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CITI CENTER FOR INTERNATIONAL TRADE & INVESTMENT

Putting it All Together | Global Value Chains (GVCs)

Jakarta, 2016

Structure of the present lecture

In this module we will discuss several issues:

- The Concept of GVCs
- The Rise of GVCs
- Implications of GVCs for Trade
- GVCs and Investment
- Indonesia's participation in GVCs

What Are GVCs?

"The **full range of activities** that firms undertake **to bring a product or service from its conception to its end-use** by final consumers. These **activities include design, production and manufacturing, marketing as well as pre-sale and post-sale support**."

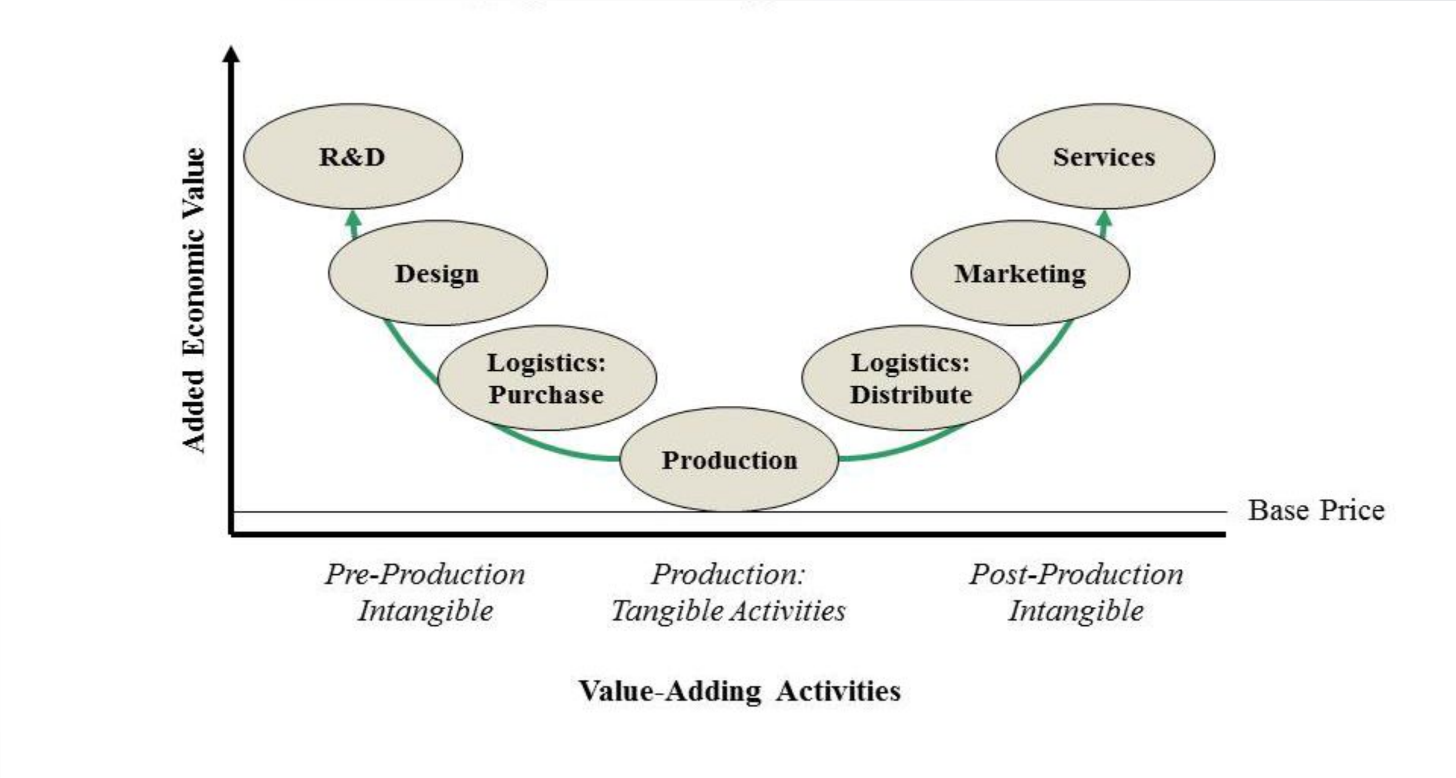
Source: International Trade Center 'Global Value Chains in Services'

Some basic characteristics of today's global economy drawn by GVCs:

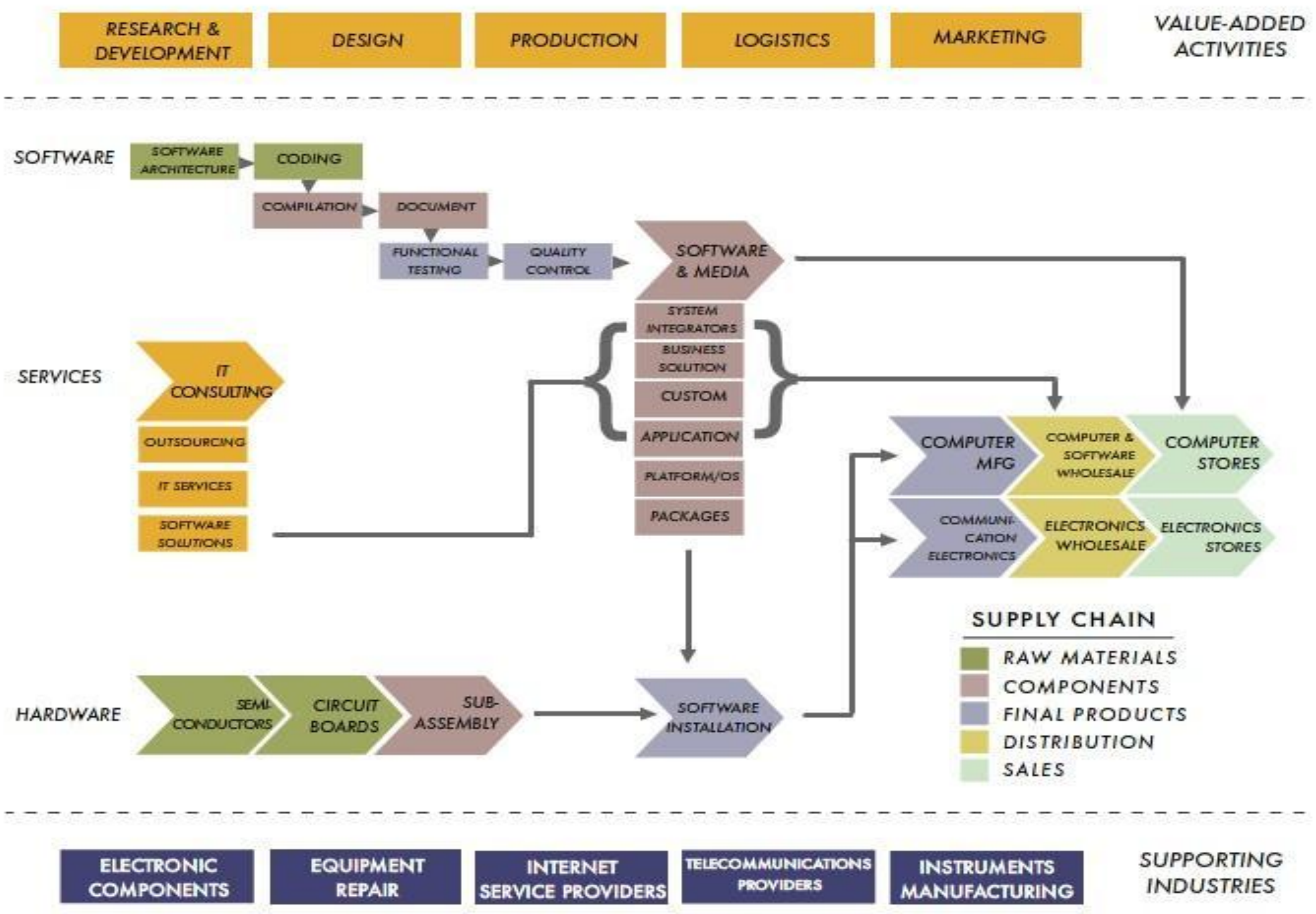
- Growing interconnectedness of economies: fragmentation of production processes, international dispersion of tasks and activities, borderless production systems (more 70% -> intermediate goods/services).
- Specialization in tasks and business functions: most goods and a share of services are "made in the world".
- Networks of global buyers and suppliers
- New drivers of economic performance, affected production, competition, labor market and so forth

Source: OECD 'Interconnected Economies'

The ‘Smiley Face’ Curve



Source: Sébastien Miroudot ‘Trade in a World of Global Value Chain‘ Slides Presentation, WTI Summer Academy 2015

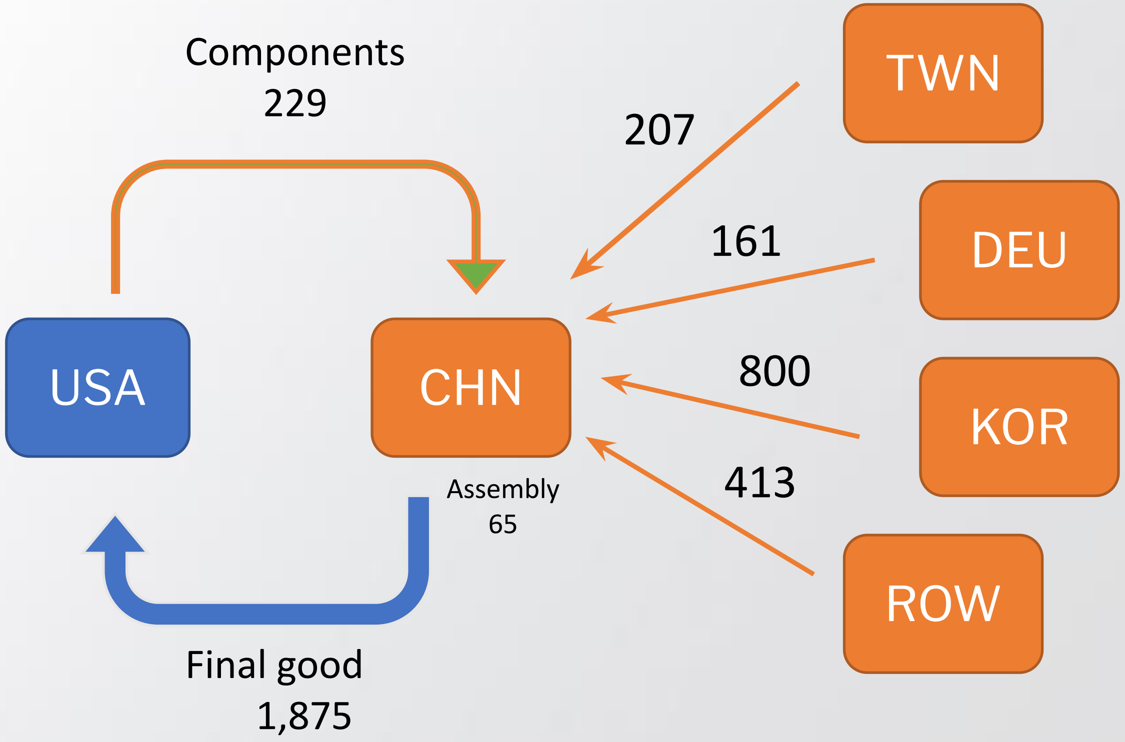


Source: CGGC (http://www.cggc.duke.edu)

Let’s watch a 5-mins video from the WTO

Who bites the Apple?

