



Overview of Global Value Chain Analysis

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Presentation Overview

1) Introduction to Global Value Chain (GVC) Analysis

- What they are
- Why they are important and their benefits
- Usefulness for policymakers
- Determinants of participation and policy levers

2) Approach to GVC Analysis

- Global aspects
- Local aspects
- Governance and stakeholders
- Data sources

3) Questions and next steps



What are Global Value Chains?

- “*Full range of activities that firms and workers do to bring a product from its conception to its end use*”¹
- The dominant paradigm of today’s global trade and investment framework
- Rooted in the economic concept of comparative advantage
- Includes all activities that support the trade of goods and services, whether these are directly traded or not.
- International production processes have grown over time as emerging markets continue to find ways to insert themselves into GVCs.
- Have special implications for small and medium sized business.

1 – Gereffi and Fernandez-Stark, 2011



The Importance of Global Value Chains

“GVCs link firms, workers and consumers around the world and often provide a stepping-stone for firms and workers in developing countries to participate into the global economy.

For many countries, especially low-income countries, the ability to effectively insert into GVCs is a vital condition for development.”

Duke University – Center on Globalization, Governance & Competitiveness



The Benefits of GVC Participation

- Increased labour force participation
- Knowledge transfer and training
- Higher productivity and stronger income growth
- Sustainable improvements in living standards
- Economic and social upgrading

Research shows growing integration between MENA, South & Southeast Asia over time and Indonesia's main competitors continue to find ways to reap the benefits of GVC.

Indonesia must continue to build on its historical export success if it is to remain competitive in the region. Reducing inefficiency and capturing a higher share of value along production chains will be a key determinant of its future.



Usefulness as a Policy Tool

- Better understanding of the depth of interconnectedness of economies
- Some production activities are highly cost sensitive. GVC analysis helps identify areas of inefficiency or non-competitiveness
- Many areas of inefficiency can be directly manipulated by policy intervention
- Provides a “top-down” and “bottom-up” view of production chains. This gives policymakers information on "global-local" dynamics.
- Helps to better understand the drivers of GVC, and the role of standards, regulations, and certifications



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Determinants of GVC participation

Non-Policy Factors

- Market size
- Level of development
- Industrial structure
- Location

Policy Factors

- Trade Policy
- Openness to Foreign Direct Investment (FDI)
- Intellectual Property Protection
- Infrastructure and logistical quality
- Institutions

Source: OECD 2015



Global Aspects of GVC Analysis

Input-Output structure

- Identify the main activities in GVC
- Identify the dynamic and companies under each segment of the GVC. What are their sourcing processes, MNC/State Owned? Small/Large?

Geographic scope

- International trade statistics to determine dynamics of global supply and demand
- Other sources, like firm level data, experts, interviews.

Governance - Lead firms and industry organization

- Buyer driven chains led by Walmart, Nike, Adidas etc.
- Producer driven chains tend to be vertically integrated and leverage the technological and scale advantage of integrated producers
- New aspects of governance structure include market, modular, relational, captive, and hierarchy.



Input-Output Analysis

Input-Output tables help identify the production process

- How do business turn inputs into output
- How is the output of production used

Allows us to determine how the income along the value-chain is distributed in Indonesia

- \$100 in coffee produced in Indonesia requires labour, return on capital, and purchases of intermediate inputs.

Determine where the key inputs are sourced

- Is this process efficient?
- Are there opportunities for Indonesia to capture more of the value chain

