Emerging Evidence on the Demographic Dividend of Nigeria

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Nigeria’s Demographic History
Nigeria’s fertility rate has started to fall

Source: UN, World Population Prospects, 2008
The infant mortality rate has fallen, but not steadily.
Life expectancy has risen, but not steadily.
Crude birth and death rates are falling.
Population growth has been rapid.
The ratio of working-age to non-working-age people has been pretty steady

Source: UN, World Population Prospects, 2008
Changing age structure, 1960-2005

Ratio of working-age to non-working-age population

Source: UN, World Population Prospects 2008
Population Age Structure for Nigeria, 1950 and 2000

Age in years

Percent

1950

2000
Nigeria’s Demographic Future
Figure 1: Population Age Structure for Nigeria, 1950-2050
Population Age Structure for Nigeria, 1950 and 2050
Population age structure, Nigeria,
The fertility rate is projected to continue falling.

Source: UN, World Population Prospects, 2008
Population growth rate will decline substantially

Source: UN, World Population Prospects, 2008
Nigeria’s population is set to soar

Source: UN, World Population Prospects, 2008
The ratio of working-age to non-working-age people is set to increase dramatically.

Source: UN, World Population Prospects, 2008
Growth of the working-age to non-working-age ratio, 1960-2050 (under 3 UN fertility scenarios)

Source: UN, World Population Prospects, 2008
Comparing the growth rates of the working-age and non-working-age population

<table>
<thead>
<tr>
<th></th>
<th>1970 - 2010</th>
<th>2010 - 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent population</td>
<td>Working-age population</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2.5%</td>
<td>3.0%</td>
</tr>
<tr>
<td>East Asia</td>
<td>0.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>2.6%</td>
<td>2.8%</td>
</tr>
<tr>
<td>World</td>
<td>1.1%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Source: UN, World Population Prospects, 2008
Changing Age Structure, 1960-2050: Nigeria compared with East Asia

Ratio of working-age to non-working-age population

- East Asia
- Nigeria low
- Nigeria medium
- Nigeria high

Source: UN, World Population Prospects, 2008
Nigeria’s Potential Demographic Dividend
Age profile of Productivity and Consumption needs, Nigeria, 2004
And Nigeria’s age profile of labor income is quite different from the standard profile.
<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young age deficit (YAD)</td>
<td>4,798,136</td>
<td>9,206,489</td>
</tr>
<tr>
<td>Old Age deficit (OAD)</td>
<td>189,794</td>
<td>280,381</td>
</tr>
<tr>
<td>Total deficit (YAD+OAD)</td>
<td>4,987,930</td>
<td>9,486,870</td>
</tr>
<tr>
<td>Total surplus for surplus ages</td>
<td>1,313,895</td>
<td>1,875,824</td>
</tr>
<tr>
<td>Lifecycle deficit</td>
<td>-3,674,035</td>
<td>-7,611,046</td>
</tr>
</tbody>
</table>
Since 2003, the dividend has turned positive and shall remain positive till 2050.

The prospect for the dividend reaches its peak in 2031 and 2032 before it starts to decline.

Contribution of the dividend is expected to increase over the years and will contribute as much as 18 percent to economic growth by year 2030 and about 10 percent to the GDP growth in 2050 if the current average growth rate exists at the time.

It should be noted however, that the dividend is transitory and will end at some point in time.

Although we do not know when the dividend will become a drag but findings from other countries indicate that the first dividend always last for between 30 to 60 years.
Growth rates of effective consumers and effective producers, Nigeria 1920-2050
Realising the dividend will be shaped by the structure of the support ratio
First Demographic Dividend, Nigeria 1950-2050
One key feature of Nigeria’s support ratio is that the take-off is very slow.

What are the challenges and opportunities in collecting the demographic dividend?

