Egypt's New Path for Competitiveness and Innovation

Research Dialogue on Emerging Markets

Tarek H. Selim
There were reasons for a revolt …

• The Egyptian revolution in Jan 25\textsuperscript{th} 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.
• 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.
Competitiveness and Innovation Perspective

Egypt has ....

- History, strategic geo-economic location, political leadership in the Middle East, population of 82 million
- Diversity potentially competitive economic activities such as tourism, Suez Canal revenues, natural gas reserves, labor-intensive assembly industries, and a growing IT services sector.
- Plagued with chronic inflation, corruption, political favoritism, severe income inequality, unemployment, poverty.
- Innovation pillars have been largely and practically untapped, given an abundant skilled labor force, thus leaving the country with large potential that never materialized.
Favorable situation?

GDP Growth Rates

- 2007: 6.9%
- 2008: 4.7%
- 2009: 5.1%
- 2010: 5.6%
## Alarming figures....!

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth (2007-2010 average)</td>
<td>5.6%</td>
</tr>
<tr>
<td>Poverty (primary)</td>
<td>&gt;20%</td>
</tr>
<tr>
<td>Poverty (secondary)</td>
<td>More than primary (informal, child, seasonal, rigidity)</td>
</tr>
<tr>
<td>Poverty (combined)</td>
<td>Reached 53% in late 2010! &gt;40% continuously for a decade!</td>
</tr>
<tr>
<td>Unemployment</td>
<td>&gt;10% for more than three years</td>
</tr>
<tr>
<td>Income distribution</td>
<td>Highest to Lowest (10%)=30% to 3% X10, ranked 90th worldwide</td>
</tr>
<tr>
<td>Minimum wage</td>
<td>One-fifth UNDP standard of $2/day Official min. wage below min. level of consumption subsistence</td>
</tr>
<tr>
<td>Inflation</td>
<td>16% per year (last three years) Reached a striking 24% in 2008</td>
</tr>
<tr>
<td>Public-private</td>
<td>24% public -76% private</td>
</tr>
<tr>
<td>Public debt</td>
<td>&gt;90% of GDP</td>
</tr>
</tbody>
</table>
Plus...

• Elections fraud (95% vote of confidence for the ruling party in 2010 parliamentary “elections”)
• Monopoly power of business tycoons close to the family of the President
• Ultra-liberal Neoclassical policies leading to unbalanced growth (dis-distribution of resources)
• Mubarak grooming his very unpopular younger son to be the next President
SYSTEM FAILURE!

Revolution of the Masses
Against the Status Quo

Calling for:
(1) Justice
(2) Freedom
(3) Social Equity
After the Revolution...

Can Egypt be a competitive innovative economy?
# Short Term Impacts of Revolution

(Policy Shifts for Fiscal, Monetary, and Exchange Rate Policy)

<table>
<thead>
<tr>
<th>Indicator/Policy</th>
<th>Pre revolution</th>
<th>Short term post revolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>An average of 5.1% real GDP growth</td>
<td>GDP growth contracted to 2.6%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>High unemployment reaching 66%</td>
<td>Increase in unemployment especially for daily workers</td>
</tr>
<tr>
<td>Fiscal policy</td>
<td>Stable fiscal policy with austerity</td>
<td>Expansionary fiscal policy</td>
</tr>
<tr>
<td>Monetary policy</td>
<td>Expansionary monetary policy</td>
<td>Fixing monetary policy via fixing the interest rate</td>
</tr>
<tr>
<td>Exchange rate policy</td>
<td>Managed float</td>
<td>Managed float (modest depreciation of domestic currency by 5%)</td>
</tr>
</tbody>
</table>
### Beyond Short Term Impact ....
Relative Sector Productivity

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of GDP</th>
<th>Vs. previous year</th>
<th>Vs. 10 years ago</th>
<th>% of labor</th>
<th>relative efficiency (labor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>agriculture</td>
<td>13.2</td>
<td>-0.2</td>
<td>-3.3</td>
<td>32</td>
<td>0.41</td>
</tr>
<tr>
<td>industrial</td>
<td>29.8</td>
<td>-0.2</td>
<td>1.7</td>
<td>17</td>
<td>1.75</td>
</tr>
<tr>
<td>services</td>
<td>57.1</td>
<td>0.4</td>
<td>1.6</td>
<td>51</td>
<td>1.12</td>
</tr>
</tbody>
</table>
Sector Competitiveness

• 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.

• 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.

