

An Analysis of Channels of Economic Upgrading in Mozambique's Agro-Processing Industry

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1. BACKGROUND

Local firms play a decisive role in the process of **structural transformation** in developing countries if they acquire the **technological capabilities** needed for **economic upgrading**

"Small and medium-sized enterprises that engage in industrial processing and manufacturing are the most critical for the early stages of industrialization and are typically the largest job creators."

(s. United Nations: Sustainable Development Goals)

1. BACKGROUND

- Sub-Sahara African countries industrialise in a context of 'compressed development' (Whittaker et al. 2010):
 - globally dispersed production systems \rightarrow globalised industries
 - Participating in Global Value Chains as important source of learning

 In order to participate in globalised industries, local firms need a certain level of technological capabilities

HIGH POTENTIAL...

- Emerging economy: high growth rates
- Structural adjustment programmes (ex donor's darling)
- vast natural resource discoveries (since mid 2000s)
- In 2016:
 - 2nd host economy of foreign direct investments (FDI) in SSA targeted primarily at natural resource extraction (UNCTAD 2016)
 - & among top 5 Sub-Saharan African countries to attract manufacturing FDI (Balchin et al. 2016)

- BUT...
- Size and level of capabilities of domestic firms remains low
 few exports (Cruz et al. 2014)
- FDI meets a country that is characterised by informal economy and small-scale agriculture, and missing middle of SMEs (Boot 2014)
 → no structural transformation
- Linkages to & spillovers from investments in natural resource sector unlikely

THEREFORE...

- MOZ needs to develop its manufacturing sector, next to its natural resource sector:
 - a. be able to seize potential spillovers from extractive FDI
 - b. make economy more resilient to current slowdown in commodity exports/price shocks/"resource curse"
 - c. Reduce dependency on foreign aid

PUZZLE

- Despite moderate performance of Mozambique's non-primary exports some successful exporting industries in the agro-processing sector have emerged
- partly backed by sector-targeted industrial policies and 'pockets of efficiency' within the state bureaucracy
- Exporting local firms are more efficient and have acquired higher levels of technological capabilities in order to be competitive on the world market

 absorptive capacity
- Learn from exceptional cases (Wangwe 1995) = exporting non-extractive industries in MOZ

1. RESEARCH QUESTION

Under which conditions do exporting industries in Mozambique's manufacturing sector emerge and what are potential channels of economic upgrading for local firms?

Economic Upgrading:

"moving production away from the most competitive, low-profit, vulnerable parts of world markets and toward <u>more complex technological activities</u> within industries and global value chains through <u>processes of technological advance and organizational learning</u>"

(Whitfield et al. 2015: 40)

1. AIMS & RELEVANCE

- Understand why and how economic upgrading takes place: theory building!
 - Political and economic preconditions for technology acquisition of local industries/firms
- A) Shed light on Mozambican case + B) provide relevant evidence for more general debates on the nature of structural change in Sub-Saharan Africa
- Policy relevance: help to identify policy instruments that promote technological learning of local firms in Mozambique
- Practical relevance for local entrepreneurs, governments, business associations, practitioners in the field of industry promotion and researchers in the areas of development studies & political economy

2. RESEARCH GAP

- interplay between political and economic preconditions for economic upgrading of local firms in Sub-Saharan Africa remains unclear
- a. Which channels prove to be particularly important for economic upgrading of local industries in Mozambique?
- b. Are there further channels that have so far been omitted in the literature?
- c. How do the different channels interrelate with each other?
- Interdisciplinary approach: bringing together different strands of literature from the fields of political economy and economics

3. THEORETICAL MODEL

Governance type of Global Value Chain

Technology acquisition

Investments & learning

Sector-Specific **Political Settlement:** Industrial policies: sector promotion

> Investments & learning

Economic upgrading at industry/firm level

Technology acquisition

Investments & learning

Foreign Direct Investment (FDI) Technology acquisition

Investments & learning

Donor

involvement

3. THEORETICAL FRAMEWORK: LEARNING BY EXPORTING

(WAGNER 2012; BIGSTEN ET AL. 2004; CRUZ ET AL. 2014, 2017)

- Future exporters tend to be more efficient and have higher levels of technological capabilities
- Export premium: positive association between a firm's performance and export participation

Channel:

• Ś

Gap:

does not explain how local firms managed to acquire capabilities needed for export & how engaging in global markets promotes/hinders technology acquisition

3. THEORETICAL FRAMEWORK: FOREIGN DIRECT INVESTMENTS (FDI)

(FU ET AL. 2011; LALL & NARULA 2004; DA COSTA 2012; NARULA & DRIFFIELD 2012)

