interim President Mansour raised the minimum wage for civil servants, causing a ripple effect across other public wage categories.

FROM PUBLIC TO SECTORAL GOVERNANCE

- 33. Along with these broad, crosscutting problems of poor public governance, there are also sector-specific governance issues that are impeding Egypt's progress. These include, among others, significant restrictions on the formation of agricultural cooperatives and the lack of a cohesive and effective urban planning apparatus. Solving these problems is not simply a matter of building roads or schools or starting new programs; rather, the underlying laws and regulatory frameworks must be revisited and revised. These are discussed in more detail in Chapter V as constraints to poverty reduction.
- 34. **Improving the quality of public governance is necessary to sustainably improve sector-specific governance.** In one sense, many sector-specific governance reforms are "easy" reforms, which could be achieved with the stroke of the pen without drawing on the government's resources. However, making the necessary reforms is often against the interests of powerful constituencies and would require substantial and sustained political will on the part of policy-makers. In addition, changing laws on paper does not guarantee their proper implementation and may not have any impact on the actual rules and constraints faced by Egyptian individuals or businesses. These components of public governance are therefore crucial in order to bring about lasting change.
- 35. The issues constraining private sector job creation, which flow both from poor regulation and from irregular implementation, illustrate this point. Egyptian businesses widely report that the requirements to obtain business licenses are too complex and are a major constraint to firm formalization and growth. ³⁰ Regulations are also enforced inconsistently,

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²⁸ 6.37 million employees in FY 2012-13, excluding military personnel (Ministry of Planning, Monitoring and Administrative Reform - August 2014).

²⁹ A new civil service law was enacted in March 2015 which seeks to link wage payments to improved service delivery, introduce meritocratic hiring and promotion practices, and simplify the wage structure.

³⁰ World Bank 2014d.

which adds to policy uncertainty and discourages entrepreneurs from taking risks. The lack of transparency and emphasis on discretion over rules also creates openings for corruption and favoritism. A recent World Bank report extensively documents the advantages afforded to politically connected firms in Egypt and other MENA countries, including protection from foreign and domestic competition and superior access to critical inputs such as a land, energy, and capital.³¹

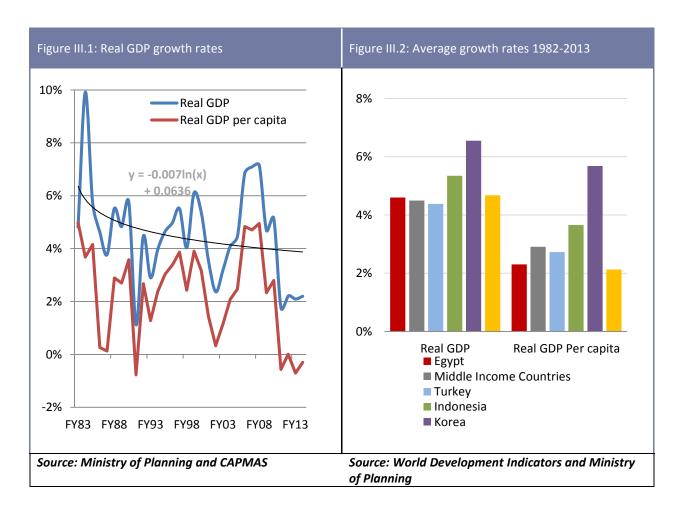
36. These are only a few examples of the ways in which poor governance has undermined the twin goals of poverty reduction and shared prosperity in Egypt. Throughout the diagnostic and analytical sections of this report, this crosscutting issue of governance will appear repeatedly as a drag on economic growth and inclusive poverty reduction. It imposes constraints on the country in contexts ranging from exchange rate policy to infrastructure spending, and from job creation to the provision of public goods. This diagnostic will therefore flag governance reforms as a top priority for the government of Egypt.

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³¹ World Bank 2014a

TREND GROWTH INSUFFICIENT FOR CONVERGENCE

37. Egypt's trend growth over the past 30 years has been average by middle-income country standards, which was insufficient to generate catch up and inadequate to provide sufficient productive opportunities for an increasing labor force. Real GDP growth has averaged 4.6 percent since 1980 and been quite volatile, with few short-lived high growth episodes along with many years of moderate to sluggish growth rates (Figure III.1 and Figure III.2). Growth has been consumption-oriented with a declining share and contribution from investment (especially public investment) and net exports have been mostly a drag on growth. Meanwhile, formal employment and productivity growth have generally been weak.



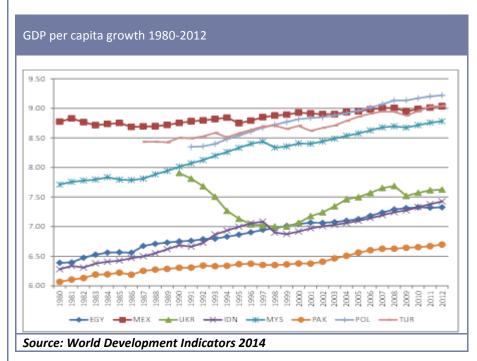
38. Macroeconomic outcomes featured short-lived growth bursts, persistent structural imbalances in the public budget and external trade, and a narrow export base (Box III.1). Output volatility was induced by recurring external and internal shocks, but the full impact of these shocks was dampened by limited capital and financial market integration and

countercyclical macroeconomic policies. When Egypt's economic indicators are analyzed in terms of their place in the global distribution, fiscal, trade, and formal employment performance, and inflation consistently stand out. It is also worth noting that in the global data, Egypt has high indicators for role of the military (share of the labor force and share of military spending). Also, very few countries have maintained fiscal deficits of comparable size to Egypt.

Box III.1: Growth benchmarking

Egypt's economic performance can be benchmarked by two approaches: with a set of peers chosen in advance or through a focus on unusual features of Egypt's economic outcomes. The first compares Egypt to a set of countries chosen *a priori* to resemble Egypt in terms of structural characteristics such as population, geographic size, and stage of development. This leads to a focus on mid-size middle-income countries. The second looks at the distribution of economic outcomes for all countries over time and focus on indicators where Egypt's performance is in extreme percentiles, leading to an alternative set of peers which share similar characteristics.

Regarding the first approach, the peer group chosen is Malaysia, Indonesia, Ukraine, Poland, Mexico, Pakistan, and Turkey. Each of these countries has a comparable span of middle-income development experience to Egypt, and is relatively large in terms of population and area. Some also have sizable but not dominant resource bases, as is the case with Egypt.



The key feature of Egypt's growth performance within this group is a steady increase that is nonetheless insufficient to generate catch-up. For 1980-2012, Egypt's overall income growth performance is not particularly weak within this group. For GNI per capita in constant 2005 US\$, Egypt's annual growth is 2.9%,

slower than Indonesia (3.6%), Malaysia (3.3%), and Poland (4.2%) but faster than the

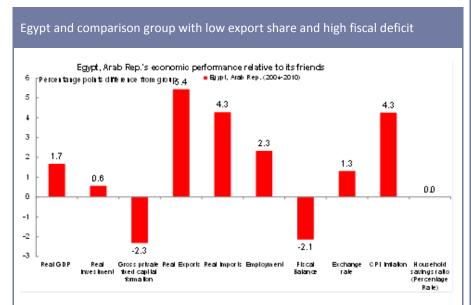
transition countries, Mexico, Pakistan, and Turkey. When placed within this group, Egypt displays a lack of well-defined growth surges (or crashes), even though there was of course considerable macroeconomic volatility in Egypt during this period. There is no sign of Egypt catching up with its upper-middle-income comparators; in fact Turkey, Poland, and Malaysia all have accelerations during the period that widened the gap with Egypt.

Egypt's export share surged in the 2000s, albeit not at the pace of surges in East Asia or the transition economies. Egypt spent most of the 1980-2012 period clustered with Indonesia, Turkey, and Mexico in terms of export share, but between 2000 and 2008, the export share increased by 16 percentage points. What stands out in the group is the breakaway of the transition economies (Poland and Ukraine), with low export shares in the early 1990s, but then rapid intensification of exports thereafter, ending at around 50 percent of GDP. Egypt's import share is consistently among the highest in the group—regardless of the local trend performance in exports—pointing to a structural gap in its trade structure.

Egypt's divergence from this group in terms of fiscal indicators is striking. Egypt raises revenue at a level similar to lower-middle-income countries (around 25 percent of GDP on average, like Indonesia), but spends at a level similar to upper-middle-income countries (at around 35 percent of GDP, like Turkey). This sustained gap raises obvious issues of

sustainability, which emerge clearly in the second type of benchmarking.

When Egypt's economic indicators are analyzed in terms of their place in the global distribution, fiscal, trade, capital formation, employment, and inflation consistently stand out. For example, since 1990, Egypt's budget deficit has been in the 3rd percentile of



Notes: All indicators are percentage point deviations of growth rates or percentage point deviation of nominal GDP

Source: Find my Friends tool using IMF WEO 2014

the world, its public debt ratio above the 80th percentile, and employment to population ratio below the 10th percentile. During 2004-10, generally recognized as a period of reforms, inflation was in the 85th percentile, as was export growth and employment growth. Thus while reforms had real impacts on exports and employment, macroeconomic indicators were still pointing to trouble spots.

Very few countries have maintained fiscal deficits of comparable size to Egypt. During 2004-2010, the only countries beside Egypt with above median-government expenditure and below-median government revenue are Cape Verde, Guyana, Jamaica, Kyrgyz Republic, and Lebanon. While these would not generally be seen as a peer group for Egypt, they have in common issues of chronic fiscal weakness and high dependence on external flows to maintain macroeconomic stability. A somewhat more varied group of countries has a similar profile in terms of low export shares and high deficits over this period (including Italy and Greece) but even by the standards of this group, Egypt has a high fiscal deficit, low private investment, and high inflation.

Nonetheless, the 2004-2010 growth episode stands out in global data. The only countries with similar performances on export and employment growth were Indonesia, Nicaragua, Panama, Singapore, and Uruguay – all cases where trade (including *entrepot* trade) was an important part of the story. However, Egypt does not resemble this group in other respects: it is much less open, and has much higher government expenditure.

- 39. Energy subsidies and inadequate revenue mobilization are the dominant factors explaining the structural deficit. Energy subsidies reached over 7 percent of GDP in 2013/14, more than the combined spending on health, education, and public investment.³² Nevertheless, with a 10 percent gap between tax revenues and spending the narrow revenue base is also an important part of the picture. While the 2004 tax reforms did succeed in broadening the tax base, the full potential of the tax administration capacity that was put in place has not been realized, and a wide range of exemptions and loopholes limit tax buoyancy.
- 40. **Egypt's poor performance in terms of convergence corresponds to an absence of growth accelerations**. While there was considerable macroeconomic volatility as in many emerging markets, it was not characterized by an episode of sustained high growth that could then have been consolidated by avoidance of a crash. As a result, there is no sign of Egypt catching up with upper-middle-income comparators; in fact Turkey, Poland, and Malaysia all have accelerations since 1980 that widened the gap with Egypt. This is consistent with the global pattern where sustained accelerations are relatively rare and difficult to systematically explain, while reversals are correlated with clear policy errors. As a result, an apparently reasonable level of trend per capita income growth does not translate into big jumps up the income ladder.³³
- 41. While matching the long-term trend, growth since 2000 showed noteworthy responsiveness to policy reform. One of the highest and most resilient growth episodes (2004-2010) was followed by a period of exceptionally low and sluggish growth (2011-2013). These growth patterns appear in the context of important reforms put in place between 2004 and 2008,

³² In FY15, the government introduced subsidy reforms that increased administered prices of fuel products by 40 to 80 percent. These reforms, aided by lower international oil prices, led to the energy subsidies bill falling to around 3 percent of GDP and 8 percent of total government expenditures in FY15.

³³ Pritchett and Summers 2014.

including reduction in corporate taxes and simplification of the tax regime, reduced tariffs, strengthening of the business environment, privatization, and exchange rate liberalization. However, the benefits from these reforms were slow to percolate, and growth was further undermined by political uncertainty following the January 25th Revolution. In sector terms, the high growth episode was relatively broad-based, but economic activity remained heavily skewed towards low valued-added sectors and sectors with a limited technological component (the oil and gas sector is an exception) and high capital intensity. The service sector was the fastest growing, reflecting mainly the development of tourism, information and communications technology (ICT), and the Suez Canal. Construction also expanded rapidly during the high growth episode. The largest sector, manufacturing, expanded only at a modest pace. Agriculture exhibited considerable resilience over this period, with some success in developing higher value-added niches (e.g. in horticulture).

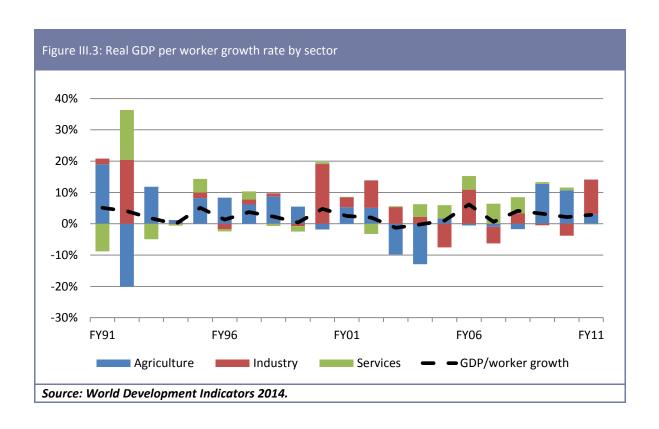
NON-EMPLOYMENT AND INFORMALITY INSTEAD OF TRANSFORMATION

- 42. With middling growth performance, employment has expanded only slowly in Egypt despite low female labor force participation and this has been accompanied by a long trend of worsening job quality. According to the Egyptian Labor Market Panel Survey, the unemployment rate dropped from 11.7 percent to 8.7 percent between 1998 and 2012. However, the fraction of the labor force employed in the informal private sector rose from 30.7 percent to 40 percent while the formal private sector remained virtually unchanged. Thus, it is the informal sector rather than the formal private sector that has been filling the gap left by a shrinking public sector. Between 1996 and 2006, the share of employment in large-scale, formal firms decreased significantly, while employment in micro-enterprises, mainly in the informal sector, increased.³⁴ This trend has mostly been driven by the behavior of young labor market entrants. Young men and women continue to experience high unemployment rates, but young men are to an increasing degree accepting lower-quality informal jobs while young women have begun to drop out of the labor force. Overall, only around one half of the labor force participates in the labor market due to very low female participation rates.
- 43. **Labor productivity (output per worker) has decelerated and its underlying sources have changed.** Labor productivity growth averaged 2.4 percent during 1990-2011, but declined from an average of 2.7 percent during 1990-2002 to 2.2 percent during 2003-2011. During the first period, productivity growth was driven by the movement of labor from low productivity agriculture to higher productivity services while employment in industry remained stable. During the second period, employment in agriculture remained stable while it declined somewhat in services and increased in the smaller manufacturing sector. In this latter period, labor productivity

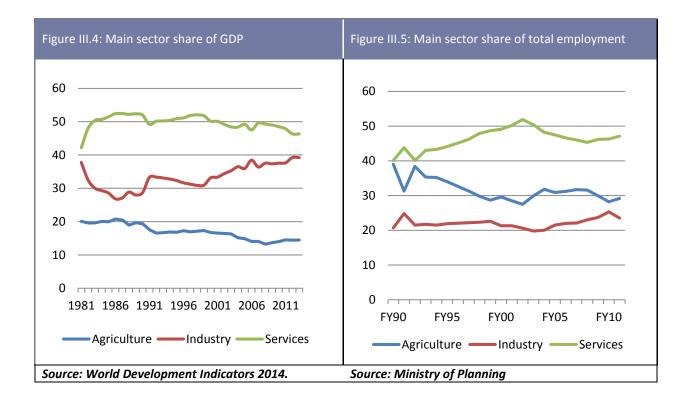
³⁴ From 1996 to 2006, the share of employment in large-scale formal enterprises (over 1,000 employees) decreased from 23% to 16% while in micro-enterprises (1–10 employees) it increased from 62% to 72%; the remainder is accounted for by SMEs. World Bank 2014f.

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growth came from progress within certain sectors, in particular mining, but not from reallocation to higher productivity sectors. ³⁵ While the pattern of structural transformation has seen services—the most productive sector—leading industry, the transformation process in some ways stalled or even reversed with the labor force employed in services declining over 2002-11 and that in agriculture stagnating (Figure III.3, Figure III.4, Figure III.5).



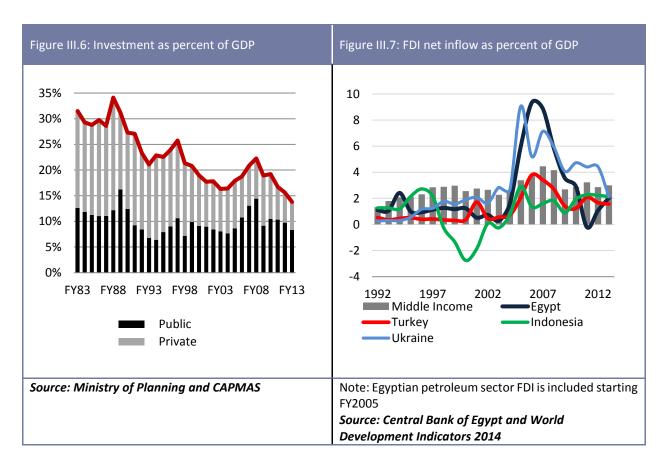
³⁵ See e.g., Morsy, H. et al. 2014. This study attributes low labor productivity growth to limited trade openness, low diversification of exports, and deficient access to finance.



44. Despite numerous policy efforts to promote it, structural transformation did not fully materialize in Egypt. Galal and El-Megharbel (2005) indicate that industrial policies through 1999 did not achieve the goals of structural transformation. They consider two markers of structural transformation: whether product variety increased and total factor productivity improved. From 1980 to 1999, product concentration actually increased (variety fell), total factor productivity scarcely improved, and those industrial sectors that received the greatest assistance exhibited the lowest rates of productivity improvement. They argue that this is not surprising: policy over this period did not particularly target new activities; did not condition assistance to firms on concrete goals, such as export success; left open the possibility that support to firms could continue indefinitely; and supported sectors rather than activities. The period from 2004 to 2011 is typically seen as representing a sharp turn towards a private-sector-driven structural transformation, export growth, and job creation. In 2004–05, the government privatized 87 stateowned enterprises and reduced income taxes, before moving on to simplify customs procedures and business start-up regulations, while continuing to liberalize the financial sector. Policies seemed to focus on new activities (subsidies to exports), and new production technologies (subsidies for modernization), and they were more substantial. However, vast areas of the economy remained closed to foreigners, including aviation and engineering services and heavy industry (energy production, steel and aluminum production, construction, insurance, and fertilizer).

INVESTMENT ACCELERATIONS HAVE OCCURRED BUT HAVE NOT BEEN SUSTAINED

45. Constrained by low domestic savings, investment has been volatile and on a declining path since the late 1980s with two short-lived surges in 1996-1998 and 2005-2008. This reflects a sustained decline in the share of public investments to GDP to 5 percent of GDP in 2014 compared to 19 percent of GDP in the early 1980s (Figure III.6). Private investment has been highly volatile and cyclical, but the average has been very low at around 10 percent of GDP. Furthermore, whatever investment took place was directed towards new capital-intensive activities, with little impact on the overall capital stock (due to low maintenance) or on growth. Investment decisions have been distorted by non-market prices, especially underpriced fuel, energy supplies, and utilities. Public investment has also exhibited a geographic bias in favor of urban and more developed regions and preference for new projects (including recently visible mega projects) at the expense of maintenance of existing capital stock. Furthermore, Egypt has not developed an effective and unified Public Investment Management system based on proper identification of priorities, cost benefit analysis, stable funding, and adequate consideration of maintenance obligations.



- 46. Liberalizing reforms prompted strong FDI inflows during the high growth episode (2004-2008), but inflows reversed following the global financial crisis and domestic political uncertainty following the 2011 revolution. FDI inflows reached 8.5 percent of GDP in FY2007, but declined to 3 percent of GDP in 2010 and further to only around 1 percent of GDP during 2011-13 as political uncertainty took its toll (Figure III.7). Prior to the high growth episode, around two-thirds of FDI inflows into Egypt went to the extractive industries (oil and gas). During the period of high growth, FDI inflows became more diversified, including inflows from sizeable merger and acquisition deals (e.g. selling the Bank of Alexandria and issuing 3G mobile licenses) and a pickup in green field investments. Since then, the petroleum sector share again became dominant, while inflows to other sectors dried out. EU countries have been the largest contributor to FDI inflows, accounting for around 50 percent of total inflows on average, followed by the U.S. and Arab countries (especially Gulf countries).
- 47. The functional income distribution continued to shift towards capital. Much of the growth over the past decade has been captured by higher profits and rents rather than wage income. According to staff calculations using National Accounts data (2000-2008/09), the gross operating surplus of companies rose from 43 percent of GDP in 2000-02 to 50 percent of GDP in 2008 while the compensation of employees declined to around 25 percent of GDP and has remained around that level. Nevertheless, net taxes have been increasing since 2005 as some successes in widening the tax net were achieved.³⁶
- 48. In terms of factor contributions, more than half of the growth since 2000 has been accounted for by capital accumulation, but total factor productivity growth (TFP) surged during the policy reform and high growth episode of FY2006-2010. During the past 10 years (FY2004-2013), growth was mainly driven by capital, followed by labor and TFP. On average, capital contributed 3.1 percentage points annually to GDP growth during the past decade (almost 80 percent of overall growth) while labor and TFP growth contributed 0.8 percentage points and 0.5 percentage points, respectively. During the growth spurt (FY2006-2010), capital continued to be the main contributor to growth (2.8 percentage points), whereas the contribution of TFP increased to 1.8 percentage points surpassing the average labor contribution of 1.2 percentage points. This indicates that the economy was capable of more dynamism as some constraints on investment were unlocked by reform.

TRADE UNDERPINNED THE HIGH GROWTH EPISODE BUT PROGRESS QUICKLY EVAPORATED

49. Egypt's external trade expanded rapidly from the early 2000s but reverted in the aftermath of the global financial crisis and the subsequent internal disruptions. After a setback in trade openness in the 1990s, Egypt's witnessed a sustained upsurge during 2000-2008 with

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³⁶ Fuel subsidies are not deducted from net taxes implying that these are overestimated, with the gross operating surplus (the residual from the generation of income account) correspondingly underestimated.

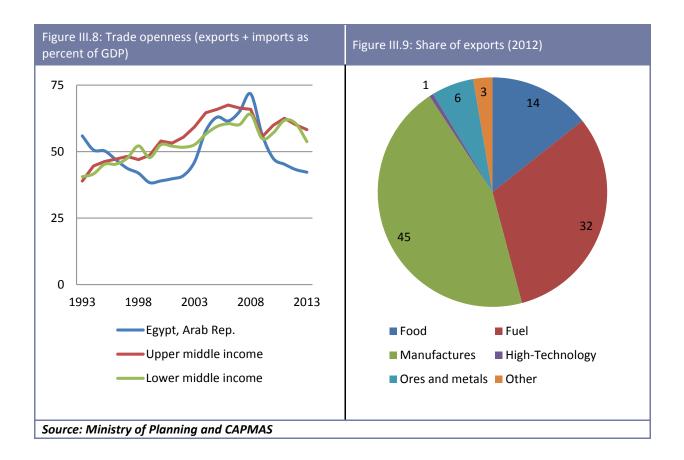
the share of exports and imports of goods and services to GDP reaching almost 72 percent of GDP in 2008 compared to 39 percent of GDP in 2000 (Figure III.8). Both exports and imports expanded rapidly, but the trade balance remained negative throughout the period. While merchandise trade proved to be relatively resilient in the context of the following external and internal shocks, service exports (mainly Suez Canal and tourism) suffered badly and total trade (exports and imports) reverted to its low level recorded at the turn of the century. With the accumulation of arrears to foreign oil firms operating in Egypt and the presence of questionable deals prior to 2011, new upstream investments and exploration for oil and gas halted, leading to a notable decline in production.³⁷ Yet domestic consumption continued to grow, especially due to informal and smuggling activities.³⁸ This had a big impact on net hydrocarbon exports. The reversion in trade openness indicators should not be viewed as a reflection of setback in policies or direction nor due to post-2004 policies, but rather due to exceptional events and developments since 2011.

