Paper proposal
Entry and Survival of South Africa's Agricultural Exports

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Structure

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2. The literature
3. Some stylized facts on growth in SA’s agricultural exports
4. Decomposition of the growth
5. Exploring export entry and survival
6. Some firm-level perspective
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Introduction

1. Work in progress….. (inputs) → setting the scene

2. Analyses of relationships... in agricultural exports

3. Partners → South African companies enter into a relationship with a foreign company

4. Maximum number of relations: 635 products x 274 countries = 173 990

5. Relationship build on the exchange of (agro-food) products for foreign currency

6. Entry and survival (duration) of these export relationships?

7. Why is this important? companies invest in exporting → cost of compliance, search cost, information cost, trade cost → guide policies, exporter support programs and industry associations to improve survival rate
The literature

• Many research on export relationships found that they are relatively short-lived, about 4-5 years on average in most studies (Besedes and Prasa, 2006; Brenton, Saborowski, and von Uexkull, 2010; Fugazza and Molina, 2011)

• Cadot and Pierola (2012): exports from low-income countries have the shortest survival rate → capacity?

• Besedes and Blyde (2010) → export survival in Latin America → sharing a common border, economic size of partners, large initial exports, a depreciated exchange rate and more developed financial institutions all positively affected survival rates.
The literature

- On a micro-level, exit, entry and survival decisions from a firm’s perspective evolve around expected returns, fixed cost, sunk cost, uncertainty and the business environment.

- Firm-level studies are limited → Esteve-Perez, Requena-Silvente and Pallardo-Lopez (2013) → Spain → average export duration two years → by political risk, firm productivity and distance.

- Exporter’s Dynamics Survey (World Bank) → most export growth comes from exporter size rather than new exporters.

- No study to date on entry and survival of exports in agro-food sector specifically: Do the same trends apply? What can we learn from a firm and policy perspective?

- Focus on SA as a large agricultural exporter → dualistic nature of sector → new entrants → limited government support.
Some stylised facts on growth in SA’s agricultural export

Source: Own calculations based on data from UN Comtrade (2018)
Some stylised facts on growth in SA’s agricultural export

• Share in total exports around 10% between 2003 and 2017

• Dominated by fruits, vegetables and grains (51%) → food products (37%) and livestock products (11%)

• High growth levels 2003-2017: total +199%, livestock products +116%, fruits, vegetables and grains +280%, food products +153%

• Number of products (2017): 102 livestock products, fruits, 218 vegetables and grains, 157 food products

• 169 different markets
Decomposition of the growth

• Intensive margin:
  1. Increase of existing products in established markets,
  2. Decrease in existing products in established markets,
  3. Extinction of exports of products in established markets,

• Extensive margin:
  1. Introduction of new products in new markets,
  2. Introduction of new products in established markets,
  3. Introduction of existing products in new markets,
  4. Product diversification in established markets

• Most growth in exports for mature exporters generally comes from the intensive margin: existing products to existing markets (Brenton and Newfarmer, 2009)
Decomposition of the growth

Livestock products (HS01-05): 2003 - 2017

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase of existing products in established markets</td>
<td>70%</td>
</tr>
<tr>
<td>Decrease in existing products in established markets</td>
<td>-22%</td>
</tr>
<tr>
<td>Extinction of exports of products in established markets</td>
<td>-1%</td>
</tr>
<tr>
<td>Introduction of new products in new markets</td>
<td>50%</td>
</tr>
<tr>
<td>Introduction of new products in established markets</td>
<td>0%</td>
</tr>
<tr>
<td>Introduction of existing products in new markets</td>
<td>0%</td>
</tr>
<tr>
<td>Product diversification in established markets</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Own calculations based on data from WITS (2018)
Decomposition of the growth

Source: Own calculations based on data from WITS(2018)
Decomposition of the growth

Source: Own calculations based on data from WITS (2018)
Exploring export entry and survival