- Local firms establish contacts with more technologically advanced partners
- FDI enables local firms to gain access to and absorb foreign technologies

Channel:

 knowledge transfer from investors to local firms, e.g. sub-contracting, circulation of managerial experience

Gap:

does not explain how some local firms succeeded in being able to absorb foreign technologies

3. THEORETICAL FRAMEWORK: GLOBAL VALUE CHAINS (GVCS)

(PORTER 1985; GEREFFI 1999; HUMPHREY & SCHMITZ 2002; GIBBON & PONTE 2005)

- Integration into GVCs can facilitate different types of economic upgrading
- The type of GVC governance determines the type and scope of upgrading of local firms

Channel:

Lead firms can play a crucial role in transferring knowledge to local suppliers → standards & norms

Gap:

Does not explain how domestic industries emerge and acquire the capabilities that are needed to gain access to GVCs

3. THEORETICAL FRAMEWORK: POLITICAL SETTLEMENTS THEORY

(KHAN 2010; WHITFIELD ET AL. 2015)

- Political settlements rather than formal institutions determine varying political and developmental outcomes in Sub-Saharan African countries and across economic sectors
- The promotion of specific sub-sectors through industrial policies depends on the configuration of power among elites and the sector-specific relations between domestic entrepreneurs and the political elite

Channels:

industrial policies, pockets of efficiency, learning for productivity

Gap:

 does not take into account how integration into global trade and foreign direct investments affect economic upgrading

3. THEORETICAL MODEL

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Sector-Specific Political Settlement:

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Investments & learning

Economic upgrading at industry/firm level

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Foreign Direct Investment (FDI)

Technology acquisition

Investments & learning

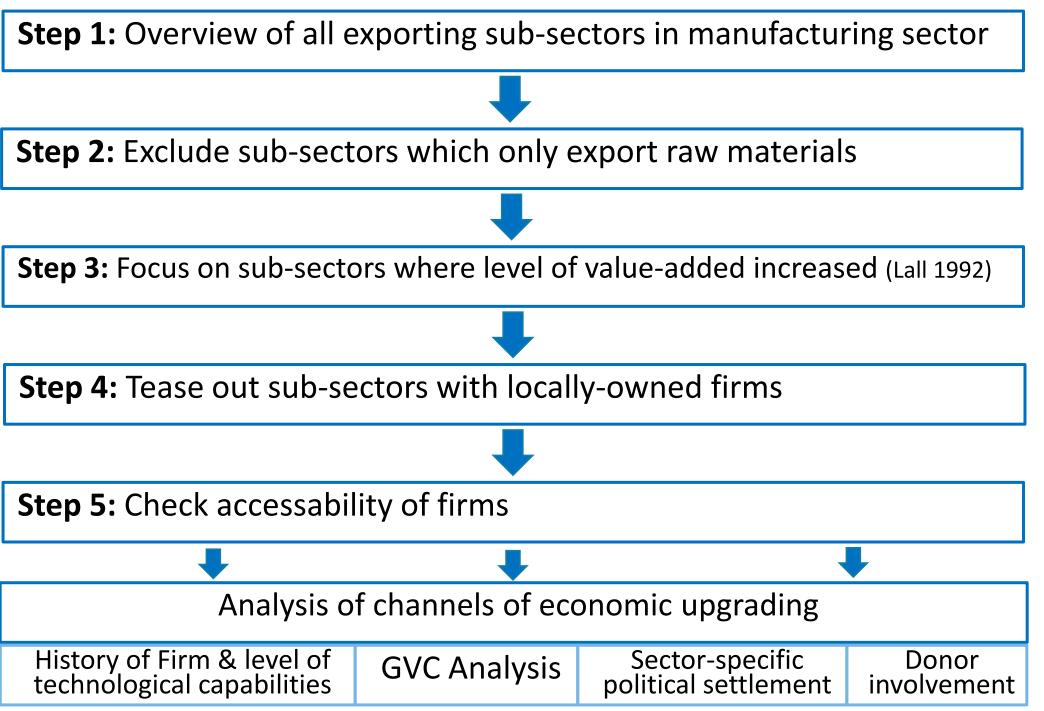
Donor involvement

ECONOMIC UPGRADING IN MOZAMBIQUE 16

4. METHODOLOGY: CRITERIA FOR CASE SELECTION



- 1. Sub-sectors need to be export-oriented
- 2. Focus on manufacturing sector, particularly agro-industry
- 3. Local industries/firms must be involved in **product processing** + there has been an increase in their level of technological capabilities
- 4. Focus on **locally-owned** exporting firms → exceptional cases
- 5. Firms must be accessible