50. Egypt's export basket is undiversified and consists mainly of low value-added products. Manufactured goods made up only around 36 percent of Egypt's total exports during 1993-2012 compared to a share of more than 50 percent for lower-middle-income countries and almost 70 percent for upper-middle-income countries. More strikingly, the share of high tech exports in Egypt's depressed manufactured exports base has been negligible (below 1 percent) over the past 20 years compared to 12 percent and 19 percent for lower and upper middle-income countries, respectively (Figure III.9).

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³⁷ Ministry of Petroleum and Ministry of Electricity and Renewable Energy

³⁸ Ministry of Petroleum and Ministry of Electricity and Renewable Energy

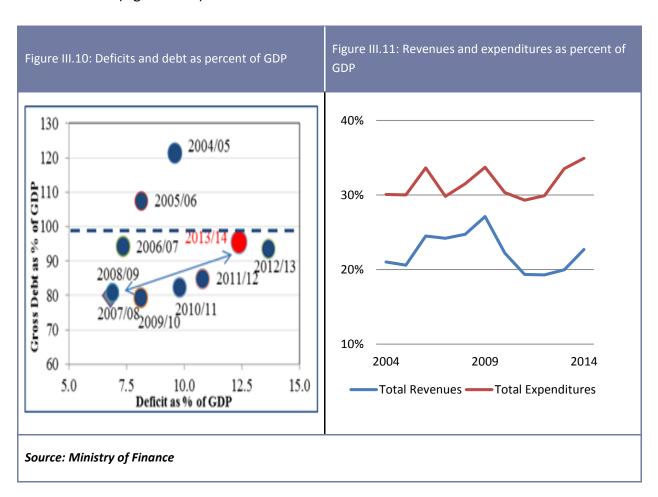


- 51. Egypt has relatively diversified export markets, but with Europe as the largest single trading partner the Eurozone crisis has compounded the country's difficulties. European countries have been Egypt's main export market over the past 20 years with a stable share of around 40 percent of total merchandise exports. The U.S. has been the second most important market with an average share of 28 percent of Egypt's exports (but with a sharp decline during 2011-2013 to 13.7 percent), while Arab countries were third with an average share of 13 percent during 1990-2013 (rising to almost 20 percent during 2011-2013). The share of Egypt's exports to African and Asian countries has hovered around 15 percent during the period of study.
- 52. **Behind-the-border trade obstacles are substantial**. Despite some improvements during the 2000s, traders still face challenges primarily associated with inspection agencies, domestic transport, and most importantly logistics and distribution centers. Egypt's ports are geographically fragmented. The Government of Egypt established several free-trade zones and industrial zones over the 1990s and 2000s. However, these zones suffered from lack of infrastructure and utilities, excessive red tape measures, modest multimodal systems, and an absence of efficient trade facilitation measures, among other issues. The political instability associated with the 2011 revolution caused a deterioration of trade conditions. The problems with security during 2011-2014 also increased transportation risks, resulting in extra surcharges to protect the consignments from theft. It also resulted in the congestion at the ports further

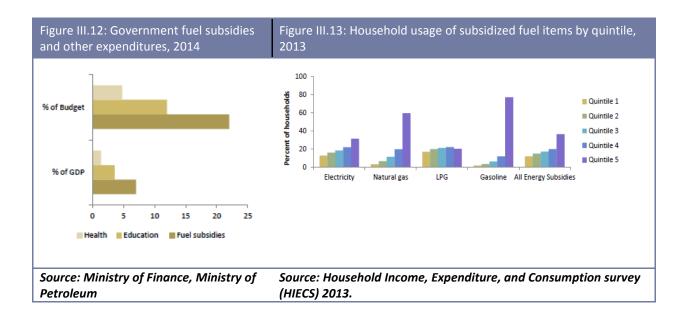
increasing trade logistics costs. Lower export activity and tourism reduced air and maritime traffic, so airlines and shipping lines increased the costs of transporting exports. Moreover, shipping lines stopped adhering to their announced schedules of departure due to the lack of sufficient uploaded containers, particularly damaging exporters of perishable goods.

FISCAL AND MONETARY POLICIES HAVE SQUEEZED PRODUCTIVE SPENDING AND TRADE

53. Fiscal policy has been characterized by a large structural deficit and a tendency to undertake countercyclical fiscal expansions through permanent spending measures in downturns, resulting in unsustainable debt accumulation. The fiscal deficit has averaged 8 percent of GDP since 2000 reflecting both high spending and low revenues. The deficit rose to more than 14 percent of GDP in 2013 in tandem with the sluggish growth in the aftermath of the revolution. With limited access to grants (with F12-FY14 an exception) and international capital markets, Egypt has relied on domestic short-term financing (and more recently large exceptional inflows from Gulf countries), and public debt has been rising rapidly, reaching almost 97 percent of GDP in 2014 (Figure III.10).



54. Structurally high spending reflects very costly and distortive universal energy subsidies, spending on which exceeded the combined spending on health and education in FY14 and amounted to more than twice the level of public investment. Energy subsidies have risen steadily over time, reaching over 7 percent of GDP in 2013/14, more than the combined spending on health, education, and public investment (Figure III.12).³⁹ They became the main source of the large fiscal deficit and the unsustainable rise in the public debt burden and crowded out productive spending on human and physical capital. Data suggests that the energy subsidies were ineffective in redistributing income with the largest share captured by higher energy consuming higher income groups. The highest income quintile received about 60 percent of all energy subsidies in 2012/13 (Figure III.13). Even more importantly, these subsidies have held back the emergence of a dynamic, employment-intensive economy, a more productive agricultural sector, and a better managed urbanization process. Energy subsidies encourage energy-intensive production, which also tends to be relatively capital intensive, thus discouraging labor and employment and adversely affecting productivity and growth of private sector firms. They also bias production within sectors towards larger, older, and less employment-generating firms.



³⁹ Energy subsidies are further underestimated by about 3 percent of GDP as domestically produced oil provided to EGPC is priced at zero and not properly accounted for. Post-tax subsidies that take into account lower taxes on energy products and negative externalities are of course even higher. While Egypt's subsidy level is around the average for the MENA region (home to one-half of the global energy subsidies), it is high among the oil importing countries in the region.

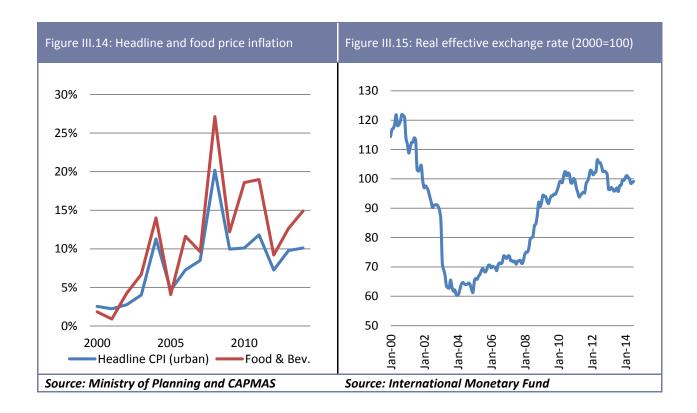
- 55. Energy subsidies have discouraged private investment in renewable energy exploration and production, limited the incentive to invest in energy-efficient production, and skewed firms away from labor-intensive production. They have skewed the limited government investment towards meeting increasing energy demand and towards energy-intensive consuming sectors such as the transportation sector at the expense of the social sectors, internal trade, and agriculture. This has led to increasing supply bottlenecks. Starting in 2011, the country began experiencing frequent electricity supply interruptions for the first time in decades.⁴⁰
- 56. Egypt has launched an ambitious energy subsidy reform initiative aimed at liberalizing energy prices over the coming five to ten years. While smaller steps were taken in 2012-13, mainly to raise prices for energy-intensive sectors, broader price increases for both firms and households were implemented in July 2014 reducing subsidies by 30-35 percent and yielding fiscal savings of around 2 percent of GDP. The recent decline in global oil prices will further reduce subsidies in Egypt and presents an ideal opportunity to move forward on this agenda.
- 57. **Furthermore, through 2014, the wage bill has been high and rising, the interest burden increasing rapidly, and food subsidies sizeable.**⁴¹ This, along with a narrow tax base and poor collections, has reduced the fiscal space for spending on human and physical capital development as well as on properly targeted social safety nets programs, thus negatively impacting growth and poverty alleviation
- 58. Monetary policy has been geared towards nominal exchange stability; in the absence of consistent fiscal policies, external competitiveness has rapidly eroded. Inflation has been volatile but persistently high due to high exposure to commodity price volatility (due to the import dependence of core consumption items) and supply-side bottlenecks (including as a result of under-spending on infrastructure such as roads and storage facilities), exacerbated at times by monetary financing of high fiscal deficits and large public sector salary increases (Figure III.14). High inflation has adversely affected the poor and vulnerable, especially those with no savings or limited access to the banking system. With the general pursuit of nominal exchange rate stability, Egypt has experienced prolonged periods of real exchange rate overvaluation followed by occasional large corrections. This cycle is illustrated in Figure III.15: sharp real depreciation in the early 2000s followed by modest appreciation in the mid-2000s during the high growth episode. Then high deficits and inflation contributed to sharp appreciation, hurting the traded goods sector.

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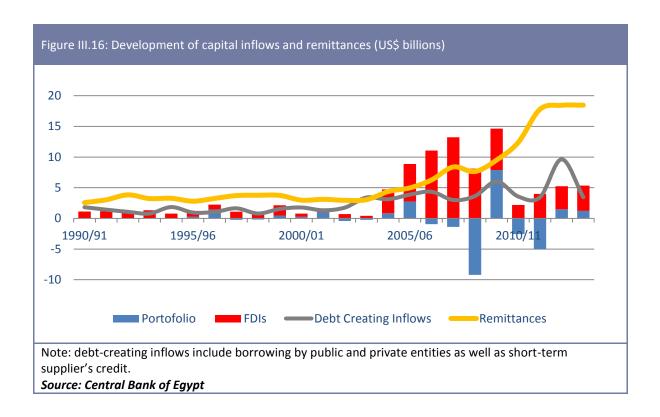
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⁴⁰ These occurred up to 14 times in a month in 2013-2014, leading to massive losses by firms. SMEs have reported average losses of 3.2 percent of annual sales. At present, firms in Egypt must wait an average of 77 days to secure new access to electricity supply (four times the time required in Latin America and East Asia and the Pacific). The supply-demand gap was estimated to reach around 5.3GW in FY14.

⁴¹ Some of the reforms in FY15 have served to reduce the food subsidy bill.



59. Egypt has experienced robust and resilient remittances, but these have been dependent on buoyant conditions in the GCC and on crisis-induced support that will be difficult to sustain. Remittance inflows accelerated strongly during the high growth episode of the 2000s and have remained resilient in the wake of the severe global and domestic turbulence since 2008. In particular, high oil prices since 2010 have supported high public spending in the GCC, which in turn has underpinned the expatriate labor market. Expatriates also seem to have increased remittances in response to difficult economic conditions in Egypt during 2011-2014. Other balance of payments capital inflows declined sharply except for large borrowing on favorable terms from neighboring countries, first Qatar, Libya, and Turkey and later (after June 2013) from Gulf countries (Figure III.16).



60. Macroeconomic policies have not been well coordinated or properly anchored in a medium-term macro-fiscal policy framework. As discussed, monetary and exchange rate policies have not been able to deliver high growth and price stability with fiscal policy operating largely independent from, and at times counter to, these objectives. Net international reserves have been allowed to fluctuate significantly to support exchange rate objectives, at times being largely depleted as happened when capital flowed out in the aftermath of the 2011 revolution. With policies previously being short term, uncoordinated, and unable to anchor expectations, Egypt has lacked a proper medium-term fiscal and macroeconomic framework consistent with its broader macroeconomic objectives and its need for fiscal and debt sustainability. Against this background, it is not surprising that Egypt's ranking in the World Economic Forum's Global Competitiveness Index has been poor and has deteriorated in the light of the financial crisis and subsequent political turmoil (Table III.1). While Egypt's rankings improved in the wake of the important reforms in the mid-2000s, they slipped by 47 places during from 2006-2007 to 2013-2014 to 118 out of 148 countries. This reflects to a significant extent the macroeconomic environment, where the ranking slipped 25 places to 140, largely due to the poor fiscal and inflation outcomes.42

⁴² In March 2015, the government of Egypt proposed an ambitious macroeconomic strategy for the period 2015-2019 with a consistent medium-term macroeconomic framework and explicit numerical targets. These include reducing the budget deficit to 8-8.5 percent of GDP by FY19 and the public debt to 80-85 percent of GDP and



	Macroeconomic environment		Gross national savings	General government debt	Inflation	
			% GDP		Annual %	
Year					change	
2006-2007	115	119	65	109	106	
2007-2008	124	127	71	61	116	
2008-2009	125	126	70	122	124	
2009-2010	120	128	80	101	121	
2010-2011	129	107	108	135	119	
2011-2012	132	132	92	133	119	
2012-2013	138	142	96	128	122	
2013-2014	140	146	108	122	129	
Change in Ranking (2007-14)	-25	-27	-43	-13	-23	

FINANCE HAS STRUGGLED TO PLAY A CATALYTIC ROLE

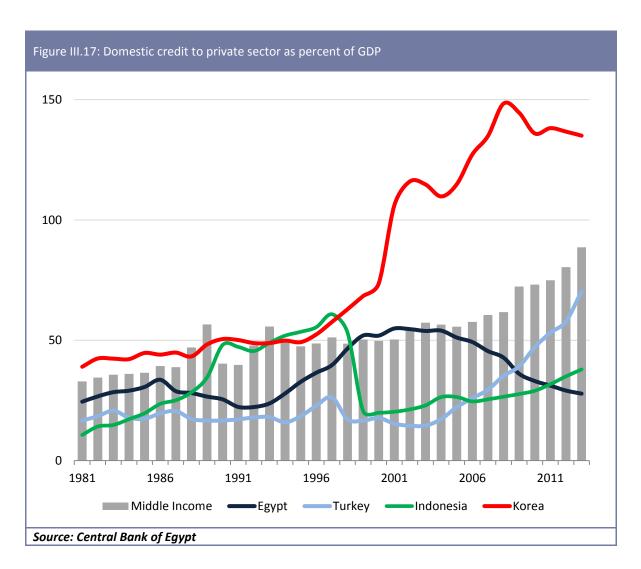
61. The Egyptian banking sector suffers from inadequate although improving competition, weak financial intermediation, and concentration of lending to large firms and the government. An important reform program was started in 2004 with the consolidation, privatization, and recapitalization of the banking sector. The number of banks was reduced from 57 to 40 with an increase in the share of private sector banks (partially owned by foreign banks). State-owned banks were also subject to financial, operational, and institutional restructuring leaving a relatively stronger, more competitive, and resilient sector.⁴³

62. **Fundamental obstacles to the intermediation of domestic savings into productive investments have not been resolved**. Bank credit to the private sector has declined steadily since the early 2000s and has remained largely short term while lending to the government (mainly in the form of purchases of government securities) has accelerated, increasing six-fold over the past 10 years (Figure III.17). During the global financial crisis, significant capital outflows stalled bank deposit growth while the banking sector continued to increase credit to the government, thus exacerbating the private sector credit crunch. ⁴⁴ While there has been a certain degree of crowding out of the private sector, private sector credit has also been hampered on both the demand side (especially during the recent downturn) and the supply side due to the absence of

⁴³ World Bank 2014j.

⁴⁴ Bank credit to the private sector has generally mirrored developments in deposits with NFAs playing a countercyclical role (increasing during periods of capital inflows and declining during periods of capital outflows), except during the post-revolution period). Herrera et al. 2012.

a proper institutional framework, including audited financial statements, credit registries, collateral, and so forth. The ease with which the issuance of Suez Canal bonds was financed in August 2014, including from private cash holdings, bears testimony to the importance of these supply-side constraints above and beyond inadequate liquidity.



63. The revolution exacerbated pre-existing constraints to SME finance. SMEs suffer disproportionately from low financial intermediation, and financial inclusion is very low by international standards. A recent Investment Climate Rapid Assessment Survey carried out in 2012 revealed that only 11 percent of micro enterprises and 17 percent of small enterprises had bank loans compared to 38 percent of large enterprises. Also, more than 70 percent of surveyed firms raised concerns regarding the surge in the cost of finance after the 2011 revolution. As a result, these firms often resorted to alternative sources of finance, including personal savings or inheritances to raise capital. Financial inclusion is limited and lagging in Egypt with only 10 percent of households having access to banks and only 7 percent of women possessing a bank

account. This makes Egypt among the bottom 10 countries in the world in terms of financial inclusion. The agricultural sector captures only 1 percent of total bank lending, contributing to large urban-rural disparities. The government has been pursuing measures to promote financial inclusion including a new microfinance law in 2015.

EXPLAINING THE SYMPTOMS: INCLUSIVE VERSUS EXTRACTIVE INSTITUTIONS

- Global experience suggests that there is a strong link between sustained economic growth and inclusive economic institutions. These include secure property rights, rule of law, markets and state support (public services and regulation) for markets, relatively free entry of new businesses, enforcing contracts, access to education, and opportunity for the great majority of citizens. This perspective sheds light on one of the puzzles of Egypt's long-term growth performance: why the presence of some elements of structural transformation—an increased export orientation, bursts of investment, and an exodus from agriculture—did not translate into sustained high growth. In essence, inclusive economic institutions create incentives for investment and innovation and a level playing field. The converse—inimical to growth—is extractive economic institutions: those designed by the politically powerful elites to extract resources from the rest of society.
- 65. How did other countries carve out a more decisive role for inclusive institutions? Egypt's high growth episodes and its capacity for positive trend growth indicate that inclusive institutions were present and occasionally drove the policy agenda, but that they never gained sufficient momentum to overcome deeply embedded extractive institutions. From an international perspective, one important factor in elevating one over the other appears to be the nature of response to economic and social crisis. Furthermore, it appears to be the case that even governments that begin as a fragile coalition of factions and elites with risks of extractive motivation can initiate a virtuous circle in which growth strengthens the base for inclusive economic institutions.
- 66. The Korean example points to the importance of a meritocratic bureaucracy empowered to enforce credible incentives on the private sector. In Korea, a democratic government in the 1950s introduced some important reforms, notably regarding access to primary education and land redistribution. By 1961, economic stagnation, a student revolt, and tensions with donors led to an authoritarian government with seemingly little room for maneuver. Because of Korea's subsequent success and its heterodox policies, it is not easy to discern or attribute a decisive role for specific policies, but there is some consensus around important elements. ⁴⁶ A key decision of the government was to shelve (under American pressure) an ambitious import-substitution plan based on a push into heavy industry and to

° Lim 2011.

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⁴⁵ Acemogulu and Robinson 2012.

⁴⁶ Lim 2011.

instead support entry into light manufacturing by the private sector. Private firms had severe problems with access to credit, which were overcome by government-guaranteed loans from foreign banks to the companies. Government monitoring of the firms that received credit access mitigated the risk of moral hazard, with export performance providing an observable signal and incentive around which firms could organize their activities. The capacity of the central bureaucracy to keep this system of preferential credit access focused on fundamentals of trade performance rather than appropriating gains for itself was vital. This in turn appears related to the rise of a meritocratic culture in the administration, which had not been present in the 1950s.

- 67. A reinforcing dynamic between growth and political inclusion copper-fastened economic gains. From its initial take-off through to its ultimate attainment of high-income status, the Korean development experience was characterized by high volatility. Furthermore, the policies and institutions had to adapt with the changing capacity of the various actors. In the early 1960s, the military was the best-organized segment of society and the private sector and unions were relatively weak, so a disciplined government could effectively manage a development push while placating workers with the prospects of steady jobs and wage progression. With the successes of development, private sector capacity rapidly grew and public expectations for inclusion rose, reinforcing the successful elements of development policy.
- 68. **Export growth, education, and rural investments likewise supported sustained growth in Indonesia, despite governance problems**. Real GDP per capita grew at 4.7 percent between 1967 and 1996, among the longest sustained high growth episodes in the modern era. Since the 1997 crisis is seen as the definitive example of crony capitalism, controversy remains about why the country's overall development trajectory from the dismal prospects of the 1960s was so successful. But again, a government with a seemingly narrow base and heavily focused on security was able to unlock a developmental orientation. The identification of the government with privileged support to Sino-Indonesian conglomerates became a political liability, but substantively the policy mix is very similar to Korea, namely sizable government incentives for export development benchmarked against performance, a major push on access to education, and high public expenditure in the agriculture sector. Regarding the crony firms, connections did not guarantee escape from competition, either with each other or foreign competitors, unlike in MENA.⁴⁷
- 69. The case of Turkey shows that when, as in Egypt, economic reform and political change have been on overlapping tracks it can take a number of attempts before inclusive institutions gain a strong foothold. Amid a post-war history of abrupt changes in political and economic direction, a decisive change in policy occurred in 1980. A previous policy mix of import substitution of intermediate and consumer goods had led to repeated fiscal and balance of payments strains and lack of competitiveness. A series of IMF stabilization programs had been accompanied by "too little, too late" fiscal adjustment. A change of government precipitated by mounting civilian unrest was accompanied by an influential (albeit elite) consensus that economic reform was essential to impart some dynamism to the economy and relieve labor

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⁴⁷ World Bank 2014a.

market pressure. With policy implementation undertaken by a like-minded technocracy, this initiated the phase of export-led growth enabled by increased trade integration with the European Union.

WEAK INSTITUTIONS HAVE PRODUCED UNSATISFACTORY POVERTY OUTCOMES

- 70. Egypt's macroeconomic profile and the absence of effective social safety nets have limited the ability of growth to benefit the less well off. In general, persistent inflation and regressive subsidies would be expected to blunt the impact of GDP growth on wellbeing. The squeeze on fiscal space from interest payments and subsidies has constrained health and education spending which would benefit the poor. And exposure to international commodity prices through dependence on imports of food and fuel is a source of particular risk to those with fewer buffers to absorb such shocks. Although the initial wave of growth following the 2004 reforms boosted job creation, Egypt then faced a series of economic shocks that were particularly harmful to the poor, including the global food and financial crisis, which in the absence of effective and integrated social safety nets resulted in a sharp increase in poverty and extreme poverty.
- 71. Between 2005 and 2010, Egypt experienced a persistent increase in poverty headcount rates, as well as further deterioration in the welfare of the poor despite high growth rates. Egypt's headcount rate increased from 19.6 to 24.3 percent. Rural areas fared worse: poverty rates went from 26.8 to 32.7 percent (Table III.2). Additionally, the welfare of the poor worsened: a poor individual was on average 261 LE below the poverty line in 2005, but in 2010, this gap had increased to 281 LE (in real terms).⁴⁸ The severity of poverty (as measured by the poverty gap squared) increased by 0.4 suggesting a further increase in the inequality among the poor.

Table III.2: Overall poverty												
	Poverty Headcount Rate			Average Poverty Gap			Pove	Poverty Gap Squared				
	2005	2010	Change	2005	2010	Change	2005	2010	Change			
Urban	10.1	12.8	2.7	1.8	2.3	0.5	0.5	0.6	0.1			
Rural	26.8	32.7	5.9	5.0	6.6	1.6	1.4	2.0	0.6			
Total	19.6	24.3	4.7	3.6	4.8	1.2	1.0	1.4	0.4			

Notes: Poverty rates based on the lower poverty line. Rates for 2010 are based on 2005 methodology and may differ from official estimates.

Source: HIECS

⁴⁸ These results are obtained by dividing the average poverty gap by the poverty headcount ratio and multiplying the result by the average annual poverty line in 2005 prices (1423 LE).

AN APPARENT DECLINE IN POVERTY AFTER 2010/2011 SHOULD BE SEEN IN THE CONTEXT OF FOOD INSECURITY

- 72. Preliminary analyses using 2012/13 data suggest that increases in real expenditures may have led to a decrease in the headcount poverty rate after 2010. The estimated decrease seems to be the result of three factors. First, the expenditure distribution of Egyptian households has consistently shown a large concentration of households around the poverty threshold. This leads to high churning (i.e. changes in poverty rates) resulting from even small changes in prices or expenditures. Second, in regions with highest poverty rates, changes in household expenditures seem to have outpaced growth in prices and specifically growth in food prices. The opposite was true in areas with lower poverty rates such as the Metropolitan area. Third, decreases in poverty rates are found in regions with high concentrations of poor people (i.e. Upper Egypt) where food shares are typically relatively high and thus changes in food prices are more likely to push households above or below the poverty threshold. These findings suggest that poverty changes after 2010 may have resulted from improvements in food security.
- 73. **Due to methodological limitations that call for caution in interpreting post-2010, this report restricts more detailed analysis to the 2005-2010 period.** The methodology used for poverty measurement in Egypt has been adapted several times in recent years. ⁴⁹ These adaptations, including how the poverty line is defined and repeated changes in the reference standard of living, require an in-depth analysis to confidently understand recent poverty trends. The Poverty Diagnostic section that follows focuses on the period 2005-2010 and avoids drawing potentially misleading representations of the evolution of poverty in Egypt. A thorough assessment of the poverty methodology will be one of the key tasks of the collaborative Poverty Assessment between the World Bank and Government of Egypt in FY15 (see Box III.2).