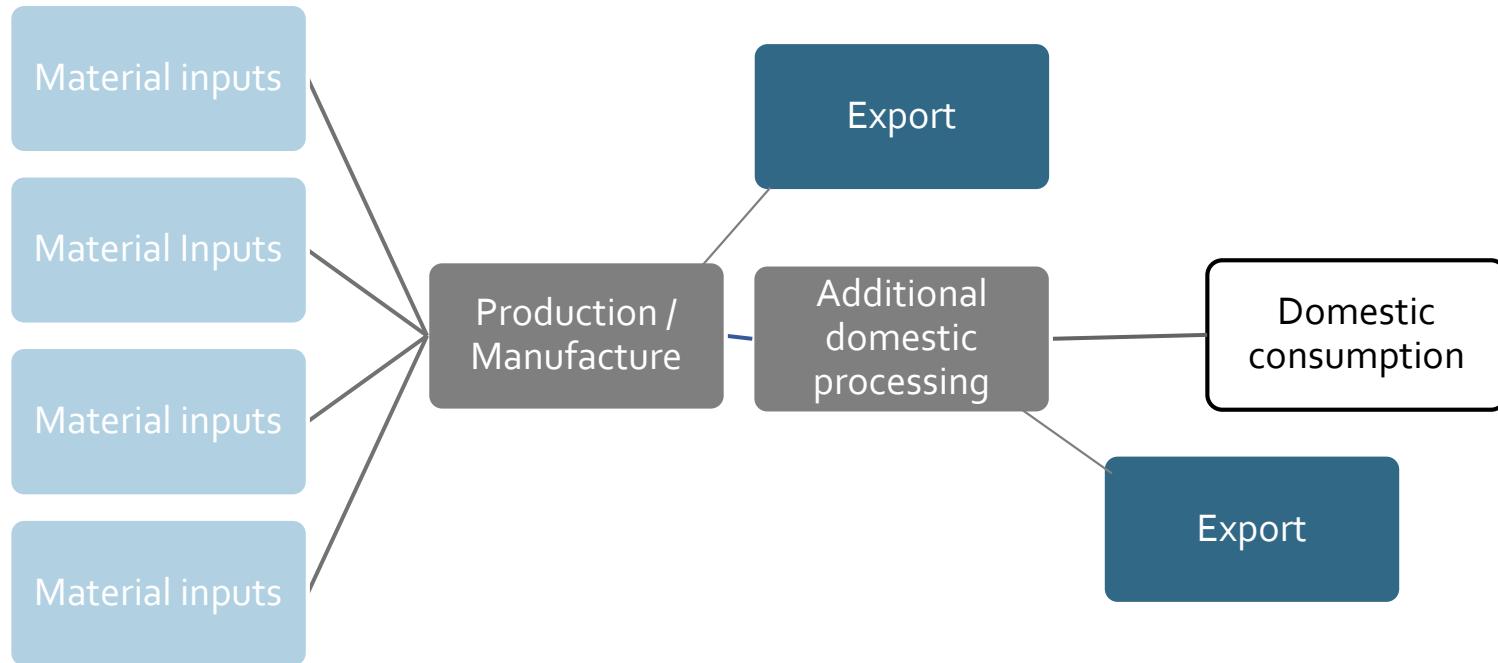
Types of companies that govern the different activities

- Maybe the coffee is mostly produced by smaller firms, but the processing is done by large firms
- Shipping companies are almost always large firms, which could make it harder for individual farmers to interact with them. This would require much more collecting and wholesaling activity for example.



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Production Process



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Collecting Input-Output Information

I/O Tables are compiled at the country level by national statistical agencies

- Statistics Indonesia <https://www.bps.go.id/>
- 180 by 180 matrix of industry inputs and outputs, including final demand use

Comparator countries

- Mexico <http://www.inegi.org.mx/est/contenidos/proyectos/scn/default.aspx>
- India <http://mospi.nic.in/publication/input-output-transactions-table-2007-08>
- Columbia <http://www.dane.gov.co/>
- Turkey http://www.turkstat.gov.tr/PreTabelo.do?alt_id=1021

Other sources

- OECD <http://www.oecd.org/trade/input-outputtables.htm>
- Asian Development Bank <https://www.adb.org/data/icp/input-output-tables>



Geographic Scope – Market Information

Three main questions:

- 1) What is the size and scope of the global market?
- 2) Who are the big producers and consumers?
- 3) How does Indonesia fit into the global market?



Geographic Scope – International Links

- 1) How much is exported globally and what is Indonesian market share?
- 2) How much of production is exported versus consumed domestically?
- 3) What countries are involved in the value-chain?
 - Where are the goods exported and where are imports sourced from?