• 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.
Going more macro...
Country Competitiveness

Egypt's Global Competitiveness Index 2007-2011

- GCI 2007-2008 (out of 131 countries)
  - Rank: 68
  - Score: 3.96

- GCI 2008-2009 (out of 134 countries)
  - Rank: 70
  - Score: 3.98

- GCI 2009-2010 (out of 133 countries)
  - Rank: 4
  - Score: 4.04

- GCI 2010-2011 (out of 139 countries)
  - Rank: 4
  - Score: 81

Tarek H. Selim, Research Dialogue on Emerging Economies, Beijing, China, 2011
Country Competitiveness

Rank of Egypt vs. Countries in MENA region in GCI

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank 2009-2001</th>
<th>Rank 2010-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qatar</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>Israel</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>UAE</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Tunisia</td>
<td>40</td>
<td>32</td>
</tr>
<tr>
<td>Iran</td>
<td>69</td>
<td>81</td>
</tr>
<tr>
<td>Egypt</td>
<td>70</td>
<td>92</td>
</tr>
<tr>
<td>Lebanon</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Syria</td>
<td>94</td>
<td>97</td>
</tr>
<tr>
<td>Lybia</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>
Country Competitiveness

Stage of development

1. Factor driven
2. Efficiency driven
3. Innovation driven

Institutions
- Innovation
- Infrastructure

Business sophistication
Market size
Technological readiness
Financial market development
Goods market efficiency
Labor market efficiency

Macroeconomic environment
Health and primary education
Higher education and training

Egypt
Economies in transition from 1 to 2
Country Competitiveness

The most problematic factors for doing business

- Corruption: 19.0
- Inflation: 14.8
- Inadequately educated workforce: 10.1
- Tax regulations: 9.2
- Access to financing: 8.2
- Inefficient government bureaucracy: 6.1
- Restrictive labor regulations: 5.9
- Poor work ethic in national labor force: 5.6
Now we are in a position to analyze country competitiveness more broadly ...  

Country Competitiveness SWOT Analysis
### Strengths

**Country level:**
- Central geographical location
- Abundant labor force
- Big market size
- Availability of financing though local equity market
- Good railroad infrastructure
- GDP growth with global recession (shielded economy)

**Additional sector specific strengths of the Services sector:**
- Suez canal and rich touristic sites
- Modern banking sector with high degree of competition

**Industrial sector:**
- Diverse industrial sector
- Abundant natural resources for the extraction industry (natural gas)

**Agriculture sector:**
- Year round cropping
- High land and water quality

### Weaknesses

**Country level:**
- 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

**Services sector**
- Foreign dependency problem
- Below potential

**Industrial sector**
- Victim of “crony capitalism” with low quality output
- Insignificant local R&D and weak supply-chain linkages

**Agriculture sector:**
- Land fragmentation
- Decreasing returns to scale (desert reclamation)
- non-targeted subsidies
- inefficient legal framework (pricing/subsidies)
<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country level:</strong></td>
<td><strong>Country level:</strong></td>
</tr>
<tr>
<td>- New government post revolution with popular support</td>
<td>- Lack of security due to weak police force after revolution</td>
</tr>
<tr>
<td>- Post revolution entrepreneurship spirit</td>
<td>- Political instability</td>
</tr>
<tr>
<td>- Economies of scale (homogenous) and economies of stretch (customized)</td>
<td>- Non-sustainable budget deficit and/or public debt</td>
</tr>
<tr>
<td>- Prospects on new anticorruption law and expected transparency via democracy</td>
<td>- Failure of central bank to stabilize currency</td>
</tr>
<tr>
<td>- International support to Egypt post the revolution to rebuild a democratic country</td>
<td>- Persistence of non-Pareto growth</td>
</tr>
<tr>
<td>- Plans to increase minimum wages creating more equity in the society</td>
<td>- Least cost- least quality output trap</td>
</tr>
<tr>
<td>- Potential flow of FDI post revolution creating more job opportunities</td>
<td><strong>Services sector:</strong></td>
</tr>
<tr>
<td><strong>Services sector:</strong> Domestic investments with positive externalities</td>
<td>- Terrorism (tourism)</td>
</tr>
<tr>
<td><strong>Industrial sector:</strong> Quality standards, local R&amp;D, supply chain linkages</td>
<td><strong>Industrial sector:</strong></td>
</tr>
<tr>
<td><strong>Agriculture sector:</strong></td>
<td>- Dependency on foreign technology</td>
</tr>
<tr>
<td>- Restricted due to land saturation</td>
<td>- Competition from China and India (unable to compete)</td>
</tr>
<tr>
<td>- Desert reclamation (export potential)</td>
<td><strong>Agriculture sector:</strong></td>
</tr>
<tr>
<td>- Import reduction (wheat)</td>
<td>- Political risk on Nile-basin water supply</td>
</tr>
<tr>
<td></td>
<td>- Lack of urban planning posing threat on arable lands</td>
</tr>
<tr>
<td></td>
<td>- High yield-high price (uncompetitive)</td>
</tr>
<tr>
<td>STRENGTHS</td>
<td>WEAKNESSES</td>
</tr>
<tr>
<td>---------------</td>
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<tr>
<td>OPPORTUNITIES</td>
<td>THREATS</td>
</tr>
<tr>
<td>COUNTRY POTENTIAL</td>
<td>RISK POSITION</td>
</tr>
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</table>
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.

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.

Risk position
Prolonged political instability, lack of security when coupled with low productivity can lead to economic depression.
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”.
Strategy Timeline to Achieve an Innovation-Driven Economy

**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.
Major Conclusions

• Dual monopoly power in politics and economics leads to radical response
• Ultra-Neoclassical doctrine is doomed to fail for transition economies
• There are short term costs to radical change
• Timeline of strategies towards a vision is needed
• Stages towards innovation-based economy
• Innovation Planning requires Bottoms-Up Analysis, but with Top-Down Policy