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⁴⁹ A detailed description of the methodology is included in Annex II.

Box III.2: Assessing recent poverty trends in Egypt

The current methodology to estimate poverty in Egypt was defined in 2005 and largely follows the Cost of Basic Needs approach. The poverty line is set based on the estimated cost for a household to meet its basic food and nonfood needs, with the reference point for basic needs being the observed consumption patterns of low-income households in Egypt, specifically the second poorest quintile. As in most countries, the poverty line accounts for regional differences in the cost of basic food and nonfood items.

There are two unusual features in the methodological approach to estimate poverty in Egypt. The first characteristic is the calculation of household-specific poverty lines based on the detailed age and sex composition of each household. A second non-standard feature of Egypt's poverty lines is that the reference food poverty basket is updated frequently: it was updated in 2010/11 and again in 2012/13. Updating the food basket is appropriate when consumption patterns of poor households change, for example, in response to changing relative prices of basic foodstuffs. However, updating the food basket also runs the risk of changing the reference standard of living associated with the poverty line, and therefore leads to inconsistent poverty comparisons over time.

Preliminary analysis of the 2012/13 HIECS data by the team for this report—applying a close approximation of comparable methodologies over time—indicates that the poverty headcount ratio has fallen from 24.3 percent in 2010/11 to 21.4 percent in 2012/13. Notably, these differ from the official government figures that show an increase from 25.2 percent to 26.3 percent, based on non-comparable poverty baskets.

Changes in food prices, large shares of food expenditures and significant concentrations of households around the poverty threshold may help explain the estimated decrease in poverty. Further investigation is required to confirm or refine the poverty estimate for 2012/13, and to better understand the evolution of poverty and prices. This will be a central part of the ongoing Egypt Poverty Assessment. This assessment is expected to analyze HIECS disaggregated consumption data from 2012/13 as well as data from the longitudinal section not currently available to the World Bank.

POVERTY DIAGNOSTICS

74. Increases in poverty headcount rates during the last decade were experienced across the country with regional welfare disparities being an enduring feature. The highest poverty rates are found in Upper Rural Egypt: in 2005 the headcount rate was 39.1 percent, but by 2010, half of the population in the region was considered poor.⁵⁰ Upper Urban Egypt has the second

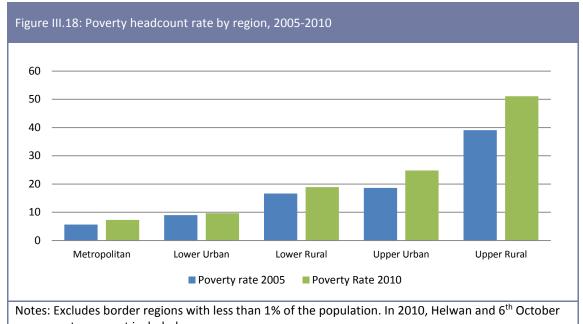
⁵⁰ These regional differences in poverty headcount rates were also found for the years 2008/09 (World Bank 2010).

highest poverty rates. The Metropolitan region (Cairo, Alexandria, Port Said, and Suez) experienced the lowest poverty rate (5.7 percent) in 2005, though poverty had also increased by 2010. Thus, while poverty is particularly high in Upper Egypt, even core metropolitan parts of the country experienced an increase in poverty (Figure III.18).

- 75. Regional disparities in poverty headcount rates were accompanied by significant regional differences in the concentration of the poor population. The poor population is overrepresented in Upper Egypt. While Upper Rural Egypt accounted for a quarter of the population, 50.6 percent of the poor in Egypt lived in the region in 2005 and still over 40 percent did so in 2010. Lower Urban Egypt had the smallest concentration of poor households in 2010, accounting for just below 5 percent of the poor and 12 percent of the population.
- 76. Less well-off households experienced decreases in consumption between 2005 and 2010, but the decrease in welfare was generalized with sharper declines in the upper half of the distribution. When looking at the annual growth rate experienced by individuals at different points of the consumption distribution, it is evident that the bottom half of the distribution experienced very similar drops in consumption at around 1.3 percent (Figure III.19).⁵¹ On the other hand, annual growth rates were lower in the upper half of the distribution and tended to be worse for the richer percentiles. Thus, while welfare fell across the distribution, the lower parts of the consumption distribution fared relatively better than richer households.⁵² Urban households, who have typically higher incomes than rural households, also seem to have performed worse in terms of annual growth rate in consumption in the period.

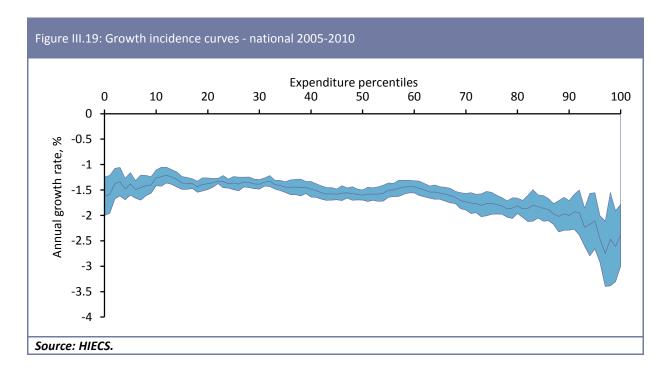
⁵¹ A similarly shaped Growth Incidence Curve was found for the period 2005-2008 (El Laithy 2011), suggesting that the observed drop in real expenditures is part of a long term trend. It is notable that this trend is at odds with the evolution of GDP for the same period. Further analysis of this discrepancy will be explored in the Poverty Assessment for Egypt in FY15.

⁵² Calculating the Growth Incidence Curve requires estimating the consumption of all households in the survey in real terms. That is, the observed consumption of households in different periods in time has to be adjusted to eliminate price differences that occurred between the periods analyzed. Different approaches to deflate the consumption may yield different GICs. See Annex II for a more detailed discussion.



governorates are not included.



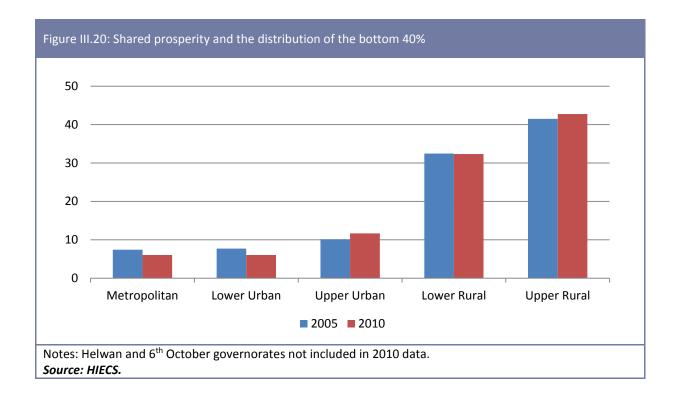


77. Relative changes in consumption across the distribution contributed to keeping the Egyptian Gini Index for consumption low during the period preceding the 2011 revolution. At the same time, people's perceived status and inequality worsened. The Gini Index for Egypt in 2008/09 was estimated to be 32-34 percent. This estimate was lower than the Gini from previous years and was found to be among the lowest in the world and among countries with similar GDP

per capita as Egypt. In contrast, perceptions of life worsened among Egyptians between 2000 and 2008. Compared to 2000, individuals in 2008 were more likely to identify themselves as belonging to a lower social stratum, to feel poorer, and to be more averse to income inequality. More individuals were also found to be unsatisfied with their financial and life situation. This implies that inequality of outcomes, such as household consumption, falls short of capturing perceptions of welfare and expectations of the population. In setting priorities for the country, it is thus important to focus not mainly on reduction of inequality, but expanding the growth base, providing opportunities for the less well-off and marginalized groups and assuring inclusive growth.

- 78. The consumption growth of the bottom 40 percent (shared prosperity) was negative for Egypt in this period, though these households fared relatively better with regards to households in other parts of the distribution. Individuals in the bottom 40 percent of the consumption distribution experienced an annual income growth rate of -1.3 percent between 2005 and 2010. Meanwhile, the general population experienced an -8.4 percent decrease in their average consumption per capita—an annual growth rate of -1.7 percent.
- 79. Individuals and households in the bottom 40 percent are spatially concentrated in the rural regions of Egypt. In 2005, over 70 percent of households who belong to the bottom 40 percent of the consumption distribution was located in rural regions of Egypt (Figure III.20). The region with the largest concentration was the Upper Rural region hosting 41.5 percent of the population belonging to the bottom two-fifths of the distribution. In 2010, 32 percent of households in the bottom 40 percent lived in Lower Rural Egypt, but Upper Rural Egypt was host to the largest share of vulnerable population.

⁵³ Verme et al. 2014

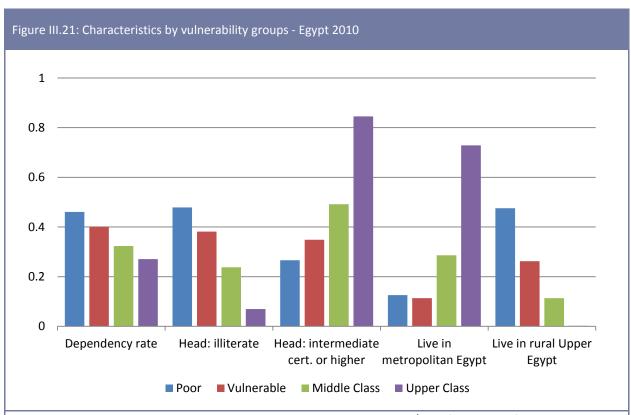


- 80. The similarity in demographic, economic characteristics and spatial distribution of the poor and the bottom 40 percent population suggest that the goals of reducing poverty and building shared prosperity are congruent and similar policies could address both. In both 2005 and 2010, the poverty status of a household seems to have been related to a similar set of characteristics as those from households in the bottom 40 percent. For instance, poor households as well as households in the bottom 40 percent tend to be larger and concentrated in Upper Rural Egypt. Also, households in these groups tend to have heads who have lower education levels or who are less likely to be employed in the public sector. These results may hint that policies aimed at improving the welfare of the Egyptian poor may broadly apply and help increasing the welfare of the bottom 40 percent as well.
- 81. Policies targeting middle-income households (such as the stimulus spending in 2013) will have limited effect in reducing poverty or boosting shared prosperity. The Egyptian middle-class shares more similar traits with rich households than with poor households and tend to be located in the top half of the consumption distribution. As an illustration, consider four subgroups in the Egyptian population: the poor, the vulnerable, the middle class, and the upper class. Poor households are defined as those with expenditures below US\$2.24⁵⁵ a day and vulnerable

⁵⁴ In fact, the determinants of the likelihood of belonging to the bottom 40 percent were found to be quite similar as the determinants of the probability of being poor (see Annex II).

⁵⁵ This is a transformation of the average poverty line per person per year for 2010 (3080 LE) to US\$ in 2005 PPP.

households have daily expenditures between US \$2.24 and US \$2.75. The middle class includes all households who have a daily per capita expenditure between US \$2.75 and US \$10 a day in 2005 purchasing power parity (PPP). The upper or rich class has daily expenditures above US \$10 a day. ⁵⁶ Based on these thresholds, the population is thus distributed as 26.4 percent poor, 18.4 percent vulnerable, 52.3 percent middle class, and 2.8 percent upper class (Figure III.21). The middle class shows lower dependency rates than the average poor or vulnerable household. Households in the middle class are also less likely to be headed by an illiterate individual or live in the Upper Rural region. Roughly half of middle class households are headed by an individual with at least intermediate educational attainment, compared to just over a quarter of poor households. In addition, almost a third of middle-class households live in the Metropolitan area compared to only 5 percent of poor households. Finally, since the upper class includes less than 3 percent of the population, the middle class (approximately 50 percent of the population) is actually situated in the top half of the distribution.



Notes: Poor households have a daily expenditure per capita lower than US\$2.24 (in 2005 PPP), vulnerable households spend between US\$2.24 and US\$2.75, middle class households spend between US\$2.75 and US\$10, and upper class households spend above US\$10 a day. Metropolitan region includes Cairo, Alexandria, Port Said, and Suez.

Source: HIECS

⁵⁶ The lower bound of the middle class is the associated daily expenditure of the group of households that yielded a median predicted probability of being poor of 10 percent. The upper bound of the middle class was obtained from Banerjee and Duflo (2008). For more details see Annex II.

- 82. Certain characteristics of the Egyptian economy explain the contemporaneous GDP growth and increase in poverty rates between 2005 and 2010. One key aspect is the large share of the population at high risk and vulnerable to falling into poverty even during periods of growth. These dynamics were made clear in a longitudinal analysis of household data (HIECS) during 2008. In this year, the Egyptian economy was growing and poverty estimates from the first months of the year showed a decrease in the poverty rate (18.9) with respect to that of 2005 (19.6). However, as data from later months became available, additional estimates that included the months following the 2008 food price crisis clearly showed an increase in poverty with respect to the previous round: the headcount rate for the whole period was 21.6. This result suggests that the gains made from the growing economy were eliminated by the crisis and highlights the vulnerable state of many Egyptian households. While the economy continued to grow between 2008 and 2011, this growth was also accompanied by demonstrations and political uncertainty. In fact, the 2010/11 survey was in the field during major manifestations of the crises. The extent to which this uncertain period disproportionately affected the less well-off may help explain the decrease in observed welfare.⁵⁷
- 83. Egypt has shown a clear divergence in consumption as measured by National Accounts and household surveys, but the composition of the GDP and labor market indicators suggest there are genuine reasons for why the observed economic growth in Egypt did not lead to a decrease in poverty between 2005 and 2010. First, an analysis of National Accounts provides some evidence that firms' profits played a larger and increasing role (as a percent of the GDP) than that of compensation of employees in the years after 2005. Also during this period, GDP growth was concentrated in sectors that are not labor intensive (i.e. extractive, insurance), and at the same time the share of informal, irregular and low quality jobs increased. Thus, a disadvantageous environment with stagnant wages may have prevented welfare improvements despite overall growth.

⁵⁷ Currently a more detailed welfare analysis for the 2010/11 period is unavailable due to lack of access to the panel component of the HIECS. Planned work for the Poverty Assessment for Egypt will attempt to address this issue (see **Box III.2**).

⁵⁸ MJBJ

IV. Risks to Sustainability

Egypt's highly concentrated population has had serious environmental implications and 84. rapid population growth will put further strain on the country's natural resources unless there are significant improvements in the quality of environmental management. Air pollution in Cairo regularly exceeds the WHO limits and the per-capita availability of fresh water is well below the cutoff for water scarcity. In addition, a substantial amount of the most fertile land in the Nile Delta has been converted into informal settlements growing around its major cities. These problems reflect poorly enforced regulations, the absence of proper and qualified institutions, and the lack of a coherent plan to deal with urban growth. Improvements in overall public governance and the implementation of sector-specific reforms are thus key elements of a strategy to mitigate future threats to public health and food supply from environmental degradation.

ENVIRONMENT, ECONOMIC GROWTH, AND POVERTY

- 85. Egypt's overall wealth has not been managed sustainability over the past decade in large part due to environmental degradation and extraction of energy resources. Per-capita wealth—determined by summing together gross savings, the depreciation of physical capital and formation of human capital, natural capital depletion, and changes in population—decreased by 2.2 percent of GDP per capita in 2010, in contrast to the MENA average of a 4.1 percent increase.⁵⁹ The per-capita wealth depletion in Egypt is primarily from declining natural capital and a growing population. Egypt's inefficiency at converting natural resources into other forms of wealth is a sign of poor resource management and inability to grow economically while maintaining environmental sustainability.
- The cost of environmental degradation in Egypt is high and its burden falls 86. disproportionately on the poor. In 2002 the cost of environmental degradation in Egypt was estimated at LE 18.9 billion or 5.6 percent of GDP, with pollution to air, water, and soil as the three largest causes of environmental damage. 60 These issues are primarily rural and account for more than 55 percent of damage cost; urban air pollution accounts for more than 40 percent. Given the concentration of poverty in rural areas, it is not surprising that environmental issues are more prevalent in regions with high poverty incidence and that environment degradation disproportionately affects the poor.

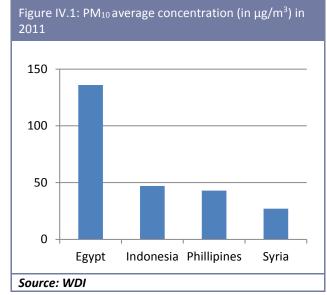
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⁵⁹ Natural capital in these calculations only includes the extraction of energy rather than the other costs of environmental degradation discussed throughout this chapter.

⁶⁰ World Bank 2005.

KEY ENVIRONMENTAL PRIORITIES LINKED TO POVERTY AND SUSTAINABLE GROWTH

87. The degradation of air quality in Egypt causes serious health and environmental issues and impact Egypt's economy. The primary contributors to air pollution in Cairo are vegetative burning of residues and municipal waste, public and private transport, lead smelters, fertilizers, and cement factories. As a result of these activities, Egypt has much higher levels of particulate matter pollution than other countries with similar GDP per capita (Figure IV.1) and exceeds the limits set by its own Environmental Law by more than 90 percent.⁶¹ Particulate matters (PM₁₀ and PM_{2.5}), sulfur dioxides and nitrogen oxides were the cause of premature mortality of 20,000 people and 483,000 cases of chronic bronchitis and



respiratory symptoms in 2005. ⁶² These diseases have reduced the productivity of Egyptian workers: the cost of degradation associated with air pollution in the Greater Cairo area alone is equal to approximately 1 percent of Egypt's total GDP and this cost rose dramatically between 1999 and 2009. ⁶³

88. Water pollution is a growing concern for economic growth and health in Egypt. Fresh water availability has been steadily diminishing for the last 50 years (Figure IV.2) and in 2012 was 700 cubic meters per capita, well below the international water scarcity threshold of 1000 cubic meters per capita, and continued population growth will put further strain on the water supply. As this affects people's health, land productivity, and fisheries, the damage of poor water quality -if no actions are taken- was estimated to cost LE 9.5 billion per year, or 3.2 percent of GDP.⁶⁴ In addition, 5.1 percent of all deaths and 6.5 percent of all disabilities in Egypt are attributable to unsafe drinking water, poor sanitation, insufficient hygiene, and inadequate water resource management.⁶⁵

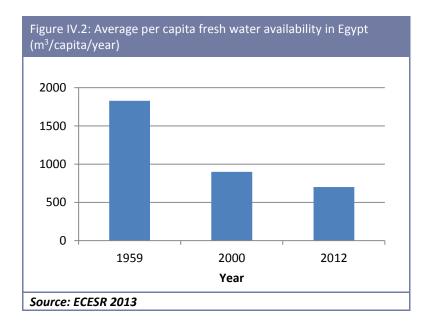
⁶¹ Egyptian Environmental Affairs Agency 2011

⁶² World Bank 2005

⁶³ World Bank 2013

⁶⁴ CEA 2005

⁶⁵ Prüss-Üstün et al 2008



89. The primary reason for the low availability of fresh water is water pollution caused by agricultural waste and poor rural sanitation. Agriculture was responsible for 85 percent of freshwater withdrawals across Egypt in 2013 and as a result 2.9 billion cubic meters of drainage water loaded with fertilizers, pesticides, and organic material is returned to the Nile annually upstream of Cairo. These pollute the river, endanger marine life, and contaminate ground water. In addition, only a quarter of the rural population has wastewater connections, and those using a sewage tank typically empty it into the Nile and near freshwater sources or onto ground where the water source is polluted through the soil. Industrial contaminants—such as hazardous detergents, heavy metals, and pesticides—dumped in the Nile have also reached levels of almost 4.5 million tons per year.

90. **Urban sprawl has compounded problems of water pollution and reduced Egypt's food production.** Unregulated urban encroachment in rural areas has threatened water supplies. Not only has the quantity of built-up land in the Nile Delta more than doubled between 1984 and 2010, from 891 to 1791 square kilometers, this expansion has been largely unplanned and haphazard. This threatens the supply of fresh water because building frequently takes place near or along secondary canals and waste disposal in these sprawling areas is largely handled by unregulated, informal private contractors who dispose most waste in drains and canals. The production of the pr

⁶⁶ ECESR 2013

⁶⁷ CEA 2005

⁶⁸ Prüss-Üstün et al 2008

⁶⁹ ECESR 2013.

⁷⁰ Alfiky et al. 2012.

⁷¹ World Bank 2009b.

⁷² In the Gharbia governorate, a study found that built-up areas within 500 meters of a secondary canal increased from 16 to 38 square km between 1990 and 2010 (Elbeih et al. 2013)

Urban encroachment also frequently occurs on the most fertile soil in Egypt, which further reduces Egypt's agricultural capacity: one study of the Qalubiya governorate found that urban expansion resulted in a loss of 10 percent of the highest class of fertile land between 1992 and 2009.⁷³

91. This has contributed to broader problems of land degradation and desertification that have increased pressures on land use. Land degradation has also occurred due to over-intensive agriculture. As a result, areas of first-grade agricultural land declined in 2001-2005 to less than one-third of their level in 1996-2000, while the third and fourth-grade lands have increased from 1,445 to 2,936 million feddan. Egypt also ranks first globally in its rate of desertification, with an estimated 65-89 percent of its land deemed critically sensitive due to wind erosion and active dunes. Overall, land degradation combined with coastal erosion represented a loss of 1.5 percent of GDP in 2005.

KEY PRIORITY AREAS OF FOCUS

- 92. In a relatively short period of time in the 1990s, Egypt made substantial progress in protecting the environment but the pace of reform is still too slow. In 1992, the Government of Egypt endorsed its first National Environment Action Plan (NEAP), in 1994 Egypt enacted its first environmental law, and in 1997 a Minister of State for Environment Affairs was appointed for the first time and key policy changes on fuel standards, vehicle emission standards and energy pricing were introduced. The country also witnessed improvements in the state of the environment particularly in the provision of water supply, wastewater treatment and solid waste management. However, the costs of degradation remain high and the country is still consuming unsustainable quantities of natural resources (in particular water). Climate change also compounds Egypt's environmental challenges. In order to address these, there needs to be a quantum change in policies and institutions and much more efficient and effective investments.
- 93. **Egypt's environmental problems come from both outdated laws and poor public sector governance and implementation.** While Egypt's environmental laws are outdated and need to be revised, the greater barrier to successful environmental policy lies in the poor implementation and enforcement of these laws. For instance, as already noted particulate matter concentration in Egypt is nearly double the limit set in the Environmental Law, indicating serious remaining challenges in the implementation, monitoring and enforcement of this law. Data limitations, multiple overlapping authorities, inadequate human resources and oversight make it simple to

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⁷³ Shalaby et al. 2012

⁷⁴ One feddan equals 1.038 acre.

⁷⁵ Egyptian Environmental Affairs Agency 2007.

⁷⁶ Executive Secretariat of the U.N. Convention to Combat Desertification 2011 and World Bank 2014k.

⁷⁷ CEA 2005.

evade environmental laws.⁷⁸ This is likely due to understaffed, inexperienced and un-incentivized regulators; for example, temporary staff constitutes 70 percent of the Egyptian Environmental Affairs Agency's (EEAA)s total staff, showing the lack of skilled environmental experts.⁷⁹ Addressing these issues will require support from civil society, and public dissemination of environmental information and risks may be one method for building this support.

