Job creation in the mining sector: evidence from Ghana

By

Prof. William Baah-Boateng
Department of Economics
University of Ghana

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Introduction

- Until recently, the growth of the mining sector has been quite strong averaging 8.2% over 2007-2012 and 4.8% over 2007-2016.
- It contributes about 2% to GDP and about 6% to industrial output.
- Leading foreign exchange earner and generated US$4.9 billion largely from gold equivalent to 44.2% of country’s total export earnings in 2016.
- Contributed GHc1.7 billion (15.9% of government revenue) to government tax revenue.
Employment concerns in mining

- Mining accounts for just about 1% of total employment (about 120,000)
- However, government documents sometimes quotes 500,000 in small-scale mining from observation)
Formal/informal sector employment in mining

- Mining employment dominated by small-scale informal mining activity
- Just a little over a quarter of mining employment in the formal sector

![Formal vs. informal employment chart](chart.png)
Employment by mining activity

- Gold mining is the main source of employment in the mining sector
- accounting for over 90% of total mining employment
Gender dimension of employment

- Mining is a male dominated activity
- 8 in every 10 mining worker in Ghana is a male
Who says the elephant cannot dance - Mining activity is often criticized for its limited direct job creation potential

But mining does not only create direct jobs but also indirect jobs and even induced jobs

- Direct jobs
- Indirect jobs created in mining communities in providing goods and services for mining activities
- Induced jobs - jobs resulting from direct and indirect employees spending and increasing consumption
Direct job creation in mining

- Using annual change in total mining employment, a total of 65,979 direct jobs were created in mining sector in Ghana over 2004-2015 averaging 5,832 annually.

- 8,299 formal and 57,680 informal jobs over the 12-year period.

- Between 2007 and 2015, 74,208 jobs were created by gold mining and 17,904 job losses in other mining activities over the period yielding a net direct jobs of 56,304.

- Using employment elasticity of output, 53,050 direct jobs were created over 2004-2015 or 4,421 annually on average.
Indirect & Induced job creation in mining

- Jobs created by suppliers of mining inputs (equipment, human resource, infrastructure) and distribution of mining products
  - Trainers of workers (engineers, geologists etc.)
  - Outsourcing of catering services
  - Repair and maintenance of mining equipment
  - Utilities, transport and accommodation
  - Distributors and marketers of mining products
  - Agriculture (food crops,

- Induced – economic activity created spending by direct and indirect mining employees
## Direct and Indirect Jobs

### Annual direct and indirect jobs created/lost in various economic sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2011-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2</td>
<td>0</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>Extractives</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mining companies</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Utilities</td>
<td>2</td>
<td>1</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Construction</td>
<td>-2</td>
<td>-2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Trade</td>
<td>3</td>
<td>7</td>
<td>-1</td>
<td>9</td>
</tr>
<tr>
<td>Transport &amp; communications</td>
<td>1</td>
<td>0</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Services</td>
<td>-1</td>
<td>2</td>
<td>-3</td>
<td>-2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

Figures in ‘000 fulltime equivalent

**Source:** Computed from Steward Reaqueen and mining company data from seven mines.
## Direct, Indirect and Induced jobs

### Annual direct, indirect and induced jobs created (in ‘000 fulltime equivalent)

<table>
<thead>
<tr>
<th>Source</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2011-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining Companies (direct jobs)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Direct suppliers (indirect jobs)</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Suppliers’ suppliers (indirect jobs)</td>
<td>4</td>
<td>7</td>
<td>-3</td>
<td>8</td>
</tr>
<tr>
<td>Re-spending of salaries (induced jobs)</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>15</td>
<td>5</td>
<td>28</td>
</tr>
</tbody>
</table>

**Source:** Computed from Steward Redqueen and mining company data from seven mines.
Conclusion

- Limited employment generation concerns is often based on the number of people engaged directly in mining activity.

- The multiplier employment effect through indirect and induced jobs cannot be ignored.

- In Ghana, the suspension of small-scale mining has caused many mining towns to lose their source of livelihood.

- Indeed, the elephant can dance if you assess it its totality.
Thanks for your attention