



Munich Personal RePEc Archive

A Value Proposition for Egypt Beyond Revolution: Competitiveness Analysis with Policy Recommendations

Selim, Tarek and Shoman, Menna

2013

Online at <https://mpra.ub.uni-muenchen.de/119495/>
MPRA Paper No. 119495, posted 28 Dec 2023 14:36 UTC

Egypt Post Revolution: A New Beginning

Competitiveness Analysis with Policy Recommendations

Tarek H. Selim and Menna Shoman¹

American University in Cairo and Egyptian Competition Authority

Abstract

The Egyptian revolution of Jan 25th 2011 presents a cross road in Egyptian history that hasn't been witnessed since ancient times. This peaceful and truly popular revolt came as a result of system failure on both political and economic levels of the regime of Hosni Mubarak who has been ruling the country for the past 30 years with political oppression, deteriorating standards of living and lack of economic equity. Persistent corruption with R&D spending less than 0.5% of the country's GDP generated an elusive path of artificially "high" growth rates. Now as Egypt embarks on its new beginning a number of questions are in desperate need for answers. This paper examines Egypt's economic performance before the revolution with an analysis of Egypt's real GDP growth, chronic inflation trends, poverty and income distributions as well as the performance of the economy's sectors and relative national competitiveness on the global scale. The analysis brings to light the most critical economic problems which was the main trigger of the January 25th revolution. The paper also examines the short term impacts of the revolution on the economy. The analysis then maps the unique opportunity in front of Egypt to step change its economy on macroeconomic as well as sectoral levels with a "Unique Value Proposition" as the recommended framework. Critical policy recommendations are then founded on a proposed cycle of competitiveness in order to achieve a higher economic quality of life for the masses and transform Egypt into an innovation driven economy in the long run. Starting with education, leading to cultural transformation and institutional governance, followed by reaching a competitive economy based on efficiency, are parallel prerequisites to achieving an innovative Egyptian economy in the long run with global competitiveness. Concrete strategies and timeline action plans are proposed.

¹ This paper is prepared by Professor Dr. Tarek H. Selim (tselim@aucegypt.edu) at the Department of Economics of School of Business of the American University in Cairo, and Senior Economic Advisor at the Egyptian Competition Authority, Egyptian Cabinet of Ministers. The paper is co-authored by Menna Shoman, Brand Manager, Proctor & Gamble Egypt and member of the Misr Al Horeyya Party (Egypt Freedom Party). This paper constitutes personal opinion and does not reflect, by any means, the opinion of any of the author's affiliated institutions or political entities mentioned above.

Table of Contents

<u>INTRODUCTION</u>	3
<u>EGYPT'S COUNTRY PROFILE</u>	3
Country background	3
Agricultural sector	6
Industrial sector	7
Services sector	8
Summing up the different sectors	9
<u>IS EGYPT INTERNATIONALLY COMPETITIVE?</u>	10
<u>REACHING THE TURNING POINT: THE EGYPTIAN REVOLUTION IS BORN</u>	13
Short term impact on economy	14
Prospects for the future: A New beginning	15
<u>COMPETITIVENESS SUMMARY AND PREREQUISITES FOR GROWTH</u>	16
<u>GOING FORWARD: RECOMMENDED VISION AND STRATEGY</u>	18
<u>CONCLUSION</u>	22
<u>BIBLIOGRAPHY</u>	24
<u>EXHIBITS:</u>	
Exhibit 1: Inflation in Egypt	26
Exhibit 2: Income distribution in Egypt	27
Exhibit 3: Share and growth of different sectors in the economy	28
Exhibit 4: Wheat in Egypt	29
Exhibit 5: Textiles industry in Egypt	30
Exhibit 6: Tourism in Egypt	31
Exhibit 7: Egypt's performance and global competitiveness	32
Exhibit 8: Egypt's SWOT analysis	33
Exhibit 9: Egypt's strategies timeline	34

INTRODUCTION

In January 25th 2011, Egypt entered a historical moment in the country's life. Millions of Egyptians took to the streets in 18 days of peaceful demonstrations with clear political, economic and social demands that finally led to the stepping down of President Hosni Mubarak who has been autocratically ruling Egypt for the last 30 years. The essence of the revolution was not just changing the president or the cabinet, but its focus was to create a democracy for the masses with transparent anti-corruption systems and new constitution, as well as implementing fair income distribution policies that creates more jobs and better income for the public. This manifesto was the conviction of the revolutionaries, and was eventually accepted by the military, hence toppling down the Mubarak regime. Consequently, it is seen that as Egypt embarks on its reform journey from the political and social standpoints, it is crucial to simultaneously develop a robust economic reform plan that enables the country to grow and compete internationally.

This research scans the status of the Egyptian economy before the revolution by analyzing the key factors that plagued the Egyptian economy with low productivity and widening inequality. Sectoral competitiveness and missing innovation elements are identified and outlined. This enables the construction of a country-level SWOT analysis (strengths, weaknesses, opportunities and threats) with sector-specific implications which is then used to provide critical policy recommendations that can help Egypt start its new era of freedom and equity for the masses. The study then outlines how Egypt can build its own efficiency-driven economy in the short to medium term horizons based on national competitiveness, with the ultimate objective of reaching a virtuous innovation-driven economy in the long term with global competitiveness. All policies and recommendations are discussed as an integrative economic plan which answers the essence of the demands of the Egyptian revolution.

EGYPT'S COUNTRY PROFILE

Country Background

Egypt has historically been a country with strategic geo-economic importance, due to its central location, social and political leadership in the Middle East, scale homogeneous population of 82 million (CIA, 2011), and diverse portfolio of potentially competitive economic activities such as tourism, Suez Canal revenues, agricultural base, labor-intensive assembly industries, and a growing services sector. Yet the country has also been plagued with chronic inflation, corruption, political favoritism, and severe income inequality preventing it from achieving a viable level of competitiveness

or achieving equitable economic growth. Additionally, innovation pillars have been largely and practically untapped, given an abundant skilled labor force with high educational attainment, leading to low economic value-added thus leaving the country with large potential that never materialized.

During the recent years before the revolution i.e. starting fiscal year (FY) 2008-2009, Egypt's economy was already starting to recover from the global financial crisis. The real GDP growth was 4.7% in FY 08-09 and increased to 5.1% in FY 09-10, whereas it had reached a high of 6.9% in FY 07-08. The FY 10-11 started positively with the first two quarters achieving an average growth rate of 5.6% driven mainly by strong growth in the tourism, construction, ICT and manufacturing sectors (Kandil, 2011). In general, the sectors of the Egyptian economy are skewed towards the services sector which represents 48.6% of GDP in 2010, followed by the industrial sector representing 37.9% of GDP and the agricultural sector representing 13.5% in relative economic value. Overall the main driver behind GDP growth in FY09-10 and first quarter of FY10-11 is the growth in domestic consumption (representing 85.9% of Egypt's GDP). However despite the recent economic growth, unemployment rate stands at 9.7% in 2010 while 20% of the population have been below the national absolute poverty line, with more than double that amount by UNDP standards of primary and secondary poverty, and inflation a chronic problem at official rates of 12% in 2010, 11% in 2009, and a striking 24% in 2008.

Egypt's fiscal situation during FY 09-10 as well as the first quarter of FY10-11 was mainly directed towards mitigating the negative effects of the global financial crisis on Egypt's domestic economy, leading to an expansionary fiscal policy and deficit rising to 8.1% of GDP in FY 09-10. Public debt (domestic) have reached alarming levels reaching more than 90% of GDP. Meanwhile, monetary policy was rather neutral coupled with stable exchange rates during FY 09-10. In 2010, Egypt's business climate was driven towards more liberalism yet bureaucracy and corruption remained to be key problems.

Despite Egypt's persistent positive GDP growth rates during global recession, yet this was not translated (i.e. not effectively income-transferred) to the middle and lower classes where the social conditions in Egypt continued to deteriorate rapidly. Poverty and its intensity continued to increase reaching an official 21.6% of the population living in absolute poverty, with 40% inclusive of secondary and seasonal poverty, with the latter reaching 53% in late 2010. Unemployment rates continued to increase with persistence of two digit levels for more than three years. Moreover, the wage level went below the minimum level of subsistence due mainly to informal sector, child labor, rigidity in the labor market, and an official minimum legal wage rate of LE 2 per day,

which is one-fifth that of international (UNDP) standards. By the end of 2010, right before the revolution, it was very clear to everyone that national sustainability was unable to float with the rich getting richer and the poor getting poorer, whereas the middle class became almost extinct.

Digging deeper into the economy and reaching for the microeconomics level, the performance and growth varied from one sector to the other (agriculture, industry and services) as well as between the private and public sector contributions. The Egyptian economy was driven by the services sector which continued to grow at the expense of agriculture, while the industrial sector was growing relatively fast yet declining in recent years preceding 2011. As for the sector split of labor productivity, industry had the lead followed by services and then agriculture. Agriculture, despite only contributing to 13% of the country’s GDP, employed more than double its share with 32% of the labor force working in the agriculture sector, thus making it the least productive sector in Egypt yet the most stable and most preserved. Each 1% of agricultural labor contributed 0.4% of Egypt’s GDP. The industrial sector, on the other hand, is seen to have been the most productive sector, employing 17% of the country’s labor force while contributing 30% of the country’s GDP thus having a relative productivity of 1.75 (i.e. each 1% of industrial labor contributes 1.75% of the country’s GDP). Consequently, industrial labor was 4.3 times as productive as agricultural labor. The services sector, on the other hand, employed 51% of the country’s labor force, and yielded 57% of GDP, thus had a relative productivity of 1.1 and can be considered the benchmark for the country’s average productivity performance (i.e. each 1% of labor in service sector roughly contributes to almost 1% output in the economy).

Table 1: Relative Sector Productivity

Split of Sectors in Egyptian economy					
	% of GDP	vs. previous year	vs. 10 years ago	% of labor	relative efficiency(labor)
agriculture	13.2	-0.2	-3.3	32	0.41
industrial	29.8	-0.2	1.7	17	1.75
services	57.1	0.4	1.6	51	1.12

Table 1 above shows relative sector productivity for Egypt immediately before the revolution. Additionally, Exhibit 3 provides an analysis for the “unbalanced growth path” of Egypt from a sectoral perspective. Analyzing each sector of the economy more deeply (agriculture, industry, and services) can help us tap more into the core dynamics of the economy from a bottoms-up perspective and can further pinpoint the real on-the-ground economic issues that have contributed to the breaking point of society and led to the January 25th revolution.

Agriculture sector

Despite representing only 13% of Egypt's GDP, the agriculture sector employs 32% of Egypt's labor force. Yet, agriculture remains one of Egypt's most important historical, cultural, and social sectors. It is the oldest sector upon which the Ancient Egyptians have built their cultural, political, and economic heritage. This conviction, fortunately or unfortunately, remains faithful in today's modern Egyptian mind. Agriculture continues to achieve steady growth rates of 3-4% per year yet continues to decline as a percentage of GDP while other sectors - namely services - outgrow its value. The main challenge for Egypt is to maintain and expand agricultural production for domestic and export markets while at the same time adding value and employment through the development of more agriculture-based processing activities.

The key strength areas for Egypt's agriculture sector are favorable weather conditions allowing for year round cropping, strong land reclamation plans leading to strong production growth yearly of an average of 3.5% exceeding population growth, high land quality and productivity, stable water sources and good water quality and labor abundance with low cost.