- 94. Many environmental risk factors revolve around the agricultural sector and the rural-urban interface. Agriculture consumes 80 percent of the water used in Egypt each year and is the primary driver of Egypt's water scarcity problems. The sector also contributes to declining air quality through open burning and increasing water pollution through agricultural runoff. In order to improve environmental quality it will be necessary to address the externalities from agricultural activity, requiring integrated, multisectoral interventions. Sustainable management of solid wastes in rural areas also provides opportunities for reducing air and water pollution and enhancing renewable energy options. Better institutions for urban planning may help reduce urban encroachment (discussed further in Chapter V).
- 95. Improvement in air quality can be achieved by establishing an air quality management system in the short term, then implementing a package of pricing and sectoral policies in the long term. These policies can be scheduled for implementation when the economic situation improves, with an eventual target of reducing PM_{10} and $PM_{2.5}$ concentrations to $112 \,\mu/m^3$ and 65 $\,\mu/m^3$ respectively by 2020. ⁸⁰ In addition, promoting energy efficiency via renewable energy can decrease air pollution. Egypt currently meets 8 percent of its energy needs with hydropower from the High Dam in Aswan and has a number of grid-connected wind farms. There is also a significant potential for solar energy, as Egypt's annual direct solar radiation varies between 1970 kWh/m² and 3200 kWh/m². Also, Egypt has huge potential for wind energy. ⁸¹ As such, the government enacted a new Renewable Energy Law and associated Feed in Tariff regulations in 2014 to attract private sector investments into renewable energy. There are also encouraging signs toward better air quality with the recent reforms of energy subsidies and further promotion of energy efficiency may also help improve air quality.

Additional diagnostics and information can help to address the key priorities. Egypt's Cost of Environmental Degradation is extremely outdated, having not been updated since 2002 during which time it likely increased substantially. This can provide a tool for policy and investment decision making. In addition, analysis is necessary to identify the technological solutions that can be adapted to the Egyptian context, assess their economic viability, and develop the policies to create financially viable and sustainable solutions. The burden of disease numbers discussed in this chapter have also become outdated and gathering new data would give better insight into the serious issues facing Egypt.

⁷⁸ Kiely 2008.

⁷⁹ CEA 2005

⁸⁰ CEA 2005

 $^{^{81}}$ Egypt has the highest wind energy potential of any country in the Middle East and North Africa, amounting to 30GW (equivalent to the entire existing installed capacity of the country) and is endowed with high intensity of direct solar radiation ranging between $2000 - 3200 \, \text{kWh/m}^2$ /year from north to south.

Box IV.1: Climate change impacts on Egypt

Egypt's climate change model projections suggest a more rapid warm-up than the global average and increased periods of drought. The average number of heat wave days observed in cities in MNA ranges from zero to seven.⁸² It is expected to increase to 93 days in a 2°C world and over 187 days in a 4°C world.⁸³ By the end of the century, maximum temperatures are predicted to increase by 3°C in large parts of Egypt under a low emission scenario.

Water resources are projected to become increasingly strained. The total fresh water budget is estimated at about 58 billion m³ per year, with a total yearly consumption of 78 billion m³. The annual per capita share of fresh water is 700 m³ per year. By considering the expected population growth, this value is estimated to become 350 m³ in 2040, without considering climate change impacts on Egypt's water resources. The vulnerability of Egypt's water resources to climate change is due to Nile flows (hypersensitivity to Ethiopian rain, sensitivity to temperature increase in equatorial lakes and Bahr El Ghazal, and uncertainty due to significant differences in the Global Circulation Models output of water flow into the Nile), rainfall (the possibility of a 50 percent reduction of rainfall on Egypt's Mediterranean coast), and ground water (increased levels and salinity due to sea level rise and consequent sea water intrusion).

Coastal resources are expected to suffer direct impacts through sea level rise and inundation of low elevation areas. It is estimated that a sea level rise (SLR) of 50 cm combined with local Nile Delta subsidence present serious impacts on low land Delta regions and adjacent highly populated cities such as Alexandria and Port Said. SLR would also lead to losses of beaches. Coastal zones are also expected to suffer from indirect impacts such as saltwater intrusion and contamination of ground water resources, exacerbating soil salinity and affecting food security. In addition, the increase in frequency and severity of storm surges will impact coastal structures. Furthermore, coastal areas below sea level in the Nile Delta constitute high-risk areas. Direct and indirect impacts are expected to lead to the immigration of 6 to 7 million people from the Nile Delta.

Assuming no adaptation, annual damages have been projected to reach US\$5 billion by 2100 for a 1.26 m SLR and cause losses of 25 percent of the Nile Delta's land area, affecting 10.5 percent of the national population and 6.4 percent of GDP with a 1 m SLR. One study estimated that assets exposed to a 0.5 m SLR by 2070 were worth US\$563 billion in the city of Alexandria alone. Furthermore, the National Strategy for Adaptation to Climate Change and Disaster Risk Reduction estimated adaptation needs at about US\$7.6 billion, with the majority of investments in the coastal zone infrastructure.

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⁸² Heat wave days are calculated by the warm spell duration index (WSDI), which is defined as the longest annual spell of at least six consecutive days with maximum temperatures exceeding the local 90th percentile relative to a reference period (in days).

⁸³ Lelieveld et al. 2013, cited in World Bank 2014k.

٧. **Key Drivers of Progress Towards the Twin Goals**

Welfare in Egypt depends heavily on location, with rural Upper Egypt experiencing 96. persistently high poverty rates. It is natural to start with a broader understanding of Egypt's structural and spatial transformation and the factors that have inhibited the reduction of regional disparities. Even though Egyptians have upgraded their human capital—through higher educational enrolment and attainment rates and better health, the fundamental building blocks of income generation—poverty reduction in Egypt has stalled. The ability of Egyptians to reap returns from these investments in human capital and generate income as workers, entrepreneurs, and farmers has been hampered by slow private sector growth, complex and inconsistently enforced regulations, and low market access for agricultural produce and land fragmentation. Poorly designed, targeted, and implemented social protection programs have also failed to insulate many Egyptians from negative shocks. However, these shortcomings can be addressed through a process of regulatory reform that focuses on core governance issues and rests on the three pillars of private-sector-led job creation, spatial integration, and inclusion.

THE STRUCTURAL TRANSFORMATION HAS HALTED

EGYPT HAS AGGLOMERATED INEFFICIENTLY

- 97. Egypt is one of the most agglomerated countries on Earth. Egyptians inhabit and cultivate a small share of Egyptian territory, with approximately 95 percent of the population living and working on 5 percent of the land. Population density in major urban areas in Egypt is almost triple the global average at 11,575 people per square kilometer relative to a global average of 4,300 people per square km in 2014.84 Egypt's agglomeration index is 90.2, the 8th highest in the world.⁸⁵ Agglomeration and income are positively correlated around the world but Egypt is far more agglomerated than other countries near its level of per-capita income, 86 which have an average index of 52, and far poorer than other countries near its level of agglomeration, 87 which have an average GDP per capita of \$40,900 (Figure V.1).
- 98. This combination of intense population concentration with low levels of economic activity suggests that the nature of Egypt's agglomeration has been suboptimal. International evidence demonstrates that urban concentration can foster productivity growth at the initial stages of development and that cities of different sizes contribute to economic growth in different ways: large cities offer greater economic diversity, secondary cities typically host more

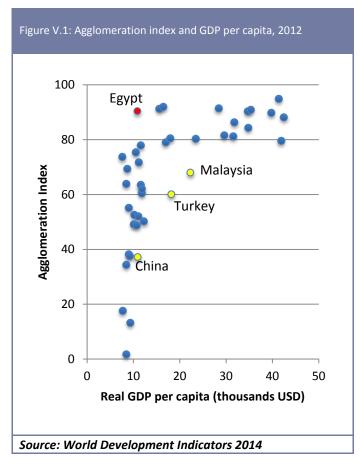
⁸⁴ Demographia 2014.

⁸⁵ The index incorporates population density, travel times, and number of cities.

⁸⁶ Countries with real GDP per capita (PPP) between 7500 and 12500 in 2012 according to World Development Indicators (2014).

⁸⁷ Countries with agglomeration index between 80 and 100, excluding Qatar, UAE, HK, and Singapore.

standardized manufacturing, and small cities can offer economies of scale and contribute to local economies.⁸⁸⁸⁹



In addition to population, the formal private sector in Egypt is also highly concentrated in the metropolitan areas. Over half of Egypt's formal private sector jobs are located in metropolitan Egypt, which contains only roughly a quarter of the country's population (Figure V.2). In addition, more than half of Egypt's small and medium enterprises (SMEs) contained in just five cities, all in Lower Egypt. 90 Egypt's smaller cities contain many fewer formal private sector jobs, and aggregate formal private sector growth in those cities has completely stalled since 2006 (Figure V.3). The fact that manufacturing employment has *not* shifted into these smaller cities despite lower prevailing wages and rents perpetuates the heavy concentration of industry and limited the reuse of the metropolitan areas for higher value production such as tradable services,

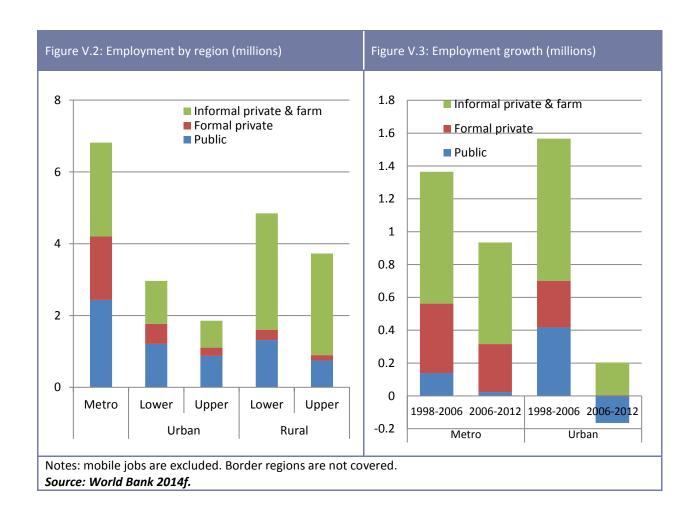
and may be one of the factors causing the stagnation of Egypt's formal private sector. 91

⁸⁸ Henderson 2003.

⁸⁹ WDR 2009

⁹⁰ Felkner et al. 2012

⁹¹ The furniture manufacturing industry is an illustrative exception to this trend, as discussed in World Bank (2014f).



99. The spread of economic activity between cities and the efficiency of the private sector within cities are both inhibited by Egypt's high logistics costs and inadequate infrastructure. Logistics costs account for around 20 percent of GDP compared with a global average of 10-12 percent. This manifests itself in the high cost of domestic transport. For instance, a round trip for a 20-foot container between central Cairo and Tanta (93 km) can cost as much as 1200 EGP—about US\$2.22 per km compared to US\$1.25 per km for a similar distance in the United States. Operating costs for trucks are approximately 30-50 percent higher in Egypt compared to countries such as Lebanon and Jordan. Furthermore, transportation costs can vary by a factor of 2.5 across Egypt, with more distant regions experiencing worse delays. Within Cairo, congestion is substantial and costly, with average speed during high congestion time periods estimated at 12 km/hr in 2005. The poor quality of Egypt's infrastructure, which was ranked 118th overall out of 148 countries in 2013-2014 (with roads ranked 122nd), is one contributing factor to these high costs (Table V.1). The electric grid is also aging and has been increasingly unable to provide

⁹² International Finance Corporation 2013

⁹³ World Bank 2012b.

⁹⁴ Lozano 2011.

sufficient energy, resulting in frequent blackouts; accordingly, Egypt ranks 106th for quality of electricity supply.⁹⁵

100. The structural transformation from agriculture towards manufacturing and services has also been inefficient in terms of land usage. The Egyptian government's strategy to reduce population density in Cairo has been to develop planned towns, however these have attracted very few people: meant for 5 million people, as of 2006 these new towns had barely drawn 800,000. Instead, populations in and near cities have mostly expanded outwards rather than upwards, with the result that the majority of city dwellers now live in informal, unplanned housing settlements surrounding the official urban areas. This has created a number of environmental hazards and reduced Egypt's agricultural capacity (see Chapter IV).

Table V.1: Global Competitiveness Rankings								
	Egypt	Chile	Jordan	Malaysia	Morocco	Romania	Tunisia	Turkey
Overall Infrastructure	118	45	38	25	48	106	80	41
Roads	122	27	46	23	53	145	77	44
Railroads	63	65	90	18	37	82	49	52
Ports	80	62	58	24	41	123	82	63
Air transport	59	46	36	20	49	119	67	33
Quality of electricity supply	107	65	38	37	47	88	56	77
Logistics performance index	64	46	119	32	58	61	46	30

Note: ranks are out of 148 countries.

Source: World Economic Forum 2013-14 and World Development Indicators 2014.

101. This is partially a reflection of Egypt's land use and public land management policies and outdated urban planning policies. Land use laws are rigid and outdated, and prohibit the formal expansion of cities into rural areas, while rent control policies and height restrictions have also limited the supply of housing. In addition, the sectoral authorities responsible for developing industry, tourism, housing, and new urban communities and for agriculture and land reclamation control about half of the land area occupied by Egypt's 80 million inhabitants. This land area has

⁹⁵ U.S. Energy Information Administration 2014.

⁹⁶ World Bank 2013b

⁹⁷ World Bank 2012b

⁹⁸ World Bank 2012b

largely been allocated inefficiently. Although 94,000 feddans of public land have been designated for industrial development in Egypt, which could accommodate 2.5 million jobs at an average density of 100 jobs per hectare, as of 2006 only 483,000 jobs had been created in the industrial estates in new urban communities and governorates.⁹⁹

CHALLENGES FOR REFORM

- 102. Investment in connective infrastructure will be much more effective if accompanied by policy reform in public spending institutions and transportation regulation. This would mean that the project selection process would be guided by technical cost-benefit analysis and that public spending would be routinely evaluated and monitored. For instance, infrastructure spending in Upper Egypt has been much less effective than anticipated since projects have too often been focused on building new roads rather than maintaining existing ones. ¹⁰⁰ More generally, in other countries it has been shown that each dollar of road spending reduces congestion costs by only 11 cents due to poor road design, inflated costs, or by politicians diverting public spending for personal benefits. ¹⁰¹ Another effective route for reducing congestion is to reduce gasoline subsidies (which promote the excessive use of cars and mainly benefit the rich) and to increase investment in mass transit. ¹⁰²¹⁰³ Reducing transit costs will also benefit Egyptians currently excluded from the labor market and will increase agricultural incomes (as will be discussed later). ¹⁰⁴
- 103. **Reforming public land use is a necessity.** The accumulation of layers of legislation over the past four decades has produced almost 45 directly and indirectly related laws and decrees that are often inconsistent and sometimes contradictory. Simplifying this system and reducing divisions among the numerous governmental agencies in the sector regulation will create less opaque pricing, reduce favoritism, and will also help encourage the efficient spread of economic growth. The World Bank's 2006 Egypt Public Land Management Strategy Policy Note recommends a staged process of public land management reform and an associated road map, with the eventual goal of a long-term shift towards a decentralized model for public land management. ¹⁰⁵
- 104. The negative effects of urban sprawl can be addressed by increasing the "effective" housing supply in cities. The government can best facilitate this by enabling the private sector to deliver housing rather than engaging in direct construction, which has historically been costly and inefficient and which opens the door to nepotism. ¹⁰⁶ One element of this is to recognize and

⁹⁹ World Bank 2006b

¹⁰⁰ World Bank 2009a

¹⁰¹ ⁹⁹ Winston et al. 2006

¹⁰² World Bank 2012b

¹⁰³ 2010/2011 HIECS

¹⁰⁴ World Bank 2012b

¹⁰⁵ These recommendations are heavily drawn from World Bank (2006b).

¹⁰⁶ World Bank 2006a

formalize existing informal settlements and upgrade their infrastructure. Another is to consistently enforce the "new" rent control reforms to reduce uncertainty and make owners more willing to rent out their unoccupied units. ¹⁰⁷ Improving and simplifying the complicated and conflicting land and property registration systems that currently exist in Egypt can help integrate urban and rural land markets and reduce the inefficiency of urban sprawl. ¹⁰⁸ Simplifying these systems can also create more secure property rights, which may improve the availability of mortgages and housing finance. ¹⁰⁹

THE FORMAL PRIVATE SECTOR HAS GROWN SLUGGISHLY

105. **Egypt has a small and anemic formal private sector.** One reason for this is that Egypt has a much lower rate of firm entry than other countries. On average across 80 countries, approximately 2.4 new firms were formally registered between 2004 and 2009 for every thousand working-age residents; in Egypt the rate was only *one* new firm for every *ten thousand* residents, 60 times less than Jordan and 100 times less than Turkey. ¹¹⁰ Because informal firms are essentially incapable of providing formal jobs (fewer than 10 percent of those employed at informal firms had formal jobs) the lack of entry of new formal firms is one driver of job insecurity and sluggish productivity. ¹¹¹

106. In addition to low rates of entry, young firms in Egypt age but do not grow. Older establishments in Egypt generally do not employ many more workers than young establishments. After 30 years in operation, Egyptian firms have only hired on average 50 percent more workers than they did initially; in Turkish firms, on the other hand, employment increased fivefold in those 30 years. As a result, nonfarm employment in Egypt has become concentrated in young and small firms, which provide nearly 40 percent of nonfarm employment as compared to 22 percent in Turkey (Figure V.4). The natural dynamics whereby firms are born, grow, and expand their employment or exit the market appear to be stalled in Egypt.

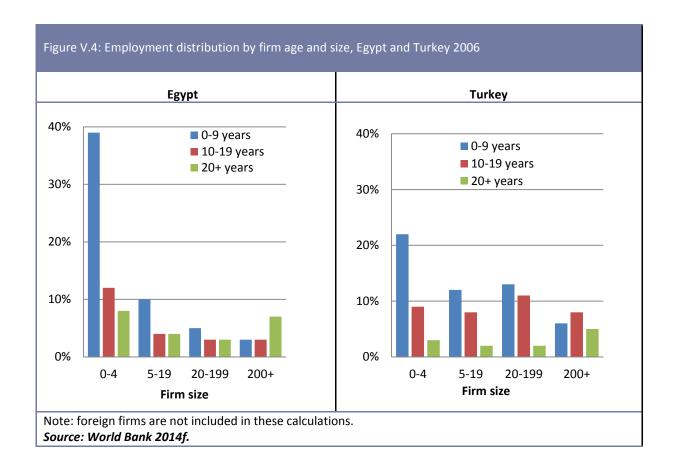
¹⁰⁷ World Bank 2012b.

¹⁰⁸ Worl Bank 2012b.

¹⁰⁹ Assaad and Barsoum 2007

¹¹⁰ Klapper and Love 2010.

¹¹¹ World Bank 2014f



107. The difficulty, red tape, and uncertainty involved in starting and expanding a business is another potential constraint on entrepreneurship and growth. ¹¹² In one study, over one-fourth of firms considered the licenses and permits necessary for formal operation to be a major constraint; in another, half of businesses reported that the requirements to obtain a business license and operate formally are too complex. ¹¹³ The complexity and uncertainty in acquiring an industrial license exemplifies the problems faced by investors. The procedures for obtaining an operating license and a certificate of industrial registration may take several years. The Industrial Register, originally intended as a means of data collection, has morphed into an administrative barrier to investment and business activity; as a result, Egypt has one of the most complex, unwieldy, and time-consuming licensing systems in the world according the IFC. ¹¹⁴ Similar levels of complexity, arbitrariness, and uncertainty prevail in most areas of government-business interaction: access to land, construction permits, licensing, inspections, customs and tax compliance, and sector-specific regulations.

108. Although the Egyptian government has made numerous reforms to reduce the cost and difficulty of starting a business on paper, it is far from clear that these have been implemented

¹¹² World Bank 2014d

¹¹³ World Bank 2014d

¹¹⁴ International Finance Corporation 2008

fairly and evenly. ¹¹⁵ Waiting times for operating licenses (especially industrial permits), construction permits, and customs clearance procedures differ significantly among firms within the same industry, and 85 percent of firms in Egypt identify corruption as a serious problem. ¹¹⁶

- 109. **Politically connected incumbent firms have numerous advantages over new firms, limiting competitive pressures.** These firms face lower regulatory burdens and have privileged access to critical inputs such as land, capital, and energy. A recent study found that in sectors dominated by "politically connected" firms, firm entry is 28 percent lower and firms report less competition. ¹¹⁷ In addition, 71 percent of connected firms in Egypt sell products that are protected by at least three technical import barriers, compared to only 4 percent of all firms, and are much more likely to be energy-intensive sectors. ¹¹⁸¹¹⁹ Opaque land pricing and public land policies also allow connected firms to acquire land cheaply. ¹²⁰ In addition to stifling competition, this also encourages connected firms to engage in capital-intensive rather than labor-intensive growth.
- 110. This may have further impeded the growth of micro- and small enterprises by limiting their ability to access sufficient financing. ¹²¹ In Egypt only 5 percent of loans go to SMEs, compared to 10 percent in Jordan. ¹²² In the 2009 Investment Climate Assessment survey, more than 28 percent of Egyptian firms reported access to finance as a major or severe constraint and 39 percent viewed the cost of finance as a significant hindrance. This is a larger problem for micro and small enterprises; over half of informal microenterprises and small manufacturing firms, and over 70 percent of small service firms find the cost of finance constraining, compared to 41 percent of medium-sized manufacturers and only 30 percent of large manufacturers. Similarly, access to finance is identified as a constraint by 37 percent of microenterprises surveyed and 40 percent of small manufacturers and service firms, as opposed to 26 percent of medium-sized manufacturers and only 18 percent of large firms. ¹²³ Micro firms also face barriers due to Egypt's stringent bankruptcy laws, in which bankruptcy is assumed to involve fraudulent behavior.
- 111. There are also some signs of a "skills gap" in Egypt with mismatch between the skills that young Egyptians are acquiring in school and those required by employers in the private sector. The policy framework for workforce development is fragmented and lacks well-defined and consistent leadership. 124 This causes most interventions to remain as pilots, as there is little institutional interest in replicating or scaling up successful programs. According to an IFC study, private sector employers in Egypt and the broader MENA region report being dissatisfied with the skill level of newly hired students; students also report feeling unprepared for the labor

¹¹⁵ World Bank 2014d

¹¹⁶ World Bank 2014d

¹¹⁷ World Bank 2014a

¹¹⁸ World Bank 2014a

¹¹⁹ World Bank 2014f

¹²⁰ Diwan et al. 2013

¹²¹ Nasr 2010

¹²² World Bank 2011

¹²³ Nasr 2010.

¹²⁴ World Bank 2014i

market.¹²⁵ Despite a relatively large pool of educated job seekers, private sector firms report that they are unable to fill 600,000 job vacancies. ¹²⁶ However, this 'frictional' unemployment accounts for a small fraction of total unemployment; an estimate from 2012 gives the total number of unemployed at approximately 2.4 million so that vacancies explain only a quarter of unemployment.

CHALLENGES FOR REFORM

- 112. Issues of uncertainty and uneven implementation of regulations have muted or distorted the private sector response to previous waves of reforms and if not addressed these same issues may limit the impact of future reforms. The 2004-2006 wave of macroeconomic and microeconomic reforms, including in the tariff and tax areas, have been successful at increasing private investment rates, FDI, and growth. However these investments mostly happened in large, capital intensive industries and missed the small-scale manufacturing and services sectors, with the result that few jobs were created and informality grew. The impact on job creation and business growth of other policies and interventions, including the areas of infrastructure, housing, skills, and financing, will be limited if the core issues of uncertainty and arbitrariness in regulatory compliance and state-business interaction continue to prevail and continue to benefit only a few.
- 113. Egypt can boost private sector growth by creating a level playing field upon which firms can compete fairly. This requires a regulatory approach that relies on uniformly enforced rules rather than discretion. Egypt amended the regulations for its Competition Authority in 2014, but the independence of this institution has yet to be validated in practice. Careful review of the insolvency regime can also ensure that entrepreneurs are not afraid of being punished for taking risks. Authorities can engage in competition advocacy targeted at consumers and policymakers to help raise their awareness of the impact of economic policies on competition. Removing policies that distort firms away from labor-intensive production will also help ensure employment growth. The ongoing phase-out of energy subsidies in particular should favor employment growth in labor-intensive industries. A fairer business environment may improve the financial access of small- and medium-sized firms by redirecting lending away from large and connected firms.
- 114. The revival of Egyptian Regulatory Reform and Development Activity's (ERRADA) regulatory simplification program is a sign that the government is serious about reducing the complexity of business-government interaction. It is important that the government continues this momentum and ensures that these reforms are fully implemented on the ground. Successful implementation will require deep public governance reforms to improve the quality, consistency, and predictability of regulatory services delivery in government across the entire country. Through showing early results in the difficult issues of industrial licenses, access to land, and

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¹²⁵ International Finance Corporation 2011

¹²⁶ World Bank 2014f

construction permits the government can send a credible signal to investors and entrepreneurs that reforms will continue. A broader shift in regulatory practice from ex-ante compliance requirements to ex-post, transparent, and risk-based controls can further reduce red tape and ease compliance costs for entrepreneurs.

