

■ GLOBALIZED SUPPLY CHAINS AND TRADE IN VALUE ADDED

SOME USEFUL DEFINITIONS:

CREDIT CRUNCH

A sudden reduction in the availability of loans and other types of credit from banks and capital markets at given interest rates.

DEGLOBALIZATION

A process of diminishing interdependence and integration between certain units around the world, typically nation-states.

FOREIGN DIRECT INVESTMENT (FDI)

A company from one country making a physical investment into building a factory or acquiring part of a firm (at least 10%) in another country. The FDI relationship consists of a parent enterprise and a foreign affiliate which together form an inter-national business or a multinational corporation.

GLOBALIZATION

The integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and the spread of technology.

INTERMEDIATE GOODS

Goods used as inputs in the production of other goods.

OFFSHORING

The relocation by a company of a business process from one country to another.

OUTSOURCING

Subcontracting a process, such as product design or manufacturing, to a third-party company.

REGIONALIZATION

The tendency to form regions or the process of doing so. When used in opposition to globalization, this often means a world that is less connected, with a stronger regional focus.

It can be measured by the ratio of regional exports in total exports or, more sophisticated, by Regionalization Indicators (e.g. a "Trade Intensity Bilateral Index").

SUPPLY CHAIN

The network of distributors, transporters, storage facilities and suppliers that participate in the sale, delivery and production of a particular product.

TRADE MULTIPLIER = ELASTICITY

The ratio of the growth rate of imports to the growth rate of GDP. It shows by how much imports will change if GDP increases by 1%.

VALUE-ADDED TRADE

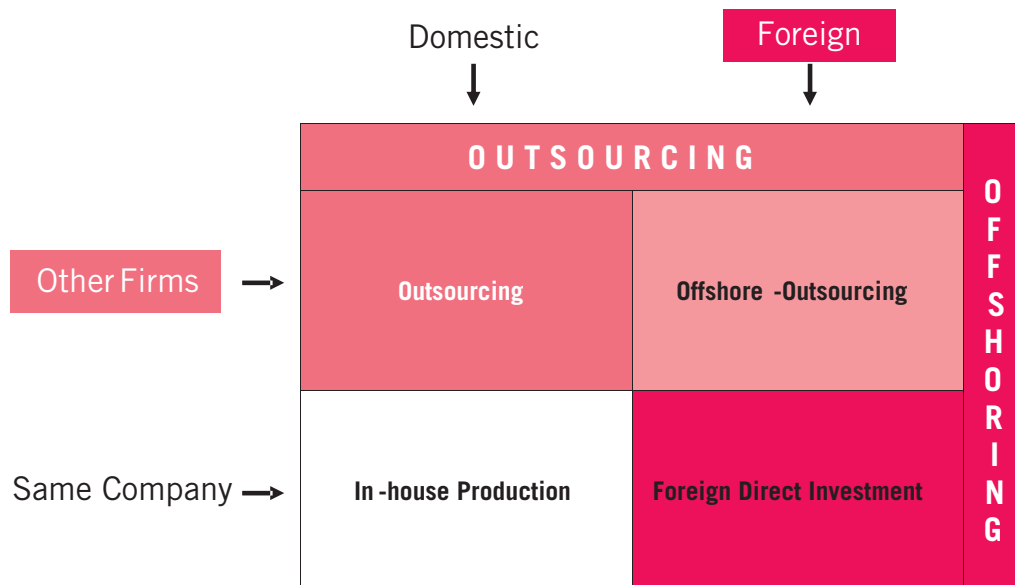
Measures trade net of inputs and reallocates the value-added produced at the different stages of the production process to each of the participating countries and industry.

VERTICAL INTEGRATION

The process in which several outsourced steps in the production and/or distribution of a product are controlled by a single company or entity. The different steps can be located in different countries.