However, Egypt's agriculture sector's main problem is low labor productivity, relative to both international benchmarks as well as other domestic sectors. This low productivity is due to a number of factors such as the sheer size of a homogeneous labor force (almost 7 million workers of homogeneous skills) which are mostly unskilled labor. This alone exerts a significant downward pressure on labor productivity. Another reason is low wage levels in the sector which are lagging behind the already low wage level in the Egyptian economy. The low sectoral wage level is a result of low education levels in the sector, lack of training and severe land fragmentation (Egypt is currently ranked seventh worldwide in severity of land fragmentation). The land fragmentation is an obstacle towards sector modernization and farmer training as well as a hinder to the ability of farmers to deploy machinery in the field in order to enhance productivity, hence exerting an increased downward pressure on overall labor productivity (Eladawi and Bandel, 2009). Another problem is inefficient water use, low investment levels, old and inconsistent legal framework, poor supply chain infrastructure, and non-targeted subsidies. Moreover, the agriculture sector in Egypt exhibits decreasing returns to scale, since all of the water-proximity land areas are already saturated (either in agriculture activities or real estate housing), such that desert reclamation seems to be the only solution for agricultural expansion. Such "horizontal land expansion" – in either direction from the Nile river – provides an investment and cost constraint on output yield due to rising variable and overhead costs coupled with lack of adequate infrastructure,

resulting in decreasing returns to scale and costly expansion relative to other sectors of the economy.

Despite these problems, the agriculture sector has a few opportunities that can be tackled to achieve higher growth rates. Such opportunities include strong export potential, abundance of low cost labor to achieve comparative advantage, re-allocation of subsidies, and industrialization (mechanization) of the agriculture process.

Exhibit 4 summarizes the wheat case in the Egyptian agricultural sector. Wheat was chosen due to its dual influence as a strategic agricultural commodity but also because it is the top agricultural commodity in Egyptian imports.

Industrial sector

The industrial sector in Egypt contributed to 35% of Egypt's GDP in 2009-2010 and contributed to almost one fifth of the 5.1% growth rate during that year. The sector employs 17% of Egypt's labor force thus indicating a higher labor productivity than both the agriculture sector (with a factor of 4.3) and the services sector (with a factor of 1.6). Yet, ironically, the sector itself suffers from low labor productivity in general as is the general case in Egypt.

The Egyptian industrial sector includes both petroleum and non-petroleum manufacturing industries. Petroleum industries include extraction and refining activities. On the other hand, non-petroleum industries include engineering industries, pharmaceutical and chemical industries, textiles and clothing industries, processed food industries, building materials industries (including steel and cement), mining and metallurgical industries as well as wood and furniture industries.

There are several constraints and disturbing obstacles that face the industrial sector in Egypt. These are firstly, low quality of labor on both the technical education side (unskilled industrial workers) and the universities and schools side (skilled industrial workers). This is mainly due to quality problems in higher education of labor as inputs in the industrial process in general. Also, lack of practical training at both levels and inefficient mapping of skills between the labor market and the industrial sector constitute a disturbing obstacle to industrial development. The second main concern is a technical constraint due to severely low levels of local industrial innovation, very low R&D spending with limited knowledge accumulation, and dependency on imported technologies. A third concern is due to improper legislative constraints. Some industrial legislation by-passes government entities in law enforcement, which leads to corruption and public sector externalities (such as pollution externalities due to lack of

environmental compliance of public sector industry), in addition to asymmetry in legislative responsibilities. Lack of transparency and sudden policy shifts via executive regulations of the legal code by the power of ministerial decrees, does not provide a stable environment for technological upgrading or industrial innovation.

The final obstacle is the historical government control of the manufacturing enterprises which contributed to the inefficient resource use for production. The government's power over the sector started back in 1961 during an era of nationalization but still maintains its influence until today after many attempts for privatization and reform. Privatization, unfortunately, shifted monopoly power from the hands of the government to the hands of the private sector with strong political ties to the ruling party. Hence, the shift of policy towards liberalism in the industrial sector did not serve the masses, and created an artificial form of capitalism, with private ownership dictated by political ties and government influences. Examples of government decision making control are many and take different forms - such as ministerial decrees, sudden policy shifts, centralized decision making, and heavy protection of selected private interests through subsidization and tariffs. These forms of corruption and intervention have historically widened the gap between domestic and international prices of manufactured goods that have become uncompetitive in most cases (Hawash, 2007). Although there have been even more liberalized open-door policies in the past decade, the corruption culture and political influence of businessmen did not change its course but rather intensified. Hence, the industrial sector in Egypt can be labeled as "a victim of crony capitalism".

Exhibit 5 examines the textile industry as an example of one of industries in the industrial sector in Egypt. Textiles industry was chosen because of Egypt's known quality advantage in long-staple cotton, the large employment intensity of Egyptian textiles and clothing markets, and also due to unrealized economic potential across the entire textile supply chain.

Services sector

The services sector accounts for almost 57% percent of GDP in Egypt with a split of 22% services provided by the government and 35% involving private sector activities. The services sector is also the main contributor of employment in Egypt accounting for over half of all the jobs in the Egyptian economy. It can be considered as the average economy-wide benchmark for labor productivity relative to other sectors. Furthermore, services contribute to neutralizing the trade deficit via services exports which create a surplus in the Egyptian current account. The services sector is also a main source for attracting FDI as well as providing backward and forward linkages to other economy

sectors (reaching up to 33% of intermediate products for services entering in other sectors and in exports (Ghoneim, 2009)). This makes the level of efficiency and growth of the services sector a key determinant to the overall competitiveness and health of the Egyptian economy. In addition, the service sector increasingly attracts foreign direct investment (FDI) over time – which is a dynamic process not apparently present in the industrial or agriculture sectors in Egypt. The largest sub-segments in the Egyptian services sector are wholesale and retail (10.7% of GDP), followed by government services (8.8% of GDP), and tourism services including restaurants and hotels (4.3%).

The services sector is diverse with different segments growing at different levels. Moreover, the services sector often witnesses an overlap of policy changes with regulatory reforms and liberalization attempts thus making it difficult to effectively evaluate its performance at the aggregate level. However, what is clear is that the Egyptian services sector is the most employed yet not overly-employed. It also contains the least asymmetry from the country's aggregate economy-wide average levels of productivity while producing positive externalities to other sectors. Services enhance efficiency in terms of upgrading quality for all sectors of the economy. Tourism, telecom, and financial services constitute the major elements of the Egyptian services sector in terms of concrete markets. Tourism is foreign dependent, the majority of ownership in telecom supply is foreign owned, and technology use in financial services are predominantly foreign based. This creates a “foreign dependency problem” which can be tackled by enacting a shift of policies towards national domestic welfare.

Tourism, a critical sub-sector, is taken as a live example to the many problems facing the Egyptian services sector. It is considered to be one of the most strategic, historical and highly employed sub-sectors with intensive externalities to the rest of the economy. Exhibit 6 provides the analysis in more detail.

Summing up the different sectors

In summary, analyzing the performance of the three sectors of the Egyptian economy as well as specific industrial clusters in each sector (Exhibits 4, 5, and 6) shows that the pre-revolution performance is both unsteady and uncompetitive internationally. Most clusters or industries that Egypt has potential of (i.e. developing a competitive advantage in) are labor intensive, yet despite abundance of skilled labor in Egypt the labor productivity remains to be the common thread across all sectors leading to slow performance.

Critical findings in terms of sectoral competitiveness are threefold:

- (1) The agriculture sector behaves according to the “low cost-low quality output trap” hypothesis. Hence, regulations on quality standards are absolutely necessary, with strong sustainability conditions for effective enforcement on the ground.
- (2) The industrial sector is seen as the main “victim of crony capitalism”, where corruption and political ties outweigh efficiency gains. Hence, there is a need to establish industrial clusters as systems of transparent self-governance coupled with more risk-taking entrepreneurship. The “blue ocean strategy” (BOS) is seen as one of the recommended viable mechanisms for implementation.
- (3) The services sector is considered to be under the “foreign dependency problem” in investments more than entrepreneurship. Hence comes the recommendation to ignite domestic investments in the services sector, conditional on such investments yielding an intensive degree of positive externality to other sectors or sub-sectors in the economy.

This unsteady performance of the different sectors of the Egyptian economy can be clearly seen on the rank and scores of Egypt in the global competitiveness index report (World Economic Forum, 2010) which enables us to dig deeper into more macro-related country issues contributing to the status of Egypt’s economy.

IS EGYPT INTERNATIONALLY COMPETITIVE?

The global competitive report (GCR) has been issued by the World Economic Forum (WEF) since 2005. In its report, the WEF bases its competitiveness analysis on the Global Competitiveness Index (GCI) which is a highly comprehensive index for measuring national competitiveness. The GCI captures both the microeconomic and macroeconomic foundations of national competitiveness in addition to sustainability criteria (which were added recently). In the GCI, competitiveness *is defined* as the set of institutions, policies, and factors that determine the level of productivity of a certain country relative to its peers (World Economic Forum, 2010). The level of productivity, in turn, sets the sustainable level of prosperity that can be earned by any economy. In other words, more competitive economies tend to be able to produce higher levels of income for their citizens. The productivity level also determines the rates of return obtained by investments (physical, human, and technological) in an economy relative to its peers. Because the rates of return are the fundamental drivers of the growth rates of an economy, a more competitive economy is one that is likely to grow faster in the medium to long run.

Consequently, the concept of competitiveness involves both static and dynamic components. It is a relative measure of the capability of a country to achieve prosperity for its citizens, and this is measured on two fronts:

(1) GCI comprehensively measures a given country's level of competitiveness relative to its peers (i.e. it determines the country's relative development path), and

(2) GCI also measures any given country's changing levels of competitiveness relative to time (i.e. the country's own development path).

In addition, although the productivity of a country clearly determines its ability to sustain a high-level of income, it is also one of the central determinants of the returns to investment, which is one of the key factors explaining an economy's growth potential.

Analyzing the results of GCR 2010-2011 carried out just before the Egyptian revolution of January 25th, 2011 enables us to complete the picture for the enabling circumstances and severe disparities which have led to the revolt of the Egyptian people against the status-quo.

Egypt's performance in the global competitiveness index has been rather unstable (see Exhibit 7). Egypt's rank in the 2008-2009 report declined from 77 in the previous year to 81, yet witnessed a jump to the rank of 70th in 2009-2010, only to decline again to 81 in 2010-2011. Therefore, Egypt's relative competitiveness to its peers (*transition economies from factor-driven to efficiency-driven*) has been volatile over time, at an average rank of 77th (out of more than 140 countries), but is also shown to be stable relative to its own performance (GCI absolute index of around 4.0/7.0) for the past three years prior to the revolution.

The decline in Egypt's competitiveness in 2010-2011 is proof that the relatively high reported GDP growth rate for that year does not reflect the welfare of the masses. It is ironic that such discrepancy was realized for the case of Egypt. Yet, it is also clear that GDP growth rates favored only the rich at the expense of the masses (including middle class) as is shown in Exhibits 1 and 2. Egypt's highest competitiveness rankings relative to its peers have been on market size and health-related diseases. None of these two factors alone can generate sustainable competitiveness without adequate infrastructure, transparent investment systems, and efficient factor markets – which are simply not available. On the other hand, Egypt's lowest competitiveness rankings relative to its peers have been on corruption, labor market efficiency, macroeconomic environment, R&D spending, and higher education and training. What can be made certain here is that the factors needed for Egypt to achieve any sustainable level of competitiveness, just before the revolution, are themselves the factors in which it has received lowest rankings.