- The above constraints and reforms are the most critical for promoting private-sectorled job creation, however beyond these the government can also assist smaller-scale entrepreneurs through programs that incentivize entrepreneurship and expand access to land, capital, and credit. Support to self-employment and micro-entrepreneurship through business training, life skills training, mentoring, micro-franchising, and microfinance can help expand and protect jobs in the large informal sector. The recent microcredit law allows commercial companies to engage in microfinance and also opens the window for NGOs to establish and own shares in microfinance companies. This may be very effective in expanding credit access. Reforms that increase the range of available financial products such as mobile banking and e-payments systems may also be important for micro- and small entrepreneurs. The government can also encourage formality among larger, more entrepreneurial informal firms. International evidence suggests that the best way to encourage firm-level formalization is to increase the benefits of formality, possibly through a nationwide enterprise registry that involves no costs or penalties to firms irrespective or size and formality. 'Decriminalizing' bankruptcy would reduce the stigma of bankruptcy, encourage firms to formalize and reorganize, and strengthen creditors' incentives to lend.
- While skills mismatch and frictional unemployment do not appear to be the dominant 116. causes of unemployment, post-secondary education reform and training and job intermediation programs that involve the private sector may be effective. A demand-led approach has not been effectively adopted, and there are few incentives to encourage employers to upgrade their workers' skills, and efforts to establish closer links with employers remain ad hoc and limited in scope. 127 Government-driven training courses may not be the best solution to these problems, especially if the frictional unemployment is driven by distortions in other markets. For instance, the high desirability of public sector jobs may be inducing students to invest in skills that are not suited to the private sector but are rather in line with public sector iobs. 128 Reforms to fix such a problem at a fundamental level need to understand and address the root causes of skills mismatch. Other sources of frictional unemployment such as information gaps between employers and jobseekers may be alleviated in the short run by active labor market policies such as job intermediation and counseling, as well as more access to labor market information. 129 In addition, such programs must be designed very carefully to ensure that they do not have a purely redistributive effect, where firms hire program beneficiaries at the expense of other job seekers, as was the case in one pilot program in Jordan. 130

¹²⁷ World Bank.2014i

¹²⁸ Assaad 1997

¹²⁹ World Bank 2014f

¹³⁰ Groh et al 2014

117. Avoiding populist measures such as high minimum wages is just as important as implementing good reforms. Imposing a private sector minimum wage will cause many firms to either reduce their hiring or to begin hiring employees informally in order to evade the regulation. The social cost in terms of jobs lost or deformalized would outweigh the benefits of higher wages for beneficiaries. In addition, because companies face a higher cost of complying with a minimum wage for their low-income workers, a minimum wage could have a severely regressive effect, as relatively poor workers would lose their formal jobs while relatively high-income workers get higher wages. One estimate of the effect of imposing a private sector minimum wage of LE 1200 per month is that 38 percent of formal private sector workers would lose their formal jobs while 20 percent would receive an average raise of LE 177.¹³¹ Public works projects that increase employment in the short-run should adhere to the core principal that they are designed to be *timely*, *targeted*, and *temporary*. If these programs pay excessively high wages they can attract workers away from the private sector, and without clear exit strategies they risk becoming permanent fixtures of the labor market and an inefficient drain of public finances.

BOOSTING INCOME GENERATION

118. These stalled private sector dynamics have had negative consequences for Egyptians. To alleviate poverty there needs to be growth at the national level and this growth needs to be translated into income for poor and excluded populations. The lack of formal private sector growth has jeopardized the ability of Egyptians to access secure, high-quality employment and as wage work is the largest source of income for Egyptian households this is a pressing concern for most of the population. ¹³² In addition, the ability of regular Egyptians to engage in entrepreneurship, the other main non-agricultural source of income, has been negatively impacted by the lack of growth in the formal private sector. There are also constraints that have affected income generation through agriculture, especially for small farmers, which plays an important role especially for poorer rural households.

THE STAGNANT PRIVATE SECTOR HAS HAD NEGATIVE CONSEQUENCES

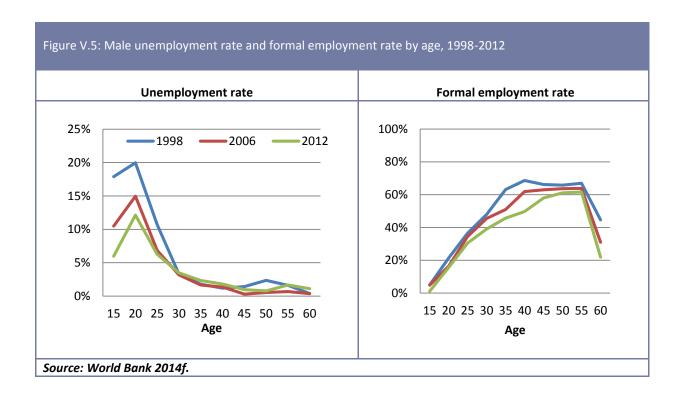
119. **Employment is a key determinant of welfare among the Egyptian population.** Having a job significantly increases the expenditures in a household and decreases the likelihood that the household is classified as poor. This is also the case for the bottom 40 percent: among those that are not in agriculture, the likelihood that a person without productive employment will be in the bottom 40 percent is markedly higher than those with jobs. International evidence shows that countries that have successfully reduced poverty have at the same time experienced growth in employment and earnings.

¹³¹ World Bank 2014f.

¹³² HIECS 2012

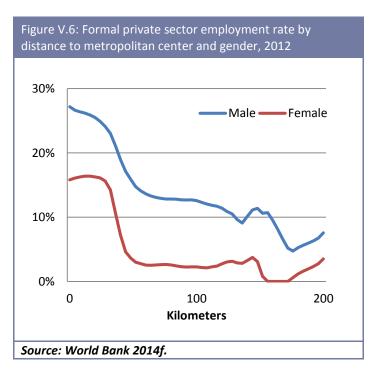
120. **Unemployment has not increased in recent years, but job quality has declined.** Even as Egypt has endured several major crises and instability over the last decade, the unemployment rate remained steady at around 9 percent between 2006 and 2012. However, job quality has been on a long-term decline. In 1998, 53 percent of employment in Egypt was in "formal" jobs that had either a written contract or social insurance, but by 2012 that had dropped to 44 percent. The overall deterioration in job quality has occurred because the public sector has been declining in importance as an employer (from employing 34 percent of the labor force in 1998 to 27 percent in 2012), and since the formal private sector has stagnated that gap is being filled with insecure and informal jobs. These sorts of insecure jobs are much less appealing to Egyptians; by one measure, unemployed Egyptians value a formal job approximately EGP 450 per month more than an equivalent informal job. ¹³³ The lack of social insurance also contributes to the vulnerability of informal workers.

121. **As in many countries, in Egypt unemployment is heavily concentrated among youth.** Entry into the labor market has consistently been associated with protracted periods of unemployment and job search. In 2012, men aged 20-24 experienced 12 percent unemployment rates, but for men over 30 the unemployment rate was less than 3 percent. Young men are not only less likely to be employed, they are also less likely to be formally employed with a formal employment rate of only 16 percent. (Figure V.5).



¹³³ World Bank 2014f

- 122. The unemployment rate among young men has declined substantially but the formal employment rate has as well. Unlike the decrease in unemployment, the formal employment rate has declined among older men as well as younger ones. The problem of low formal employment among young Egyptians today is not an issue of age alone but also an issue of generation: Egyptians born more recently have been persistently shut out of formal employment. Egyptians born in 1955 were 29 years old in 1984, and at that time they had a 54 percent formal employment rate. By contrast, Egyptians born in 1980 were 29 years old in 2009 but had a formal employment rate of only 40 percent.
- 123. For women, especially educated women, the response to declining formal employment in the public sector has been to drop out of the labor force. The cohort of educated women born in the late 1950s had high rates of labor force participation—50 percent among high school graduates at age 20 and 63 percent among college graduates at age 24. However, these rates of participation have been declining sharply and today only 12 percent of female high school graduates born between 1985 and 1989 were in the labor force at age 20.¹³⁴ Women have had even less success than men in finding work in the formal private sector: overall, fewer than 2 percent of working-age women are in the formal private sector.



124. There is also tremendous spatial inequality in access to formal employment. This is the result of Egypt's geographically concentrated This formal private sector. exacerbated by the limited degree of labor mobility that **Egyptians** experience. Internal migration rates in Egypt are low, and when Egyptians move they rarely cross governorate boundaries. 135 Between 2006 and 2012, 14 percent of working-age individuals moved from one locality¹³⁶ to another but only 1.1 percent moved from one governorate to another. 137 This has been attributed to low educational attainment in peripheral areas, absorption of labor by low-

productivity agricultural activities, and households producing significant portions of their own total food consumption. ¹³⁸ The high cost of urban housing may also play a role. In place of

¹³⁴ World Bank 2014f

¹³⁵ Herrera and Badr 2012; Wahba 2007

¹³⁶ Locality is a general term that encompasses shyakha (neighborhoods) in urban areas and villages in rural areas.

¹³⁷ World Bank 2014f

¹³⁸ Herrera and Badr 2012

migration, more than a quarter of Egyptian workers commute to another region to work. This high rate of commuting contributes to congestion costs, especially given the lack of mass transit options: in Cairo, there are only 231 full sized buses per million residents, compared to 362 per million in Mexico City, 636 in Tehran, and 1020 in Sao Paolo.¹³⁹

125. This means that Egyptians who were not born within commuting distance from a metropolitan area have great difficult accessing the formal private sector, even those who live relatively close to the metropolitan areas. Men who live within 20 km of a metropolitan center have a formal private employment rate of 26 percent, compared to 13 percent for those who live 60 km away and around 10 percent for those who live 150 km away (Figure V.6). This is especially true for women, who are essentially absent from the formal private sector if they live more than 60 km away from a metropolitan center. Given that wage work is the dominant method of income generation even in the more remote parts of rural Upper Egypt, lack of access to high quality employment may be one factor that contributes to household poverty, which is closely associated with travel time to a city. Accordingly, the 2010 HIECS shows that the majority of regional welfare differences come from differences in the returns to human capital (63% of the rural-metropolitan gap) rather than differences in human capital itself.

CHALLENGES FOR REFORM

- 126. Growing the formal private sector is the most important means of reducing informality and increasing inclusion of young Egyptians, but it is also possible to reduce employment informality among current workers at formal firms. Currently, half of the workers employed by formal firms have informal jobs, and with appropriate reforms the government could encourage more formal employment. Tax breaks, a simpler tax regime, and reduced employer contributions for social insurance, especially for small firms, may help reduce the costs of formalizing workers. Alternatively, worker protection could be extended through government-supported efforts, which could be delivered through the national registry proposed previously. Perhaps the most important thing the government can do is to refrain from reforms that make it more costly to hire workers formally; private sector minimum wage laws in particular are likely to do much more harm than good in the Egyptian context.
- 127. The spread of the formal private sector out of the major cities could also be facilitated by a uniform adoption of best practices in regulations across urban areas. Egyptian cities currently exhibit a high degree of variation in the difficulties of conducting business, with each city performing better on some metrics but worse on others. If Egypt were to adopt the best

¹³⁹ World Bank 2014c

¹⁴⁰ World Bank 2014f

¹⁴¹ HIECS 2012

¹⁴² Felkner et al. 2012

practices from each city across the entire country, its international ranking in overall ease of doing business would rise from 128th to 104th. 143

- 128. Helping youth, women, and those in remote areas access employment opportunities may require several different approaches. For youth, active labor market policies in the form of facilitated job search and counseling programs may be useful. To the extent that skills mismatch are a problem, these may be combined with interventions that promote on-the-job skill acquisition through internships and private sector designed training. In the more peripheral areas, public works programs can help improve connective, health, or educational infrastructure. Improved roads and mass transit may help reduce the effective distance to jobs for Egyptians who are moderately far from the metropolitan centers, in addition to the other benefits discussed previously.
- 129. Women may particularly benefit from active labor market policies and improvements in mass transit. Creating a safe working and commuting environment is also important. The crowd-sourced website HarassMap¹⁴⁴ has documented and mapped more than one thousand instances of sexual harassment in Egypt, and women report fear of harassment during commutes as an important concern. In addition, policies promoting flexible working hours may help women (and especially mothers) balance the demands of work and domestic responsibilities.

LAND FRAGMENTATION AND POOR MARKET ACCESS REDUCE AGRICULTURAL INCOME

- 130. Agricultural growth could have the largest effect on poverty for those already employed in the agricultural sector. A number of detailed studies have demonstrated that the growth of value-added in the agriculture sector has a far higher impact on poverty than on non-farm incomes. At the same time, they show that improvements in yields alone do not affect the incidence of poverty, and suggest that the benefits of higher yields do not accrue to the poor but rather to those above the poverty line. Small farmers in the traditionally farmed areas along the Nile and in the Nile Delta ("Old Lands") are fully integrated into the market town and village complex, so addressing their constraints will also stimulate local economies and improving nonfarm incomes in rural areas. Reforms that affect these farmers are thus more likely to be effective in reducing poverty compared to those affecting larger farmers in expansion areas ("New Lands").
- 131. Poor organization of production is one of the two main barriers keeping small farmers from exiting subsistence agriculture. In 2000, more than one third of landholders owned less than one feddan of farmland. This has worsened over time, as the average farm holding size

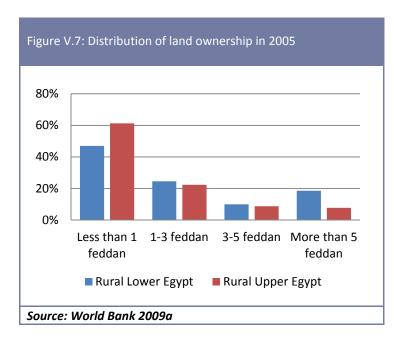
¹⁴³ World Bank 2014d

¹⁴⁴ harassmap.org

¹⁴⁵ See for example, Kheir-El-Din and El-Laithy 2008

¹⁴⁶ Cadot, Dutoit, and Olarreaga 2010

declined from 2 to 1.85 feddans between 1990 and 2000. Since average net revenue per feddan was about 8-10 thousand LE in 2005, a six-person household with less than two-thirds of a feddan and no nonfarm income would be below the poverty line, even assuming perfect crop choice. This problem is worse in rural Upper Egypt due to its more extreme degree of land fragmentation (Figure V.7). Southern Upper Egypt is also much more fragmented than northern Upper Egypt, with average plot size of 1.7 feddan across Giza, Fayoum, and Beni-Suef but only 1.1 in the states further south. 148



132. These small farms are too small to be commercially viable, and there are extremely limited available to institutions create economies of scale. As one consequence small farmers continue to plant traditional crops such as wheat, maize, sugarcane, and rice instead of more lucrative horticultural crops (fruits and vegetables). 149 Agricultural cooperatives are reasonably widespread but do not have full penetration: only 70 percent of communities have agricultural cooperative societies in communities or that can be accessed

within 30 minutes.¹⁵⁰ More importantly, the agricultural cooperatives themselves have a very limited legal mandate. While they play a marginal role as intermediaries of subsidized inputs and providers of credit, they do not link small farmers to market chains, have few resources, and have inflexible rules governed by laws that have not changed in decades.¹⁵¹

133. The other main barrier to exiting subsistence agriculture is poor market access, especially for farmers in rural Upper Egypt. 152 153 It is estimated that up to 20 percent of Upper Egypt's fruit products and 40 percent of its vegetable products spoil during transportation from farm to wholesaler. 154 This is due to the poor condition of road networks, a lack of properly maintained refrigerated trucks, and an improperly regulated trucking sector controlled by

¹⁴⁷ World Bank 2009a

¹⁴⁸ World Bank 2009a

¹⁴⁹ World Bank 2009a

¹⁵⁰ World Bank 2009a

¹⁵¹ Booze Allen Hamilton 2008.

¹⁵² Cadot, Dutoit, and Olarreaga 2010.

¹⁵³ World Bank 2006c

¹⁵⁴ Fawzy 2004

governorates and local trade unions (another potential link to poor governance). ¹⁵⁵ In 2005, USAID reported that the reported delivery time for a refrigerated truck from Sohag to the Port of Alexandria is 24 hours and from Toshka 36 hours, cutting Upper Egyptian farmers off from export markets, especially for Egyptians in the deep south. ¹⁵⁶ Even at the local level market access is very limited: only 40 percent of residents of rural Upper Egypt live in communities where weekly markets were held. ¹⁵⁷ This is a key reason for high levels of poverty in rural Upper Egypt despite its innate advantages in agricultural production compared to Lower Egypt. ¹⁵⁸

- 134. **Farmers also have limited access to inputs such as finance, irrigation, and water.** Formal financial institutions such as the Principal Bank for Development and Agricultural Credit do not deal with landless tenants and farmers who own less than 0.25 feddan. Many small landowners cease to deal with the bank due to the increasing credit cost that renders it impossible to repay the loan; increasing numbers of debtors are unable to repay loans because even a few days' delay in payment resets the dealer's interest rate from 7 to 14 percent. There is also limited access to informal institutions such as microcredit. In 2005, more than 92 percent of Upper Egypt communities declared that they were in need of microcredit, but less than 70 percent actually benefited from these loans. Poorer farmers also have inferior access to irrigation and water, as the poorest 25 percent of farmers accounted for only about 10 percent of total irrigation water use. Urban encroachment has also led to higher levels of salinity and toxicity in irrigation water due to improper disposal of wastewater, which has also had negative impacts on public health as described in Chapter IV.
- 135. Policy distortions further limit the transition to high-value cropping and promote inefficient use of water. The government subsidizes and guarantees procurement of certain 'strategic' field crops such as wheat, rice, and sugarcane. This encourages small farmers to continue to grow these low value and water-intensive crops. In addition, the government provides irrigation water on a pre-defined schedule with stops and starts, which is developed to be favorable for the strategic field crops. Since water is not available to farmers on demand, this schedule encourages them to continue cultivating the field crops rather than diversify into the more lucrative horticultural crops.
- 136. Fertilizer subsidies also play an important role for small farmers, but also encourage them to continue cultivating traditional crops such as wheat. Egypt uses more fertilizer per hectare than any other large country in the world partially due to the cultivation of fertility-intensive crops. The government subsidizes fertilizer sales to small farmers at below-market

¹⁵⁵ World Bank 2012b

¹⁵⁶ USAID 2005

¹⁵⁷ World Bank 2009a

¹⁵⁸ World Bank 2006c

¹⁵⁹ World Bank 2009a

¹⁶⁰ World Bank 2009a

¹⁶¹ World Bank 2009b

¹⁶² Egypt used 431 tons of nutrients per thousand hectares of arable and permanent crop area in 2010, 6th overall behind Singapore, Qatar, New Zealand, and Kuwait. FAOSTAT 2010.

prices up to a certain quota (600 kilos of fertilizer annually per feddan as of October 2014). This further distorts the market in favor of the production of the traditional crops. However, these fertilizer subsidies do make up a substantial portion of the assistance provided by the government to small farmers and changes to this policy could have negative consequences if not enacted carefully.

CHALLENGES FOR REFORM

- 137. The role of cooperatives and farmers associations may be critical for small farmers to pool their capabilities to reach a critical mass in order to benefit from contract farming. International experience has shown that farmers' organizations can allow small farmers to reap scale benefits and provide them with the needed technical and managerial support and quality control for the production of export-quality products. In Egypt, this would entail reforming the Law on Agricultural Cooperation to provide farmers with the full freedom and flexibility to organize into independent cooperatives with minimal government control.
- 138. Investments in long-haul freight connective infrastructure could help to increase market access and agricultural income, especially in rural Upper Egypt. Given the long shipping times experienced by farmers in further rural areas, improving connectivity is likely to have a high payoff. However, thus far the returns to connective infrastructure have proven to be surprisingly low, which implies that there must be deeper reforms regarding the redistribution of budget resources and accountabilities across ministries as well as the central and local governments. In addition, it is not clear that simply building additional roads or other infrastructure upgrades will be effective on their own at reducing transit costs. High costs could also be a manifestation of regulatory issues such as a lack of competition in the transport industry or poor logistics and coordination among truckers.
- 139. Empowering community-based water user organizations to operate and maintain some irrigation schemes may ensure ownership and equitable division of water among farmers and give farmers increased flexibility in scheduling. The first step towards providing flexible water usage would be to revise Law 12/1984 and provide Branch Canal water user organizations a legal standing and enable them to collect funds to ensure their sustainability. However, whether these organizations are effective at improving outcomes depends on the design and implementation of these policies. It will be necessary to experiment with different methods of interacting with the existing informal water user organizations and methods of providing higher-level coordination Government policies regarding the traditional strategic crops may also be revisited, with the distortionary impacts taken into account and benchmarked against other possible uses of the government's resources.
- 140. After addressing these crucial barriers, there is scope to benefit farmers by improving access to finance. Microcredit initiatives can reduce the challenges faced by private lenders to small farmers. Farmers associations can play an important intermediary in creating credit pools,

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¹⁶³ Abdellatif 2012

providing collective guarantees and increasing peer pressure for reimbursement. As integrated supply chains develop and farmer cooperatives mature, it becomes possible to introduce supply chain financing which distributes risk more broadly with guarantees based on securitization of product flows, delivery and export contracts and other non-physical forms of collateral. Examples from Central America, South Asia, and Africa demonstrate how even in the absence of effective, retail lending institutions for agriculture, contract farming (with individual farmers or with associations) can incorporate a credit component linked to the delivery of the contracted produce.¹⁶⁴

141. The system of fertilizer subsidies is beginning to break down and the government could begin to consider the move to a more sustainable alternative. Recent decreases in energy subsidies appear to have heavily reduced the supply of fertilizer (an energy-intensive good). The administratively set low prices may create an active black market and decrease the amount of subsidized fertilizer actually received by small farmers. The government has increased the domestic price of fertilizer in 2014 by 27-35 percent. As small farmers are a highly vulnerable population, it is important that other social protection programs such as cash transfers be in place to offset further reductions in fertilizer subsidies in order to mitigate the risk of rising poverty.

PROGRESS IN HEALTH AND EDUCATION BUT INCOMPLETE SOCIAL PROTECTION

142. Poverty reduction requires not only growth at the macro level and access to incomegenerating opportunities but also that workers have the mental and physical capacities—the human capital—necessary to take advantage of opportunities. In addition to this instrumental value, health and education are both fundamental components of human welfare. Recognizing the vulnerability in poverty, an effective social protection system is necessary to increase welfare and to keep individuals from eroding future human capital in response to relatively small shocks.

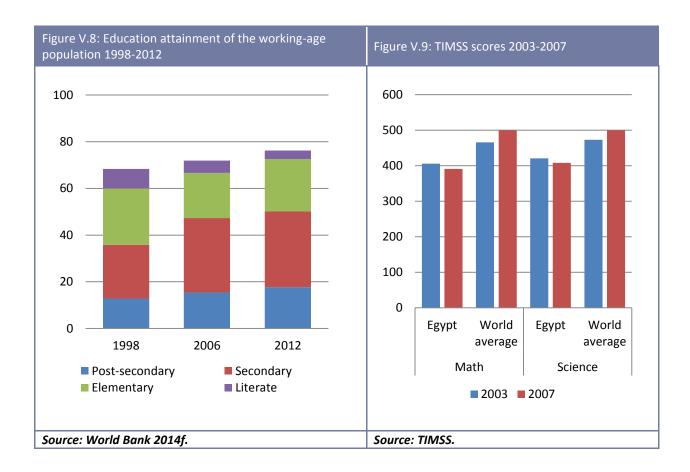
EDUCATIONAL QUANTITY HAS INCREASED BUT QUALITY IS A CONCERN

143. Egypt has made great strides increasing the breadth of literacy and educational attainment across the country. In 1998, only 38 percent of working-age Egyptians had a post-secondary education but by 2012 more than half had attained post-secondary graduation (Figure V.8). In addition, while educational attainment is much higher in the core areas than in the peripheral areas, there has been remarkable catch-up in terms of male educational attainment. Almost no men aged 70-74 in rural Upper Egypt graduated from secondary school, compared to 61 percent of 30-34 year olds. Women in peripheral areas, however, still lag far behind men in

¹⁶⁴ World Bank 2014l

¹⁶⁵ World Bank 2014f

terms of secondary attainment while those in core areas have caught up and in some cases exceeded men. In addition, Egypt has made little progress in supporting early childhood education, as ECE enrollment rates of 4-5 year olds remain low at roughly 30 percent. This is a critical component for developing cognitive and non-cognitive skills of children and ensuring that the investment in the later stages of the education system bears fruit. 166



144. While this increase in the *quantity* of education is heartening there are some signs that the *quality* of education has declined, and despite regional catch-up there remain substantial inequities in both quantity and quality of education. TIMSS scores in Egypt declined between 2003 and 2007 in both math and science even as they rose across the rest of the world (Figure V.9), and the pupil-to-teacher ratio in primary schools also rose from 22 pupils per teacher in 2003 to 28 pupils per teacher in 2010. The quality of education in Egypt is also very uneven, as roughly a quarter of the observed inequality in TIMSS test scores was found to be associated with factors beyond the control of the student such as parental education, wealth and geographic location. Differences associated with location are quite large: Children in rural areas performed, on average, 40 points below those in urban areas and almost 75 points below those in urban Lower Egypt. And on a basic level, while there is nearly full enrollment for children in the richest

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¹⁶⁶ World Bank and OECD 2015

quintiles, the poorest quintile still registers enrolment rates of about 73 percent in basic education and below 50 percent in secondary levels.

