Understanding Rwanda’s merchandise export sector

... and what we learned or didn’t learn about Learning-by-Exporting

June 25th, 2013
What is Laterite?

Laterite is an economic and social research firm with a presence in Rwanda, Malawi and Burundi
What was our role in the Learning-to-Compete program?

1. A book

Understanding Rwanda’s Agribusiness & Manufacturing Sectors

Sachin Gathani & Dimitri Stoelinga

2. A paper

Understanding Rwanda’s Export Sector

A deep-dive into Rwanda’s merchandise export sector, focusing on destinations, products and firms

Sachin Gathani & Dimitri Stoelinga
The objective of this presentation?

1. Provide you with some insights on Rwanda’s merchandise exports sector

2. Highlight some structural points at the firm level with interesting implications for learning-by-exporting

3. Hopefully spark some new thinking about learning-by-exporting
Brief overview of Rwanda’s export sector ....
Rwanda has a very small exports sector ... merchandise exports have been flat and only account for about 5% of GDP.

**Chart:**

**Merchandise exports over GDP (1960-2010)**

- 0%
- 5%
- 10%
- 15%
- 20%

% GDP

- 1965
- 1975
- 1985
- 1995
- 2005
Approximately 90% of that is commodity based ...

Breakdown of Rwanda's merchandise exports (2010)

- Tea and Coffee: 49%
- Minerals: 39.2%
- Other products: 11.7%
In fact Rwanda’s commodity and non-commodity export sectors are two completely different sectors and should be analyzed as such.

Destinations of Rwanda's merchandise exports (2010)

- **Coffee and tea**
  - DRC and EAC: 0%
  - Other Africa: 30%
  - Asia: 60%
  - Europe, US, Canada: 90%

- **Minerals**
  - DRC and EAC: 0%
  - Other Africa: 30%
  - Asia: 60%
  - Europe, US, Canada: 90%

- **Other products**
  - DRC and EAC: 0%
  - Other Africa: 30%
  - Asia: 60%
  - Europe, US, Canada: 91%
The commodity sector is anchored in the colonial past

By 1955 there were more than 200 small scale mines operational in Rwanda ( wolfram, casserite)

Mandatory coffee production started between 1931-38 during 5 large planting campaigns

Introduced in 1936, pyrethrum was grown in the highlands where coffee couldn’t grow
The commodity sector is anchored in the colonial past (2)

Tea production was started by European investors in the mid-50s and supported by development aid after independence.
Yet has remained the main driver of exports growth (and new product discovery) over the past 20 years …

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Total exports</th>
<th>Contribution to exports growth (2000-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established export products</td>
<td>170m</td>
<td>74.6%</td>
</tr>
<tr>
<td>New Export Discoveries</td>
<td>38m</td>
<td>19.5%</td>
</tr>
<tr>
<td>Intermittent</td>
<td>9m</td>
<td>4.3%</td>
</tr>
<tr>
<td>Incipient</td>
<td>4m</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New export products</th>
<th>#products</th>
<th>Share of new products</th>
<th>Value (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully washed (specialty) and roasted coffee</td>
<td>1</td>
<td>41%</td>
<td>15.5m</td>
</tr>
<tr>
<td>Minerals (tungsten + chromium)</td>
<td>2</td>
<td>26%</td>
<td>9.8m</td>
</tr>
</tbody>
</table>
Non-commodity exports … which are almost exclusively targeted at regional partners… are still in their infancy (US$32m in 2011!)

### Destination of Rwanda's manufacturing exports - excl. tea, coffee, pyrethrum (average 2008-2010)

<table>
<thead>
<tr>
<th>Country</th>
<th>Share of manufacturing product exports (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC</td>
<td>53%</td>
</tr>
<tr>
<td>Burundi</td>
<td>23%</td>
</tr>
<tr>
<td>Kenya</td>
<td>8%</td>
</tr>
<tr>
<td>Uganda</td>
<td>5%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>13%</td>
</tr>
</tbody>
</table>

### Share of non-commodity exports (2005-2011)

- **Share of total exports**
  - 2005: 0%
  - 2007: 14%
  - 2009: 20%
  - 2011: 16%

- **Share of non-commodity exports (2005-2011)**
  - 2005: 0%
  - 2007: 0%
  - 2009: 4%
  - 2011: 8%
These regional markets are however where the future of Rwanda’s export sector lies and where learning will take place ....
It’s a sector that’s poised to take-off … Rwanda is experiencing the fastest pace of firm creation rate since the 1970s.

