Firm Capabilities and the ‘In Between’ Sector: A Research Agenda for IGC Tanzania

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Partially based on fieldwork in Tanzania in August and September 2014.
Motivation: Part One

‘An economy does not divide into a capitalist sector hiring workers for factories and other large units on the one hand, and a small farming sector on the other hand. In between are units of production of all sizes, and in particular a great number of one-to five-man undertakings in manufacturing, transport and a wide range of services – often nowadays called the informal sector. Some of this activity belongs in the modern sector as we have defined it; i.e., it will expand with economic development; the rest – e.g., some of the handicrafts and some of the services – belong to the traditional sector in that they will contract.

Motivation: Part Two

The expansion of small scale activity in the modern sector is an important part of the development process. This is not because it is a temporary resting-place for migrants from the countryside seeking jobs in large scale enterprise. In LDCs, no less than in MDCs (as we shall see in our next section) jobs in large scale urban enterprises are not normally awarded to people who have no connections. It is rather because this sector of the economy is useful in its own right, meeting genuine market needs, and providing a lot of employment in the process.’

Lewis’ Traditional Sector – subsistence farmers and street vendors
Lewis’ In-between Sector – food and furniture for the domestic market
Lewis’ modern sector
Key Messages

- Tanzania’s recent growth is not well understood
- ‘In between’ sector important part of growth story
- IGC could help close this information gap
- Stakeholders have lots of interest and requests
- Data not perfect but lots of it
- Plenty of room for IGC supported research
Stylized Facts 1: SMEs Tanzania

- There are more than 3 million such enterprises employing around 5.2 million people;
- More than half of these enterprises are in rural areas;
- 60 percent of these enterprises report that their businesses are growing;
- 54 percent of enterprise owners report that they would not give up their job for a full-time salaried position;

Source: Authors calculations, MSME Survey 2010
Stylized Facts 2: MSMEs Tanzania

• Average monthly incomes of these small business owners is 267 USD compared to average monthly incomes for all households of 88 USD;

• Overall, 14 percent of the enterprises are in the manufacturing sector and in rural areas, 18 percent of the enterprises are in the manufacturing sector, and;

• Virtually none of the small firms export – their markets are purely domestic.

Thus, while some of the enterprises belong in the traditional sector as conceptualized by Lewis (1954), many do not.

Source: Authors calculations, MSME Survey 2010
Stylized Facts 3: Youth in SMEs

Source: Author’s calculations based on 2012 Population Census, Tanzania 2014
So many interventions!

- SME Policy in 2003
- Government & Private Sector
  - Credit Schemes
  - Guarantee Schemes
  - Training Programs
  - Dedicated Sites
Stakeholder views

In spite of all of these interventions, lots of knowledge gaps:

• SMSEs complain
  - Products and services not adequate
  - Regulations too cumbersome
• Government stakeholders (MIT, BoT, FSDT) complain
  - We know MSMEs are important
  - We don’t know impact of current programs
• Lots of interest and talent among local researchers
  - UDSM, IMED, RePOA
Recent Research: Tanzania SMEs

- Dr. Nsubili Isaga Mzumbe B School, (Personality Traits of Entrepreneurs, Kwhaja) Furniture (2012)
  - Dr. Olomi IMED (several)
  - Dr. Wangwe RePOA (several)
- Dr. Goodluck Urassa (UDSM, B School), (Networks, information and capital) Family Firms (2014)
  - Heavy emphasis on SMEs as source of jobs
  - Target three sectors: leather, non-traditional ag,
Lots of data

- SME Survey 2010 (FSDT/MIT)
- HBS 2009, 2011
- Manufacturing CENSUS, ETA?
- Each has limitations so need to be creative to understand the big picture
Key Research Questions

- What drives productivity growth in the SME sector?
- How much does this contribute to overall growth?
- Can we identify ‘transformational’ firms?
- And, if so, can we design products targeted at these firms?
- What happens to the micro firms in the process?
- What are the linkages between small and large firms?
- How has the IT revolution impacted SMEs?
- Are current programs working?
Some More Specifics on Projects Related to Firm Capabilities and SMEs that IGC Might Support
Analytical Framework Linking SMEs to Growth

The East Asian model does not seem appropriate for Africa/TZ
- export oriented labor intensive mfg less likely
- natural resources more important
- external pressures on industrial policy and politics

Need a new model with following characteristics:
- 3 sectors Traditional, In-between, Modern
- Modern (open/international markets)
- In-between (closed/domestic markets)
- How do these sectors contribute to productivity growth?
- Even if modern open is most productive, in-between still contributes to productivity growth
Mechanisms to Target “Transformational” SMEs

• Clear that SME sector in Tanzania is extremely heterogeneous – can products be developed that target “transformational” entrepreneurs?