Teacher quality and inequalities in the provisioning of school infrastructure may be some of the reasons for the declining quality of education. There is unequal distribution of teachers across Egyptian governorates. Shortages of teachers in four of the six surveyed governorates, with the exception of Cairo and Dakhalia, have been reported. 167 Significant leakages in government spending on education may contribute to this. There are large discrepancies between the quantity of school supplies allocated by governorates and the districts and what eventually reaches the schools. In some cases schools received more materials or resources than what had been allocated by the governorate, for instance in the case of computers. For all other supplies there is a certain degree of loss at every level: between the governorate and the district, and between the district or governorate and the schools.

CHALLENGES FOR REFORM

- There are basic problems related to service delivery that are not well understood and this knowledge gap poses a serious constraint to policy design. Any policy, no matter how well intentioned or designed, will have difficulty succeeding if undermined by teacher absenteeism, leakages in spending, and poor administration. Establishing reliable systems of data collection, both quantitative and qualitative, across all of Egypt can provide the government with more nuanced knowledge of the challenges faced at the lowest level of service delivery and identify and remove any perverse incentives experienced by teachers and administrators.
- 147. The governance of the education system in Egypt requires a holistic approach. Such an approach would be a cross-sector transformation to improve service delivery and remedy current fragmentation in education policy, financing, and administration. This would entail a shift from a top-down, unaccountable management style to one based on transparent information and reward-oriented decision-making and embrace broader aspects of governance culture and practice. The focus of education would shift from the acquisition and repetition of knowledge to the development and demonstration of skills. In line with the change in pedagogical approach, assessment practices in Egypt require overhaul: away from low-quality high-stakes examinations to a process of monitoring learning that is beneficial to students and teachers alike. 168 Educational reform can also be coupled with complementary approaches in other public sector delivery reforms, especially in terms of child health initiatives.
- 148. Because of the remaining spatial inequality in educational attainment, improving access to basic educational infrastructure in the peripheral areas of Egypt can also be a priority. Households in more remote areas of the country, and in particular in rural Upper Egypt, are located further from schools than their counterparts in core areas and this deficiency has been

¹⁶⁷ PETS 2008

¹⁶⁸ World Bank and OECD 2015

growing over time. In 2012, more than half of households in rural Upper Egypt reported living more than 20 minutes away from a secondary school, up from 28 percent of households in 1998.¹⁶⁹ Programs to build and staff new schools in these areas, which also have the highest concentrations of poverty, will be critical to increasing human capital.

REMARKABLE IMPROVEMENTS IN BASIC HEALTH BUT CHALLENGES REMAIN

149. **Egypt has had great success in improving health outcomes at the national level**. Over the last twenty years, life expectancy in Egypt has increased from 64.5 to 70.5 years, and Egypt is on track to achieve the Millennium Development Goals related to maternal and child health. Tolid mortality declines from 86 to 23 deaths per 1,000 live births between 1990 and 2011 and maternal mortality also dropped from 174 to 54 deaths per 100,000 live births. Tolid, more than 80 percent of women received prenatal care and more than 90 percent had skilled attendants at delivery. The immunization rate is also high (91 percent in 2014), even in lagging areas such as

Table V.2: Life expectancy 1960-2007							
Year	Male	Female					
1960	51.6	53.8					
1976	52.7	57.7					
1986	60.5	63.5					
1996	65.1	69.0					
2001	67.1	71.9					
2007	69.5	74.0					
Source: El Zanaty and Way 2009							

rural Upper Egypt (where 88 percent of children were fully immunized). 175

150. **Child nutritional status remains a concern.** Despite improvement in these other early childhood indicators, child nutritional status has not improved substantially over the last 15 years. Child nutritional status is particularly important as a component of human capital because it has been shown to strongly predict future cognitive function and productivity. The Today 21 percent of Egyptian children aged 0-4 are stunted, down only 2 percentage points since 2000. The same period, wasting has increased from 3 to 8 percent. Stunting is also more prevalent in Upper Egypt at 26 percent, compared to Lower Egypt or metropolitan Egypt at 18 and 19 percent respectively. Overall, more than one in four children in Egypt suffer from some degree of anemia, and rural children are somewhat more likely to be anemic than urban children. Malnutrition may be linked to the structure of Egypt's food subsidies, which have encouraged an

¹⁶⁹ World Bank 2014f

¹⁷⁰ World Bank 2014b

¹⁷¹ World Bank 2014b

¹⁷² MDSR 2010.

¹⁷³ WHO 2013

¹⁷⁴ El Zanaty and Associates 2014

¹⁷⁵ El Zanaty and Associates 2014

¹⁷⁶ Behrman and Roszensweig 2004

¹⁷⁷ According to the WHO, children are classified as stunted if they are more than two standard deviations below height-for-age.

over-reliance on cheap and calorie-dense foods with limited nutrient content (particularly bread). 178

- 151. Health is also an important component of human capital for adults, whose capacity for work can be temporarily or permanently diminished by illness and disease. The leading causes of death in 2010 in Egypt were non-communicable diseases (NCDs) such as heart disease and stroke, a sharp contrast to twenty years ago. This is compounded by rising obesity rates, with nearly half of women older than 15 being obese. Another issue affecting women is an increasing burden of mental health, as depression and anxiety are now a leading cause of disability and death; there is a particular lack of psychiatric hospitals in governorates in Upper Egypt such as Luxor and Qena. In 2008, Egypt also has the highest prevalence of hepatitis C in the world at 14.7 percent among 15-59 year olds. Is Just as the Egyptian health system has successfully addressed communicable diseases in the last decades it may now step up to respond to the growing NCD burden. In addition, despite a degree of catch-up health outcomes remain inequitably distributed. Child mortality among the lowest wealth quintile was three times as high as in the highest wealth quintile. Patterns of geographic inequalities in health outcomes also persist, as child mortality is 30 percent higher in rural areas compared to urban ones.
- 152. There are also public health concerns stemming from Egypt's water and sanitation system. Sanitation services are especially needed in Upper Egypt where only 10 percent of households are served by sewerage networks with treatment plants. Overall, there are roughly 42 million Egyptians in need of sanitation services located in 15 cities and 26000 villages, with a high concentration in Upper Egypt. As discussed in Chapter IV, unregulated urban encroachment in rural areas has also diminished the water quality in these areas, and the lack of clean water is overall responsible for large numbers of deaths and disabilities each year.
- 153. Health insurance coverage is low, especially among the poor and the informally employed. Half of the population does not have any type of formal health insurance, especially those who are poor or employed in the informal sector. The poorest quintile spends 21 percent of their income on healthcare compared to 14 percent of the richest, and nearly 7 percent of Egyptians are pushed into poverty each year due to catastrophic out of pocket health expenditures. A similar burden can be shown for the informal sector, irrespective of income group. If a member of the informal sector does not have any form of health insurance he can

¹⁷⁸ International Food Policy Research Institute 2013

¹⁷⁹ World Bank 2014b

¹⁸⁰ International Food Policy Research Institute 2013

¹⁸¹ World Bank 2014b

¹⁸² El Zanaty and Way 2009

¹⁸³ World Bank 2014b

¹⁸⁴ World Bank 2009b

¹⁸⁵ World Bank 2009b

¹⁸⁶ World Bank 2014b

¹⁸⁷ World Bank 2014b

expect to spend almost 70 percent more on health care out of pocket than a similarly insured peer. 188

CHALLENGES FOR REFORM

- 154. The government can fully implement the model of Family Health Services (FHS) introduced in 1999 and ensure its adoption especially in the poorest governorates. This model aimed to provide a comprehensive package of basic health services at the level of primary health care facilities, including family health planning, maternal and child health services, expanded program of immunization, integrated management of child diseases, non-communicable diseases and mental health. The FHS model also integrated pay-for-performance incentives in five governorates based on metrics linked to patient volume, structural quality, and processes of care, and this aspect of the program could be expanded further. An evaluation of this program showed it to be successful in improving the quality of care and satisfaction levels of both health care providers and beneficiaries.¹⁸⁹
- 155. Fostering local accountability in service provision is one method of improving the quality of healthcare. This can be accomplished by establishing grievance and redress mechanisms to engage citizens in the provision of care and by incorporating satisfaction with health services as part of the pay-for-performance criteria. Quality and safety can be further improved through the mandatory accreditation for family health services and compliance with clinical guidelines, standards and treatment protocols in health facilities.
- 156. Developing a comprehensive plan to deal with NCDs can address future health needs, and properly implementing the current plan for hepatitis C can address this present problem. Egypt currently lacks a unified and well-costed national NCD plan. ¹⁹⁰ In addition, data tracking of NCDs is scarce and is mostly available through the STEPS survey. The present system of disease surveillance at MOHP is mainly hospital-based and focused only on communicable diseases. NCDs have not been included in the routine reporting forms of hospitals. ¹⁹¹ The treatment of NCDs requires the presence of high performing chronic care systems with integrated referral systems that are presently not in place. In addition, while the government has a national mental health plan in place, it was developed in 2003 and has not been updated to reflect current needs. Mental health services are underfinanced, making up only 2 percent of the total government health budget. ¹⁹² Better data on the disease burden due to different mental health conditions is important, overlaid with a mapping of providers to treat such conditions. By fully funding the recently created national plan for hepatitis C treatment and prevention the government can also deal with this current problem.

¹⁸⁸ World Bank 2014b

¹⁸⁹ World Bank 2010b

¹⁹⁰ World Bank 2014b

¹⁹¹ World Bank 2014b

¹⁹² World Bank 2014b

- 157. Given continued spatial disparities in health outcomes, the government may consider targeting certain peripheral regions with public works projects to build additional facilities or with increased financing for the operation of existing facilities. Parts of rural Upper Egypt appears to be suffering from worsening health infrastructure, where 73 percent of households live more than 20 minutes away from a hospital, up from 41 percent in 1998. Increased funding for regular operations and maintenance of health facilities along with quality and capacity improvement will also help preserve and improve existing infrastructure; by prioritizing emergency obstetric and neonatal care units in these efforts the government can also help to lower the still-high rates of maternal and child mortality in these areas.
- 158. Innovative approaches to address the low availability of health insurance markets may help expand access to formal health insurance. Given the high level of out-of-pocket expenditures in the Egyptian health system and the minimal mechanisms for comprehensive risk pooling across population segments in Egypt, the extent to which formal health insurance markets are available and utilized appears to be a promising new area of work. Experimenting with alternative means of expanding access to health insurance by self-employed and informal workers could be one method of incorporating more people into the healthcare system. The existing players in the health care system may be reformed by separating the institutional responsibilities for the purchasing function from service provision and by transforming currently passive payers into active purchasers.
- 159. Community-based, self-financed programs can be used to address deficits in rural sanitation. These could lead to avoided health damages in terms of diarrhea incidence estimated at LE 2.5 billion per year and could add at least 1 percent to GDP.¹⁹⁴

SOCIAL PROTECTION IS AN URGENT NECESSITY

- 160. **Egypt has a high proportion of vulnerable population.** Efficient architecture to deliver social protection services to this segment of the population, particularly during times of shocks and crisis, is indispensable to protecting and consolidating gains on reducing poverty. The experiences with the food price crisis over the past decade, in particular, exposed the degree to which global crises can easily permeate through national borders and affect the poor. Effective social protection systems are critical also from an inclusion perspective as well-targeted programs have the potential to reach poor individuals whose characteristics make them perennial members of the bottom 40 percent.
- 161. However, Egypt's social protection programs are highly fragmented and do not provide adequate protection to the poor. Egypt has a complex social protection system that relies heavily on fuel and food subsidies. These subsidies cost between 6-9 percent of GDP, dwarfing the funding for non-subsidy Social Safety Net (SSN) programs (at 0.2 percent of GDP), but are very

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¹⁹³ World Bank 2014f

¹⁹⁴ World Bank 2009b

poorly targeted: the top 20 percent of Egyptian households by income receive 36 percent of total energy subsidies, and 73 percent of non-poor Egyptian households have access to food ration cards. ¹⁹⁵ There are also substantial leakages from the food subsidy system, estimated at 29 percent in 2008. ¹⁹⁶ Nevertheless, food subsidies have played an important role in protecting the poor from the impact of high food prices, and it is estimated that removing food subsidies would increase the national poverty rate by 9 percentage points. ¹⁹⁷

- 162. There is little funding for social security net programs outside of subsidies. These programs, including employment services, social insurance (health, pension, and unemployment) and social assistance (cash transfers), only make up 10 percent of the poorest quintile's consumption expenditure in total. Low coverage rates and poor targeting also characterize these programs. For instance, the Social Solidarity Pension, Egypt's main cash transfer program, reaches less than 10 percent of the poorest quintile and less than a quarter of the program's resources accrue to this income group.
- 163. Egypt faces targeting and enrolment challenges for any future compensation program. The beneficiary population is not appropriately identified with the currents status of the social safety net system and there is no robust delivery mechanism of benefits to segments of the population that are largely left out of current public benefits for which they are qualified. One way to ensure accurate targeting of the poor is through the development of a unified registry. These types of unified database systems ensure accurate targeting through drawing on a series of administrative databases from different sources to determine asset ownership, income, and other proxy characteristics that can identify the poor. They also have the ability to connect to a technological platform (i.e., the Family Smart Card System) to allow policy makers to monitor payment transactions thereby reducing error, fraud, and misconduct by personnel. In early 2015, the government has begun implementing a national cash transfer program that, if managed properly, could provide an opportunity improve targeting along these lines.

CHALLENGES FOR REFORM

164. Egypt's food subsidies are a critical but costly component of the social protection system, making policy reforms a high priority. A 2013 report by the International Food Policy Research Institute and the World Food Programme suggest three directions for policy: improved supply chain efficiency, improved targeting, and introducing new policies that complement bread subsidies with voucher programs, conditional cash transfers, and targeted nutrition interventions for children and pregnant women. In the longer term, these policies could supplant food subsidies as the primary source of food security. ¹⁹⁸ Early in FY15 the government took measures to overhaul the food subsidies scheme and modernize the cash transfer program. Food subsidies

¹⁹⁵ International Food Policy Research Institute 2013

¹⁹⁶ World Bank 2010b

¹⁹⁷ International Food Policy Research Institute 2013

¹⁹⁸ International Food Policy Research Institute 2013

have been limited to final product and households have been given more flexibility and discretion in purchasing with a direct monthly quasi-cash transfer. The government also limited issuance of new food ration cards to citizens with monthly income below EGP 1500 (USD 210).

- 165. The existing social safety net system can be refined in order to make it useful for targeted programs such as a cash transfer program for the poor. Implementation questions that the relevant ministries faces include reducing the under-coverage of the poor, developing a unified targeting system, and adapting database utility and data input to administer payments and MIS processes for other assistance programs. Exclusion of higher income beneficiaries is also a challenge that the food ration program (administered by FCS) has also faced. The current FCS database contains nearly 85 percent of the population of Egypt. The government is currently seeking international experiences on how the use of other governmental databases can help inform targeting and graduation of ineligible beneficiaries in the medium-term. The process will, therefore, include integrating existing databases, such as the FCS database, with other databases from the traffic office, pension fund, electricity bills, phone bills, and vehicle registration, using a unique national identity card database.
- 166. The social security system can be improved through business process and targeting reforms. These business processes include enrolment procedures, payments, and grievance and redress processes among others. To a large extent, improvements in safety nets rely on recognizing the deficiencies in the existing system and developing ways to synchronize administrative processes and improve program targeting and design to address poverty and human capital issues. Developing a Unified Registry for targeting and monitoring of payments is largely a political decision, taking a long-term perspective in that systems are perfected over time. The cost in Egypt can be lower than in other countries if the existing infrastructure in the different government agencies, including databases and possibly hardware and software, can be used.

IMPLICATIONS FOR SOCIAL INSTABILITY

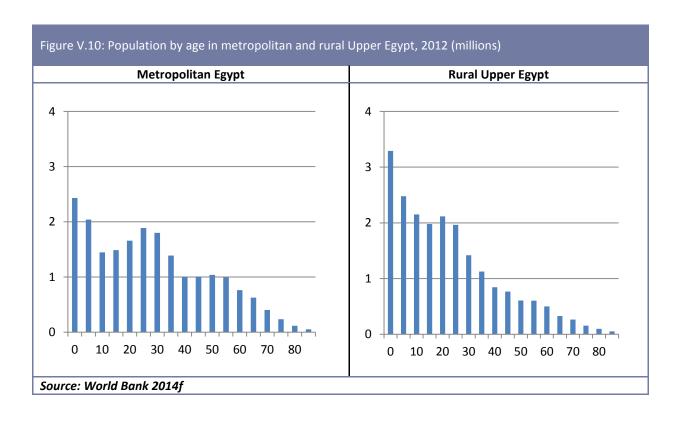
- 167. In light of the turmoil following the Arab Spring and the coming echo generation, preventing social instability in Egypt should be a high priority. The series of protests and counter-protests especially during the period 2011-2014 and the rapid succession of post-revolution governments all point to continued dissatisfaction with life on the parts of many Egyptians. Social instability can be caused by many factors including slow income growth, high inequality, lack of economic security, and poor governance, all of which are at play in Egypt in different degrees. 199
- 168. **Fundamental change will be needed in order to achieve lasting stability.** It is not fiscally sustainable to provide Egyptians with economic security by expanding public sector employment

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¹⁹⁹ Knight 2013

(as was done in the 1960s and 1970s) nor by pumping more money into food and energy subsides. Reforms to boost private sector-led job creation and to ensure that the jobs created provide working Egyptians with a sense of security will therefore play a crucial role, as will a revamped social security net that provides efficient and targeted social protection. The influx of young Egyptians will also put additional stress on public services and may drive up rents in urban and metropolitan areas, which makes effective urban planning all the more important.

169. **Promoting spatial integration and the narrowing of regional gaps is critical.** As already discussed, the more remote areas of Egypt suffer from higher poverty rates and have less access to economic opportunities. In addition to this, the echo generation is much more highly concentrated in those areas due to rebounding fertility rates outside of metropolitan Egypt. Rural Upper Egypt in particular will be experiencing an extremely large echo generation that will also be entering the labor market earlier than in metropolitan Egypt (**Figure V.10**). This demographic reality combined with the current lack of economic opportunities and low social mobility could lead to social unrest if left unaddressed.



CONCLUSION

- 170. This analysis suggests that the reform agenda for Egypt rests on the three pillars of private-sector-led job creation, spatial integration and inclusion. Addressing these issues will sustainably reduce poverty by enhancing the ability of all Egyptians to access high-quality labor market opportunities and earn greater income from agricultural activities, and will promote health, security, and high quality of life.
- 171. Cutting across all three pillars is the poor quality of governance in the Egyptian public sector. Private sector-led job creation has been largely constrained by the privileges accorded to connected firms and the atmosphere of uncertainty and favoritism surrounding the enforcement of laws and regulations. Egyptians exhibit very little faith overall in the accountability of public sector officials, with only 40 percent of Egyptians believing that a local official would be punished for issuing a license for personal benefit.²⁰⁰ In sectors such as health, there is a perception by most Egyptians that there is rent-seeking behavior by public officials that undermines the governance and the quality of health care services.²⁰¹ On average, visitors to an Egyptian primary healthcare facility would find 32 percent of staff absent from work.²⁰² Infrastructure investment in Upper Egypt has also had a smaller effect on poverty than it might have due to limited participation of community members in decision-making in local development and a desire to spend infrastructure funding on large, visible construction projects rather than more cost-effective maintenance projects.²⁰³

VI. PRIORITIZING THE CHALLENGES AHEAD

172. Based on the evidence and analysis presented thus far, this chapter creates a framework to prioritize and sequence reforms to address the fundamental problems that have constrained Egypt's long-run progress. Egypt faces many challenges. At the macro level, long-term GDP growth has been moderate but there is a large fiscal deficit and public debt has been ballooning; in addition, much of GDP growth is based on unsustainable resource depletion. More troublingly, even during periods of rapid growth there has been almost no progress toward the twin goals of poverty reduction and shared prosperity. In fact, poverty has been rising. At the micro level, there are structural constraints that are inhibiting poverty reduction such as poor labor market opportunities despite impressive improvements in educational attainment and health status among young Egyptians and an agricultural sector that has resulted in persistently high poverty rates among small farmers in Upper Egypt. These are all long-standing trends that predate any recent turmoil. In many cases, lasting solutions can be found in reforms that require only the stroke of the pen, but they must be backed by sustained political will.

²⁰⁰ WJP 2012

²⁰¹ IDSC Social Contract Center and World Bank 2009

²⁰² World Bank 2010b

²⁰³ World Bank 2009a

173. The primary purpose of the Systematic Country Diagnostic is to take an evidence-based approach to determine the most pressing policy and institutional weaknesses and identify the greatest reform opportunities for improving the lives of the Egyptian poor. Huge welfare gains are possible through fundamental governance reforms and by reducing the distortions that are limiting the income opportunities and livelihoods, especially of the younger generations. Given Egypt's recent population boom, better access to public services and productive economic opportunities in terms of employment, entrepreneurship and agriculture, as well as strengthening the social safety net, will be critical for maintaining social stability and ensuring sustainable growth.

TOP PRIORITIES FOR REFORM

174. There are three overarching areas for reform: macroeconomic management, energy subsidy reform and public governance reform. The quality of macroeconomic management and public governance form the foundations of good policy-making, and without meaningful reforms in these areas a wide range of other programs and investments will be rendered far less effective. Energy subsidy reform has the potential to dramatically improve Egypt's fiscal situation while simultaneously undoing damaging distortions in many sectors. Because of these breadth of returns and because the Egyptian government has already shown willingness to undertake this politically difficult reform, ensuring that progress on energy subsidy reform continues is especially important.

MACROECONOMIC STABILITY

- 175. In the absence of significant reforms, Egypt's macroeconomic and fiscal prospects are not sustainable. Achieving stability will require a sustained, gradual fiscal consolidation plan (2-3 percent of GDP) to reduce the deficit and public debt. However, this consolidation does not need to come at the expense of continued investments in targeted social safety nets and physical and human capital.
 - On the tax and revenue side, reforms should be guided by equity and efficiency considerations. Recent measures to enact property taxes and increase taxes on cigarettes, as well as to tax previously exempted income such as dividends, realized profits from mergers and acquisitions, and the annual bonuses of civil servants are steps in the right direction. In addition, authorities' intention to adopt a modern VAT, revise outdated fees and fines, and increase non-tax revenues should be actively pursued.
 - On the spending side, continuing the energy subsidy reform program will reduce wasteful
 and unproductive spending, provided that the government is successful in attracting
 private capital and significantly improving the efficiency of the energy supply chain. The

government can also work to reduce the wage bill by controlling new employment, undergoing a strategic staffing exercise, and freezing the already relatively-high salaries in the public sector especially in light of the recent large increase in public sector minimum wages. Reforms such as these and the 2015 civil servant law may allow the government to achieve its target of reducing the wage bill to 7.8 percent of GDP in FY16.