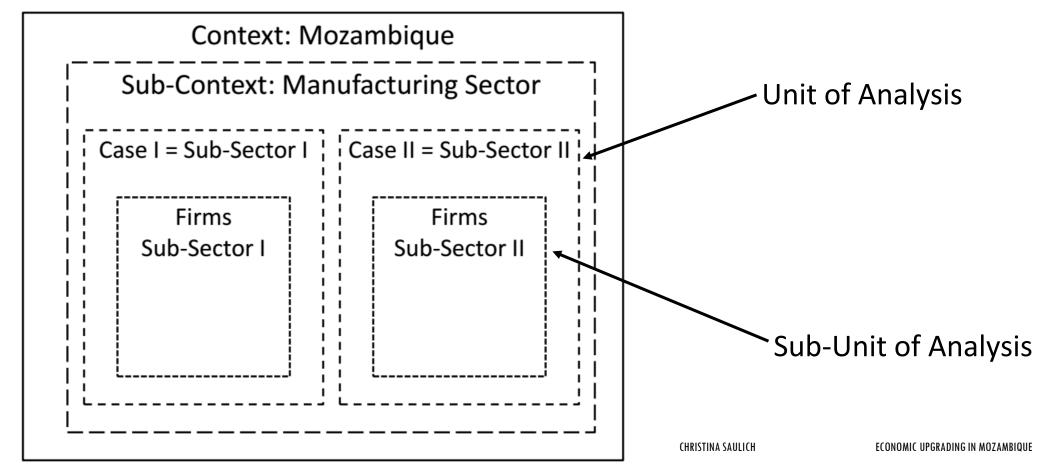


4. METHODOLOGY: CASES

#	Type of Industry	Export	Product processing	Local processing firms
1	Cashew	Yes	Yes	Yes
2	Tea	Yes	Yes	Yes?
3	Horticulture	Yes	Yes	Yes?
4	Fishery/	Yes	Yes	Yes
	shrimps			
5	Pulses	Yes	Yes	No
6	Sesame	Yes	limited	Ś
7	Cotton	Yes	Yes	No
8	Sugar	Yes	No	Ś
9	Tobacco	Yes	Yes	No

4. METHODOLOGY: RESEARCH DESIGN

- Inductive qualitative case study (s. Eisenhardt 1989)
- Embedded Multiple-Case Design (s. Yin 2014)



4. METHODOLOGY: DATA COLLECTION & DATA ANALYSIS

Data Collection: Triangulation of Research Data

- a. Desk study
- b. Firm survey
- c. Semi-structured interviews
- d. Direct observation

Data Analysis:

Step 1: in-depth within-case analyses using process-tracing (George & Bennett 2005)

Step 2: cross-case synthesis \rightarrow cross-case conclusions \rightarrow theory building

5. TIME FRAME

TERM	ACTIVITIES
September 2016-March 2017	Literature reviewClarify theoretical framework
April-September 2017	 Finalise theoretical framework, research theses & case selection Develop methodological framework Conference & mini field work in Maputo (September)
October 2017-April 2018	 Industry analysis Prepare field research Develop semi-structured interview outline February-April 2018: field research in Mozambique
May-September 2018	 Data analysis and data management Complement collected data
October 2018-August 2019	Prepare first draft of the dissertation

THANK YOU FOR YOUR ATTENTION!



4. METHODOLOGY: ENSURING RIGOUR IN CASE STUDY RESEARCH

(EISENHARDT 1989; GIBBERT, RUIGROK & WICKI 2008; YIN 2014)

INTERNAL VALIDITY	CONSTRUCT VALIDITY	EXTERNAL VALIDITY	RELIABILITY
 Theory triangulation Pattern matching (comparison with conflicting & similar literature) Clear research framework 	 Data triangulation Review of transcripts by peers & key informants explanation of data collection explanation of data analysis Constructs emerge from analysis process 	 Cross case analysis: nested approache (embedded multiple - case design) Provide details on case study context 	 Case study protocol Case study database Providing names of studied firms/interviewees

PRESENTATION OUTLINE

- Research Question
- 2. Background, Aims & Relevance
- 3. Research Propositions & Theoretical Framework
- 4. Methodology
- 5. Time frame





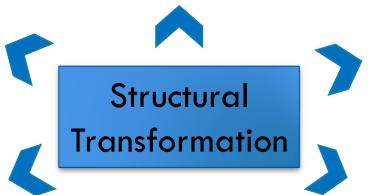


2. BACKGROUND

Export diversification

Value addition in agroindustry, manufacturing, and knowledge-based services

High-value exports replace low-value exports



Reducing dependence on primary commodities

Greater application of technology to upgrade