In terms of concrete rankings, Egypt's strongest economic attribute in the 2010-2011 GCR report is market size (26th out of 139 countries), and this attribute is mostly driven by the sheer size of its modest population of 83 million (relative to its peers). Another very strong attribute (ranked 2nd) is protection from malaria disease, which does not constitute any significant level of competitive advantage, except that the health sector has been planned in that area very well. Unfortunately, in other health diseases, such as tuberculosis, Egypt ranks very low. This re-enforces lack of systems planning and *inefficient learning mechanisms* across different implementation projects.

On the other hand, Egypt's worst pillar in the 2010-2011 GCR report has been labor market efficiency (ranking 133rd out of 139 countries), followed by higher education and training (ranking 97th), followed by health and primary education (ranking 91st). These scores reveal that despite Egypt's availability of skilled and unskilled workers in the labor market, those skills are not matched by productivity gains, due to lack of a proper education system in the country. Moreover, both primary, secondary, and tertiary education rankings are very low compared to Egypt's peers. The country's education system has been a relative failure. This is seen as a major disaster on social and economic sustainability, and is considered to be one of the key cumulative factors giving rise to the revolution.

Additionally, the GCR report points the most problematic factors for doing business in Egypt. The top five problematic factors for Egypt in 2010-2011 have been: (1) corruption, (2) inflation, (3) inadequately educated work force, (4) ineffective tax regulations, and (5) access to financing (see Exhibit 7).

All the above factors have been in fact the reason behind public protests and revolts prior to the January revolution of 2011. There have been multiple major public revolts on many of the above factors sequentially for several years prior to the revolution. Unfortunately, the situation was getting worse and hopes for efficient reform evaded, since the cabinet and the President continued on the same policies and same agendas as before, with cumulative policies geared towards high class businessmen with strong ties to the family of the President, in which national policies were made by private choice – rather than public choice- until the time when the people of Egypt lost all hope for a better future.

It is interesting to note that the revolution itself called for three major objectives: (1) justice, (2) freedom, and (3) social equity. The revolution's three objectives can be directly derived from the GCR's top five problematic factors outlined above. The revolt against the Mubarak regime, led by the Egyptian population and backed by the army,

had their main demands as an end to corruption as well as better standards of living which was not possible for the widest sects of the society due to high inflation and lack of jobs, and called for social equity for the masses - rather than for the elite few who used to control country-wide decisions and regulations related to national income determination and distribution.

REACHING THE TURNING POINT: THE EGYPTIAN REVOLUTION IS BORN

The previous economic analysis for microeconomic sectoral performance of the Egyptian economy prior to the revolution in addition to the macroeconomic competitiveness of Egypt relative to its peers provides a clear picture for the severe disparities and obstacles in the economy which led to the major uprisings leading to the revolution. Although it is clear that there is room for potential, this potential was not realized due to corruption, political favoritisms, and severe inefficiency in the labor, education, and financing markets for the public.

The poor performance and decline in the country's competitiveness provide insights to the peculiar status of Egyptian economy in the few years leading up to the Egyptian revolution of January 25th, 2011. Specifically, the economy witnessed high and consistent GDP growth rates (between 4% to 7% per year in the three years preceding the revolution) yet this GDP can be described as non-efficient growth (i.e. non-Pareto economic growth) where the fruits of GDP growth didn't reflect any improvement in the standards of living of the middle or low classes, whose standards actually continued to fall as inflation continued to increase. Non-Pareto growth made the rich richer while the poor poorer, even though GDP growth has been significantly positive. On the other hand, Egypt's Gini index increased by 13% (from 30 to 34 between the latest 2 census) whereas cumulative primary and secondary poverty reached 53% of the population (World Bank, 2011). In addition, disguised unemployment continued to increase as ex-Minister of Finance Samir Radwan announced directly after the revolution that based on official statistics (factoring in disguised unemployment and the informal sector), 66% of Egyptians are officially unemployed (The Egyptian Gazette, 2011).

All of the above factors combined made the status-quo non-sustainable and unbearable for the masses. In addition, severe political discrimination, such as fraud in the parliamentary elections of late 2010, a cabinet of ministers composed primarily of business tycoons - in what was coined as "marriage between money and power" - led to complete system failure. The country reached a boiling point which was made more severe by the fact that President Hosni Mubarak has been ruling the country for 30 years and was planning to instate his younger son to inherit power after him via an

inheritance plan that was insulting to the Egyptians, especially that his son was less popular than his father. Thus, the road was paved towards a revolution of the masses. This occurred on January 25th, 2011. The mass protests of January 25th to February 9th 2011, ultimately backed by the army, changed the course of Egyptian history. The country is now ready to start a new phase of its long history towards building a new democracy based on justice, freedom, and social equity.

Short term impact on the economy

The full extent of the 2011 revolution on Egypt's economy is still uncertain. Yet any revolution has some form of short term negative effects before the new prospects of democratic systems and Pareto growth start to come to life. During the 18 days of the revolution, there was a total shut down in the economy due to curfews and security conditions. There has been a significant drop in Suez canal revenues, tourism receipts and remittances, in addition to losses in the stock market (main indices of Egypt's stock market EGX30 and EGX100 dropped 11% and 14% respectively within several months post-revolution). The Egyptian stock market was in effective closure from January 28th until March 23rd posing severe negative effects on Egypt's overall economic activity. Moreover, there has been moderate downward pressure on the foreign exchange market, where the Egyptian pound (exchange rate to the US dollar) depreciated by more than 5% and rose to 7% - although exchange rate policy continued to operate based on the announced managed float regime (at least in the short term by the central bank of Egypt).

Fiscal policy, on the other hand, witnessed an expansionary trend immediately after the revolution versus austerity measures prior to the revolution. Fiscal expansion mainly covered the announcement of minimum wage level for all public sector employees, and planning of mega-infrastructure projects particularly for roads and bridges, with enactment of a national transportation network plan. The global increase of food prices also caused fiscal expansion to guarantee subsidized bread for the masses, since Egypt is the world's largest importer of wheat. Egypt's ex-Minister of Finance Samir Radwan indicated that as a result of the recent domestic and regional turmoil, the GDP growth rate is expected to contract to 2.6% (from 5.1% the previous year) by the end of the fiscal year. Also during the revolution several international agencies dropped Egypt's financial credit ratings. For example, Moody dropped Egypt's rating from Ba1 to Ba2 and Fitch-Stable gave Egypt a negative rating. Also, an expansionary fiscal policy is expected during remainder of FY 2010-2011 in order to cater for the revolution's demands for better social equity and higher minimum wages coupled with a decrease in revenues leading to an increase in the budget deficit by a forecast of 25% (Kandil, 2011). On the other hand, the expansionary monetary policy

prior to the revolution was halted and replaced by fixing monetary policy for the immediate short term and incrementally raising interest rates towards the medium term.

Overall, the short term impact of the revolution on key economic policies are outlined in the table below.

Table 2: Short Term Impacts of Revolution (Policy Shifts for Fiscal, Monetary, and Exchange Rate Policy)

Indicator/ Policy	Pre revolution	Short term post revolution
Real GDP growth	An average of 5.1% real GDP growth	GDP growth contracted to 2.6%
Unemployment	High unemployment reaching double digits, with 66% inclusive of disguised unemployment	Increase in unemployment especially for daily workers
Fiscal policy	Stable fiscal policy with austerity	Expansionary fiscal policy
Monetary policy	Expansionary monetary policy	Fixing monetary policy in immediate short term Raising interest rates towards medium term
Exchange rate policy	Managed float	Risky Managed float (depreciation of domestic currency by 7%)

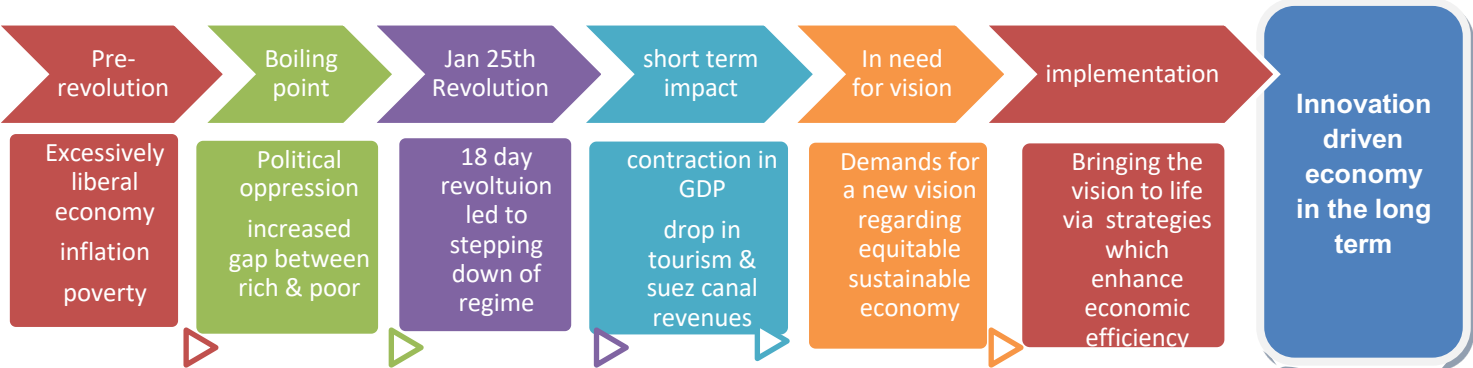
PROSPECTS FOR THE FUTURE: A NEW BEGINNING

Despite these short term impacts, prospects of a corruption-free democratically elected government as well as political stability with sound institutional base presents a great opportunity for Egypt's future. Multi-party parliament legislation is due by March, 2012 and elections for a new President of the Republic is due by June, 2012. In the meantime, the Supreme Council of the Armed Forces is temporarily managing the country on basically all fronts in associated with a newly founded Advisory Council. The economy is expected to recover its fiscal losses within a couple of years after Presidential elections end. However, more uncertainty is expected to impact the Egyptian stock exchange and the financial sector, including the banking industry, contingent on the results of parliamentary elections. More than twenty new political parties have emerged, and the Islamist movements are now more visible than ever before. Yet, Islamic political parties themselves are sub-divided on their economic and social agendas, ranging from socially conservative (on the likes of Saudi Arabia and Iran) to the more modern Islamic parties (on the likes of Turkey). However, future economic policy seems to be tailored to the *center-left* of the economics spectrum (i.e. towards relaxation of free markets with temporary price fixing of strategic commodities, minimum and maximum wage levels, and more welfare subsidies for the masses). The Muslim Brotherhood is considered the most influential political entity, but it is not recognized as a political party, and its leaders affirm that the Brotherhood has no intention to run in Presidential elections.

Egypt’s economic future needs a vision on the grounds of creating an equitable sustainable economy. However, such a vision will not be realized overnight. Therefore, it is imperative that a *timeline progression* for Egypt’s new economic development path be developed for the purpose of inclusionary policies for the welfare of the masses with drastic strategies to combat corruption, government bureaucracy, and labor inefficiency.