- As fiscal consolidation takes hold, the reduction in the budget deficit will limit the need for monetary financing of the fiscal deficit and thus reduce the cost of domestic borrowing, persistent inflation and safeguard trade competitiveness. With better control of inflation, monetary policy will be able to focus more squarely on price stability without resort to high interest rates. Furthermore, lower deficit financing requirements will reduce crowding out in the financial sector, improving the enabling environment for financial sector priorities. Overall, increased fiscal space for pro-growth spending, lower inflation, avoidance of real exchange rate overvaluation, and improved access to the financial sector are essential for reducing poverty and improving people's real incomes.
- 176. It is also critical to embed the fiscal reforms in a medium-term macroeconomic framework consistent with restoring fiscal/debt sustainability, reducing inflation to mid-low single digits, preserving external competitiveness, and growth recovery. The macroeconomic strategy for the period 2015-2019 presented during the Economic conference held in March 2015 is an illustration of such a framework. It encompasses a consistent medium-term macroeconomic framework with specific numerical targets such as bringing down the budget deficit to 8-8.5 percent of GDP by FY19, public debt to 80-85 percent of GDP by June 2019, and inflation to single digits. These efforts could be further strengthened through additional efforts to:
 - Strengthen coordination between the Ministry of Finance and Central Bank.
 - Improve public debt management to encompass contingent liabilities.
 - Develop further primary and secondary markets for government securities.
- 177. Public investment can be embedded in proper PIM system.
 - Overhaul planning for infrastructure and Public Investment Management
- 178. Promote a competitive and sound financial system, including reforming the banking sector and developing non-bank financial institutions.
 - Enhance financial sector competition through facilitating entry/exit and enforcement of corporate governance code

 Promote access to finance for private sector, especially MSMEs, including through strengthening the financial infrastructure: improved quality and quantity of credit data collected by the credit bureau, secured lending framework and registry of movable assets.

ENERGY SUBSIDIES

- 179. Energy subsidies are an extremely promising area for reform because of the breadth of impact a phased reduction of subsidies can have. As previously discussed, energy subsidies are expensive both directly and indirectly, benefit the rich rather than the poor, discourage employment growth in the private sector, create congestion in cities, and put unnecessary strain on the water supply. It is very encouraging that the government has been moving forward with politically difficult reforms in this area, and it is important that it continue to do so. The recent decline in global oil prices will further reduce subsidies in Egypt and presents an ideal opportunity to move forward on this agenda.
- 180. The long-term objective is for the energy sector to recover from its unsustainable financial situation and to meet energy demand efficiently and sustainably. This is a long-term process and will involve a series of challenging yet attainable steps that will gradually increase the commercialization of the sector. These steps may include, among others:
 - Rebase the current price controls with ad valorem subsidy rates allowing for price adjustments in line with international prices. This will safeguard against a renewed increase in subsidies should global energy prices go up.
 - Eliminate distortions within the energy sector, both across fuels and users, to avoid undesirable substitution and rent-seeking trade.
 - Implement a clear time bound plan for phasing out overall fuel subsidies, and use the resulting savings for high priority social and growth needs. This needs to be supported by an effective communication plan, social protection measures to compensate the poor and vulnerable from price shocks, and a robust monitoring mechanism to inform policymakers and citizens of the results.
 - Scale up energy efficiency programs and improve the generation mix to increase the share of renewable energy and secure the long term supply of natural gas
 - Underpin the above measures with improved energy services and improvements in the governance structure of the energy and gas sectors. To achieve financial sustainability, experience has shown that attracting private sector investments through state guarantees—essentially the single buyer model—has its limits. A number of countries have succeeding in reducing costs and achieving energy security through corporatization

of the sector, including improved corporate governance, regulations, competition, privatization of segments of the sector and restoration of the borrowing capacity of the holding companies.

PUBLIC GOVERNANCE

- 181. There is an overwhelming need for public sector governance reform in Egypt to support and sustain the necessary concrete sectoral governance reforms. As discussed in Chapter V, the fundamental constraint on the growth of the formal private sector is the lack of a level playing field; there are basic governance reforms that could go a long way towards creating such an environment. Agricultural incomes are also being artificially inhibited by poor governance, as farmers are denied the ability to form agricultural cooperatives and do not have control over their water schedules. The concrete reforms that address these problems are discussed in the next section, and may on their own have significant impacts. However, without broader improvements in public governance these reforms will be difficult to sustain, as the sector problem solved with one reform will eventually reemerge, perhaps in a different guise, somewhere else.
- 182. Increasing the accountability, credibility, and efficiency of regulators and policy-makers is therefore one key to making lasting progress. The ability of the government to effectively translate *de jure* reform into *de facto* reality is a crucial component of any reform. Public governance reforms such as the following may contribute to improvements in these areas:
 - Effectively implement civil service reforms to allow meritocratic hiring, promotion, and firing.
 - Amend the public procurement law according to OECD/UNICITRAL good practices for comprehensive transparency and disclosure of bidding opportunities, contact awards, and technical and finance evaluations.
 - Increase government transparency both by making more data publicly available and by making progress towards a more comprehensive right to information law.

PRIORITIZATION CRITERIA FOR FURTHER REFORM

183. Outside of these three necessary top reform priorities, there are a variety of other possible sector-specific policies and program that the government could take which could make progress towards the twin goals. These fall into the three pillars of reform discussed in Chapter V: private sector job creation, spatial integration, and inclusion. These pillars influence how

growth is translated into welfare improvements through nonfarm employment and entrepreneurship, improvements in agricultural incomes, building of human capital, and an adequate social safety net to cushion against adverse events and sustain progress towards poverty reduction.

- 184. There are four questions that can be asked about every reform to evaluate its priority level. These questions—about advancing the twin goals, enabling further reform, and so forth—will be used as a filter to guide the identification of the policies and reforms that are most critical for unleashing growth, creating jobs, and boosting poverty reduction and shared prosperity. For each reform, it is also necessary to take into account the evidence base in favor of the reform.
 - Governance: will this reform improve governance within the sector? Sector-specific governance reforms are at the heart of Egypt's constraints to poverty reduction. These reforms are either enablers that substantially boost the effectiveness of further reform or necessities without which other reforms will be almost entirely ineffective.
 - <u>Twin goals</u>: how will this advance the twin goals? Given the current trends of rising poverty in Egypt, priority should be given to policies and programs with the most potential for sustainable poverty reduction and improvement in the welfare of the bottom 40 percent. Policies that address these problems directly should be prioritized over those that are more indirect.
 - Breadth: will this make progress along more than one dimension? Many policies have the potential to have impacts in more than one domain, and these positive spillovers should be taken into account when evaluating policies. For instance, there are many agricultural policies that may have positive environmental effects as well, given agriculture's central role in water usage and pollution.
 - <u>Time horizon</u>: what is the timeframe? All else being equal, it is preferable to pursue policies that can be enacted quickly without waiting for other reforms to be implemented, and which can begin to take effect right away. Especially given the narrow window of opportunity mandated by Egypt's demographic structure, this should affect the government's sequencing of policies.
- 185. In many cases, there is clear evidence available to evaluate specific policies and come to a conclusion about the prioritization, however in other cases there are knowledge gaps such that recommendations must be made at a much broader level. It is difficult to evaluate specificities on what kinds of infrastructure to build and where, even though it is clear at the aggregate level that there are key infrastructure gaps. In addition, while improved urban planning would enhance Egypt's ability to manage its natural resources more efficiently, there is no specific "off-the-shelf" package of reforms that can be easily evaluated. There is thus a two-step process for prioritizing policies. The first step is to determine whether there is sufficient evidence to confidently conclude whether or not the policy will be effective. Then for policies for which

there is sufficient evidence, the governance, twin goals, breadth, and time horizon criteria are applied.

APPLYING THE FILTERS FOR PROGRESS TOWARDS THE TWIN GOALS

- 186. **Tables 6.1, 6.2, and 6.3 take each of the pillars and provide a diagnostic report based on the analysis in chapter V.** The first column lists "symptoms," the surface problems that are present in each sector. An example of this from the spatial integration pillar is that small farmers are failing to diversify the crops they grow away from wheat, rice, and other inefficient crops and towards more profitable horticultural produce, which has inhibited agricultural income generation.
- 187. In many cases there are deeper fundamental issues causing these symptoms. These fundamental constraints are listed in the second column. In the example of agricultural incomes, one reason that farmers are failing to move into horticulture is that their plots are too small to effectively leverage the necessary economies of scale.
- 188. The next step in the diagnostic to determine how to overcome these problems. The third column contains selected key and concrete reforms that the government could enact in order to address the fundamental constraints, and for which the case is clear based on the evidence. In the case of fragmented land ownership and poor organization of production, giving farmers more freedom to form into larger cooperatives will allow them to better access economies of scale.
- 189. Finally there are many policies that may or may not be effective and further evidence is needed to determine how to prioritize them. The fourth column poses some of the important, as-yet-unanswered questions for each sector. Some of these "knowledge gaps" are specific pieces of information, or in other words, do not yet pass the evidence filter. For instance, Egypt lacks a comprehensive system for monitoring agricultural water usage and thus information on usage patterns. Any policy to improve water efficiency through pricing or other similar measures would require such an information base. Other gaps are not this simple. For instance, international evidence on the effectiveness of programs that improve access to specific inputs (such as credit or technology) is mixed. The emerging wisdom is that the optimal combination of interventions differs from country to country. Thus, while Egypt can draw on global experience, it will be essential to also engage in rigorous experimentation and evaluation of pilot projects to ensure maximum cost-effectiveness of anti-poverty programs. In all cases, making data publically available and readily accessible will allow for evidence-based policy debates, and such transparency may also be a profoundly important accountability mechanism for good policymaking.
- 190. Below each table some of the fundamental reforms that pass the evidence filter are rated on each criteria. This determines if a reform addresses sector-specific governance issues, whether it has a direct or indirect impact on the twin goals, whether it advances progress along

multiple pillars, and whether it can be implemented and take effect quickly. The highest priority should be given to the reforms that rank highly on all criteria and especially those that fulfill at least three.

TABLE VI.1, PILLAR 1: PRIVATE SECTOR LED JOB CREATION

		Evidence filter			
Symptoms	Fundamental constraints	Recommended policies	Knowledge gaps remain		
Stagnant firm dynamics and slow growth in formal private sector Firms are choosing to be informal rather than formal and formal firms are offering informal jobs. Limited access to key inputs for entrepreneurs such as credit, capital, and land Possible frictional unemployment due to skills gap or information gap	Lack of a level playing field Regulatory complexity Penalizing risk taking and entrepreneurship	Competition: Enforce the independence of the Egyptian Competition Authority (ECA) as well as the Central Auditing Organization (CAO), and the Administrative Control Authority (ACA). Transparency: Make all regulatory information governing the private sector publicly and easily accessible both in print and online, including application requirements, fee schedules and regulatory performance. Simplification: Simplify procedures for licensing and registering property and create a transparent system for business license approvals and emonitoring and disclosure of processing times and move towards risk-based compliance systems. Bankruptcy: Reform bankruptcy procedures so that they are not considered to involve fraudulent behavior and simplify the process of declaring bankruptcy and resolving insolvency disputes. Credit reforms: Strengthening of the credit bureau and enacting a secured lending framework.	Where are the informal firms located (by region and sector) and which are entrepreneurial versus subsistence in nature? What are the actual input constraints experienced by entrepreneurs and what programs will be effective in addressing them? Which training and intermediation programs will be most effective in the Egyptian context?		

		Priorities		
Reform	Governance	Twin goals	Breadth	Time horizon
Competition	Yes	Indirect	Yes	Short
Information	Yes	Indirect	Yes	Short
Simplification	Yes	Indirect	Yes	Short
Bankruptcy	Yes	Indirect	Yes	Short
Credit reforms	Yes	Indirect	No	Short

- 191. The core issue for private-sector-led job creation is the lack of a level playing field. The lack of a true competitive environment hinders the ability of new firms to enter the market and reduces the incentives for existing firms to invest in new technologies and expand their workforce. Reducing the ability of connected firms to obtain unfair advantages requires that there be an independent and effective set of competition institutions. However, merely guaranteeing the putative independence of the competition authorities will not in itself insulate firms from ad hoc regulatory abuse. In order to ensure truly independent regulatory bodies and reduce favoritism, there must be increased transparency and other public governance reforms that change the underlying incentives of regulators and policy-makers.
- 192. New firms are also inhibited from starting and growing by the complex and opaque regulatory system. These increase the riskiness of starting a firm (since potential entrepreneurs are unsure which regulations they will be forced to follow) and punish innovation. The stringent bankruptcy procedures also punish risk-taking, as entrepreneurs may be faced with criminal punishments for engaging in a risky-but-valuable business venture. The four regulatory reforms in the areas of competition, information, simplification, and bankruptcy are thus at the heart of job creation.
- 193. The limited access to credit for entrepreneurs may be a constraint, but the impact of providing credit services to entrepreneurs is not clear. The international evidence on the effectiveness of microcredit and other similar programs is very mixed. A suggested way to proceed here is to begin laying the basis for specific programs. This would include strengthening the existing credit bureau by enabling access and dissemination of more types of credit data and allowing additional bureaus to be established as well as implementing a secured lending framework and movable collateral registry. When the regulatory environment is improved this will allow government or NGO programs to experiment and innovate with credit and credit "plus" programs and thus create a firmer knowledge base for future action. The newly issued microfinance law (effective starting 2015) addresses key regulatory gaps, including allowing commercial companies to engage in microfinance, which opens the window for NGO to establish and own shares in microfinance companies. If implemented properly, this may also open up additional space for innovation.
- 194. Active labor market policies can start to bridge the skills gap and do not require preconditions, but need to be carefully designed and evaluated. The rigorous evidence that exists suggests that positive impacts are limited to the short run, and unless more fundamental reforms to boost employment creation are put in place, the effects will not be sustained. In this

context, many studies have shown that training programs in isolation are not effective at creating long-term employment, especially, as in the case of Egypt, where formal private sector growth is sluggish. When carefully phased in and evaluated, however, they can be useful in informing the design and scaling up of larger programs. Similarly, programs specifically targeted towards increasing female labor force participation and employment are unlikely to have a lasting impact unless they are preceded by more fundamental reforms.

TABLE VI.2. PILLAR 2: SPATIAL INTEGRATION

			Evidence filter	
Sector	Symptoms	Fundamental constraints	Recommended policies	Knowledge gaps remain
Agriculture	Lack of diversification Poor market access Limited access to finance	Land fragmentation Price or purchasing guarantees for strategic crops Lack of control over water supply	Cooperative law: Reform the Law on Agricultural Cooperation (Law 122/1980) to provide farmers with the full freedom and flexibility to organize into independent cooperatives or associations without the existing rigid control of the Union of Agricultural Cooperatives and of the Ministry of Agriculture. Reduced price and purchasing guarantees: Reduce price guarantees and public procurement of wheat. Branch canal law: Revise Law 12/1984 to give the Branch Canal water user organizations legal standing and enabling them to collect funds to ensure their sustainability.	How is water being used on farms in terms of location, timing and crop variety? What are the actual input constraints experienced by farmers and what programs will be effective in addressing them? What can be done to mitigate the impact of removing price guarantees or fertilizer subsidies?

	High transport and			What is the extent of
infrastructure, housing, and transportation	logistics costs Urban encroachment Limited labor and capital mobility High housing prices Informal housing	Poor public land management Low levels of land registration	Committee for State Land Management to review and approve all new allocations of state land for investment purposes, reclassifications of state land and interagency land transfers. Land information system: Create and populate a State Land Information System with detailed maps. Rent control enforcement: Ensure even enforcement of existing rent control laws and reform aspects of grandfathering and inheritance of rent control. Titling: Incremental introduction of a	urban sprawl and informal housing in Egypt's secondary cities especially in Upper Egypt? To what extent are women shut out of the labor market due to poor commuting options? What is contributing to high transport
			industrial estates and parts of new towns. Public transport: increase buses and other forms of mass commuter transit. Urban planning: begin to create a long-term urban planning framework	what reforms will be most effective at reducing single-family vehicle commuting and congestion? Can mortgage finance help resolve access to housing issues for the poor?

		Priorities		
Reform	Governance	Twin goals	Breadth	Time horizon
Cooperative law	Yes	Direct	No	Short
Branch canal law	Yes	Direct	No	Short
Wheat price guarantee	Yes	Indirect	No	Short
Land committee	Yes	Indirect	Yes	Short
Land information system	Yes	Indirect	Yes	Long
Rent control enforcement	Yes	Indirect	No	Short
Titling	Yes	Indirect	Yes	Long
Public transportation	No	Indirect	Yes	Short
Urban planning	Yes	Indirect	Yes	Short

- 195. In agriculture, as already mentioned, the most straightforward hindrance to increasing incomes is that small farmers are not diversifying away from traditional crops and into horticulture, where Egypt (and especially Upper Egypt) has a strong comparative advantage. This occurs alongside of a number of problems, particularly limited access to markets and to support services such as credit. Digging deeper, there are three fundamental constraints to diversification; in addition to the land fragmentation, there are price guarantees for strategic crops and the fact that farmers often do not have access to water at the right times for horticulture crops. There is a straightforward governance reform that can address each issue. These are, respectively, reform of the cooperative law; reform of the branch canal user law; and removal or reduction of crop price and purchasing guarantees and fertilizer subsidies. All three could be accomplished very quickly if the government chooses, however the first two appear to be more important. First, they are likely to have a direct impact on poverty while removing the price distortions will be indirect. Second, removing the distortions will only help farmers diversify away from wheat if they have the water supply and the economies of scale necessary to productively move into other crops.
- 196. Increasing access to credit or other programs (such as agricultural extension) may be important only after the fundamental constraints are eased, but it is unknown which are the most binding constraints and what kinds of programs will be effective at increasing agricultural incomes. Further experimentation will be required to pilot different types of programs before deciding which should be brought to scale. In addition, Egypt currently lacks a water monitoring system that would allow the government to create a more efficient water scheduling policy; given the importance of water to agriculture increasing this field of knowledge is very high priority. Limited market access is a serious constraint especially for perishable horticultural crops. Building facilities for storage and collection centers for produce would improve access but as with all infrastructure projects will work best if coupled with the fundamental public sector reforms.
- 197. There are many important governance reforms related to land use and infrastructure which can be started quickly but which will have an impact over a longer timeframe. The process of reforming state land management will require a number of separate stages. However, given the importance of state land management as a component of public sector reform, it is

very advisable to start on these reforms now. Untangling the two competing property registration systems currently in existence will be a long and complex process, and will also require experimentation in how to approach it. Supporting urban transformation will require building connective infrastructure, but this will be much less effective if it does not take place in accordance with the establishment of long-term urban planning programs, land use reform, and improved public procurement processes.

- 198. Improving urban planning and certain land management systems are flagged as high priorities but ensuring that they are implemented properly will require improvements in public governance. These systems will be able to function more smoothly if they have broad political backing and the support of civil society. The existence of urban planning systems will also not automatically reduce the influence of powerful constituencies and political interests unless they are implemented properly and act independently, otherwise political interests will continue to push for ad hoc, opportunistic, and inefficient uses of public lands.
- 199. Given the housing shortages in metropolitan areas, it is important to focus on increasing the effective supply of housing through enforcement of rent regulations. More generally, the government can change its role in the housing market from that of a direct supplier to an enabler of the private sector to deliver housing. This could include addressing the problems with land and property registration systems in urban areas, which may currently hamper access to mortgage and housing finance.²⁰⁴ Upgrading informal housing and connecting it to urban infrastructure will also help but again requires better public investment management.

²⁰⁴ Assaad and Barsoum 2007

TABLE VI.3. PILLAR 3: INCLUSION

			Evidence filter	
Symptoms		Fundamental constraints	Recommended policies	Knowledge gaps remain
Regional defineducational infrastructur quality of edicand retention for girls The education system does prepare study the private standard work as privated and work as private	e and ucation, n rates In onal not ents for ector ecism for I many ate tutors ent in	Service delivery Centralized funding and decision-making offerible curriculum driven by public sector	Devolution: Develop a strategy to devolve funding to local authorities and give them additional flexibility in project choice while maintaining topdown accountability. Bottom-up accountability: Put appropriate standards for learning outcomes, certification, and accreditation in place and publish results and strengthen the involvement of parents and communities.	What is the current capacity of local authorities to manage funds? What are the proper criteria to benchmark school and teacher performance? What programs can do the most to encourage attendance and discourage dropout? What are the sources of low educational attainment in peripheral areas, especially for girls?

Health	Staff absenteeism and low morale Poor access to healthcare in peripheral areas High out-of-pocket health expenditures and low availability of health insurance Public health risks due to poor sanitation in rural areas Childhood malnutrition High hepatitis C prevalence Increasing burden of non-communicable diseases	service delivery Centralized funding and decision-making Lack of comprehensive plan for dealing with non-communicable diseases	Implement the Family Health Services model of providing basic health services at the level of primary health care facilities and pay-for-performance especially in the poorest areas Health accountability: Establish grievance and redress mechanisms and active monitoring of the quality and satisfaction with health services	What are the proper criteria to benchmark health facility performance? What are the most effective ways to extend health insurance to poor households and the informally employed? What is the mental health disease burden? What are the sources of childhood malnutrition? What are the drivers of rising fertility rates in non-metropolitan Egypt?
Social protection	Poorly targeted and inefficient food subsidy system	programs and databases on poverty Lack of framework for rolling out a national cash	implementation of the decree establishing cash transfer program to target poor and vulnerable. Registry: Continue building registry of poor households from existing databases and improve processes	What are the proper criteria for determining poverty and vulnerability status? What is the ability of the poor to access bank accounts, and are there alternative ways of safely delivering cash to the poor?
Environment	pollution especially in the Greater Cairo area	integrated, multi- sectoral approach to prevent pollution Institutional	building: Establish an air quality management system to successfully implement a strategy that would reflect the	What is the current Cost of Environmental Degradation? What are the most technologically costeffective interventions

L	Land degradation and	regulation and	Environmental information:	to tackle pollution
ı	urban sprawl	enforcement	Providing and disseminating	issues?
			factual information on air	
			pollution and its health risks.	
		consequences of		
		policy failures in		
		other sectors		

	Prio	rities		
Reform	Governance	Twin goals	Breadth	Time horizon
Devolution	Yes	Indirect	No	Long
Bottom-up accountability	No	Indirect	No	Short
Family Health Services model	Yes	Direct	Yes	Short
Health accountability	No	Indirect	No	Short
Non-communicable diseases	No	Direct	No	Long
Cash transfers	No	Direct	Yes	Short
Registry	Yes	Direct	Yes	Short
Environmental institution- building	Yes	Indirect	No	Long
Environmental information	No	Indirect	No	Short

- 200. Bridging the deficit in service delivery in terms of access and quality is a key priority for Egypt. This will disproportionately benefit the lagging areas such as Upper Egypt and hitherto excluded groups especially women and girls. It is unclear whether regional and gender gaps in human development outcomes are stemming from supply-side constraints such as lack of access and poor quality or financial and other demand-side constraints. Testing a variety of programs that consider both sides would fill an important knowledge gap.
- 201. The health and education areas suffer from problems of absenteeism and low staff morale. In health, there is fortunately a solution ready at hand, which is the deployment of the Family Health Model. This has been previously proven effective and includes elements of more efficient provision of care and provider incentives. Because it has been intermittently in place, reviving and expanding it should be relatively easy. Once this is in place, it will also be easier to use it as a framework to implement increased accountability reforms and to eventually expand it to address non-communicable diseases.
- 202. Dealing with these problems in education may be a more prolonged process, requiring the government to devise a framework for devolving decision-making power and funding to local authorities. This strategy must begin with reforming financing for the education sector to be based on enrolment rather than historical allocations, and can draw upon the ongoing piloting of limited decentralization reforms. Increasing bottom-up educational accountability through transparency can be accomplished relatively quickly, but in isolation it will have limited impact.

It will also improve local outcomes only to the extent that local authorities are incentivized to improve educational services, which requires that these authorities be held accountable locally.

- 203. Perhaps the most important reform to expand inclusion is the establishment of a cash transfer system and an accompanying registry of poor households. A critical initial step in this direction is the rollout of the Takafful and Karama cash transfer program. There are additional benefits, as the registry could serve as a foundation for the delivery of higher-level programs. For instance, conditional cash transfers have been found to be effective at increasing educational attainment particularly among girls. The registry would allow the government to implement these transfers targeting poor households. Another problem is that health insurance coverage among the poor is very low; the registry could serve as a platform for these kinds of interventions as well. Finally, a well-functioning and targeted cash transfer system would facilitate the streamlining of (untargeted) energy subsidies.
- 204. Fundamental environmental policies can be put in place over the longer term while policy improvements in other sectors can have positive spillovers in the short-run. Improving the implementation capacity of the existing environmental agencies cannot happen overnight, and will depend heavily on the implementation of the overall public governance reforms. Fortunately, some of the environmental issues Egypt faces can be addressed by reforms in the other sectors. As agriculture is the biggest consumer of water and one of the main sources of water pollution, finding and implementing polices that improve agricultural water efficiency should decrease water degradation. Since urban sprawl and encouragement are responsible for much of the degradation of fertile land, better urban planning policies should promote less wasteful expansion. Finally, energy subsidy reform would discourage excessive driving and improve air quality. Many of these sectoral policies are prioritized, and of course continued energy reform is classified as a top overall priority for Egypt.