• Dr. Nsaga documented the importance of seemingly intangible personality traits on SME performance in furniture industry TZ

• Entrepreneurial Finance Labe at Harvard/ Asim Khwaja – developed psychometric method of credit scoring

• Vilcassim, Chintagunta and Anderson (2014) – developed an algorithm for targeting high growth potential entrepreneurs
Linking Small and Large Firms

• Sutton and Olomi’s Enterprise Map of TZ documents lack of adequate inputs as a constraint on large firm growth

• Statistics from NBS show that 87.5% of all inputs purchased by large firms are sourced domestically – 98% in agri-business

• Can the smaller firms be groomed to ease input constraints of large domestic and foreign firms?

• What about technology transfer from foreign firms to domestic firms?

• Manufacturing census not yet gone to the field, I am trying to get them to include a module on linkages (ongoing in Ethiopia)
IT for SME Growth (Aker & Dillon 2014)

- Mobile phones have enormous potential to boost SME productivity via access to cheaper inputs and services.

- Dillon, Blumenstock and Aker (ongoing) have teamed up with the Institute for Rural Development Planning in Tanzania, (Adalbertus Kamanzi) on experiment designed to measure the value of the cell.

- The primary intervention is a telephone directory that lists descriptions and contact information for enterprises in the surrounding area.

- The directory will be randomly distributed to a large number of households in villages and towns of varying sizes, with an emphasis on rural, disconnected farming households, thereby creating an exogenous shock to firm and household networks.

- They will track a range of firm outcomes, including number of employees, revenues, and profits, as well as the intermediate mechanisms by which those outcomes are realized, such as number of customers, number of phone calls received, inventories, trading volumes, location of activities, and prices.
Meta-Analysis of SME Interventions

• Both Dr. Ndulu the Governor of the Central Bank of TZ and Dr. Ishebabi the Director of SME Policy at the MIT in TZ requested such a study

• Idea is to review existing interventions in the context of a theoretical framework so as to provide policymakers and practitioners with a better sense of what is happening on the ground

• Dr. Ishebabi actually would like some guidance on policy implementation

• I thought of this in terms of a possible SME Map a la the Enterprise Maps but I realize that it is a bit of a different beast

• UNIDO did a review of Tanzania’s SME Policy in 2012 but it only covers a few region and they only talked to 10 SME owners. At least now there is data that could be used as a foundation for such an analysis.

• One idea would be to focus on a key sector like furniture for example where we know there is a lot of unmeasured activity to try to get a handle on which types of entrepreneurs benefit from which services.
Summing up

• Clear mandate for IGC involvement
• Even the World Bank Lead economist wants IGC help! And he has money
• The meta-analysis although perhaps most boring from an academic perspective (maybe somebody else can sell it better!) seems like it would be extremely valuable
• Although not a specific proposal, having the IGC involved could also help improve data collection which is quite political
• My trip is the second round of visits and it would be nice to go back with something concrete sooner rather than later esp. for MIT/Ishebabi
Table 25: Raw materials purchased by product category and origin – 2009