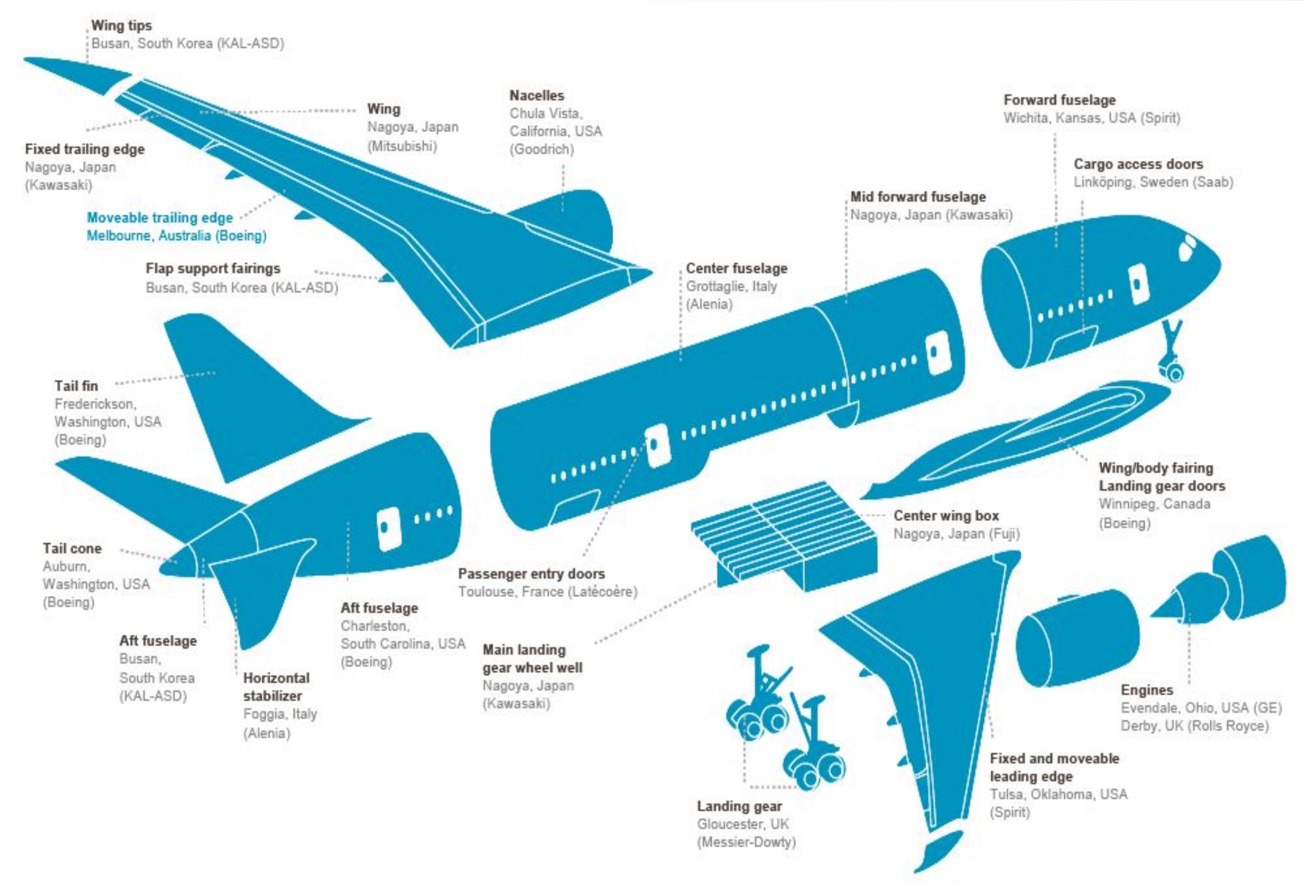
Country	Components	Manufacturers	Costs
Chinese Taipei	Touch screen, camera	Largan Precision, Wintek	$ 20.75
Germany	Baseband, power management, transceiver	Dialog, Infineon	$ 16.08
Korea	Applications processor, display, DRAM memory	LG, Samsung	$ 80.05
United States	Audio codec, connectivity, GPS, memory, touchscreen controller	Broadcom, Cirrus Logic, Intel, Skyworks, Texas Instruments, TriQuint	$ 22.88
Other	Other	Misc.	$ 47.75
		Total	**$ 187.51**



Source : Xing and Detert

Sport shoes : 100 Euro (final retail price)

Bringing the 787 together



Source: DFAT

The Rise of GVCs

The 'Great Unbundlings' by Richard Baldwin

- First unbundling: steam machine invention made it possible
  - Cut trade costs, produce at vast scale, transform transportation
  - International trade and labor migration boomed
  - Production clustered locally, dispersed globally
  - Spatial separation of factories and consumers

The Rise of GVCs

- Second unbundling: ICT revolution made it possible
  - Communication costs reduced
  - Easier to coordinate complexity at distance
  - Transfer know-how facilitation
  - Internationally mobile technology
  - Production started to disperse geographically
  - fragmentation, offshoring, vertical specialisation, and slicing up the value-added chain.

Want to know more about the rise of GVCs?

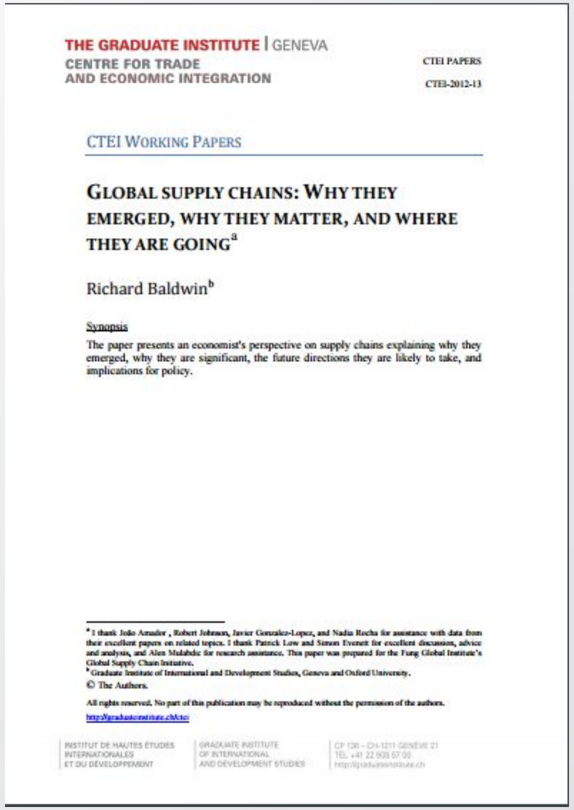
20 September 2006

Richard Baldwin[1]

Globalisation: the great unbundling(s)

This paper is a contribution to the project *Globalisation Challenges for Europe and Finland* organised by the Secretariat of the Economic Council. The project is a part of Finland's EU Presidency programme and its objective is to add momentum to the discussion in the European Union on globalisation, Europe's competitiveness policy and the Lisbon strategy.