CONCLUSION

205. This is a critical point in Egypt's history. The last four years starting with the 2011 revolution have brought to the fore issues of social justice that went beyond mere subsidies. People's frustration included concerns about job stability, quality of life, access to good educational opportunities, and health. This analysis has identified a number of key reforms that can address these aspirations and foster social stability and a well-functioning society. Beyond achieving macroeconomic stability, these include continuing down the path of energy subsidy reform, promoting private-sector-led job creation, boosting agricultural incomes, and creating a more efficient system of social protection.

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ANNEX I: CONSULTATIONS

A series of three consultations were organized in September 2014 - (I) a round table with entrepreneurs organized by IFC, (II) academics and think tanks and NGOs - and (III) government representatives. Below are the key points raised in each context.

CONSULTATIONS WITH ENTREPRENEURS:

There was wide agreement on the diagnostics that were presented on Egypt's development challenges. Discussion points hovered around the ways to improve the climate for job creation. Salient points raised were:

- The issue of exchange rate policy, the need to improve manufacturing which is key to job creation—highlighting problems faced by the textile industry as an example.
- There was also lively discussion around how to enforce law to reduce perceptions of unfairness among the private sector.
- Concrete steps to make regulations work and enable competitiveness were emphasized.
- The pitfalls of an industrial policy that picks winners was discussed—the point was made that it is important to reduce policy distortions so that industrial take off would be determined by those that naturally arise as opposed to guessing what should be the "right" industries to encourage.
- The issue of lack of competitiveness of the banking sector and not efficiently using money available for investment was raised.

CONSULTATIONS WITH ACADEMICS/ THINK TANKS/ NGOS:

Some salient points:

- Responding to the issue of fundamental governance constraints underpinning many of the development challenges. Participants concluded that it would be better framed in terms of a vicious cycle between weak incentives (coupled with lack of accountability) and low capacity of public sector.
- In discussing public sector issues, including the attraction of the public sector as a desirable good job, one participant noted that in the public sector, the story is no longer about minimum wage or 'prestige,' but the concentration of the benefits received by the top 20%.

Regarding the agricultural sector, the role of cooperatives was discussed. Some highlighted that a "new cooperative law" may be in the works; that food price inflation was partially explained by the low competition of cooperatives and rent extraction from middlemen. Lack of market access including transportation and logistics were highlighted as key constraints.

CONSULTATION WITH GOVERNMENT

Some salient points:

- There was agreement with the diagnostic but a stronger elaboration was requested of ways to boost agricultural production and include "care" work.
- There was discussion on whether the outcomes in the labor market can be fully explained by lack of capacity of individuals or whether i "it is the lack of jobs." The existing job market is not equipped to cater to the qualifications of the entrants; there is a need for a labor-intensive development, "driven by the private sector."
- There is a plan to remove all energy subsidies in five years. The PM has issued a decree of what will be the price from now on for both residential and commercial uses. On electricity there is a need to include efficiency (in terms of generation and distribution).

REVIEW OF THE CALCULATION OF POVERTY LINES IN EGYPT

The methodology for the calculation of headcount poverty rates in Egypt largely follows the Cost of Basic Needs approach. The poverty line is based on estimating for each household the cost of meeting its basic needs. This poverty line is based on estimating the cost of satisfying the caloric needs of all members in a household (i.e. food needs) and a further adjustment for the consumption of non-food items. If the household's total consumption is below the poverty line, it is considered poor. The aggregation of all households' poverty status leads to the national headcount poverty rate. As described in World Bank 2010, the steps to calculate the poverty rates are as follows:

- 1. Define caloric requirements. Using tables from the World Health Organization (WHO), caloric needs for each individual and are separately specified for urban and rural individuals, by sex and 13 age categories.²⁰⁵ The caloric needs of each household are obtained by adding the caloric needs of each member. Thus, each household has its own caloric requirements depending on its location, age and gender composition.
- 2. Define per calorie cost in each region in the country. A representative consumption bundle of the poor is obtained by estimating the average quantities of all food items consumed by households in the second quintile of the total household per capita expenditure distribution. Next, the total calories provided by this bundle are calculated by adding the calories provided by each item in the bundle. Using unit prices for each food item in each region in the country, a region-specific total price of the bundle is calculated. Finally, the total cost of the bundle is divided by the total calories provided by the bundle to obtain a region-specific measure of the cost of buying one calorie.
- 3. Obtain household-specific poverty line. For each household, the region-specific per calorie cost is multiplied by the household's caloric needs to obtain the household's total cost of covering the caloric requirements of all its members. This cost is referred to as the Food Poverty Line.

²⁰⁵ For individuals over 18 years of age, WHO's recommended daily allowances are further differentiated by weight and activity levels. In defining the 2004/05 households' caloric needs, the authors assumed an average weight of 70 kg for men over 18 years of age, and 60 kg for women. Urban individuals were assumed to need 1.8 times the average basal metabolic rate (BMR) and rural individuals were assumed to need 2.0 times the average BMR (World Bank 2010).

4. Calculate the non-food poverty line. Under current methodology, the non-food part of the poverty line is obtained by applying Engel's law to households' consumption on food. First, food shares are regressed against a logarithm of total household expenditure relative to the food poverty line and its square, and a series of household demographic characteristics. That is:

$$s_{i} = \alpha + \beta \log \left(\frac{x_{i}}{z_{f}}\right) + \gamma \left[\log \left(\frac{x_{i}}{z_{f}}\right)\right]^{2} + \delta h_{i} + \varepsilon_{i}$$
(1)

Where s_i denotes food share of household i, x_i is household consumption, z_f is the food poverty line, h_i is the vector of household demographic characteristics (location, logarithm of household size and its square, age and gender composition – share of children under 14, share of adult males and females, and share of elderly), and ε_i is an error term.

The non-food allowance can then be obtained in two ways. A lower bound of the poverty line is obtained by identifying the share of non-food expenditure for households in which total expenditure is equivalent to the food poverty line. In this case, households had to displace food consumption to allow for non-food expenditures. Alternatively, an upper bound of the poverty line can be obtained by regressing the food share against total expenditures, and identifying the non-food share in the expenditure distribution of households in which expenditure on food is equivalent to the food poverty line.

5. Updating poverty lines. Estimation of headcount poverty rates across time require defining a methodology to make the poverty lines comparable across time by taking into account changes in prices in both food and non-food items. Official poverty lines estimated by CAPMAS have used region-specific CPI adjustments to update food and non-food poverty lines between 2004/05 and 2008/09.

Further changes to the methodology were performed for each of the rounds 2010/11 and 2012/13. That is, steps 1 through 4 were performed using the consumption distribution for each survey year because the bundle of the second quintile of the distribution (from 2004/05) was deemed to no longer being representative of the consumption bundle of the poor. This change in methodology does not allow a straightforward comparison of poverty trends before and after the 2008/09 round. The non-comparability arises because the definition of what characterizes the poor population is not consistently measured and compared across all years.

As part of the SCD, early explorations to estimate headcount poverty rates for the years 2010/11 and 2012/13 were performed while keeping a comparable methodology. The rates were estimated at 24.8 in 2010/11 and 21.7 in 2012/13. This exercise confirmed the continuous

increase in poverty between 2005 and 2010 and thus, these rounds provided the basis of the poverty profile analyses in the document.

The finding of an apparent drop in poverty after 2010 is not consistent with the trend from official estimates for the 2012/13 round (26.29). Preliminary results looking at the regional evolution of prices and household expenditures suggest that changes in food prices may be key drivers of changes in poverty in Egyptian regions. For instance, poverty is estimated to have increased the most between 2004/05 and 2008/09 in Urban and Rural Upper Egypt. Figure A3 shows that during this period, the growth of total household per capita expenditures grew at a slower pace than overall prices and food prices, implying a drop in real expenditures in these regions and most likely an increase in poverty. After 2010, household expenditures seem to outpace prices (overall and food) probably leading to the observed decrease in poverty. On the other hand, prices grew faster in Alexandria and Cairo—two governorates that belong to the Metropolitan region where poverty was estimated to have increased between 2010/11 and 2012/13.

The work program of the Poverty Group will include an in-depth review of the methodology to calculate the headcount poverty rates. Among the main areas of analysis, there will be a review of how the poverty line is estimated. While the current methodology is sound and has the intuitive appeal of allowing for taking into consideration differences in household composition and regional prices, it remains a complicated tool to use for social policy given the essentially household-specific method of setting a poverty line. The study will explore how setting other methodologically rigorous poverty lines affect the headcount poverty rates and trends.

GROWTH INCIDENCE CURVES

The Growth Incidence Curve (GIC) is a very useful graphical tool to analyze how changes in welfare are distributed among all individuals (or households) in the country. Basically, the GIC calculates for each percentile of the per capita consumption (or income) distribution, the observed annual growth rate between two time periods of interest. To make this comparison informative, the per capita consumption (or income) distribution in all years has to be expressed at the same prices. This adjustment helps purge out any changes in observed consumption that are entirely due to changes in prices—which by themselves do not lead to a change in welfare.

Adjusting the per capita consumption observed in the surveys into the same prices requires making an assumption of what is the most appropriate price vector to be used as anchor for the adjustment. In this diagnostic, the consumption observed in the 2011/12 survey was adjusted to 2005 prices to make both consumption distributions comparable. The steps followed to perform the price adjustment were:

- a) Calculate the average national per capita poverty line for 2005. After dividing each household poverty line by the household size, the weighted average per capita poverty line in the country is calculated.
- b) Calculate the average national per capita poverty line for 2010. After dividing each household poverty line by the household size, the weighted average per capita poverty line in the country is calculated.
- c) Adjust each household's per capita consumption spatially. For each survey year, first obtain for each household the per capita monthly consumption by dividing the household consumption by household size. Then, create a spatial adjustment factor by diving each household's poverty line by the average national per capita poverty line (obtained in steps (a) for 2005 and (b) for 2010, respectively). Finally, obtain the household's per capita spatially adjusted consumption by multiplying the per capita consumption by the spatial adjustment factor. This step helps take into account differences in prices faced by households living in different regions of the country.
- d) Adjust consumption observed from households in 2010 for changes in prices. After adjusting for spatial differences, the consumption in 2010 is also adjusted to account for how prices (from both food and non-food items) have changed between 2005 and 2010. First, the price adjustment factor is obtained from the ratio of the average national per capita poverty line in 2005 and the average national per capita poverty line in 2010. Next, for all households in 2010, their per capita consumption is multiplied by this adjustment factor to express their consumption in 2005 prices.
- e) Calculate the Growth Incidence Curve. For each year, the distribution of per capita consumption is divided into 100 centiles (ordered from the lowest to highest consumption). The annual growth rate for each centile is estimated using the formula:

$$growth\ ratec = 5cons2010ccons2005c - 1$$
 (2)

Where $growthrate_c$ refers to the annual growth rate of centile c, $cons2010_c$ represents the average per capita consumption of centile c in 2010, and $cons2005_c$ refers to the average per capita consumption of centile c in 2005. Finally, the GIC plots for each centile c the estimated growth rate using equation (2).

Alternative assumptions yield different adjustments that could be applied to calculate the GIC. Two alternatives to the approach used here illustrate how such assumptions affect the estimates for the GIC.

Alternative 1: No spatial adjustment and price adjustment using the poverty lines. This alternative is similar to the approach used here, but does not perform step (c) described above.

Alternative 2: No spatial adjustment and price adjustment based on the country's CPI. This approach is the most commonly followed approach to price-deflate series across time (including for instance the World Bank's PovCalNet tool). Under this approach, no spatial adjustment is performed (i.e. steps a-c above), and the per capita consumption of 2010 is adjusted to 2005 prices using the following adjustment factor: CPI_{2010} / CPI_{2005} . The GICs obtained through these alternatives are shown in Figure A4.

Alternative 2 shows a positive annual growth rate across the per capita consumption distribution, whereas the current approach and alternative 1 show a decrease in the welfare of households between 2005 and 2010. Additionally, the current approach and alternative 1 are very similar. The main difference between the two comes at the top of the distribution where the current approach estimates larger drops in welfare for households above the 70th centile. These results suggest a closer look be taken as to how the poverty lines are adjusted for the poverty calculation in Egypt. The Poverty Assessment planned for FY15 will further explore these issues.

AN ILLUSTRATIVE EXERCISE ON EGYPT'S MIDDLE CLASS

This exercise aims to identify a group among the Egyptian population that can be considered as the middle class. Individuals and households in this group are considered to not be vulnerable to falling into poverty, and at the same time do not belong to the rich or upper class. This follows a large literature in economics that uses income as criteria to define who is in the middle class, in particular, an adaptation of the approach of Lopez-Calva and Ortiz-Juarez (2011) to define the lower bound of households that can be considered middle class. The approach herein is based on the following steps:

- a) Estimate a probit regression to obtain how demographic and economic characteristics are related to the likelihood of being poor. These characteristics include for instance household composition, age, and gender of the household head, region of residence, and whether the head is employed. The *probit* regression is estimated using data from HEICS 2005 round.
- b) Use the coefficients from step 1 to estimate the predicted probability of each household in 2010 (from HEICS data) of being poor. Predicted probabilities use demographic and economic characteristics recorded in the 2010 survey.
- c) Define the lower threshold of being at risk of falling into poverty at a predicted probability of 10% or more. Households with predicted probabilities lower than 10% will

- be considered as candidates of belonging to the middle class. Obtain the median per capita household daily expenditure (in 2005 PPP) of households close to this threshold.
- d) Defining the upper threshold for being in the middle class. Following Banerjee and Duflo (2008),²⁰⁶ this threshold was set at US\$10 per capita household daily expenditures (in 2005 PPP). Households with expenditures below this threshold are candidates for belonging to the middle class. Households with expenditures above this threshold are considered as upper class.
- e) Households with expenditures above the lower threshold and below the upper threshold are considered belonging to the middle class.

Figure A5 plots the results from steps 1 and 2. The threshold of a 10% probability of being poor yields a lower threshold of US\$2.75 a day (per capita in 2005 PPP). This constitutes the lower bound used for identifying the middle class. This bound is above the (approximately) US\$2.24 a day threshold that would be consistent with the country's average national lower poverty line for 2010. Finally, the US\$10 a day threshold is used to define the upper threshold of who is considered middle class. Using these results together, the following groups in the population (see table A6) are defined:

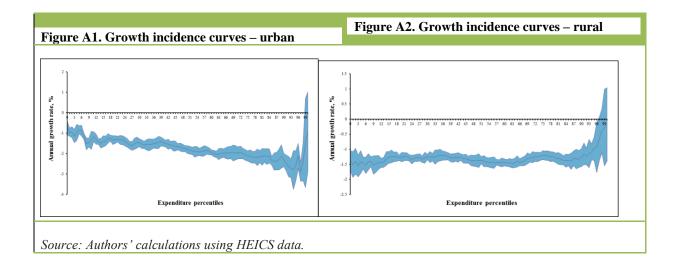
- Poor population: households with daily expenditure per capita lower than US\$2.24 a day—26.4% of the population.
- Vulnerable population: households with daily expenditures per capita above US\$2.24 and below US\$2.75 a day—18.4 % of the population in this group.
- Middle Class: households with daily expenditures per capita between US\$2.75 and US\$10 a day—approximately 52.3% of the population belongs to the middle class.
- Upper Class: households with daily expenditures per capita above US\$10 a day approximately 2.8% of the population was found as belonging to the Upper class.²⁰⁷

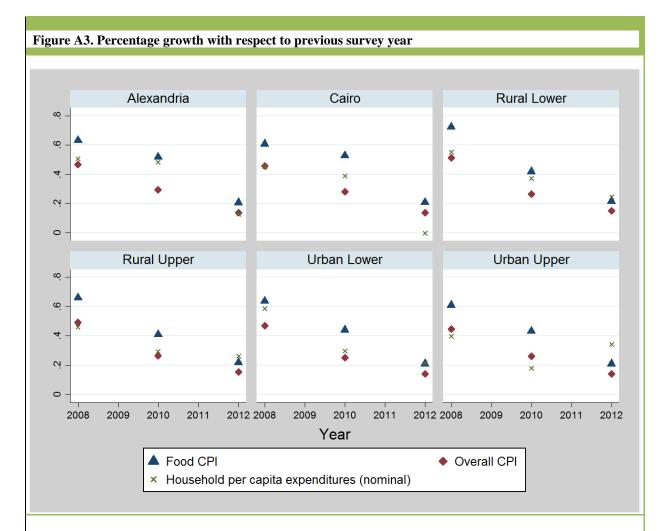
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²⁰⁶ The authors study a set of 14 developing countries.

²⁰⁷ Lopez-Calva and Ortiz-Juarez (2011) use a much higher upper threshold at US\$50 a day and find about 2.2 of the population in the upper class. However, the set of countries they analyze are richer countries than Egypt. For the set of countries used in Banerjee and Duflo (2008), a US\$10 a day upper threshold leaves an average of 8% of the population in the upper class.

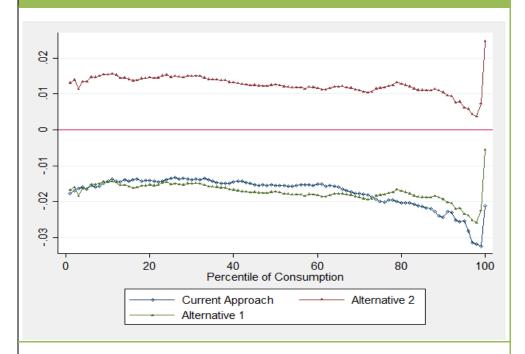
ANNEX FIGURES





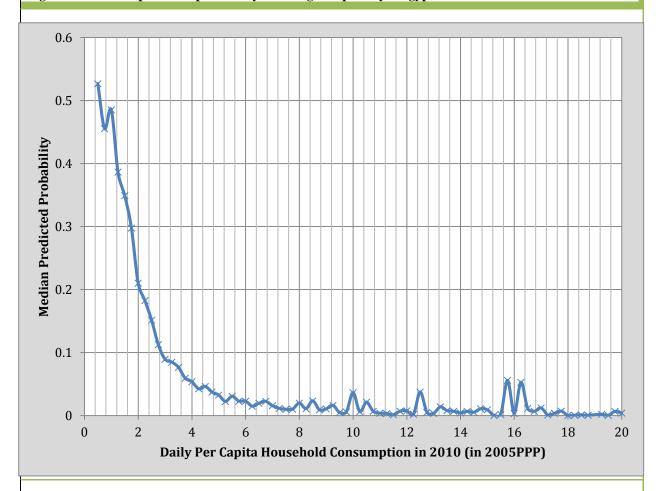
Notes: Selected regions included. The HIECS rounds are referred as 2008 for 2008/09, 2010 for 2010/11, and 2012 for 2012/13. Regional overall CPI for 2012/13 estimated from regional food and non-food CPIs. Source: *Author's calculations*.

Figure A4. Growth incidence curves under alternative assumptions – Egypt 2005, 2010



Notes: Current approach adjusts spatially and for prices using the poverty line. Alternative 1 only adjusts for prices using the poverty line. Alternative 2 only adjusts by prices using the CPI. *Source: Authors' calculations using HEICS data*.

Figure A5. Median predicted probability of falling into poverty – Egypt 2010



Notes: Median predicted probability estimated for all households in US\$0.25 brackets of daily per capita household consumption (in 2005 PPP). *Source: Authors' calculations using HEICS data*.

ANNEX TABLES

	Poverty Hea	dcount Rate	Distributio	on of Poor	Distribution (of Population
Region	2005	2010	2005	2010	2005	2010
Metropolitan	5.7	7.3	5.4	5.1	18.7	17.2
Lower Urban	9.0	9.7	5.6	4.9	12.1	12.3
Lower Rural	16.7	18.9	26.2	25.6	30.8	33.0
Upper Urban	18.6	24.8	11.3	11.8	11.9	11.6
Upper Rural	39.1	51.1	50.6	51.3	25.4	24.5
Total	19.6	24.4	100.0	100.0	100.0	100.0

^{*} Calculations exclude border regions with less than 1% of the population. Source: Authors' calculations using HEICS data.

LS regression results: determinants of household	l Consumption	<u>'</u>
Dependent variable: Log Monthly Ho	usehold Consumption per capita	1
	(1)	(2)
VARIABLES	2005	2010
Log Household Size	-0.551***	-0.681***
	(0.016)	(0.041)
Log Household Size Squared	0.028***	0.088***
	(0.006)	(0.014)
Household head characteristics		
Male	-0.079***	-0.094***
	(0.007)	(0.015)
Literate	0.094***	0.071***
	(0.005)	(0.014)
Less than intermediate studies	0.164***	0.132***
	(0.007)	(0.015)
Less than university studies	0.233***	0.237***
	(0.005)	(0.012)
University or higher	0.571***	0.560***
	(0.006)	(0.015)
Employed	0.066***	0.051***
	(0.006)	(0.014)
Additional regressors		
Age	0.007***	-0.002
	(0.001)	(0.002)
Age Squared / 100	-0.005***	0.004*
	(0.001)	(0.002)
Dependency Rate	0.107***	0.060***

	(0.008)	(0.020)
Lower Urban	-0.209***	-0.194***
	(0.006)	(0.016)
Lower Rural	-0.323***	-0.344***
	(0.005)	(0.013)
Upper Urban	-0.235***	-0.357***
	(0.006)	(0.016)
Upper Rural	-0.458***	-0.535***
	(0.006)	(0.014)
Constant	5.859***	6.102***
	(0.026)	(0.062)
Observations	46,384	7,140
R-squared	0.480	0.493

Notes: Standard errors in parentheses. Omitted category includes female, illiterate, unemployed or out of the labor force, metropolitan region. Household consumption per capita was spatially adjusted. Regressions use sampling weights. *** p<0.01, ** p<0.05, * p<0.1 *Source:* Authors' calculations using HEICS 2005 and 2010 data.

able A3. Probit Regression results: Determinants Poverty Statu	us	
Dependent variable: P	overty Status	
	(1)	(2)
VARIABLES	2005	2010
Log Household Size	1.311***	2.368***
	(0.065)	(0.158)
Log Household Size Squared	0.032*	-0.314***
	(0.019)	(0.045)
Household head characteristics		

Male	0.162***	0.207***
	(0.014)	(0.033)
Literate	-0.228***	-0.258***
	(0.010)	(0.027)
Less than intermediate studies	-0.433***	-0.424***
	(0.014)	(0.030)
Less than university studies	-0.581***	-0.640***
	(0.011)	(0.024)
University or higher	-1.053***	-1.123***
	(0.019)	(0.042)
Employed	-0.223***	-0.145***
	(0.014)	(0.031)
Additional regressors		
Age	-0.012***	0.026***
	(0.002)	(0.005)
Age Squared	-0.000***	-0.000***
	(0.000)	(0.000)
Dependency Rate	-0.515***	-0.353***
	(0.019)	(0.047)
Lower Urban	0.221***	0.141***
	(0.017)	(0.041)
Lower Rural	0.431***	0.420***
	(0.014)	(0.033)
Upper Urban	0.605***	0.701***
	(0.016)	(0.037)
Upper Rural	1.038***	1.212***

	(0.014)	(0.033)
Constant	-2.849***	-4.411***
	(0.070)	(0.169)
Observations	46,384	7,140

Notes: Standard errors in parentheses. Omitted category includes female, illiterate, unemployed or out of the labor force, metropolitan region. *** p<0.01, ** p<0.05, * p<0.1 *Source:* Authors' calculations using HEICS 2005 and 2010 data

Table A4. Groups of the Egyptian population, by vulnerability levels				
	Thresholds	Proportion		
Group	(USD a day in	of the		
	2005 PPP)	population		
	Less than			
Poor	2.24	26.4%		
	>2.24 and ≤			
Vulnerable	2.75	18.4%		
	>2.75 and ≤			
Middle Class	10	52.3%		
Upper Class	> 10	2.8%		