• Data considerations → data classifications and periodic amendments
• Export relationship = product-market combination
• Export value =>10 000 USD
• Analysis does not consider value of export relationships
• Entering into a relationships
• Export spells
• Sustaining exports over time → duration of relationship
Exploring export entry and survival

- Number of products exported: 458 in 2003, 480 in 2017 (4.8% growth)
- Share of total agricultural products: 72% in 2003, 76% in 2017
- Number of export destinations: 173 in 2003, 169 in 2017 (-2.3%)
- Share of total export destinations: 63% in 2003, 62% in 2017
- Number of export relations: 4825 in 2003, 4911 in 2017 (1.8%)

Source: Own calculations based on data from UN Comtrade (2018)
Exploring export entry and survival


Source: Own calculations based on data from UN Comtrade (2018)
Exploring export entry and survival

Agricultural export relationships per sub-sector: 2003 - 2007

Source: Own calculations based on data from UN Comtrade (2018)
Exploring export entry and survival

Number of "new" agricultural export relationships (2004-2017)

<table>
<thead>
<tr>
<th>Number of &quot;new&quot; entries</th>
<th>Count</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11,113</td>
<td>65.4%</td>
</tr>
<tr>
<td>2</td>
<td>4,001</td>
<td>23.5%</td>
</tr>
<tr>
<td>3</td>
<td>1,464</td>
<td>8.6%</td>
</tr>
<tr>
<td>4</td>
<td>366</td>
<td>2.2%</td>
</tr>
<tr>
<td>5</td>
<td>43</td>
<td>0.3%</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Source: Own calculations based on data from UN Comtrade (2018)
Exploring export entry and survival

Duration of agricultural export relations: 2003-2017

<table>
<thead>
<tr>
<th>Years exported</th>
<th>Cumulative share of ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>4%</td>
</tr>
<tr>
<td>14</td>
<td>10%</td>
</tr>
<tr>
<td>13</td>
<td>13%</td>
</tr>
<tr>
<td>12</td>
<td>15%</td>
</tr>
<tr>
<td>11</td>
<td>17%</td>
</tr>
<tr>
<td>10</td>
<td>19%</td>
</tr>
<tr>
<td>9</td>
<td>21%</td>
</tr>
<tr>
<td>8</td>
<td>30%</td>
</tr>
<tr>
<td>7</td>
<td>33%</td>
</tr>
<tr>
<td>6</td>
<td>38%</td>
</tr>
<tr>
<td>5</td>
<td>42%</td>
</tr>
<tr>
<td>4</td>
<td>47%</td>
</tr>
<tr>
<td>3</td>
<td>55%</td>
</tr>
<tr>
<td>2</td>
<td>67%</td>
</tr>
<tr>
<td>1</td>
<td>100%</td>
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</tbody>
</table>

Source: Own calculations based on data from UN Comtrade (2018)
Exploring export entry and survival


Source: Own calculations based on data from UN Comtrade (2018)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sustained until 2017</th>
<th>Share of new ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>45</td>
<td>3%</td>
</tr>
<tr>
<td>2005</td>
<td>44</td>
<td>3%</td>
</tr>
<tr>
<td>2006</td>
<td>59</td>
<td>4%</td>
</tr>
<tr>
<td>2007</td>
<td>67</td>
<td>4%</td>
</tr>
</tbody>
</table>
Exploring export entry and survival

Source: Own calculations based on data from UN Comtrade (2018)
Some firm-level dynamics ➔ EDD

Source: Own calculations based on data from the EDD, World Bank (2018)
**Inputs**

- Most growth from intensive margin but lots of churning in export relationships and low survival rates
- Determinants of export duration → product dynamics or destination dynamics? Both?
- Compare sectors?
- Compare countries?
- Macro-level or firm-level? (→ data availability, confidentiality → no firm specifics available → hampers analyses of firm dynamics)
- Value not considered
- Develop policy brief → DAFF, DTI, industry associations
Thank you!