[1] Graduate Institute of International Studies, Geneva.



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GLOBAL SUPPLY CHAINS: WHY THEY EMERGED, WHY THEY MATTER, AND WHERE THEY ARE GOING[a]

Richard Baldwin[b]

Synopsis

The paper presents an economist's perspective on supply chains explaining why they emerged, why they are significant, the future directions they are likely to take, and implications for policy.

[a] I thank João Amador , Robert Johnson, Javier Gonzalez-Lopez, and Nadia Rocha for assistance with data from their excellent papers on related topics. I thank Patrick Low and Simon Evenett for excellent discussion, advice and analysis, and Alen Mulabdic for research assistance. This paper was prepared for the Fung Global Institute's Global Supply Chain Initiative.

[b] Graduate Institute of International and Development Studies, Geneva and Oxford University.

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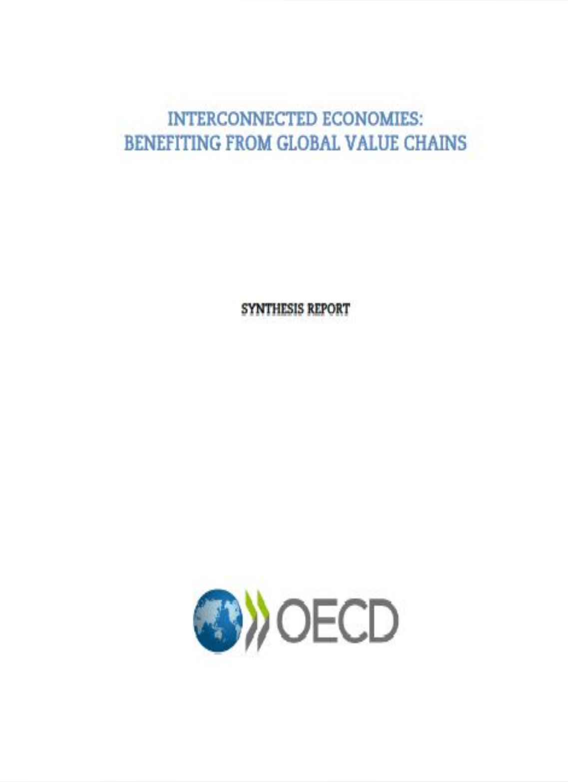
How Economies Engaging in Value Chains

- Either as users of foreign input or suppliers of intermediate goods/services
- Not all equally engage and depend on their size and openness
- Emerging economies play increasingly important role
- Upstream (raw materials, R&D) and downstream (production and customer services), this position may change over time
- Both multinational and small firms involved

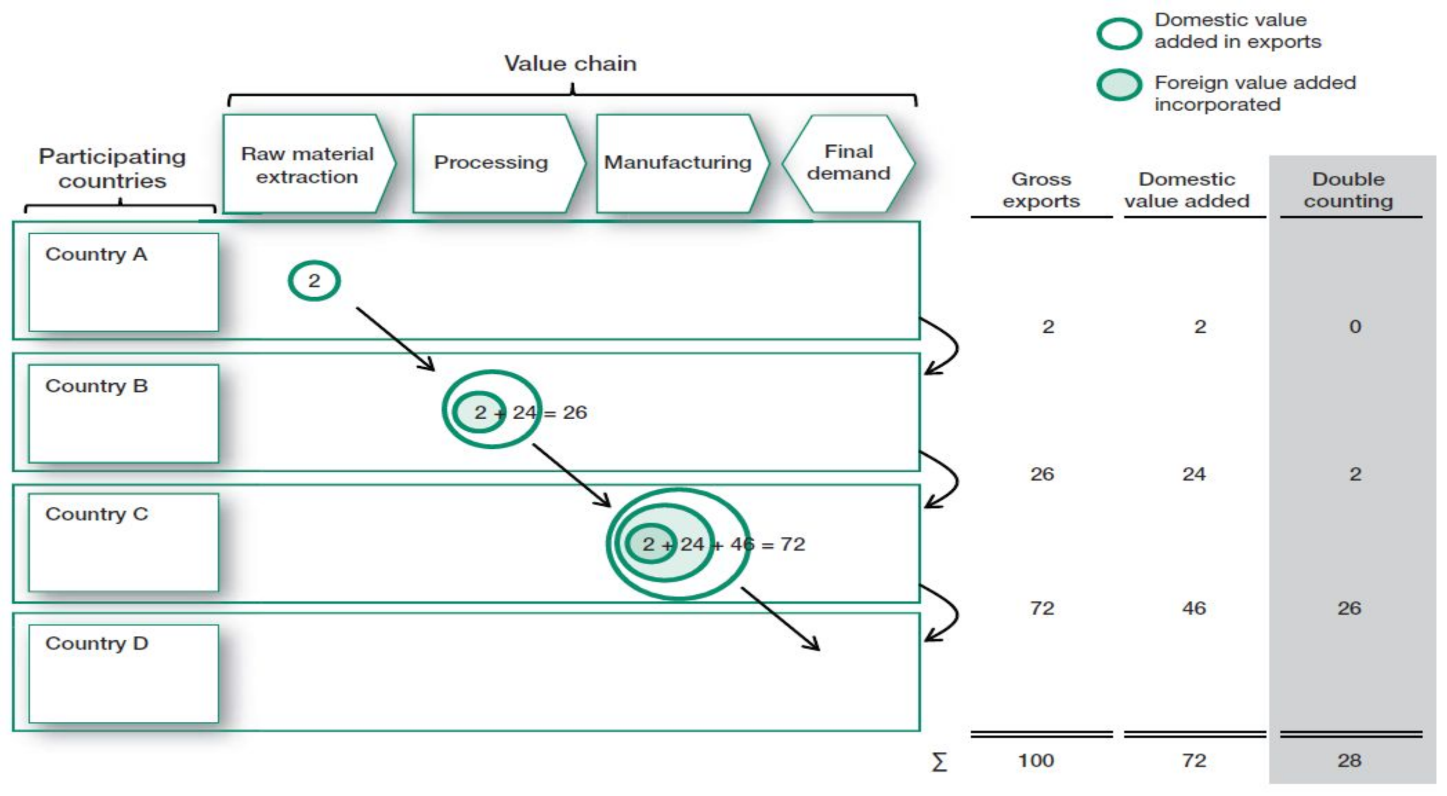
Read more about Interconnected Economies