Data Sources:

- UN Comtrade database
- OECD TiVA tables
- Inter-Country IO tables
- World Trade Organization
- National statistical agencies



Geographic Scope – Other Information

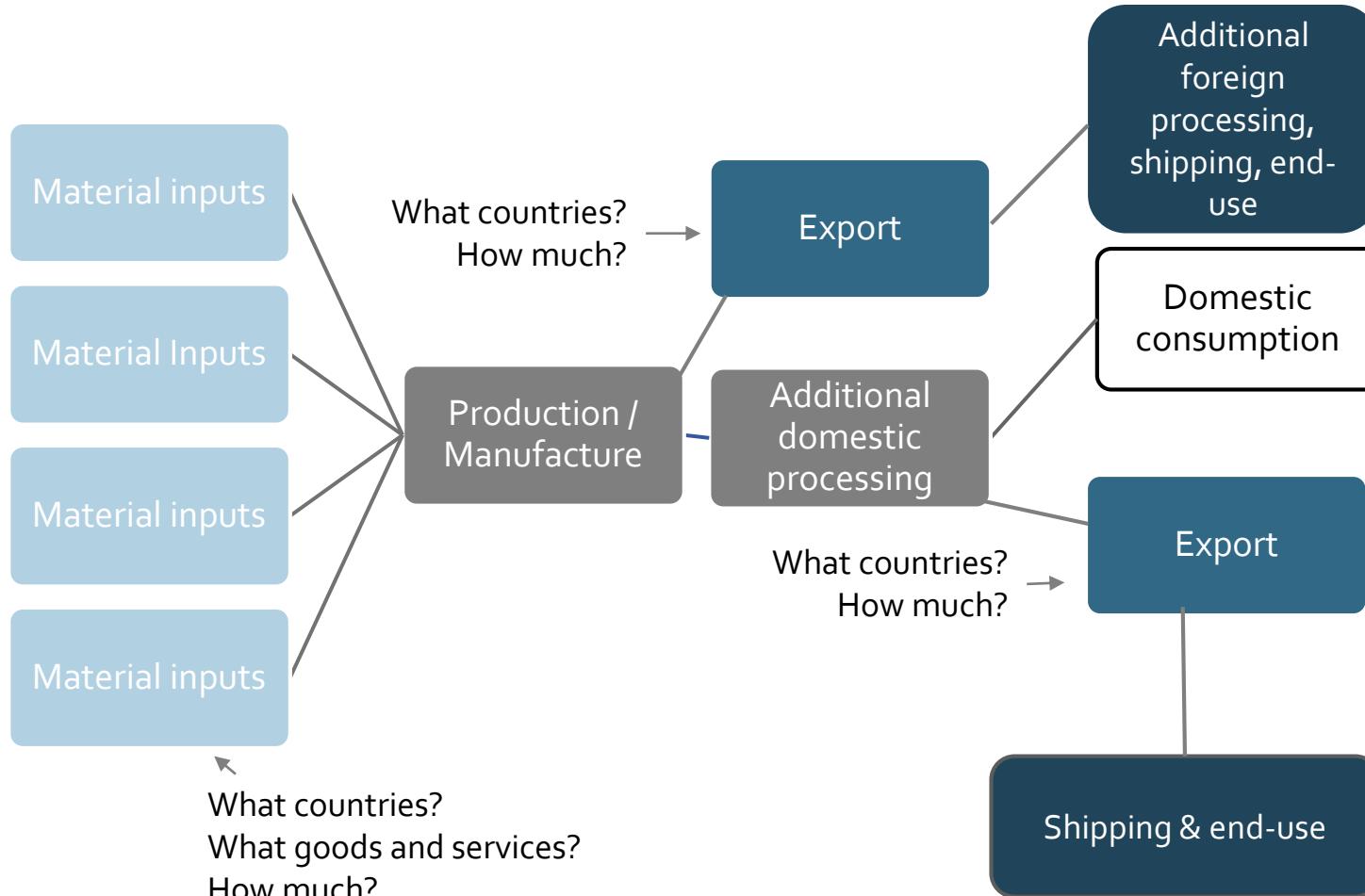
Data sources are unequal across countries, often containing different definitions of data and different levels of detail. To fill in these gaps:

- Collect firm-level data
- Literature review
- International, regional, and national industry associations
- Conduct interviews/surveys with industry experts, firms, and other stakeholders

Based on the data and these secondary sources, the researcher should now have an accurate portrait of how the production process works, how it integrates with global markets, and how the dynamic has been changing over time.