Analyzing Egypt’s current status as well as opportunities that lie ahead can provide a timeline of the progression of the Egyptian economy as per the below figure:

Figure 1: Timeline Progression for Egypt’s New Economic Development Path



This paper will recommend a specific vision for the Egyptian economy with clear recommendations on short and long term strategies that could enable Egypt to embark on a growth journey and tap into its full potential. Exhibit 8 provides a SWOT analysis for Egypt in light of the analysis done in the previous parts of this research study. The SWOT analysis shows the strengths, weaknesses, opportunities and threats, and provides key attributes for the economy as a whole as well as sector-specific attributes. The analysis enables the articulation of Egypt’s competitive position, risk position, country outlook, and country potential. Combining these four elements gives rise to an overall vision with recommended strategies that enable each “Egyptian citizen of the future” a meaningful job, adequate standards of living, and the ability to build an equitable sustainable innovation-driven community towards the long run.

Competitiveness summary and prerequisites for a new beginning

Egypt’s economy has been for the past three decades mostly uncompetitive with severe weaknesses in labor market efficiency and quality of education systems. Despite consistent GDP growth rates, this has led to deteriorating income distribution with lack of equity and brutal disparities in the society where the gains from economic growth weren’t channeled to the mass of the population. Yet the revolution when it occurred

had the effect of leading the country to a change in its core system of governance with a desire to drive equitable economic growth with international support.

When coupled with Egypt's core strengths, the revolution was able to provide a unique potential for the country to step change its declining competitiveness and plan to apply structural and sustainable efficiency-driven systems across the economy as well as specific interventions in each sector to become one of the fastest growing economies in the world in areas that Egypt enjoys a competitive advantage in.

This will only be made possible via first a set of prerequisites to create the suitable environment for step changing the economy.

These prerequisites are:

1. Fixing the lack of security issue post the revolution
2. Reaching political stability via new elections for parliament and president
3. Running an extensive assessment of the current state of the economy and its shortcomings to create a concrete understanding of the current base to build on.

In analyzing the third prerequisite, the SWOT analysis for Egypt (developed in Exhibit 8) provides a summary of country-level and sector-specific attributes and highlights CROP statements (Competitive, Risk, Outlook, Potential) for the country's new future. It should be noted here that Egypt's *competitive position* is derived by combining the core elements of strengths with weaknesses, whereas Egypt's *risk position* is derived by combining the core elements of weaknesses with threats. On the other hand, Egypt's *country outlook* is derived by mapping core opportunities with core threats, whereas Egypt's *country potential* is derived by mapping core strengths with core opportunities.

The following is a summary of the derived CROP statements for Egypt.

❖ Competitive Position

Despite its several strengths, notably market size, the Egyptian economy is uncompetitive ranking at 81 globally due to low productivity of labor, wide corruption, and inefficient country-wide education and R&D systems.

❖ Risk Position

Egypt faces the risk of prolonged political instability, such that lack of security when coupled with low productivity will lead to economic depression.

❖ Country Outlook

Good potential to be realized towards sustainable economic development by leveraging scale and stretch opportunities post the revolution yet after addressing political instability on both domestic and regional (Middle East/ Nile-basin) fronts.

❖ Country Potential

Egypt can become a fast-growing labor-intensive scale economy with efficiency systems in place to leverage its newly found democracy and achieve balanced growth with social equity.

GOING FORWARD: RECOMMENDED VISION AND STRATEGY

The recommended vision for Egypt's economy post the revolution is:

“Transforming Egypt into a fast growing efficiency driven competitive market in the short to medium term and an innovation driven economy in the long term”

This should be done via tapping into the country's potential in a way that brings to life the heart of the Egyptian revolution's demands of equity and economic justice, more jobs and higher living standards. Furthermore the economy needs to start *gradually* shifting from the extreme Neoclassical liberal approach of the late pre-revolutionary era to a more centered system of welfare state which fits more to the need of driving equity in the Egyptian economy and at the same time provides an open environment for investment and entrepreneurship. This is especially true in order to create labor-intensive economies of scale (homogeneous) and stretch (customized) in selected sectors. Egypt can then base its economic operations on its traditional comparative advantage or build its own competitive advantage relative to its peers.

Timeline strategy guidelines to achieve this vision are summarized below.

Short term strategy (1-2 years):

Immediate intervention to step change the economy

- *Revising the minimum wage to reflect the cost of living - given inflation - and indexed by level of educational attainment.* This should step change minimum welfare levels of the masses towards minimum income targets, and at the same time, encourage educational attainment in society which is a key starting point towards sustainable economy.

- *Restructuring public management systems and developing training plans to drive productivity in short term.* It is evident that public sector productivity (taken on aggregate) is lower than that of the private sector, although there is abundance of skilled labor in the public sector. Hence, training of public employees is a must to step change the economy. However, it should be noted that training is not a one-shot game, and thus its impacts may not be drastically evident in the short run. Lifelong training will achieve a more long term target.

- *Reducing corruption by enacting transparency-driven systems.* This is a key starting point, accompanied by the above two changes, in order to halt excessive depletion of national resources in the hands of the few, and to foster equitable standards of conduct in the economy. Studies have shown that corruption in developing countries such as Egypt can cost the country's GDP an equivalent amount of an increase in the effective tax rate by eighteen to fifty percent without government collection (Wei, 2000).

Medium term strategy (3-5 years):

Efficiency driven economy with equitable economic growth

- *Enforce local quality standards in line with regional competition.* In the medium term, it is highly recommended that regional quality standards be enforced on local production in Egypt since the gap is not initially large, and this will be a step towards international quality standards. It will also increase the consumer welfare in the economy.

- *Radically renovating and updating the educational system across all levels to incorporate critical thinking outside the box, with educational transformation away from rigid memorization.* It has been proven that memorization mechanisms of teaching fail to reach character maturity, and are forgotten more quickly, than if critical thinking techniques and student-led research are implemented. At least in the medium term, it is highly recommended to abandon rigid memorization in Egypt's educational system and replace that with more critical thinking educational techniques.

- *Creating an alternative tertiary education system with linkages to public R&D and industry practice away from free tertiary education for all.* China's cultural transformation was based on such a pattern and Egypt can follow such track. It is recommended that tertiary education system must have strong linkages to R&D on both public as well as private sectors. This will generate incentives for new ideas

and will provide a mechanism upon which tertiary education research will benefit the economy with spillover effects on patent intensity, local incentives for innovation, and minimization of borrowed technologies.

- *Build a national infrastructure system to de-fragment agricultural land areas, create supply chain linkages in industry, and intensify proximity externalities in services.* Most industrialized economies have taken such a route, and there is a high significant correlation between quality of infrastructure (not quantity) and GDP growth. This, by itself, will generate solid supply-chain industrial linkages across locations and will intensify the delivery of services in proximity to local household population.

- *Establish a Planning Commission to build on the country's potential of an efficiency-driven economy with social equity.* This has been implemented successfully in India. A centralized planning commission, with decentralized decision-making at the local governorates level, will provide long term vision with “on-the-ground” implementation rules.

- *Enact national mechanisms for cost-benefit economic evaluation of new investments, and not only rely on financial cost-benefit assessment.* The National Bank of Egypt can take the lead in this project, to be followed by all national banks, and if found feasible, to be followed by all banks operating in Egypt. Currently, all banks in Egypt accept or reject investment proposals based only on financial profitability, which may not cumulatively lead to economic prosperity for the nation. A financially viable investment project may contain negative externalities (such as pollution), negative impact on the country's GDP and trade balance (such as importing heavy equipment in production - for the ultimate local consumption - without export proceeds), barriers to entry, monopolization, etc. On the other hand, it can contain positive externalities to the economy, such as additional employment generation, creation of a new local patent, or export-oriented production. All these cases must be evaluated based on an economic – rather than purely financial – feasibility study.

- *Subsidy intervention towards economic efficiency for essential goods should be acceptable only if accompanied by a positive welfare degree of national competitiveness, i.e. negative spill-over effects must be accounted for, and consumer welfare (consumer surplus) should have higher priority than producer welfare (producer surplus) even if total welfare is enhanced.*

Long term strategy (5-20 years):
Reaching an innovation driven economy

- *Enforce international quality standards.* It is essential that Egypt becoming a truly emerging market in the global economy in the long term to follow the world demand for international quality standards. This is a key element to start-off an innovation-driven economy. Although not sufficient, it is still a necessary step without which the vision of an innovation economy will never be achieved.

- *Achieve world class education and infrastructure.* Given an efficient competitive economy in the medium term, achieving world class education and infrastructure levels is paramount. It is highly recommended that yearly Egyptian graduates be offered scholarships to study in highly reputable universities and research centers worldwide, across all levels of specialization – from psychology to nuclear science- in a similar manner to Mehmet Ali's educational transformation in early 1800s. More recently, during its cultural revolution, China has taken this road and have spent on 10,000 students per year to study abroad (repeated for ten consecutive years) such that these students are to be trained at world class educational institutions and come back to serve China (and not necessarily serve the home institution or public sector in which the student was selected). Additionally, China provided a fund for the returning students in order to fund their new ideas and projects for the betterment of the Chinese society. Overall, the yearly cost to such a project will not exceed \$500 million per year which is not a significant percentage of the country's GDP. The spill-over effects for such a project is huge and will create a new base for a competitive innovative society over time.

- *Target R&D spending at 5% of GDP with strong linkages to the agriculture, industry, and services sectors.* Currently, Egypt's R&D spending is less than 1% of the country's GDP. Most industrialized emerging nations have their R&D at 3-7% of GDP (for example, India is targeting 6%, whereas China is targeting 4%).

- *Radical shift in institutional culture (work ethic, corruption, and transparency).* Hopefully, this target should be achieved relatively smoothly given educational, cultural, and political transformations of the society contingent on the above medium-term and short-term targets. However, the risk of not achieving this objective should be studied carefully. Of particular importance is effectiveness of institutions in delivering and/or providing adequate services at reasonable cost. The latter is the minimum benchmark that must be achieved even if minor corruption issues persist.

- *Promoting local and regional investments to turn Egypt into a regional cost-based entrepreneurship hub.* Given the country's effective educational transformation coupled with an institutional system of governance based on the above medium-term targets, Egypt's entrepreneurship base will now be ready for cost-based competitive advantage within the regional investment landscape. The sectors at which such competitive advantage lie are not necessarily the same as Egypt's current sectors of comparative advantage. Achieving competitive advantage will require an added entrepreneurship base over and above a purely cost-driven comparative advantage base. Hence, the dual effect of innovation with cost effectiveness will create competitive advantages for Egypt in the long term.

- *Achieve differentiated competitive advantage relative to regional peers ("branding Egypt").* Although competitive advantage is a key target to be achieved in the long term, it is not sufficient to induce sustainability. Due to the dynamics of the global marketplace, the sustainability of competitive advantage needs to be complemented by country branding. The legacy of emerging – and even developed – economies during the past half a century point towards that direction. For example, countries like Japan (electronics and automotives), China (consumer industries), US (military), Switzerland (watches and banking), France (fragrances and retail), Spain (tourism), Taiwan (semiconductors), India (IT communications) have all benefited from branding their image in the world market. It is also evident that country multi-branding is feasible on the global level. Consequently, it is critical that Egypt enters the world market with branding, and such an outcome will be achieved only if a differentiated competitive advantage persists for Egypt relative to its regional peers. Tourism is a strategic brand that should be targeted, given Egypt's historical and cultural portfolio, but additional branding remains open.