INTERCONNECTED ECONOMIES:
BENEFITING FROM GLOBAL VALUE CHAINS

SYNTHESIS REPORT

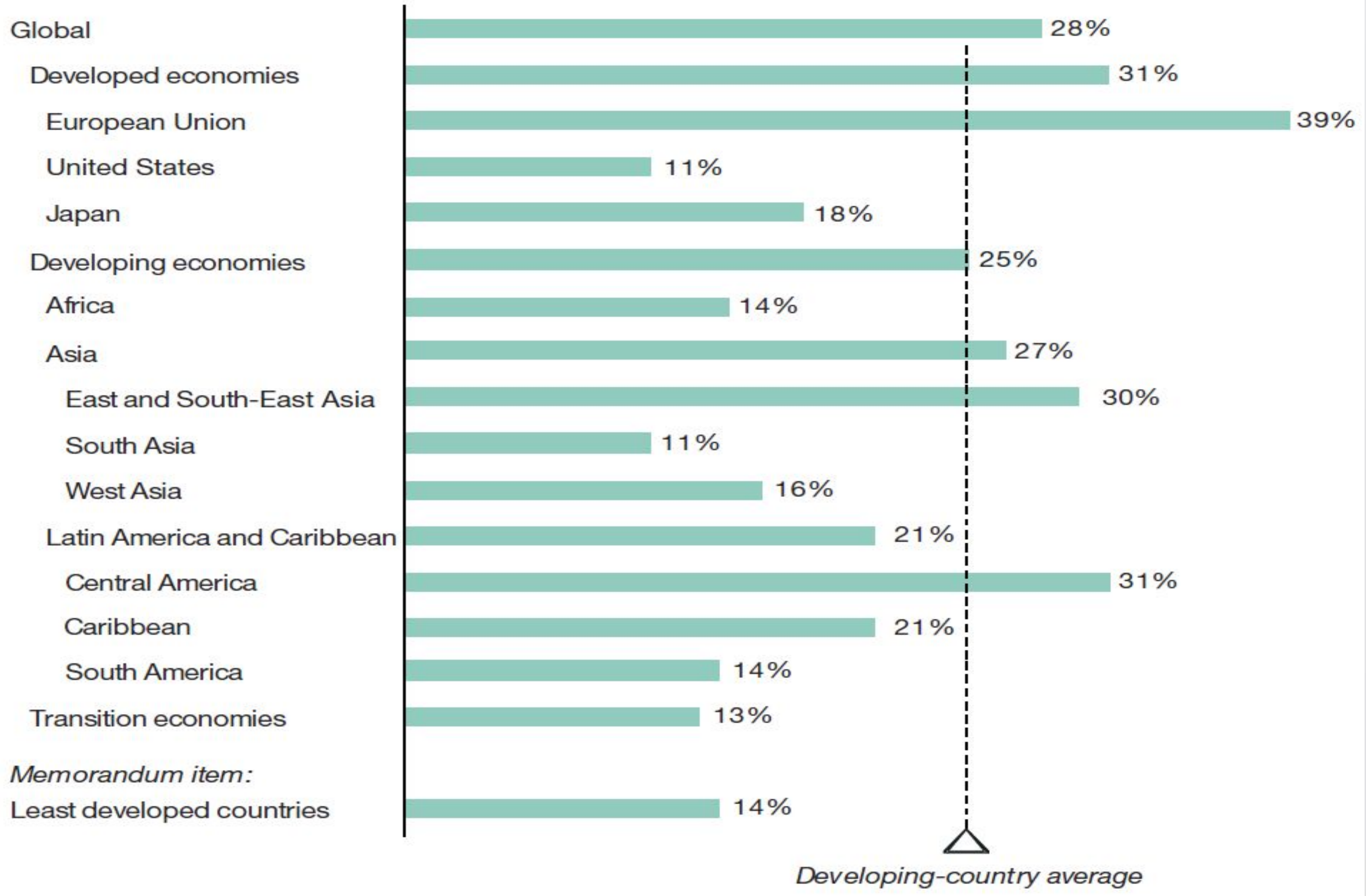
OECD

Value Added Trade – Raw Materials Counted Several Times in World Exports



Source: UNCTAD

Share of Foreign Value Added in Exports, by Region (2010): Indicating the extent to which a country' exports depend on imports

