



# An Explanatory Framework for Measuring Services Global Value Chains

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## Trends in services and global nature of value chains



- 1. IT-enabling of services is allowing the offshoring of services to more countries**
- 2. Increasingly, higher value services are offshored (e.g. R&D services, KPO)**
- 3. Virtualization of services products**
- 4. Potential for value chains to be reconfigured may be increasing**

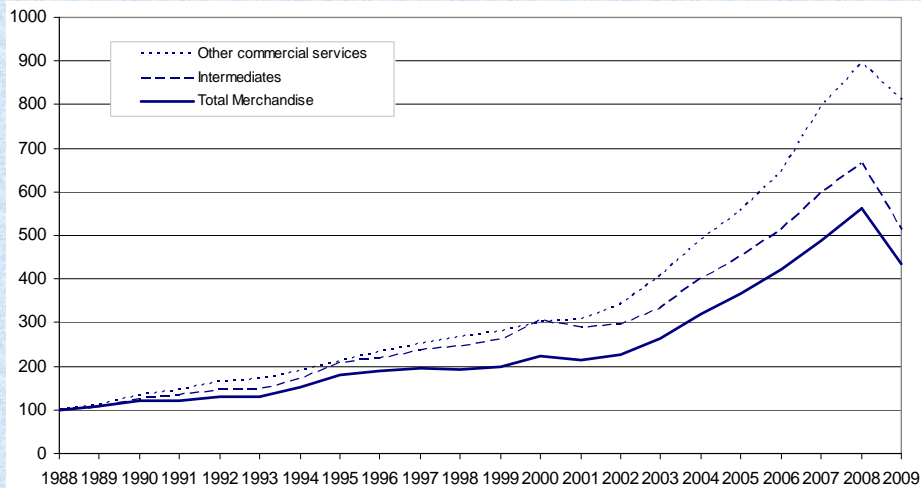
**All this has potent implications for where growth occurs, where value migrates to, etc.**



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## Trends in world trade of total merchandise, intermediate goods and other commercial services Index 1988 = 100



## Trade in value added

### Three approaches to measure the trade

1. Case studies
  - Examples: iPod, Barbie doll, Porsche Cayenne
2. Direct measurement
  - Enterprise surveys
  - Strengthening links between trade and business statistics
  - Foreign trade statistics (share of parts in total trade)
3. Indirect measurement
  - Estimation based on national accounts (input/output) and trade statistics

### Global Forum on Trade Statistics

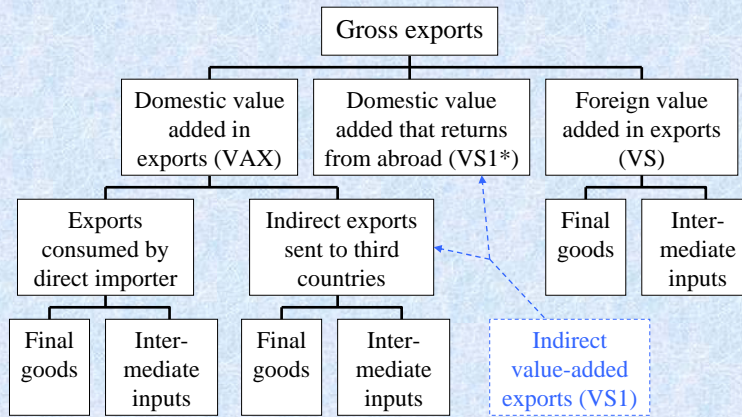
Measuring Global Trade - Do we have the right numbers?