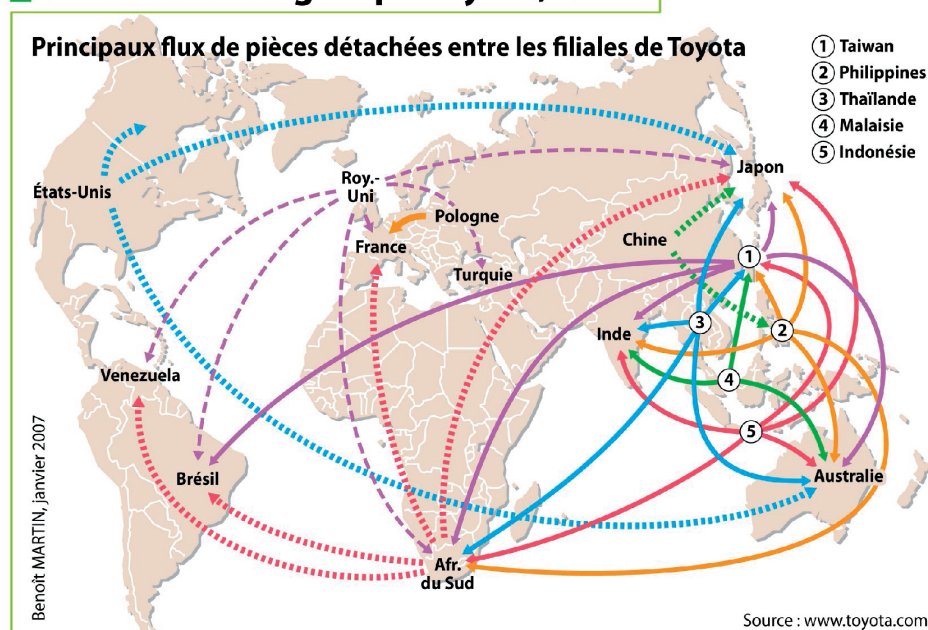
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Differentiation between Outsourcing and Offshoring:



Example of a supply chain:

■ Production du groupe Toyota, 2004



in Marie-Françoise Durand, Benoît Martin, Delphine Placidi, Philippe Copinschi,
Atlas de la Mondialisation, Presses de Sciences Po, Paris, 2008



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Three ways of measuring the fragmentation of the value chain

1. Using firm surveys
 2. Foreign trade statistics
 - The increase in the share of parts and components in trade flows indicates more production-sharing between countries.
 3. Using international input-output tables to depict inter-industry relations.
 - I-O shows how the output of one industry is an input to each other industry. Input is enumerated in the column of an industry and its outputs are enumerated in its corresponding row.
 - International I-O extends the inter-sectoral relations to several countries. It shows how dependent each national industry is on all other sectors from the domestic economy and from other partner countries, both as customer of their outputs and as supplier of their inputs.
- International I-O is conceptually very simple, but requires high-quality data. It is a powerful modelling tool for:
- Measuring size/magnitude of production linkages and the “length” of the chains
 - Computing Vertical Specialization Index
 - Tracking the international transmission of demand/supply shocks

What factors have been driving the increase in international outsourcing ?

- Fall in trade costs
 - Tariffs
 - Transport and communication costs
 - Time cost of transport
- Reliability/timeliness of delivery has improved (through better infrastructure and logistic services)
- Technological improvements
 - IT advancements made it possible to separate geographically an increasing number of services tasks

JAPAN

SINGAPORE

REST OF THE WORLD

VALUE ADDED

	INTERMEDIATE DEMAND SINGAPORE			FINAL DEMAND JAPAN		FINAL DEMAND SINGAPORE		EXPORT BY COUNTRY OF DESTINATION				
	Agri-culture	Manu-facturing	Service	Agri-culture	Manu-facturing	Service	Cons-umption	Invest-ment	Export to USA	Export to EU	Export to ...	Export to RoW
Agriculture	A^{jj}	A^{js}					F^{jj}	F^{js}	L^{ju}	L^{je}	$L^{j..}$	L^{jw}
Manufacturing												
Service												
Agriculture	A^{sj}	A^{ss}					F^{sj}	F^{ss}	L^{su}	L^{se}	$L^{s..}$	L^{sw}
Manufacturing												
Service												
Agriculture	A^{wj}	A^{ws}					F^{wj}	F^{ws}				
Manufacturing												
Service												
Wages	V^j											
Profits												
Depreciation												
Taxes												