Production & Geographic Scope



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Value-Chain Governance

How is the value-chain controlled and what is its structure?

- Overlaps with IO analysis by further refining our information about the types of firm and the level of control they have

Research identifies many different types of GVC governance

- Producer driven
- Buyer driven
- Market
- Modular
- Relational
- Captive
- Hierarchy

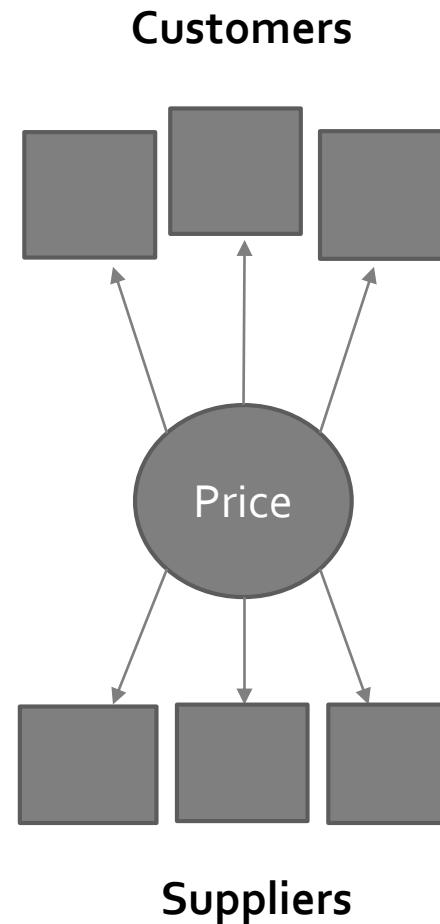
What institutions, policies, and regulations impact the balance of control along the chain?



Governance Structures

Market Governance:

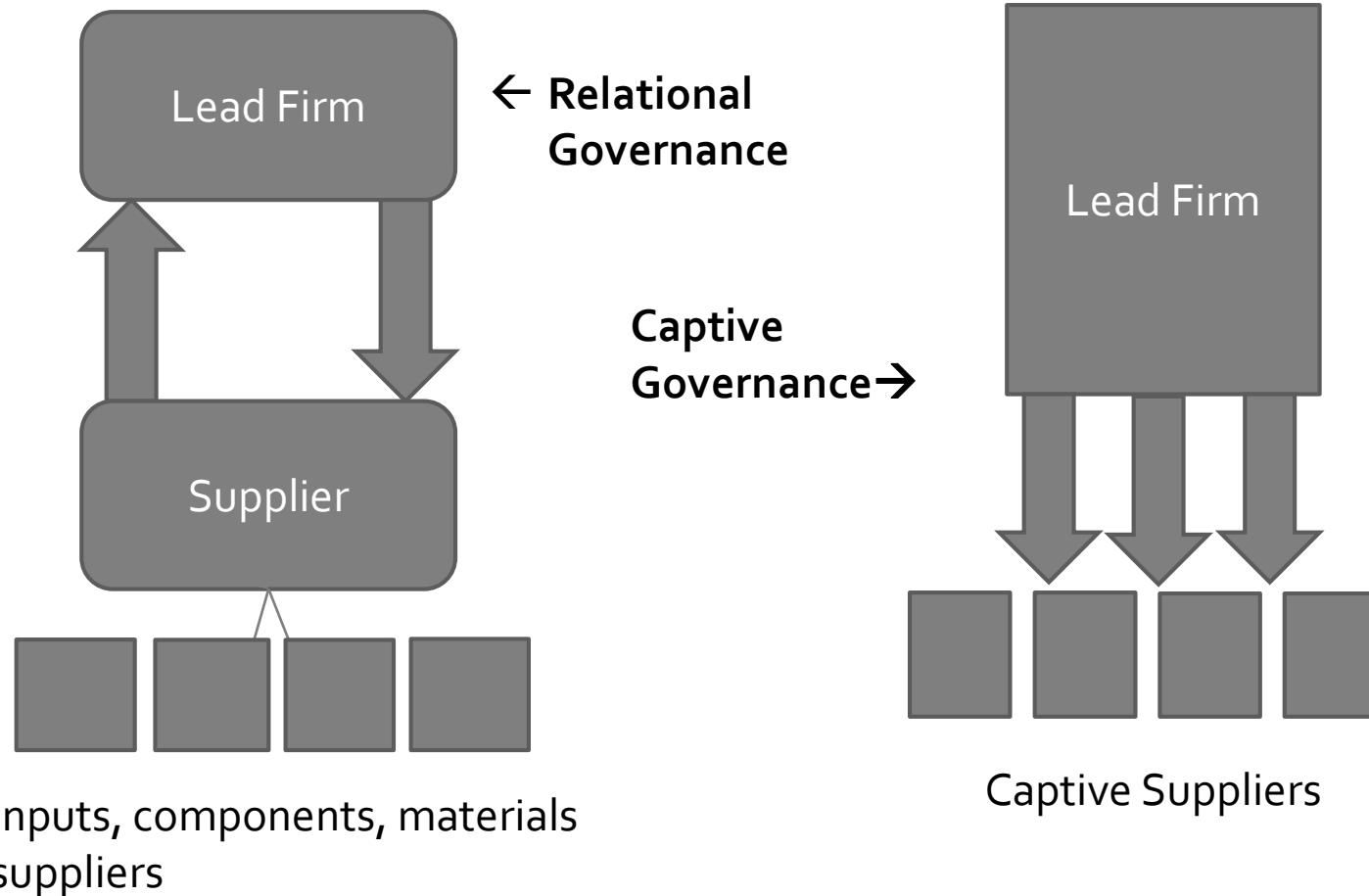
- Power is evenly balanced
- Information is readily available
- Product specifications are consistent across producers



Source: Gereffi et al. 2005



Governance Structures



Source: Gereffi et al. 2005



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Local Aspects of GVC

Upgrading

- Opportunities to create positive outcomes for Indonesia

Local institutional context

- Unique characteristics about Indonesia that impact how it participates in GVC

Stakeholder analysis

- The scope of interaction between governments, businesses, workers, and other parties



Upgrading

Possibly the most important aspect of GVC from policymakers perspective. Through the upgrading process, standards of living improve and countries are better off.

Process upgrading

- Firms get more efficient in their production by specialization and by removing inefficiencies