- Like many developing countries, the best opportunities many times turn out to be the biggest challenges
  - Jobs creation
  - Education
  - Health – infant/child mortality, maternal health, unmet need for family planning

- That, of course, raises the more difficult question of “How”. What are some of the main opportunities Nigeria can capitalize on to realize its demographic dividend?
Education will be key in making jobs productive: economic lifecycle - aggregate

Needs of children

Labor surplus

Source: Mason et al. 2010. Population and economic progress in Nigeria. Background paper for the NGN project
And results can be achieved with little: Nigeria’s current education expenditures.

Nigeria’s education and health spending

<table>
<thead>
<tr>
<th></th>
<th>Actual ($)</th>
<th>% of spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education, Public</td>
<td>142</td>
<td>7.33</td>
</tr>
<tr>
<td>Education, Private</td>
<td>922</td>
<td>47.63</td>
</tr>
<tr>
<td>Health, public</td>
<td>39</td>
<td>2.01</td>
</tr>
<tr>
<td>Health, private</td>
<td>833</td>
<td>43.04</td>
</tr>
<tr>
<td>Total</td>
<td>1,936</td>
<td>100</td>
</tr>
<tr>
<td>Total Public</td>
<td>181</td>
<td>9.33</td>
</tr>
<tr>
<td>Total Private</td>
<td>1,755</td>
<td>90.67</td>
</tr>
</tbody>
</table>

Per capita spending (2004 $s)

Big issue...

- Working age population (i.e. Those aged 15-60 years) will increase from about 85.7 million in 2011 to an estimated 185.6 million by 2050, an average increase of 25 million per decade.
- The size of the demographic dividend will depend on massive creation of wage-earning jobs
The high proportion of the working age population must be taken into consideration...

- identify job-intensive sectors in which the country enjoys a global competitive advantage or strong domestic demand;
- improve access to finance for these sectors;
- build appropriate infrastructure;
- cut unnecessary regulation; and
- ensure that the labour force has the necessary skills.
Nigeria's Labour Force (million) 2005 - 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Employment</th>
<th>Total Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>49.5</td>
<td>6.7</td>
</tr>
<tr>
<td>2006</td>
<td>50.3</td>
<td>8.6</td>
</tr>
<tr>
<td>2007</td>
<td>52.3</td>
<td>8.9</td>
</tr>
<tr>
<td>2008</td>
<td>53.6</td>
<td>9.4</td>
</tr>
<tr>
<td>2009</td>
<td>52.2</td>
<td>12.8</td>
</tr>
<tr>
<td>2010</td>
<td>51.2</td>
<td>13.9</td>
</tr>
<tr>
<td>2011</td>
<td>51.2</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Total Employment: Blue
Total Unemployment: Red
The high proportion of the working age population must be taken into consideration...

1. Improve access to labor markets for the youth (domestically)
   - Unemployment has to be reduced to the barest minimum
     - Lifecycle profile indicates low productivity of young workers and this has to be addressed
   - In the future we may not rule out access to the elderly
2. Improve access to labor markets for the youth (Internationally) Migration can be an option for human capital development and utilisation
   - Given the evident lack of opportunities for the baby boom children
   - Can be a loss of highly qualified young adults to emigration
   - But attractive because of remittances and implications for poverty reduction
3. **Increase investment in human capital as fertility declines is important**

- Investing more in the education and health of children means that standards of living will at first rise more slowly.
- Investing in continuous training to further develop the citizens in the present knowledge economy
- Moreover, by continuing to invest in human capital, higher standards of living can be sustained even after the economic support ratio has declined
4. Financial sector must be strengthened to aid and sustain investment that will enhance possibilities of reaping second dividend

- Develop and emphasize more asset-based pension systems.
- Raise financial literacy.
- Strengthen financial sector.
- Improve domestic investment environment.
- Increase access to international capital markets.
Conclusion

• Age structure is important for economic performance

• However, welfare implications of compositional change is unclear.

• First dividend is a transitory phenomenon. Although, Nigeria has entered the window of opportunity, the first dividend will eventually turn negative as aging occurs.

• Demographic transition can have a permanent effect on consumption by influencing the accumulation of assets.

• However, outcome is highly policy-dependent.
Thanks