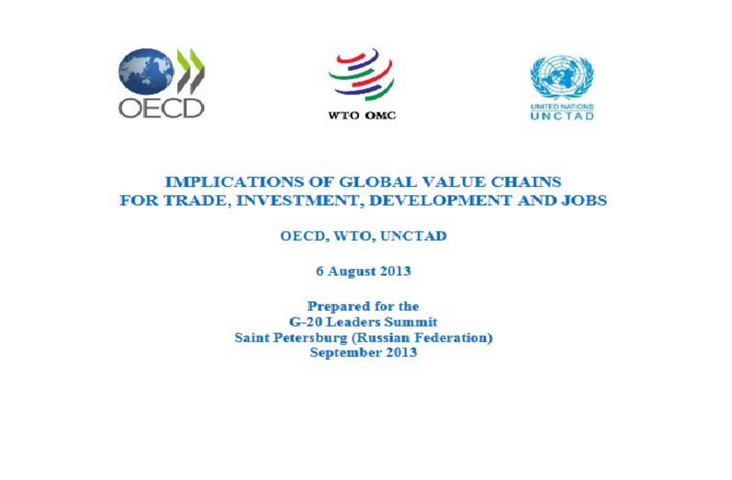


Source: UNCTAD

The implications of GVCs for trade policies

- GVCs contribute to double counting in trade
  - Intermediate inputs are traded across the borders many times. This process have resulted tariffs accumulation.
- Trade facilitation measures become increasingly significant
  - Trade policy focusing on reducing supply-side constraints such as cutting the red tape, providing fast and efficient customs and ports management is necessary to improve participation in GVCs
- Non-tariffs measures are serious barriers for GVCs participation
  - Mandatory compliance with varied standards and technical regulations proves to be burdensome for companies including small-medium enterprises (SMEs)
  - Regulatory convergence and mutual recognition agreements could be a way to ease this burden of compliance and enhance participation in GVCs
- GVCs change international trade's pattern and structure
  - The old mercantilist view 'exports are goods and imports are bad' to be counterproductive
  - Trade agreements have to cope with the new reality and to be able to facilitate the changes in order to be relevant.

Want to know more about implication of GVCs?



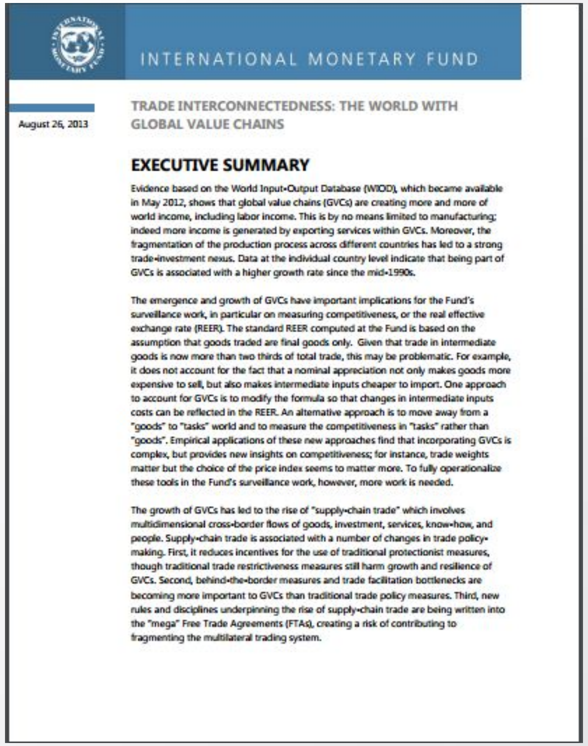
OECD   WTO OMC   UNITED NATIONS UNCTAD

IMPLICATIONS OF GLOBAL VALUE CHAINS
FOR TRADE, INVESTMENT, DEVELOPMENT AND JOBS

OECD, WTO, UNCTAD

6 August 2013

Prepared for the
G-20 Leaders Summit
Saint Petersburg (Russian Federation)
September 2013



INTERNATIONAL MONETARY FUND

August 26, 2013

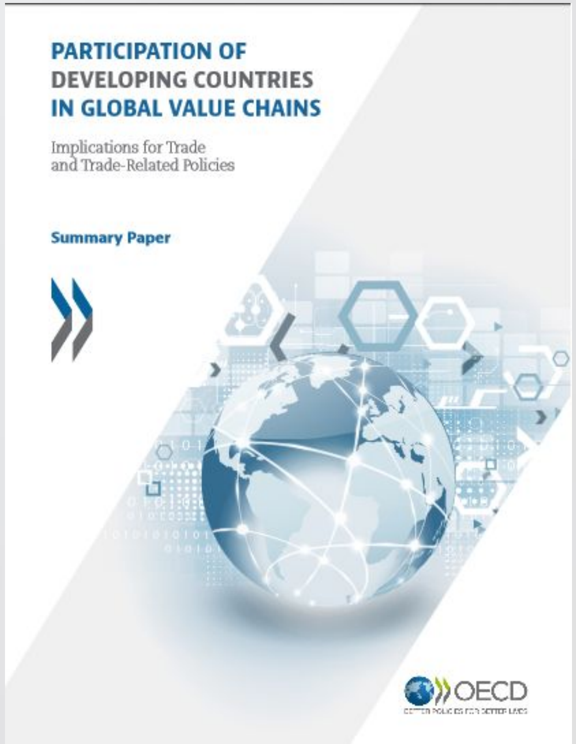
TRADE INTERCONNECTEDNESS: THE WORLD WITH GLOBAL VALUE CHAINS

EXECUTIVE SUMMARY

Evidence based on the World Input-Output Database (WIOD), which became available in May 2012, shows that global value chains (GVCs) are creating more and more of world income, including labor income. This is by no means limited to manufacturing; indeed more income is generated by exporting services within GVCs. Moreover, the fragmentation of the production process across different countries has led to a strong trade-investment nexus. Data at the individual country level indicate that being part of GVCs is associated with a higher growth rate since the mid-1990s.

The emergence and growth of GVCs have important implications for the Fund's surveillance work, in particular on measuring competitiveness, or the real effective exchange rate (REER). The standard REER computed at the Fund is based on the assumption that goods traded are final goods only. Given that trade in intermediate goods is now more than two thirds of total trade, this may be problematic. For example, it does not account for the fact that a nominal appreciation not only makes goods more expensive to sell, but also makes intermediate inputs cheaper to import. One approach to account for GVCs is to modify the formula so that changes in intermediate inputs costs can be reflected in the REER. An alternative approach is to move away from a "goods" to "tasks" world and to measure the competitiveness in "tasks" rather than "goods". Empirical applications of these new approaches find that incorporating GVCs is complex, but provides new insights on competitiveness; for instance, trade weights matter but the choice of the price index seems to matter more. To fully operationalize these tools in the Fund's surveillance work, however, more work is needed.