- *Attain a sustainable level of an equitable competitive economy with innovation.* If the Egyptian people unite towards achieving their vision, and if educational, cultural, political, infrastructure, and institutional governance systems are effectively in place, then such an outcome will be attained.

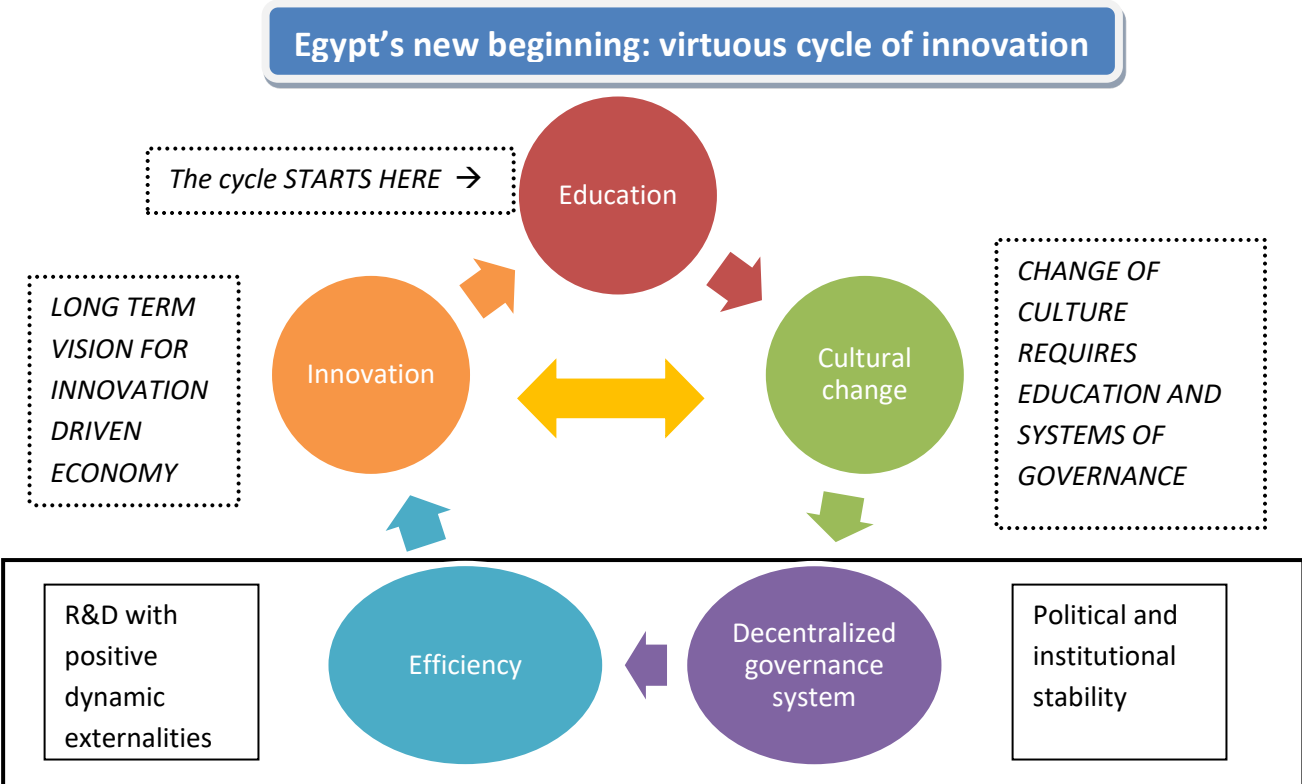
The above strategies (short, medium, and long term) must be implemented sequentially via the suggested timeline (see Exhibit 9) in order to achieve the stated long term vision for Egypt.

CONCLUSION

The Egyptian revolution in 2011 has changed the face of Egypt forever waking it up from the continuous economic, social and political decline it has been witnessing in

the past 30 years and reassuming its economic potential and political impact as a leader in the Middle East. Post the revolution, the economy has a unique opportunity to fix the chronic problems of poverty and inequality, informality, corruption and bureaucracy, labor inefficiency, fragmented supply chains, low productivity and lack of innovation. This, however, cannot happen overnight and must be carefully planned with timeline strategies and action plans. Through leveraging unique strengths and opportunities and overcoming weaknesses and threats, Egypt can transform itself into a fast growing efficiency driven competitive market in the short to medium term and an innovation driven economy in the long term. This vision can be achieved via tapping into the country’s potential in a way that brings to life the heart of the Egyptian revolution’s demands of equity, more jobs and higher living standards. It is key to highlight that the timeline of recommended strategies is destined to create a leap in the Egyptian economy and enable Egypt to embark on its **“NEW BEGINNING”** (see Figure 2 below) as a competitive emerging economy and democratic society which should lead to a *virtuous cycle* of equitable growth based on local innovation. Short, medium, and long term strategies towards such a target have been proposed and outlined in this paper. Starting with education, leading to cultural transformation and institutional governance, followed by implementing a competitive system-based efficient economy, are parallel prerequisites to achieve the stated vision of a long-term innovation-driven economy.

Figure 2: Long Term Virtuous Cycle of Innovation



BIBLIOGRAPHY

Abou Shamma, M. (2010). "Resistance to Foliage Feeding in Wheat", Retrieved from *Egypt Then and Now*. www.allaboutegypt.org

Arab Republic of Egypt Ministry of Finance. (December 2010). *Egyptian Economic Monitor*. Cairo: www.mof.gov.eg.

Arab Republic of Egypt Ministry of Finance. (December 2004). *Egyptian Economic Monitor*. Cairo: www.mof.gov.eg.

Beshai, Adel (2011). Personal interview.

Central bank of Egypt. (n.d.). <http://www.cbe.org.eg/>. Retrieved May 20, 2011

CIA World Factbook. (2011, May 25). <https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html>. Retrieved from www.cia.gov.

Coface (2010). Coface Country Risk and Press Releases, December 2010.

Eladawi, Amr and Bandel, Tobias (2009). ENCC Annual Competitiveness Report 2009. Egyptian National Competitiveness Council (ENCC), Cairo.

ECES. (January 2011). *Business Barometer: Performance and expectations of the Egyptian business sectors, issue 26*. Cairo: Egyptian Center for Economic Studies, Cairo.

Egyptian Ministry of Economic Development. (n.d.). http://www.mop.gov.eg/MOP_META/nsdp.htm. Retrieved May 10, 2011

Elsayed, A. (2011, May 14). Unemployment: Egypt's scourge . *The Egyptian Gazette*. Galal, Ahmed (2011). ERF Policy Viewpoint on Future Challenges for Egypt. Economic Research Forum, Cairo.

Ghoneim, A. (2009). Egypt's prerequisites to ensure effective and fruitful reform of services. *ECES*. Cairo.

Kandil, M. (April 2011). The Egyptian Economy: Short and Medium Term Prospects. Cairo: ECES.

Kheireldine, H., and Ellaithy, H. (2008). Agriculture productivity growth, employment and poverty in Egypt. *ECES working paper series* .

Ministry of finance. (2011, May 20).

http://www.mof.gov.eg/English/_layouts/MOF/NewsRoom/MinisterReleasesen.aspx. Retrieved June 6, 2011

Mohamed, T. (2011, June 2). Egypt salary plan draws mixed reactions. *The Egyptian Gazette*

MOP. (2010). *Follow-Up Report for the Year 2009/10*. Cairo: Ministry of Planning and Economic Development.

Ragab, Adla (2011). Al-Ahram Commentary. April 24, 2011. www.english.ahram.org.eg

Reda, M. (April 2011). Towards enhancing Egypt's competitiveness in the global economy. *Egyptian Center for Economic studies*. Cairo.

Sakr, M.; Massoud, N. and H. Sakr (2009). "Tourism in Egypt: An Unfinished Business", Egyptian Center for Economic Studies Working Paper 147.

Selim, T. (2007). The Education Market in Egypt: A Game Theory Approach. ERF annual conference.

Transparency international. (2010). *Corruption Perceptions Index*.

UNDP. (2002). *Fighting Corruption*.

Wei, Shang-Jin (2000). "How Corruption is Tax on International Investors?" *The Review of Economics and Statistics*. Vol. 82, No. 1 (Feb., 2000), pp. 1-11.

World bank Country Brief: Egypt. (n.d.).

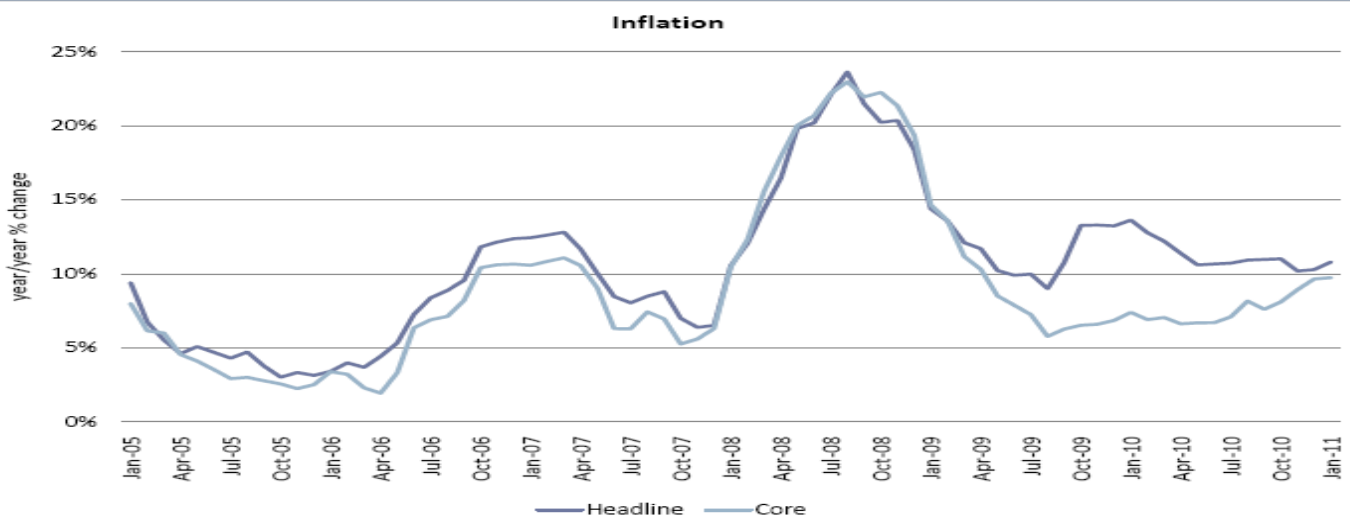
<http://www.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EGYPTEXTN>

World Bank Development Indicators. (n.d.). <http://data.worldbank.org/indicator>. Retrieved May 14, 2011, from www.data.worldbank.org.

World Economic Forum. (2010). *The global competitiveness report 2010-2011*. Geneva: Centre for global competitiveness and performance.

