Chapter 1 "Made in the World" Reading Notes

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UPDATED: February 2022

1 Recent Changes in the World

- 1. ICT changes
- 2. gradual dismantled trade barriers, like formation of FTAs, China WTOs..
- 3. political movements in favor of globalization, in addition to 2., relaxation of currency convertibility and balance of payments restrictions in low and middle-income countries.

2 The Slicing of the Value Chain

More and more firms now organize production on a global scale and choose to offshore parts, components or services to producers in foreign and often distant countries.

- · Apple's iPad 3
 - Feenstra and Hanson (1996b): US share of imported intermediate goods increased 5.3% in 1972 to 11.6% in 1990

- Campa and Glodberg (1997): find similar trend in Canada and UK as well, but not in Japan!
- Hummels, Ishii and Yi (2001): "vertical specialization" imported goods and services accounted for 30% of the world export in 1995.
- Johnson and Noguera (2012a, b): "VAX ratio" the *domestic* value added to gross-value ratio of exports.
 - An inverse measure of vertical specialization.
 - The VAX ratio has declined since 1970, with about 2/3 of the decline occurring after 1990
 - Limitations:
 - * Fairly aggregated level IO table
 - * Impose strong proportionality assumption
 - Koopman, Wang and Wei (2014): "Tracing Value-Added and Double Counting in Gross Exports"
- Yeats (2001): "production process fragmentation" intermediate input categories accounted for about 30% of OECD merchandise exports of machinery and transport equipment in 1995, the same number in 1978 is 26.1%
 - Limitation: focusing on industries composed *exclusively* of inputs
- Antras, Chor, Fally and Hillberry (2012): a more continuous measure of "Upstreamness" of an industry's output
 - average positions (i.e., final goods and/or different stages of inputs),
 weighted by the ratio of the use of that output in that position relative
 to the total output of that industry.

3 Old and New Theories

- incorporating "fragmentation" in neoclassical models (with homogeneous goods, perfectly competitive markets and frictionless contracting).
 - main idea: the production process (as represented by an abstract mapping between factors of production and final output) can be decomposed into smaller parts or stages that are themselves (partly) tradable.
 - * "intermediate inputs", "vertical production stages", "tasks"...
 - conclusion: the possibility of fragmentation generates nontrivial effects on productivity, and that these endogenous changes in productivity in turn deliver novel predictions for the effects of reductions in trade costs on patterns of specialization and factor prices.
 - Limitations: differentiated intermediate inputs
 - "incomplete contracting"

4 Contracts in International Trade

- · choice-of-law
- "home bias"
- enforcement
- CISG
- ICC
- implicit contracting to sustain 'cooperation' (chapter 3)
- contractual risks are more problematic for intermediate goods than final goods.

- long time lag between agreement and execution
- highly customized products (seller), incompatibility issues (buyer)

5 Firm Responses to Contractual Insecurity

- "Location" and "the extent of control"
 - neoclassical models
- the boundaries of firms (a recurring theme)
- · why do we care?
 - a first step, for properly studying the causal implications of multinational activity on growth, on absolute and relative factor price movements, and on welfare
 - * multinational activity is not randomly assigned
- caveats

6 A Comparative Advantage of Trade Statistics

- Some useful data sources
 - US imports, ten-digit Harmonized Tariff Schedule classification system
 - * NBER website http://data.nber.org/data/
 - US Related Party Trade data
 - * six digit NAICS level http://sasweb.ssd.census.gov/relatedparty/
 - * six digit Harmonized System (HS) http://scholar.harvard. edu/antras/books

- What did we learn from these data?
 - 1. Intrafirm transactions (i.e., multinational firms)
 - 2. The share of U.S. intrafirm imports varies widely across countries.
 - 3. The share of intrafirm trade varies widely depending on the type of product being imported
 - 4. Even when focusing on a narrowly-defined component, with U.S.-based producers appearing to source particular inputs quite differently depending on the location from which these products are bought.
 - 5. The higher the U.S. capital intensity in production of the good being imported ⇒ the higher the share of intrafirm imports in total US imports
 - 6. The higher the capital-labor ratio of the exporting country ⇒ the higher the share of intrafirm imports in total US imports
 - Chapter 6 and 7
- Potential limitations of the "related-party imports" data
 - 1. 6% of the outstanding voting stock, "relatedness"?
 - 2. quality?
 - Example of 2005 Gillette 120 mil-euro establishment in Poland

7 Back to the Location Decision

- wage and other production costs versus contract honoring issue and/or contract enforcement effectiveness and/or intellectual property rights issue.
- Jurisdiction data
 - "Rule of Law" in Worldwide Governance Indicators

- * subjective
- * ordinal
- "the time it takes a plaintiff using an official court to evict a nonpaying tenant and to collect a bounced check"
 - * Djankov, La Porta, Lopez-De-Silanes and Shleifer (2003)
- The extent of contractual insecurity varies depending on the characteristics of the goods being transacted
 - homogeneous goods with a thick market, versus differentiated goods

8 A Brief Road Map

This book will study the various ways in which the **contracting environment** shapes the *location* and *internalization* decisions of firms in the global economy.

- Part II: Location
- Part III: Internalization
- Chapter 2 provides an overview of the 'complete-contracting' frameworks that will serve as the basis or skeleton for the models to be developed in future chapters