The growth of GVCs has led to the rise of "supply-chain trade" which involves multidimensional cross-border flows of goods, investment, services, know-how, and people. Supply-chain trade is associated with a number of changes in trade policy-making. First, it reduces incentives for the use of traditional protectionist measures, though traditional trade restrictiveness measures still harm growth and resilience of GVCs. Second, behind-the-border measures and trade facilitation bottlenecks are becoming more important to GVCs than traditional trade policy measures. Third, new rules and disciplines underpinning the rise of supply-chain trade are being written into the "mega" Free Trade Agreements (FTAs), creating a risk of contributing to fragmenting the multilateral trading system.



PARTICIPATION OF
DEVELOPING COUNTRIES
IN GLOBAL VALUE CHAINS

Implications for Trade
and Trade-Related Policies

Summary Paper

OECD

GVCs: Investment and Trade Linkages

- Trade and investment are intertwined. FDI can be a substitute for and a complement to trade
  - E.q for trade substitution: a firm invests and produces goods in the foreign country to serve the consumers in that country
  - E.q for trade complementary: efficiency-seeking FDI, through a firm looks for the best (low-cost) location from which to produce efficiently and export their products

See: Trade and Investment Linkages and Policy Coordination

Linkages

- FDI generates trade flows globally. According to UNCTAD, 80% of global trade is linked to the international production networks of TNCs, either as intra-firm trade or through arm's length transactions involving at least one firm.
- TNCs' international production networks, where most trade takes place, are geared towards providing the value added inputs needed to generate trade.

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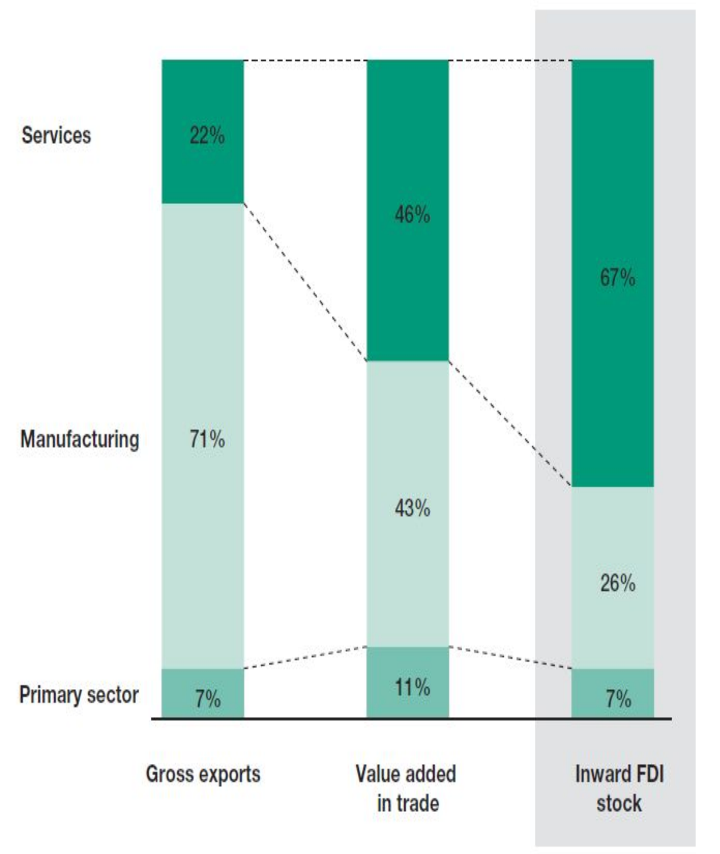
Extensive Use of Services Caused by GVCs

- Almost half of value added inputs (46%) to export is served by services-sector activities
- 67% of global FDI stocks is allocated in services sector activities



Source: UNCTAD, Global Value Chains and Development

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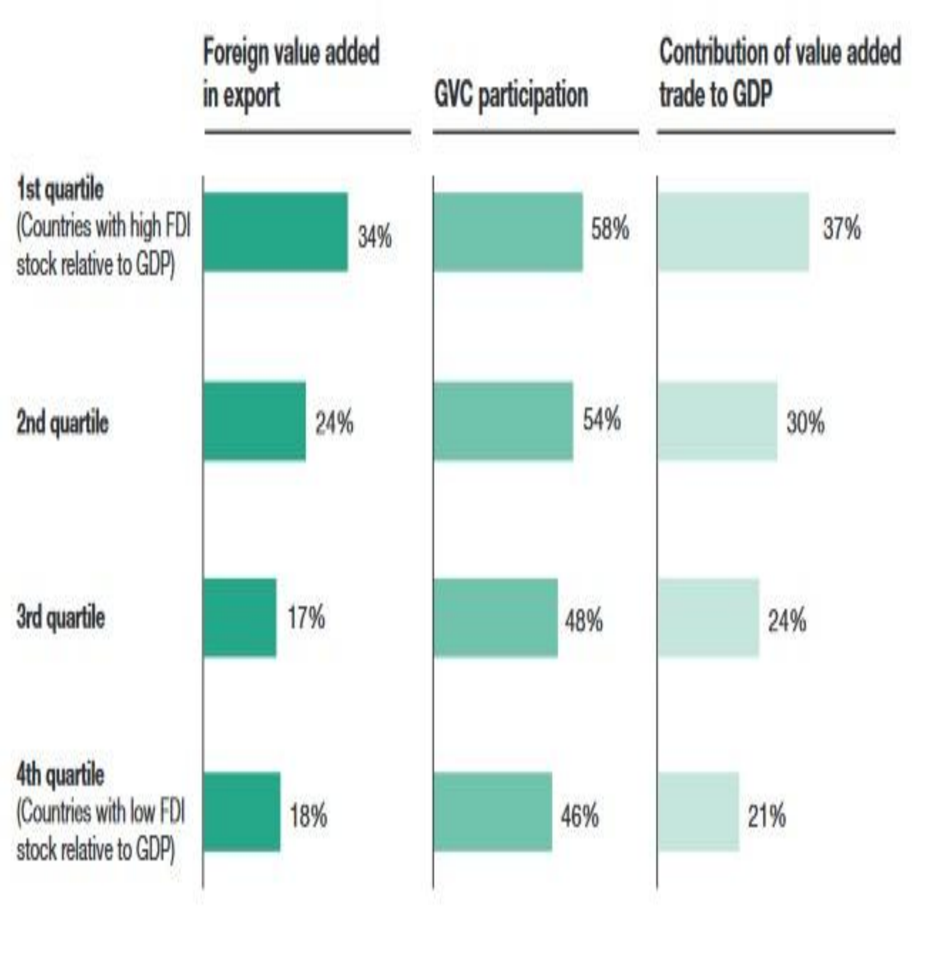
TNCs' presence and Country's GVC Participation