Exhibit 1: Inflation in Egypt

Inflation in Egypt has been a continuous eroding threat to the standards of livings of the mass of Egyptians. The headline inflation which includes prices of all goods and services consumed by households measures the rate at which the cost of living is rising. Being a 2 digits figure since 2006 till 2011 (except for a brief period in 2007) compared to a slow/stagnant growth in income of middle and lower classes (real GDP per capita growth in 09-10 was 2.9%) implies that lower classes have been suffering from a decline in their standards of living over the past 5 years. Even if we look at core inflation which is used by the central bank to calibrate monetary policy and excludes food and energy to give a less volatile and a better reflection on supply and demand relations, it shows that core inflation is persistently high and has officially reached close to the 12% mark in 2011.



Source: Central Bank of Egypt

Exhibit 2: Income distribution in Egypt

The Lorenz curve shows high income disparities between rich and poor as well as rural and urban where income share held by lowest 10% is only 3% while income share held by highest 10% is almost 30%. The Lorenz curve gives a Gini index of 34 making Egypt rank as the 90th country worldwide in terms of income inequality. Consequently, the top 10% of the population receives an income that is almost 10 times as much as the lowest 10% thus creating a clear and ever rising tension between the upper class and the underprivileged class.

Egypt's national absolute primary poverty rate is 23%, with combined primary and secondary poverty reaching more than 40% continuously for the past decade. The latter reached a striking 53% (more than half of the entire country population!) in late 2010, just months before the revolution. When looking at secondary poverty rates (i.e. percentage of population who are extremely poor, poor and near poor) the percentage includes seasonal poverty, a major problem in the construction and tourism sectors (despite some improvement in 2005). This also further indicates the increase in gap in income distributions.

*Source: Lorenz curve data based on World development

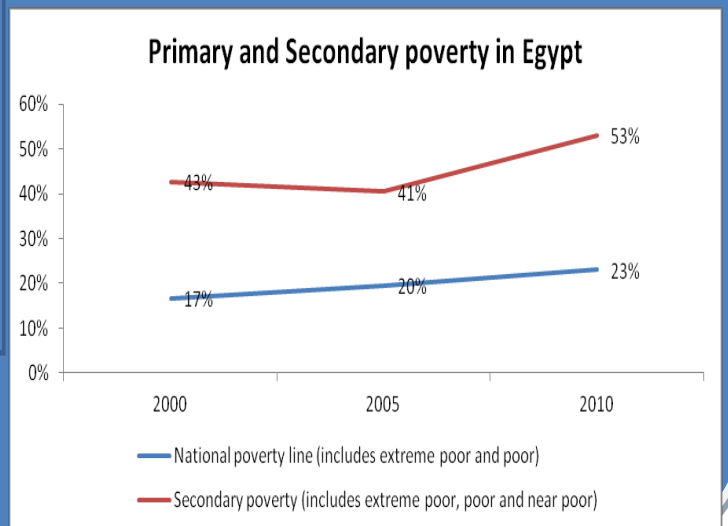
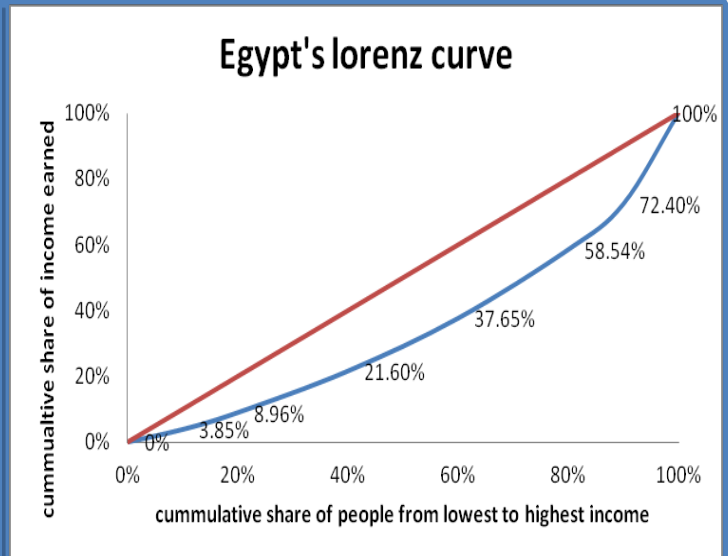
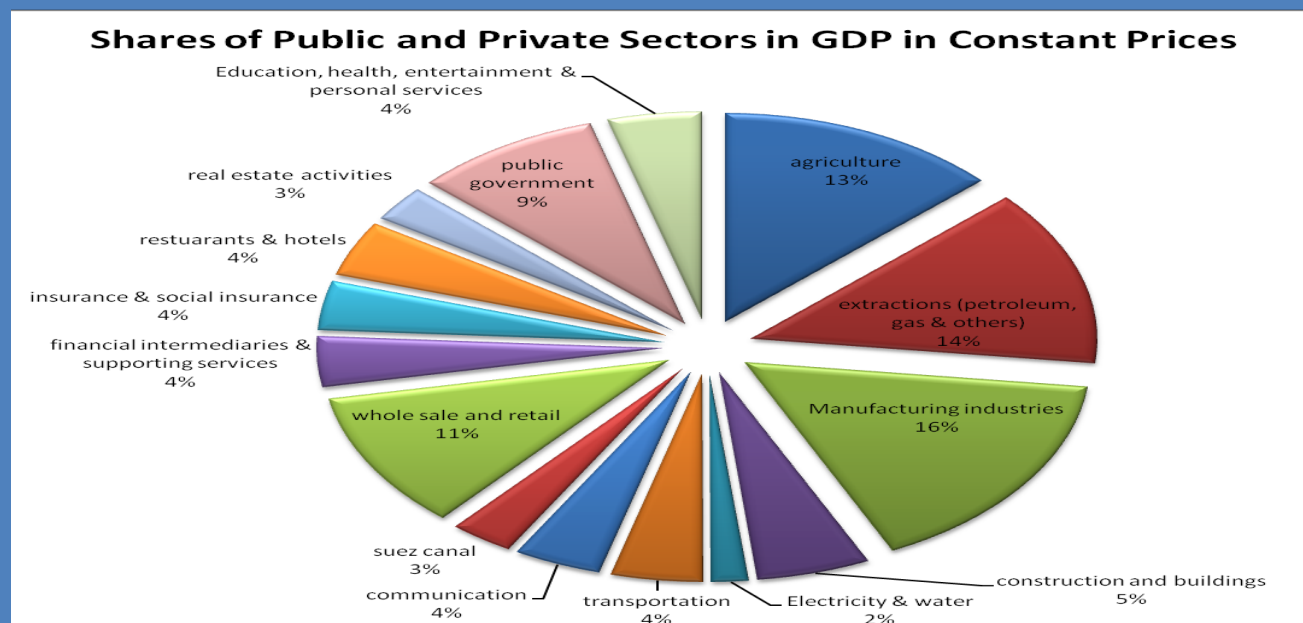


Exhibit 3: Share and growth of different sectors in economy



Ministry of Finance Egyptian economic monitor December 2010 edition

Egypt's output economy is split between 13% agriculture, 30% industry and 57% services. The industry sector is split between extractions (14%) which are based on petroleum and gas extraction, and manufacturing industries (16%) like textile, steel, cement etc. The services sector is split across different activities the biggest being wholesale and retail (11%) and the next is government services (9%). Construction and buildings represent 5% of the Egyptian economy while tourism is estimated to be 12% when combining the hotels and restaurants as well as its share from transportation and entertainment.

During fiscal year 2009/2010 out of the 5.1% real GDP growth, the private sector has led the growth in the economy contributing with a 3.88% versus 1.3% growth in the public sector activities (Ministry of Finance, Egyptian Economic Monitor 2010). The sectors driving the growth were (1) construction and building and (2) IT and communication (coded in green in below table), while the Suez Canal contribution declined (coded in red).

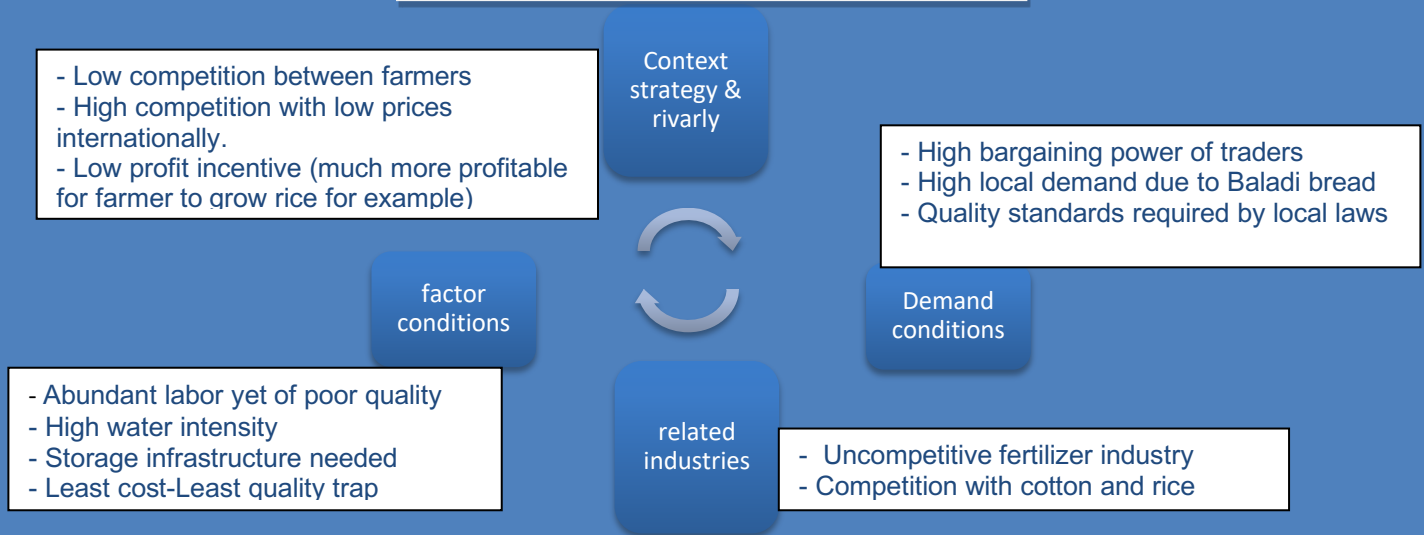
GDP Growth by Sector in FY 2009/2010		
Sector	Growth rate (%)	Share in real GDP Growth (% point)
agriculture, woodlands and hunting	3.5	0.5
extractions	0.9	0.1
Manufacturing industries	5.1	0.8
Electricity	6.3	0.1
construction and buildings	13.2	0.6
transportation	6.8	0.3
communication	13.3	0.5
Suez canal	-2.9	-0.1
whole sale and retail	6.1	0.6
financial intermediaries and supporting services	5.2	0.2
Tourism (hotels and restaurant)	12	0.5
public government	4.3	0.4
Other sectors		0.6
Total		5.1

Exhibit 4: Wheat cluster in Egypt

Egypt became the largest importer of wheat in the world by importing 6 million tons of wheat in 2009. This is because wheat is the main input ingredient in the “Baladi” bread which is a vital element in the Egyptian citizen’s food intake, especially in rural areas. Egypt’s total consumption of wheat per year is approximately 14 million tons, out of which 8 are locally produced. Thus productivity of the wheat cluster in Egypt has a direct impact on the country’s trade balance due to high level of imports burdening the economy.