Product upgrading

- Firms learn to create new, higher value-added products

Functional upgrading

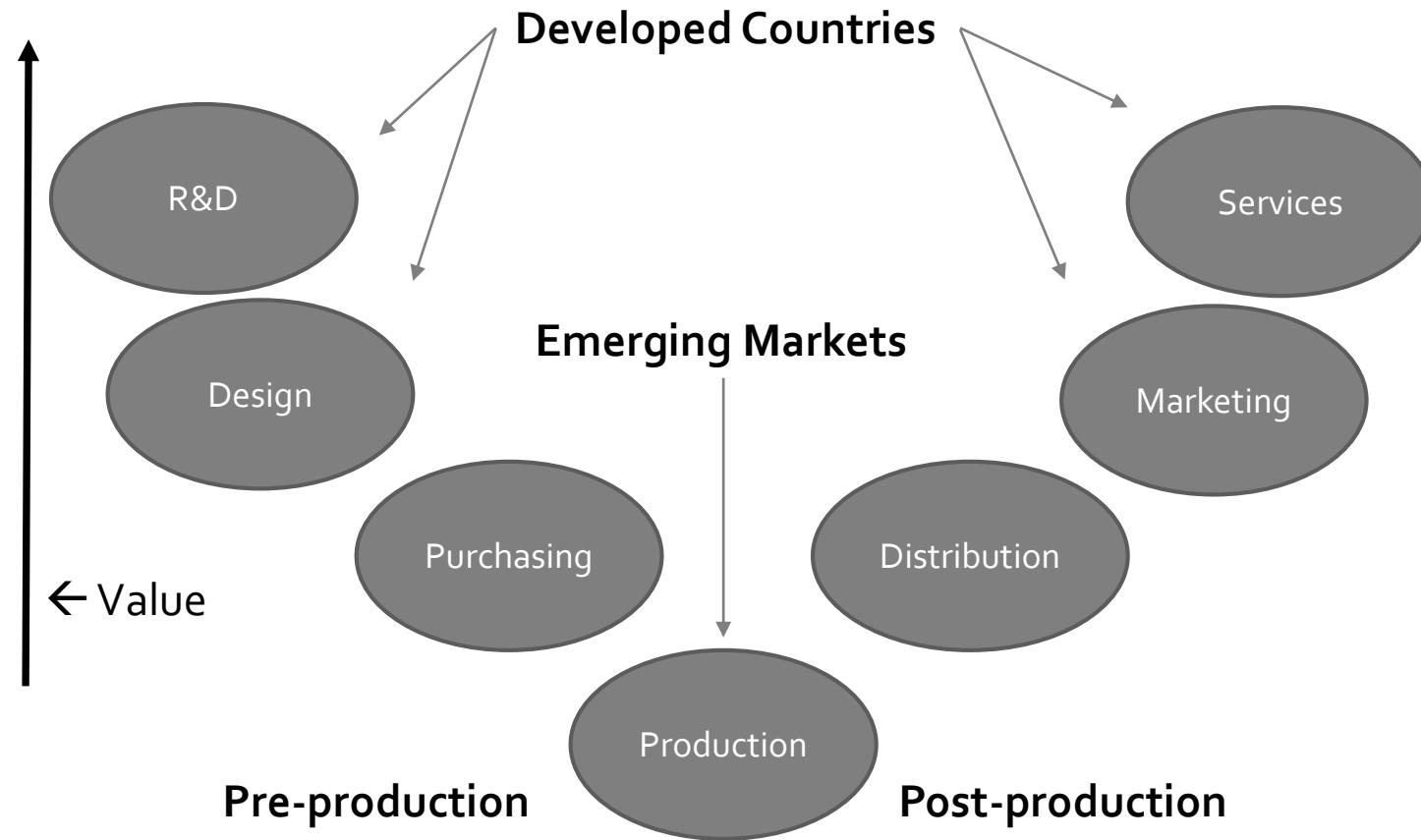
- Firms branch into new activities along the same value chain

Chain upgrading

- Firms integrate into different global value chains for other products



“Smile” Curve



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Source: Duke GCC, OECD, others



Upgrading – Torreon, Mexico



Source: Bair & Gereffi, 2001



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Local Context

These are levers that policymakers can influence that will impact a country's GVC participation. They are the things that make a country unique with respect to other participating countries in the chain.

- Wages
- Quality of labour force
- Infrastructure
- Access to education
- Access to finance
- Taxes
- Government policies
- International, national, and local governments
- Other