organized jointly by UNSD and Eurostat in collaboration with WTO and UNCTAD

4 February 2011, Geneva, Switzerland



## Complete Decomposition of Gross Exports

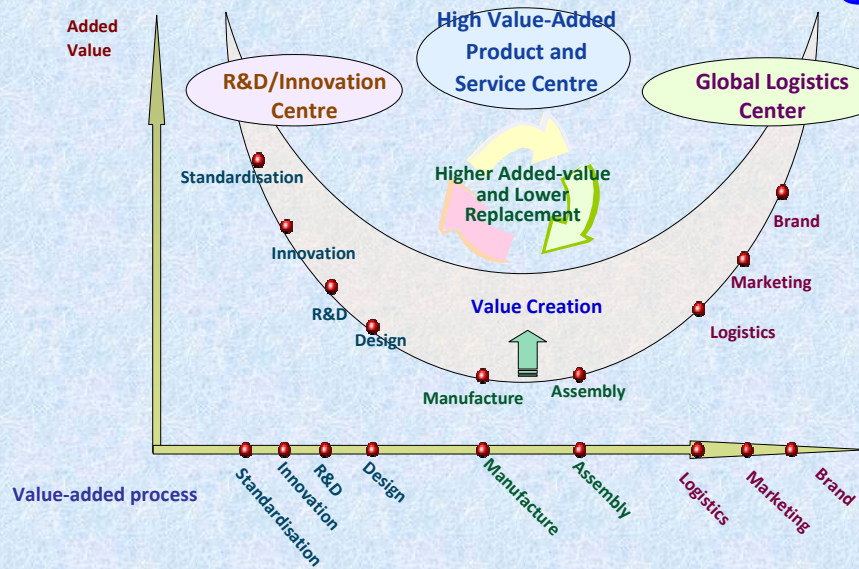


Source: Koopmann, Powers, Wang, Wei, US ITC 2011

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## Smiley Face: conceptual model of the shift to a high value added, globally integrated, services economy

(Source: Business Week International online extra, May 16, 2005, Stan Shih on Taiwan and China)



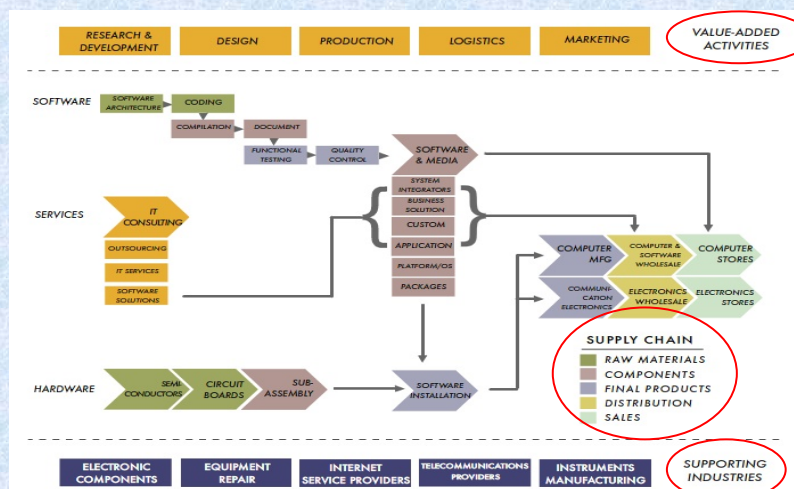
## Are services itself displaying characteristics of a value chain?



- Services can now be stored and traded digitally
- Services are no longer only input to trade in goods but have become a « final export » (see WB, Economic Premise, April 2011)
- Services are unbundled which has led to « services exports sophistication »

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## A sample value chain for software, IT services and hardware



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Source: CGGC (<http://www.cggc.duke.edu>), More Information: Global Value Chains ([www.globalvaluechains.org](http://www.globalvaluechains.org))



## Trade in Services Statistics and Trade in Value Added



M2: Services undertaken by enterprises that do not own the goods

M1: Services subcontracting

M1: Merchancing  
M1: BPO and ITES

M3, M4: Intra-firm trade



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Offshoring -- Services undertaken by enterprises that do not own the goods



Processing of goods

Manufacturing services on physical inputs owned by others

Assembly of clothing



Oil refining



Liquefaction of natural gas

Packing



Assembly of electronics



Labelling




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## Manufacturing on own account vs. on physical inputs owned by others

### Different arrangements:

- Necessary to show them separately
- Own account: role of manufacturer in design, marketing, and financing the goods is different

 Showing transactions on a change of ownership basis assists in:

1. identifying actual transactions
2. attributing value added due to owner for designing, marketing, financing, etc.