Despite being very productive when it comes to wheat yield, the “wheat cluster” in Egypt is not functioning at the optimum level. Egypt’s wheat yield is estimated to be 18 ardebs per feddan, whereby an ardeb is the equivalent of 150kg (Beshai, 2011). During the past 20 years, the production of wheat increased by 60% thus averaging 3% a year compared to an average population growth of 2% a year during the same period. This fact reduced the Egyptian market shortage for wheat from 7.2 million tonnes to 6.6 million tonnes (approximate figures for the period 1989 to 2009 (Abou Shamma, 2010)). The wheat cluster in Egypt isn’t functioning at the optimum level because its marginal productivity is not optimized. Optimizing marginal productivity can allow Egypt to cover 70-75% of its domestic demand for wheat in the medium term (instead of the current 55%). The main problem hindering the wheat clusters productivity is the dual disadvantage from over-supply of homogenous unskilled labor coupled with land fragmentation, hence giving rise to the least cost-least quality output trap.

Diamond model of Wheat in Egypt



Wheat cluster SWOT analysis

<p style="text-align: center;"><u>Strengths</u></p> <ul style="list-style-type: none"> - High local demand - Abundant labor - Favorable weather 	<p style="text-align: center;"><u>Weaknesses</u></p> <ul style="list-style-type: none"> - Low quality of labor - High cost of capital - Other crops like rice are more profitable - land fragmentation not allowing for economies of scale.
<p style="text-align: center;"><u>Opportunities</u></p> <ul style="list-style-type: none"> - Government incentives for farmers - Subsidy for bread price 	<p style="text-align: center;"><u>Threats</u></p> <ul style="list-style-type: none"> - Political factors in the Nile bank might threaten water supply - Pests and climate changes threatening yield productivity
<p>Key Recommendations:</p> <p>Invest in training labor to increase productivity</p> <p>Enable farmers with access to loans with favorable terms to invest in capital</p> <p>Providing incentives to farmers to cultivate wheat to neutralize the high appeal of other crops</p> <p>Enforcement of adequate quality standards to by-pass the least-cost-least quality output trap</p>	

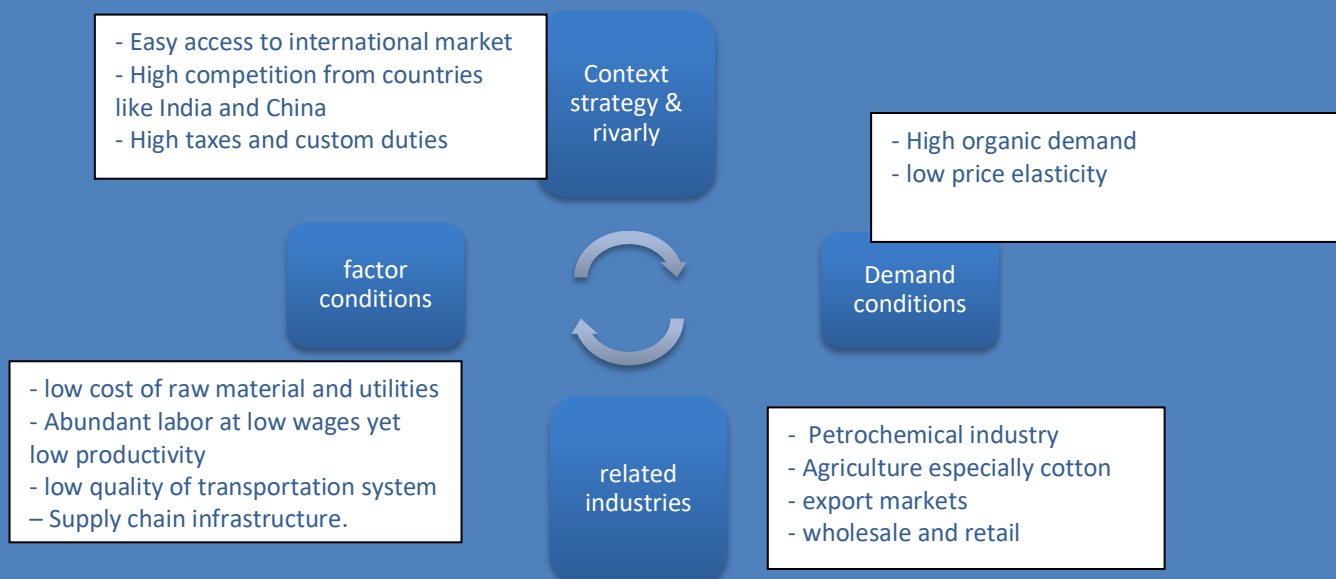
Exhibit 5: Textiles in Egypt

Textiles are one of the main sectors that strengthen the Egyptian exports position around the world. Textiles is one of Egypt's most important industrial sectors, accounting for 25% of the country's non-fuel industrial output and nearly 30 percent of all industrial jobs. Cotton and textile fabricates ranked third in Egyptian exports and accounted for 25% of all Egyptian exports in 2010 (Coface Egypt, 2010).

The Egyptian textile industry has an average annual growth rate of 10%. It also represents significant value added economic activity to the Egyptian economy due to its local supply chain availability (from raw materials such as cotton, to the final finished product). The industry has been always dominated by the public sector yet privatization and new investments have played a significant role in the industry during the past 10 years. Export agreements with EU, U.S. and the QIZ protocol have been a main contributor to the growth of the industry. Chronic problems facing Egyptian textiles include over-employment (disguised unemployment), lack of innovation, lack of R&D spending, labor-intensive production with low labor productivity, and also falling into the least cost-least quality output trap.

Analyzing the sector's diamond model shows that the industry has high export potential yet faces severe international competition, which in the face of low skilled labor and inadequate quality standards makes it not competitive versus other countries such as India and China.

Diamond model of Textiles in Egypt



Textile cluster SWOT analysis

<p style="text-align: center;"><u>Strengths</u></p> <ul style="list-style-type: none"> - High local & international demand - Abundant labor - Tax free treaties 	<p style="text-align: center;"><u>Weaknesses</u></p> <ul style="list-style-type: none"> - Low quality of labor - Low productivity leading to uncompetitive price versus competition - Outdated technology - High corruption in public sector
<p style="text-align: center;"><u>Opportunities</u></p> <ul style="list-style-type: none"> - Higher quality could lead to higher export potential 	<p style="text-align: center;"><u>Threats</u></p> <ul style="list-style-type: none"> - Competition from China and India - Expiry of favoring taxes after the 10 years relief period

Key Recommendations:

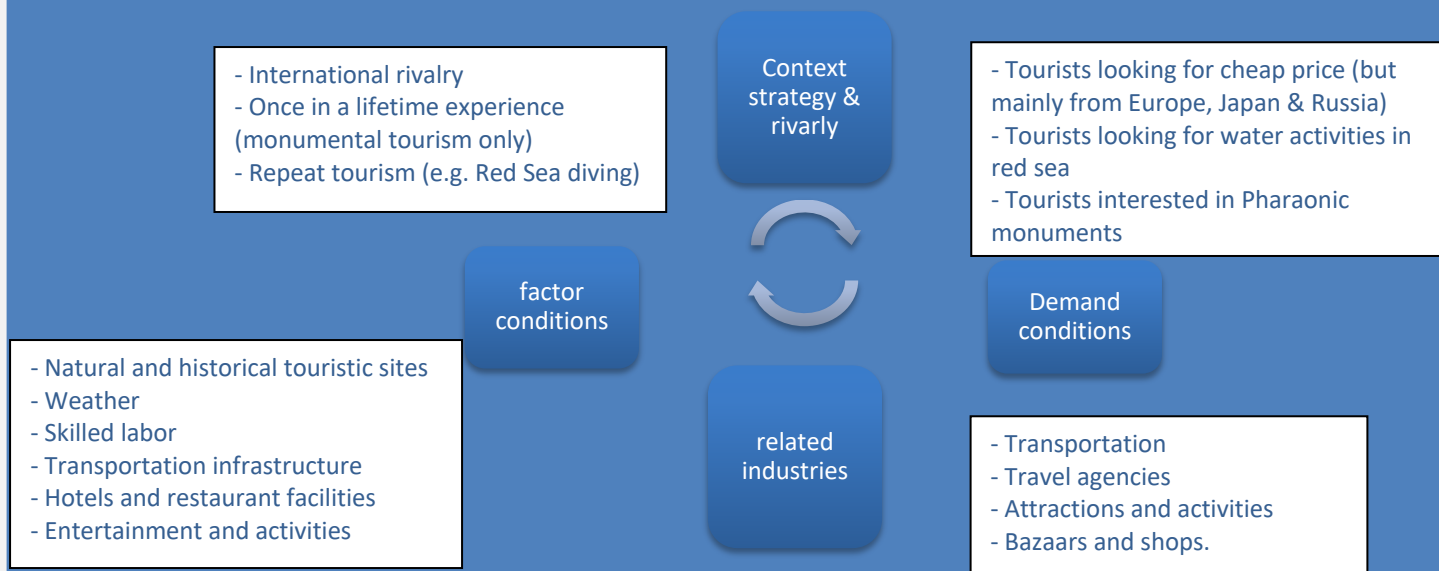
Invest in training labor to increase productivity
Link the supply chain & acquire new updated technology to increase productivity and decrease prices

Exhibit 6: Tourism in Egypt

Tourism is the fastest growing segment of the Egyptian economy (12% growth in FY0910 with \$11.6 billion earnings (Ragab, Adla 2011)). It is a main contributor to employment and foreign currency earnings (20% of foreign earnings). However, there are a lot of concerns regarding tourism's effectiveness and potential. It is key to note however that data on tourism tend to underestimate its contribution since using hotels and restaurants as a proxy for tourism doesn't include linkages that tourism provides to other segments. Accordingly, tourism despite being the fastest growing sector directly represents 4.3% of Egypt's GDP in 2009-2010 but when factoring-in secondary tourism (i.e. effect on trade and transportation etc.) it is found to represent 11.6% of GDP with total tourism employment approximately 12.6% of Egypt's employed labor force (Sakr, M., Massoud, N. and Sakr, H. 2009). This re-enforces the positive externality characteristic of the services sector in general.

Analyzing tourism's diamond model shows that Egypt's tourism sector has strong factor and demand conditions, strong rivalry and a network of related industries, but is far behind its potential. Egyptian tourism suffers from a quality problem of labor as well as infrastructure, which given the high international rivalry in this sector, leaves Egypt uncompetitive. Thus, despite the output and labor growth in tourism sub-sector, it did not achieve an attractive competitiveness ranking at the international scale. Egypt holds one-third of the world's monuments, but is ranked 18th in the top 50 touristic destinations, and has a share of the global touristic revenues of only 1.5%. Overall, Egypt is ranked internationally as the 75th country in the 2011 tourism competitiveness report out of 139 countries (actually falling down from rank 64 in 2009). This reveals that Egypt's high potential in tourism is not realized and its international competitiveness position is falling.