Stakeholder analysis

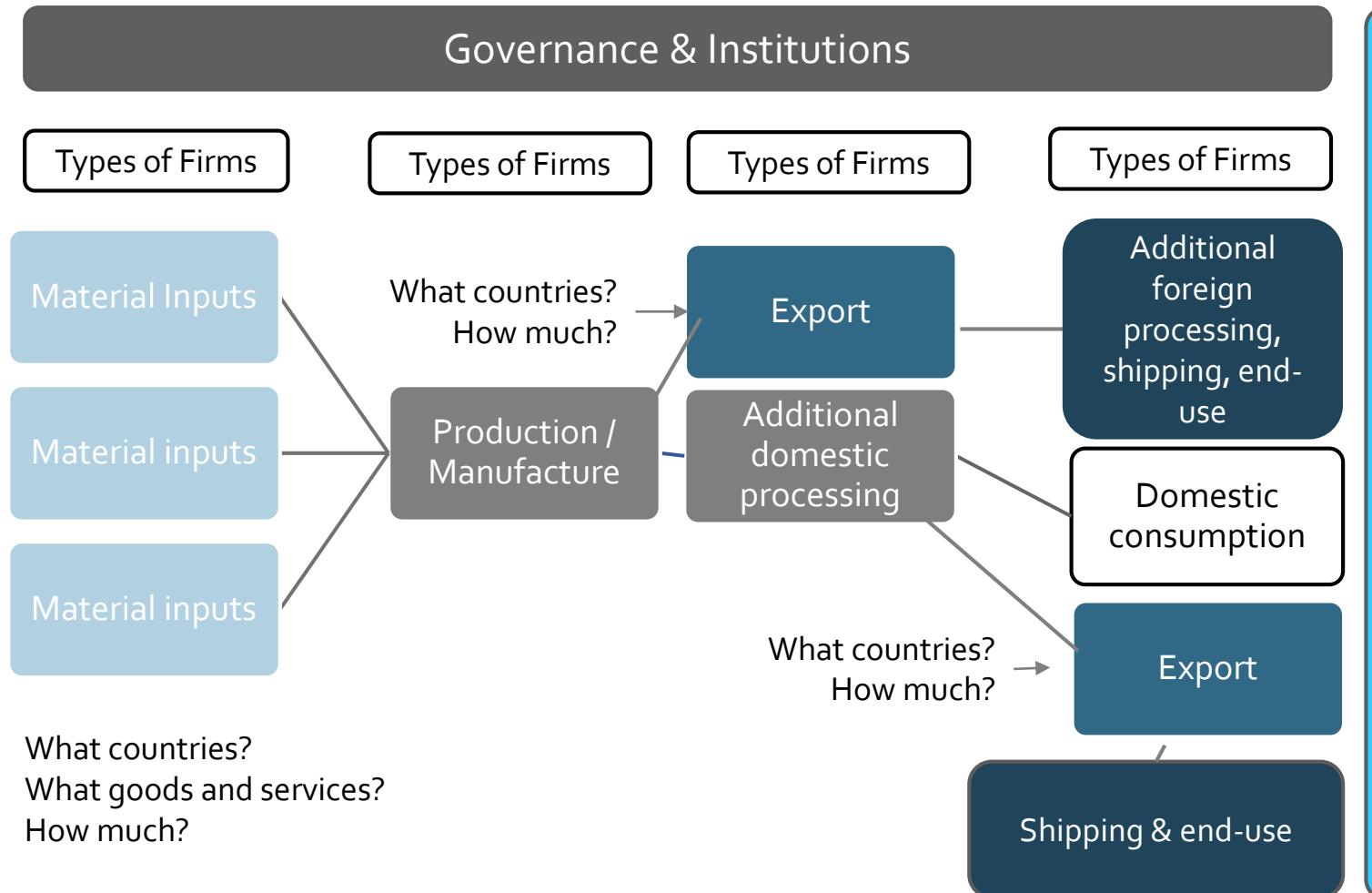
How do all of the different actors in the chain interact?

- Businesses
- Industry associations
- Workers
- Ministry of trade and national export development agencies
- Economic development and investment attraction agencies
- Institutions in trading partner countries

How effectively does information flow between stakeholders?



Final Analysis



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Summary of Approach

- Find out how a good is produced in Indonesia and compare that to other applicable countries.
- Find out how the production process integrates into global markets – where do they export to and where do they import from.
- Find out who the stakeholders are in the value-chain and who controls the main activities.
- Analyze the local environment and opportunities for upgrading.
- Conduct interviews and surveys with firms to understand their challenges

Based on the above information, we compile a full picture of potential barriers that inhibit export success and identify potential solutions.





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Questions

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