<table>
<thead>
<tr>
<th>CPC Version 2</th>
<th>Description</th>
<th>Imported</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Products of agriculture, horticulture and market gardening</td>
<td>5,333,914</td>
<td>285,670,647</td>
<td>291,004,561</td>
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<tr>
<td>02</td>
<td>Live animals and animal products (excluding meat)</td>
<td>3,984,243</td>
<td>72,467,502</td>
<td>76,451,745</td>
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<tr>
<td>03</td>
<td>Forestry and logging products</td>
<td>4,419,164</td>
<td>30,804,949</td>
<td>35,224,113</td>
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<tr>
<td>04</td>
<td>Fish and other fishing products</td>
<td></td>
<td>17,081,651</td>
<td>17,081,651</td>
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<tr>
<td>14</td>
<td>Metal ores</td>
<td>28,042,821</td>
<td>87,020,932</td>
<td>115,063,753</td>
</tr>
<tr>
<td>15</td>
<td>Stone, sand and clay</td>
<td></td>
<td>16,074,019</td>
<td>16,074,019</td>
</tr>
<tr>
<td>16</td>
<td>Other minerals</td>
<td>6,208,490</td>
<td>49,104,751</td>
<td>55,313,241</td>
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<tr>
<td>17</td>
<td>Electricity, town gas, steam and hot water</td>
<td></td>
<td>24,629</td>
<td>24,629</td>
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<tr>
<td>18</td>
<td>Water</td>
<td>90,661</td>
<td>36,215,951</td>
<td>36,306,612</td>
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<tr>
<td>21</td>
<td>Meat, fish, fruit, vegetables, oils and fats</td>
<td>127,051</td>
<td>186,788,873</td>
<td>186,915,924</td>
</tr>
<tr>
<td>22</td>
<td>Dairy products and egg products</td>
<td></td>
<td>932,281</td>
<td>932,281</td>
</tr>
<tr>
<td>23</td>
<td>Grain mill products, starches and starch products; other food products</td>
<td>20,170,673</td>
<td>148,579,043</td>
<td>168,749,716</td>
</tr>
<tr>
<td>24</td>
<td>Beverages</td>
<td>9,273,307</td>
<td>30,145,423</td>
<td>39,418,730</td>
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<tr>
<td>25</td>
<td>Tobacco products</td>
<td>7,160,513</td>
<td>41,944,047</td>
<td>49,104,560</td>
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<tr>
<td>26</td>
<td>Yarn and thread, woven and tufted textile fabrics</td>
<td>4,177,168</td>
<td>28,838,828</td>
<td>33,015,996</td>
</tr>
<tr>
<td>27</td>
<td>Textile articles other</td>
<td>937,734</td>
<td>12,883,080</td>
<td>13,820,814</td>
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<tr>
<td>28</td>
<td>Knitted or crocheted fabrics; wearing apparel</td>
<td>699,000</td>
<td>3,653,785</td>
<td>4,352,785</td>
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<tr>
<td>29</td>
<td>Leather and leather products; footwear</td>
<td>733,489</td>
<td>2,164,525</td>
<td>2,898,014</td>
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<tr>
<td>31</td>
<td>Products of wood, corks, straw and planting materials</td>
<td>21,432,221</td>
<td>408,316,216</td>
<td>429,748,437</td>
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<tr>
<td>32</td>
<td>Pulp, paper and paper products, printed matter and related articles</td>
<td>10,964,515</td>
<td>63,354,047</td>
<td>74,318,562</td>
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<tr>
<td>33</td>
<td>Coke oven products, refined petroleum products; nuclear fuel</td>
<td>10,325,800</td>
<td>3,192,973</td>
<td>13,518,773</td>
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<tr>
<td>34</td>
<td>Basic chemicals</td>
<td>49,204,152</td>
<td>136,666,626</td>
<td>205,870,778</td>
</tr>
<tr>
<td>35</td>
<td>Other chemical products; man-made fibres</td>
<td>9,702,220</td>
<td>19,616,434</td>
<td>29,318,654</td>
</tr>
<tr>
<td>36</td>
<td>Rubber and plastics products</td>
<td>15,562</td>
<td>45,779,584</td>
<td>45,935,146</td>
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<tr>
<td>37</td>
<td>Glass and glass products and other non-metallic products n.e.c.</td>
<td>50,583,215</td>
<td>22,682,818</td>
<td>73,266,033</td>
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<tr>
<td>38</td>
<td>Furniture; Other transportable goods n.e.c</td>
<td>2,770,295</td>
<td>27,472,065</td>
<td>30,242,360</td>
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<tr>
<td>39</td>
<td>Wastes or creeps</td>
<td>5,768,725</td>
<td>32,082,754</td>
<td>37,851,479</td>
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<tr>
<td>99</td>
<td>Not indicated</td>
<td>63,286,734</td>
<td>177,456,297</td>
<td>240,743,031</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>319,854,798</strong></td>
<td><strong>2,225,585,778</strong></td>
<td><strong>2,545,439,576</strong></td>
</tr>
</tbody>
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