Graduation of Ghana and Kenya to lower-middle income status: fiscal implications for health financing

School of Public Health, University of Ghana (GSPH)

The Lancet Commission on Investing in Health (CIH)
Background & Requirements for Convergence

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Global Health 2035: a world converging within a generation

Executive summary
Prompted by the 20th anniversary of the 1993 World Bank/IMF "Health is Wealth" statement, this paper outlines a pathway for preventing 50 million premature deaths over the next 15 years. The approach includes strategies to achieve a "grand convergence" in health levels across countries.
• The graduation of Ghana (2010) and Kenya (2014) to lower-middle income country status came as good news:
  - Depicts growth in economic activity, affecting all sectors
  - Growth expected to lead to
    - Expansion in critical health infrastructure through improved health spending
    - Improvements in health outcomes / indicators

• In reality, however, this may have downsides:
  - Reduction in total funds available to the sector due to reduction in donor support
  - If action not taken, may lead to shrinking infrastructure, worsening health outcomes
Objectives

The main objectives of the study were to:

1. Estimate funding requirements to achieve “grand convergence” in health
2. Explore funding gap due to reduced donor support
3. Explore potential fiscal space for health
Funding Requirements to Attain the Grand Convergence: Ghana & Kenya
Achieving GCH: Incremental Costs

KENYA

- A total of $932m is required annually over 20 years (i.e. total $18.6b) on top of current spending
  - About 83% of that for health systems str.
  - The rest distributed among prog areas
  - Investments should target vulnerable regions & populations with interventions
  - About 54,031 deaths could be averted each year
  - Econ returns could be $14 for every $1 spent i.e. BCR of >14.28

GHANA

- Total of $566m annually over the next 20 years (i.e. total $11.3b) on top of current spending to reach “grand convergence”
  - About 82% of that for health systems str.
  - The rest distributed among prog areas
  - Investments should target vulnerable regions & populations with interventions
  - Cost savings could accrue in immunizations, TB
  - About 23,930 deaths could be averted each year
  - Econ returns could be $10 for every $1 spent i.e. BCR of >10.9
Distribution of Incremental Programmatic Costs

Kenya
- Malaria: 27%
- TB: 23%
- HIV: 12%
- Family Planning: 12%
- Maternal and Newborn: 15%
- Childhood Illness: 11%

Ghana
- Malaria: 43.5%
- HIV: 33.6%
- Maternal and Newborn: 11.3%
- Childhood Illness: 11.2%
- Family Planning: 0.4%
**Estimated Reductions in Mortality**

<table>
<thead>
<tr>
<th><strong>Cause</strong></th>
<th><strong>Kenya</strong></th>
<th><strong>Ghana</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011 (# of deaths)</td>
<td>2035 (# of deaths)</td>
</tr>
<tr>
<td>Maternal deaths</td>
<td>5,700</td>
<td>1,900</td>
</tr>
<tr>
<td>Stillbirths</td>
<td>35,000</td>
<td>17,600</td>
</tr>
<tr>
<td>Under-5 child deaths</td>
<td>131,100</td>
<td>46,800</td>
</tr>
<tr>
<td>TB deaths</td>
<td>12,500</td>
<td>4,100</td>
</tr>
<tr>
<td>HIV deaths</td>
<td>71,000</td>
<td>11,100</td>
</tr>
<tr>
<td>Births</td>
<td>1,584,000</td>
<td>1,298,000</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>4.7</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>(births per woman)</td>
<td></td>
</tr>
<tr>
<td>Under-5 mortality rate</td>
<td>83</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>(per 1,000 live births)</td>
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</tbody>
</table>
Ghana Case

Jacob Novignon, PhD
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KNUST, Ghana
Funding Gap
Health Expenditure by Source, 2005 - 2013

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Public funds</th>
<th>Donors</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>29.6%</td>
<td>17.4%</td>
<td>53.0%</td>
</tr>
<tr>
<td>2010</td>
<td>68.7%</td>
<td>12.7%</td>
<td>18.5%</td>
</tr>
<tr>
<td>2012</td>
<td>56.8%</td>
<td>9.1%</td>
<td>34.2%</td>
</tr>
<tr>
<td>2013</td>
<td>56.5%</td>
<td>8.7%</td>
<td>34.8%</td>
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</table>
Fiscal Space
Improved Tax Revenue

• We assessed tax efforts, buoyancy and elasticity of various tax handles and conclude that there is space to broaden tax base and raise more revenue for health
• Tax effort in Ghana is lower across such handles as (VAT, excise, corporate, income etc.). This raises efficiency concerns.
• Average tax elasticity is estimated to be 1.03 between 1987 and 2007.
• Tax effort and capacity is estimated at 0.55 and 24.2, below the middle income average of 0.63 and 26.4, respectfully.
  • Effective tax reforms
  • Reaching out to the informal sector
  • Macroeconomic fundamentals
Overseas Development Assistance

- External resources to the health sector have been inconsistent over the years
- Significant declines in recent years attributed to
  - Transition to MIC status and
  - Global economic downturn
Borrowing

Trend in Revenue and Debt

Trend in Revenue and Expenditure

[Graph showing Trend in Revenue and Debt with years 2000 to 2013 on the x-axis and % of GDP on the y-axis.]