Diamond model of Tourism Sector in Egypt



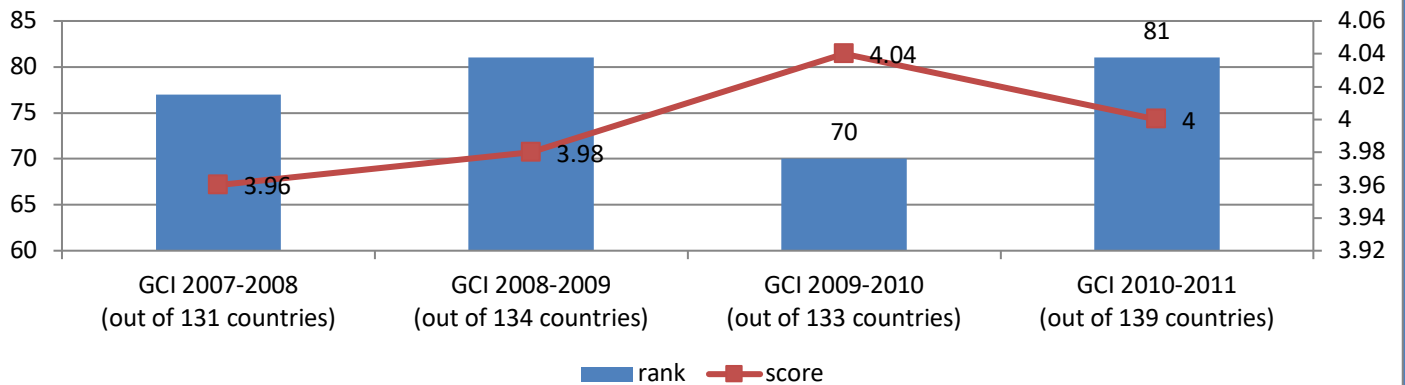
Tourism cluster SWOT analysis

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> - Abundant touristic sites & history - Favorable weather & beaches - Cheap prices 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> - Low quality of labor leading to complaints and non-repeats - Poor infrastructure - Lack of environmentally friendly solutions
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> - Low spending per tourist - Run marketing campaigns 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> - Terrorism - Political instability

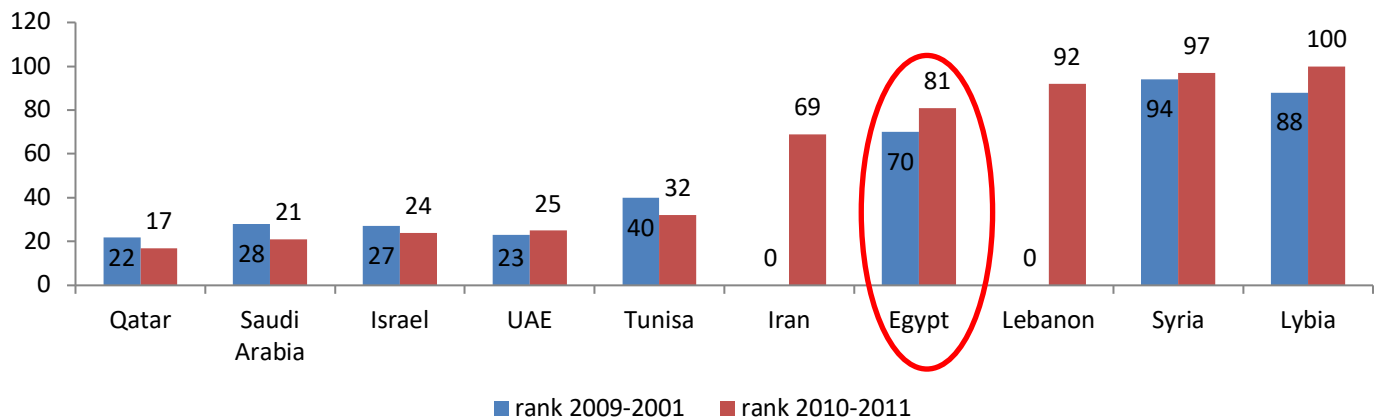
Key Recommendations:
Invest in training labor to increase productivity
Incorporate a Planning Commission to realize potential

Exhibit 7: Egypt's Performance in global competitiveness report

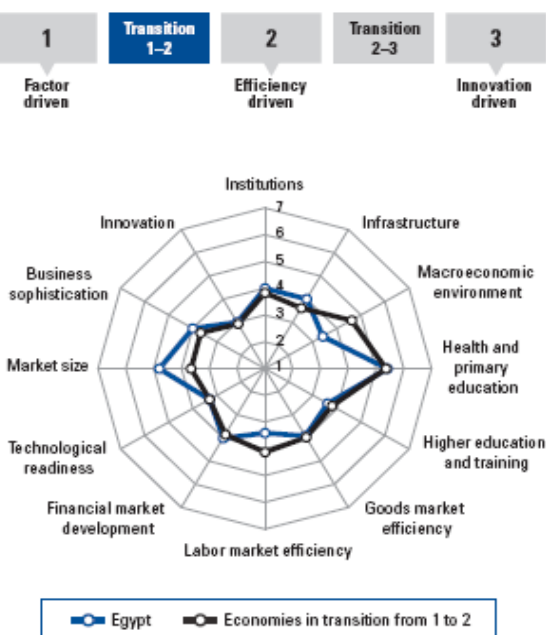
Egypt's global competitiveness index scores 2007-2011



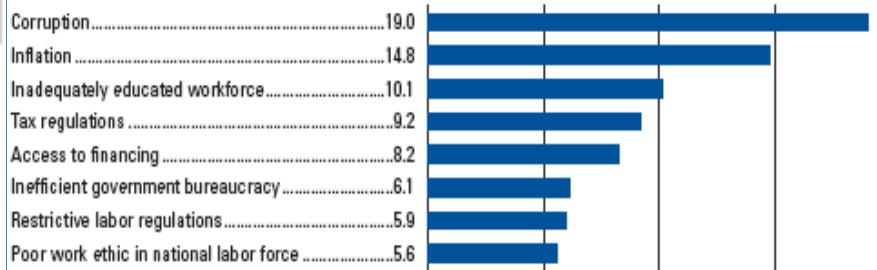
Rank of Egypt vs. Countries in MENA region in GCI



Stage of development



The most problematic factors for doing business



- Egypt's economy is in the transition phase from factor driven to efficiency driven.

- Egypt is among the poorest performers in the GCI sample with respect to the efficiency of using talent (133rd)

- Corruption, inflation and inadequately educated labor force are the 3 top problematic factors of doing business in Egypt.

*** Exhibit 8: Egypt's SWOT analysis**

<p align="center">Strengths</p> <p>Country level:</p> <ul style="list-style-type: none"> - Central geographical location - Abundant labor force - Big market size - Availability of financing through local equity market - Good railroad infrastructure - GDP growth with global recession (shielded economy) <p>Additional sector specific strengths of the Services sector:</p> <ul style="list-style-type: none"> - Suez canal and rich touristic sites - Modern banking sector with high degree of competition <p>Industrial sector:</p> <ul style="list-style-type: none"> - Diverse industrial sector - Abundant natural resources for the extraction industry (natural gas) <p>Agriculture sector:</p> <ul style="list-style-type: none"> - Year round cropping - High land and water quality 	<p align="center">Weaknesses</p> <p>Country level:</p> <ul style="list-style-type: none"> - Corruption and no transparency - Poor education quality across all levels - Low labor productivity - Poverty (>53%), Unemployment (66%), Inflation (20%) - Lack of systems and institutions (people-centric) - Wage rates lower than sustenance level yet higher than productivity <p>Services sector</p> <ul style="list-style-type: none"> - Foreign dependency problem - Below potential <p>Industrial sector</p> <ul style="list-style-type: none"> - Victim of "crony capitalism" with low quality output - Insignificant local R&D and weak supply-chain linkages <p>Agriculture sector:</p> <ul style="list-style-type: none"> - Land fragmentation - Decreasing returns to scale (desert reclamation) - non-targeted subsidies - inefficient legal framework (pricing/subsidies) 	<p align="center">Competitive position</p> <p><i>Despite its several strengths, notably market size, the Egyptian economy is uncompetitive ranking at 81 globally due to low productivity of labor, wide corruption, and inefficient country-wide education and R&D systems.</i></p>
<p align="center">Opportunities</p> <p>Country level:</p> <ul style="list-style-type: none"> - New government post revolution with popular support - Post revolution entrepreneurship spirit - Economies of scale (homogenous) and economies of stretch (customized) - Prospects on new anticorruption law and expected transparency via democracy - International support to Egypt post the revolution to rebuild a democratic country - Plans to increase minimum wages creating more equity in the society - Potential flow of FDI post revolution creating more job opportunities <p>Services sector: Domestic investments with positive externalities</p> <p>Industrial sector: Quality standards, local R&D, supply chain linkages</p> <p>Agriculture sector:</p> <ul style="list-style-type: none"> - Restricted due to land saturation - Desert reclamation (export potential) - Import reduction (wheat) 	<p align="center">Threats</p> <p>Country level:</p> <ul style="list-style-type: none"> - Lack of security due to weak police force after revolution - Political instability - Non-sustainable budget deficit and/or public debt - Failure of central bank to stabilize currency - Persistence of non-Pareto growth - Least cost- least quality output trap <p>Services sector:</p> <ul style="list-style-type: none"> - Terrorism (tourism) <p>Industrial sector:</p> <ul style="list-style-type: none"> - Dependency on foreign technology - Competition from China and India (unable to compete) <p>Agriculture sector:</p> <ul style="list-style-type: none"> - Political risk on Nile-basin water supply - Lack of urban planning posing threat on arable lands - High yield-high price (uncompetitive) 	<p align="center">Country Outlook</p> <p><i>Good potential to be realized towards sustainable economic development by leveraging scale and stretch opportunities post the revolution yet after addressing political instability on both domestic and regional (Middle East/ Nile-basin) fronts.</i></p>
<p align="center">Country Potential</p> <p><i>Egypt can become a fast-growing labor-intensive scale economy with efficiency systems in place to leverage its newly found democracy and achieve balanced growth with social equity.</i></p>	<p align="center">Risk position</p> <p><i>Prolonged political instability, lack of security when coupled with low productivity can lead to economic depression.</i></p>	

Exhibit 9: Egypt's Strategies timeline

Vision

“Transforming Egypt into a fast growing efficiency driven competitive market in the short to medium term and an innovation driven economy in the long term tapping into the country's potential in a way that brings to life the heart of the Egyptian revolution's demands of equity, more jobs and higher living standards”.

Short term

(1-2 years)

Immediate intervention to step change the economy

- Revising the minimum wage to reflect the cost of living - given inflation - and indexed by level of educational attainment.
- Restructuring public management systems and developing training plans to drive productivity in short term.
- Reducing corruption by enacting transparency-driven systems.

Medium term

(3-5 years)

Efficiency driven economy with equitable economic growth

- Enforce local quality standards in line with regional competition.
- Radically renovating and updating the educational system across all levels to incorporate critical thinking outside the box.
- Creating an alternative tertiary education system with linkages to public R&D and industry practice.
- Build a national infrastructure system to de-fragment agricultural land areas, create supply chain linkages in industry, and intensify proximity externalities in services.
- Planning Commission to build on the country's potential of an efficiency-driven economy with social equity.
- Enact national mechanisms for evaluation of new investments and subsidy intervention towards economic efficiency.

Long term

(5-20 years)

Reaching an innovation driven economy

- Enforce international quality standards.
- Target R&D spending at 5% of GDP with strong linkages to the agriculture, industry, and services sectors.
- Achieve world class education and infrastructure.
- Radical shift in institutional culture (work ethic, corruption, transparency).
- Promoting local and regional investments to turn Egypt into a regional cost-based entrepreneurship hub.
- Achieve differentiated competitive advantage relative to regional peers ("branding Egypt").
- Attain a sustainable level of an equitable competitive economy.