TIMELINE OF CREATION OF MANUFACTURING FIRMS

- **1972/3 Regional crisis**
- **1994 Genocide**
- **EAC entry**

Rwanda’s industrial sector is relatively new.

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Current growth is largely driven by regional investments

- 30% of output comes from new firms created since 2005

Total Output: ~ $128M

Brasserie de Milles Collines
ICM Rwanda Agribusiness
Bakhresa Grain Milling
Kigali Cement Company
Rwanda Trading Company
Rwanda Mountain Tea
Master Steel
Safintra
SteelRwa
FINDING #1

There are very few exporters
There are very few non-commodity exporters in Rwanda

**Sampling frame: All firms that paid tax and social security in 2010**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Non-Exporters</th>
<th>Commodity exporters</th>
<th>Retail, wholesale, or transport firms</th>
<th>Other exporters</th>
<th>Total number of exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exports &gt; 0</td>
<td>1170</td>
<td>27</td>
<td>50</td>
<td>43</td>
<td>120</td>
</tr>
<tr>
<td>2. Exports &gt; USD$50,000</td>
<td>1223</td>
<td>26</td>
<td>18</td>
<td>24</td>
<td>68</td>
</tr>
<tr>
<td>3. Exports/sales &gt; 10%</td>
<td>1234</td>
<td>26</td>
<td>14</td>
<td>17</td>
<td>57</td>
</tr>
</tbody>
</table>
Not only that, but the export orientation of exporters is low ... can learning really happen with such low exports?

All started in 2011, all owned by East African firms

Plastic shoe maker .... exports exclusively to Burundi, where owner used to live and run a BATA shoe factory
And there’s also a structural problem: in each sector there are only one or two producers, so it is hard to identify comparator firms!
FINDING #2

There is little switching in and out of the exports sector ...
Firms in the commodity sector are “born global”; firms in the non-commodity sector are “born regional”

Firms switching in and out of the export sector is often used to test the learning-by-exporting hypothesis. There is however little evidence of switching in Rwanda’s export sector...

**Firms in commodity sector are “born global”**
- All firms are 100% exporters
- These firms are also literally global … owned by large US, EU and Indian groups

**New non-commodity exporters are “born regional”**
- New investments by EAC group driving exports and manufacturing sector growth
- Investments made with eye on Burundi and DRC markets
FINDING #3

Firms don’t always export by choice, it can be by default....
And what if exporting happens by default in some cases, which is why we see such a high share of “born global / regional” firms?

In the literature the decision to export or not is presented as a choice. But does this assumption hold?

The counter-example of Pembe Flour

- Largest wheat flour producer (>US$30m)
- 2nd largest non-commodity exporter in 2010 (US$2m)
- Exports only wheat bran, a residue, that is used for animal feeds
- Reason: animal feeds processor in Rwanda bankrupt and inexistent animal feeds market
FINDING #4

Traders play a key role because of export barriers
Traders are central to Rwanda’s regional exports sector … they are better at overcoming export barriers

Typically the LBE literature doesn’t take into account the role of traders. But isn’t that central to who learns?

The prevalent export model in Rwanda

Producers

Distributers/retailers in DRC & Burundi

Trader

Bays goods

Bays goods

Who learns??

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FINDING #5

Don’t forget that even in the formal sector, exports are sometimes informal.
Rwanda’s informal trade networks are used by large firms to export to neighboring countries

How can the LBE model better adapt to informal trade networks? They’re bigger than you think ....

- Informal exports to Burundi and DRC are larger than formal exports! According to NBR: 60% of exports to DRC, 55% of exports to Burundi

The case of Minimex (turnover >US$10m)

Sells products to small traders in border market

Products taken across at low cost by informal traders
FINDING #6

Supply is the biggest constraint
Why do we assume learning on the sales side is greater than learning on the supply side?

Our rationale

1. The supply of raw material is the biggest constraint to growth in Rwanda’s manufacturing and agribusiness sectors (see book!)

2. The costs and delays related to supplies decrease productivity and capacity utilization

3. Developing effective international supply networks that are diversified, stable and based on established relationship can have a very high impact on productivity

4. It also helps firms keep updated on the latest available inputs and industry best-standard

5. This exposure to international markets on the supply side can therefore lead to learning
Summary of highlights

1. There are very few exporters
2. There is little switching
3. Exporting is not always a choice
4. Traders are central to the equation
5. Formal firms can export through informal networks
6. Supply matters most … so let’s study learning-by-importing