[Graph showing Trend in Revenue and Expenditure with years 2008 to 2014 on the x-axis and % of GDP on the y-axis.]
Improved Health Systems Efficiency

• There is space to save from improved efficiency (use of fewer resources to achieve same level of outputs) of health services and health expenditure
  • Average efficiency for district hospitals was 0.72, suggesting potential wastage of 0.28.
Improving Private Sector Investment

• Public-private partnerships for health
  • PPP in delivery of specific services improves efficiency but also brings in private sector resources for health
  • Consider successful case studies in
    • Myanmar: involvement of cooperatives, joint ventures with NGOs
    • Pakistan: encouraging private investment in pharmaceutical industry

• Make an economic case for private sector to specifically invest in health
  • Typical e.g. of businesses lost approx. US$6.5m in 2014 alone, & one month of staff productivity to malaria between 2012-2014
In Ghana, businesses lost approx.

- US$6.5m in 2014 alone to malaria
- 3,913 workdays, equivalent of one month of staff productivity, lost to malaria 2012-2014
- 93% of business leaders think it is worthwhile for their businesses to invest in malaria control
Kenya Case

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Funding Gap
Funding Gap

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost (KSH)</th>
<th>Revenue (KSH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>21,027</td>
<td></td>
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<tr>
<td>2013-14</td>
<td>50,009</td>
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<tr>
<td>2014-15</td>
<td>43,231</td>
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<td>2015-16</td>
<td>41,015</td>
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<td>2016-17</td>
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<td>52,281</td>
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A World Converging within a Generation

GLOBAL HEALTH

UNIVERSITY OF GHANA

SCHOOL OF PUBLIC HEALTH
Health Financing by Source

Percentage of total expenditure

<table>
<thead>
<tr>
<th>Year</th>
<th>Public</th>
<th>Private</th>
<th>Donor</th>
<th>Other</th>
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<tbody>
<tr>
<td>2001/02</td>
<td>29.6</td>
<td>53.9</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td>2005/06</td>
<td>29.3</td>
<td>39.3</td>
<td>0.4</td>
<td>0.4</td>
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<tr>
<td>2009/10</td>
<td>28.8</td>
<td>36.7</td>
<td>0</td>
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Fiscal Space
Improved Tax Revenue

**Tax Revenue**

- **Actual** to **Potential VAT revenue**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td>22%</td>
<td>19%</td>
<td>16%</td>
<td>14%</td>
<td>15%</td>
<td>16%</td>
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**Beer consumption** vs **Beer excise tax revenue**

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<tbody>
<tr>
<td>% growth</td>
<td>-40.0</td>
<td>-20.0</td>
<td>0.0</td>
<td>20.0</td>
<td>40.0</td>
<td>60.0</td>
<td>80.0</td>
<td>100.0</td>
<td>120.0</td>
<td>140.0</td>
<td>160.0</td>
<td>180.0</td>
<td>200.0</td>
<td>220.0</td>
<td>240.0</td>
<td>260.0</td>
<td>280.0</td>
<td>300.0</td>
<td>320.0</td>
<td>340.0</td>
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**Cigarettes consumption** vs **Cigarettes excise tax revenue**

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<tbody>
<tr>
<td>% growth</td>
<td>-100.0</td>
<td>-50.0</td>
<td>0.0</td>
<td>50.0</td>
<td>100.0</td>
<td>150.0</td>
<td>200.0</td>
<td>250.0</td>
<td>300.0</td>
<td>350.0</td>
<td>400.0</td>
<td>450.0</td>
<td>500.0</td>
<td>550.0</td>
<td>600.0</td>
<td>650.0</td>
<td>700.0</td>
<td>750.0</td>
<td>800.0</td>
<td>850.0</td>
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A World Converging within a Generation
Fiscal Space from Tax Revenue

• Space from Tax Revenue
  • Broaden tax base
  • Enhance tax compliance: Automated Tax System (iTax)
  • Enhance VAT collection
  • Enhance property tax collection
Overseas Development Assistance

• Significant declines expected due to
  • Transition to MIC status and
  • Global economic downturn
Borrowing

• High fiscal discipline in Kenya, relative to Ghana.

• Suggests a more sustainable public debt levels and low risk of debt distress.

• This could be leveraged for fiscal space for the health sector.

• Channeled to high priority public health areas
Improved Health Systems Efficiency

• Enhancing Efficiency

• Average efficiency estimated at 72.6%, 50.7%, and 43% for hospitals, health centers and dispensaries respectively.
  • Need to rationalize expenditure through curtailing of less productive expenditures
Improving Private Sector Investment

• Public-private partnerships for health
  • PPP in delivery of specific services improves efficiency but also brings in private sector resources for health

• Make an economic case for private sector to specifically invest in health
Concluding.....

• Shortfall in funding health in Ghana and Kenya due to
  • Transition to LMIC
  • Global economic downturn

• The gaps notwithstanding, there is potential to improve health financing through:
  • Improved tax revenue – expanding tax base
  • Improved efficiency
  • Public-private Partnerships & private sector contributions to health

• Countries can reach convergence with improved financing and strengthening health systems

• A conscious effort needed
Study Team

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- **The Commission on Investing in Health**, University of California, San Francisco
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