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## BPO and ITES

### Offshore-outsourcing

- Data processing, call centres, legal support, etc. (India, Philippines, etc...)
- Logistics services...Hong Kong (China)

-  1. “intermediation activity”
2. specialized services (quality control, simple processing...)
3. foreign affiliates as regional headquarters providing business services

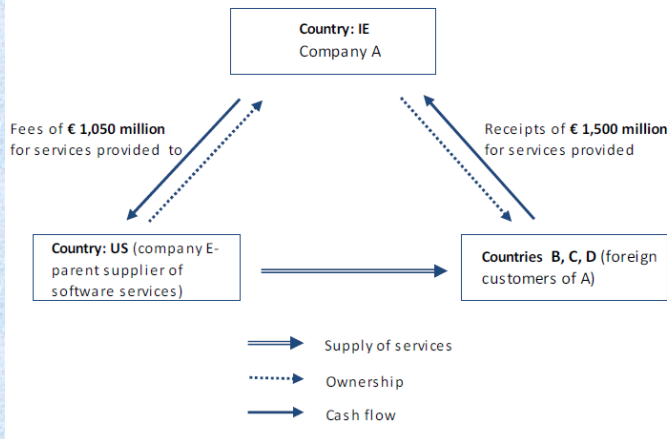


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## Services subcontracting

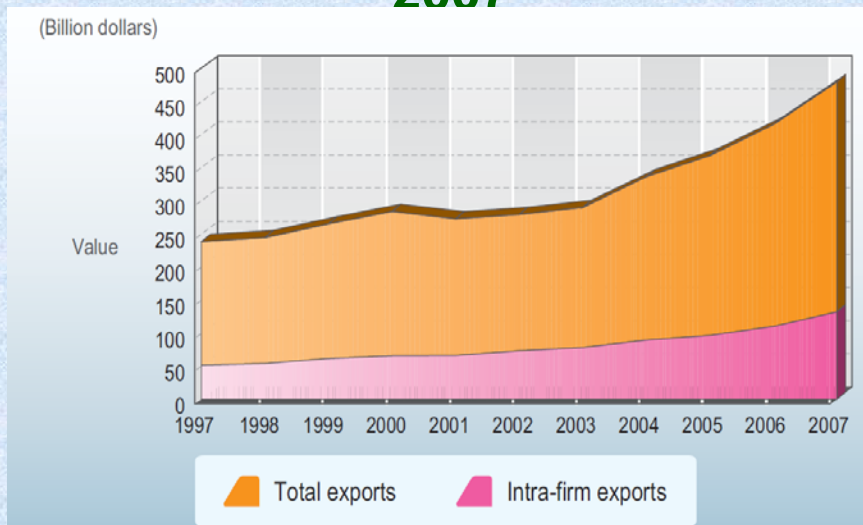


Chart 6.2.2 Treatment of receipts and expenditure of an Irish direct investment enterprise for services provided by foreign affiliates



Source: Guide on the Impact of Globalization on National Accounts, ECE, forthcoming

## Intra-firm trade in US total private services exports, 1997-2007



## Research questions...



- Do firms partition work according to a certain logic because of the nature of the work and decision criteria?
- If, does work get partitioned and outsourced by a certain grouping of functions?
- Does it depend on type of service/sector?
- Do certain countries benefit more, and how?

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## Needs for research questions and for data collection alike



**We need better theories and frameworks to guide how things are happening, including**

- How firms and industries form
- How value chains emerge, are constructed (following the global value chain perspective)
- How clients' decisions take place
- How this is (can be) reflected by trade in services statistics

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