- A group of countries that have most FDI tend to have:
  - higher foreign value added in their exports
  - higher GVCs participation
  - a higher contribution of value added trade to their GDP



Source: UNCTAD, Global Value Chains and Development

Indonesia’s Participation in GVCs

- Indonesia’s participation is driven by downstream activities as other countries use Indonesia intermediates in their exports (e.q. commodities and natural resources)
- Mining and chemicals and minerals are two Indonesia’s industries strongly involved in GVCs
- One of the examples is Indonesia’s sectoral policy to restrict export of raw mineral which has far reaching implications in the downstream industries is being questioned by trading partners
- Majority of final demand for goods and services represents value added that has been created domestically
- Domestic value added (direct or indirect) represents final demand for a large number of products such as food, textiles, wood and so forth.

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Want to read more about Indonesia's participation in GVCs?


WORLD TRADE ORGANIZATION
ORGANISATION MONDIALE DU COMMERCE
ORGANIZACIÓN MUNDIAL DEL COMERCIO

WTO Chairs

Value chains governance in Indonesia's extractive and natural resources export commodities: Policy notes on its upgrading and diversification endeavors

Riza Noer Arfani & Poppy Sulistyaning Winanti

Dominated by natural resources commodities and extractive industries (such as oil and gas, coal, copper and other minerals, palm oil, rubber and other horticulture commodities), export diversification and upgrading have been the concerns of the Indonesian government and related stakeholders in the industries. Considered as one of successful stories of developing countries in escaping the resource-curse, Indonesia has undergone rapid economic growth. In this context, it is interesting to examine the governance of regional and global value chains of top ten Indonesia's export commodities in an effort to annotate its upgrading and diversification endeavors.


INDUSTRIAL POLICY IN INDONESIA: A GLOBAL VALUE CHAIN PERSPECTIVE

Julia Tijaja and Mohammad Faisal

NO. 411

October 2014

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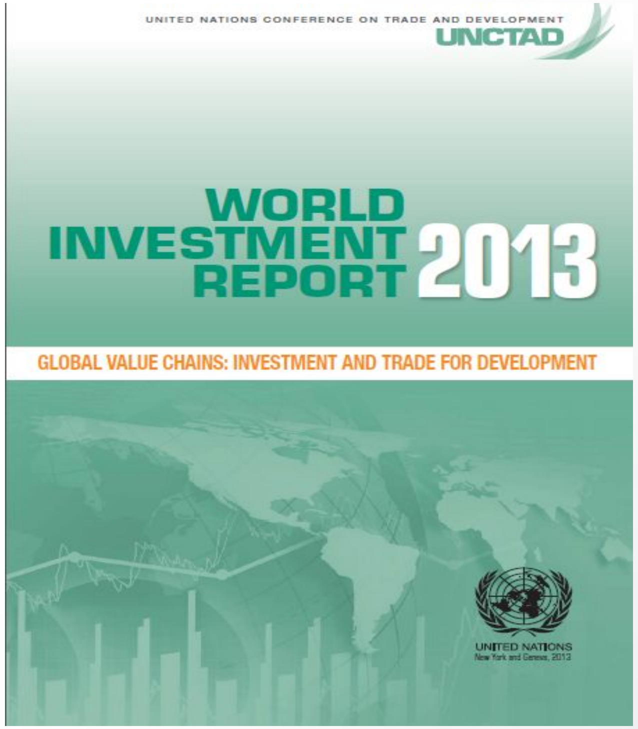
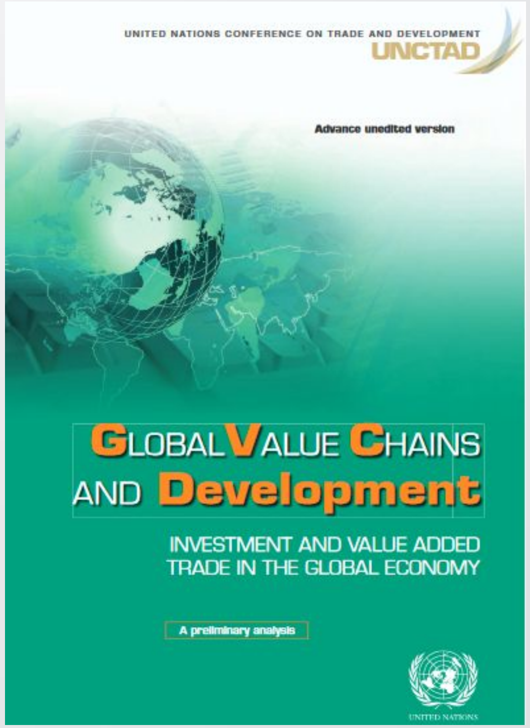
Room for Improvement

- Infrastructure and energy
- Efficient bureaucracy, reduced red-tape and robust and transparent rule of law
- Improved inter-agency coordination
- Improved quality and reduced volatile risk of labor market
- Sustainable industrial policy

Other readings worth to consider





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