



**S. RAJARATNAM SCHOOL  
OF INTERNATIONAL STUDIES**

A Graduate School of Nanyang Technological University



International Centre for Trade  
and Sustainable Development

# **TFCTN DIALOGUE ON SERVICES AND GLOBAL VALUE CHAINS**

Singapore, 23 June 2014

**Dr. Sherry Stephenson**

Senior Fellow, ICTSD

[sstephenson@ictsd.ch](mailto:sstephenson@ictsd.ch)

**“VALUE CHAINS & TRADE IN SERVICES: SETTING THE STAGE”**

# **Value Chains and Services**

- **Determinants of the new reality of 21<sup>st</sup> century production and trade patterns**

## **CHARACTERIZED BY:**

- 1) Growing trade in intermediate products**
- 2) High importance of services in output, trade and employment**
- 3) Increasing fragmentation of service related tasks**
- 4) Comparative advantage in trade based on “tasks” rather than final products**

# Drivers of Global Value Chains

- Reduction of transportation costs
- IT and telecom advances
- Technological innovation
- Human capital availability
- Competitive labor cost
- Proximity to supply sources or to final markets because of short lead times or customization required by customers

Many of these factors have to do with SERVICES

# **Servicification: what is it?**

- Increased use of services in manufacturing- for production and sales
- Increased consumption of services
- Embedded and embodied services in intermediates and final products
- Increasing “modularization” makes separating goods from services harder e.g. “business functions”

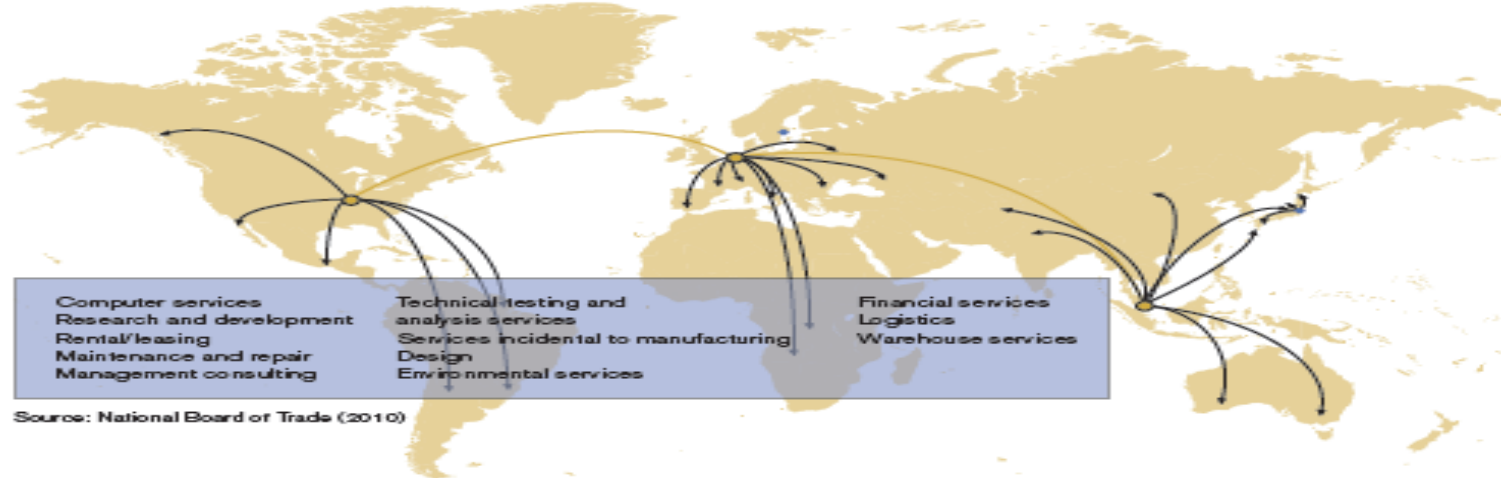
**Services are now the most important component of productivity growth in our modern economies**

# Case Study: Services used by firm Sandvik Tooling in its production

Figure 1: Services needed for effective supply chain and delivery of goods, Sandvik Tooling



Services delivered to the customer, Sandvik Tooling



Source: National Board of Trade (2010)

- ▶ Sandvik Tooling, a high-technology goods manufacturer, needs 40 different services to deliver products globally
- ▶ The company supplies 15 services themselves
- ▶ SERVIFICATION → Good producing companies increasingly buy, produce, sell and export services

Source: "Global Value Chains and Services".  
Kommerskollegium 2013:1. National Board of Trade.  
Available at:  
<http://www.kommers.se/Documents/dokumentarkiv/publikationer/2013/rapporter/report-global-value-chains-and-services-an-introduction.pdf>

# **Role of Services in GVCs**

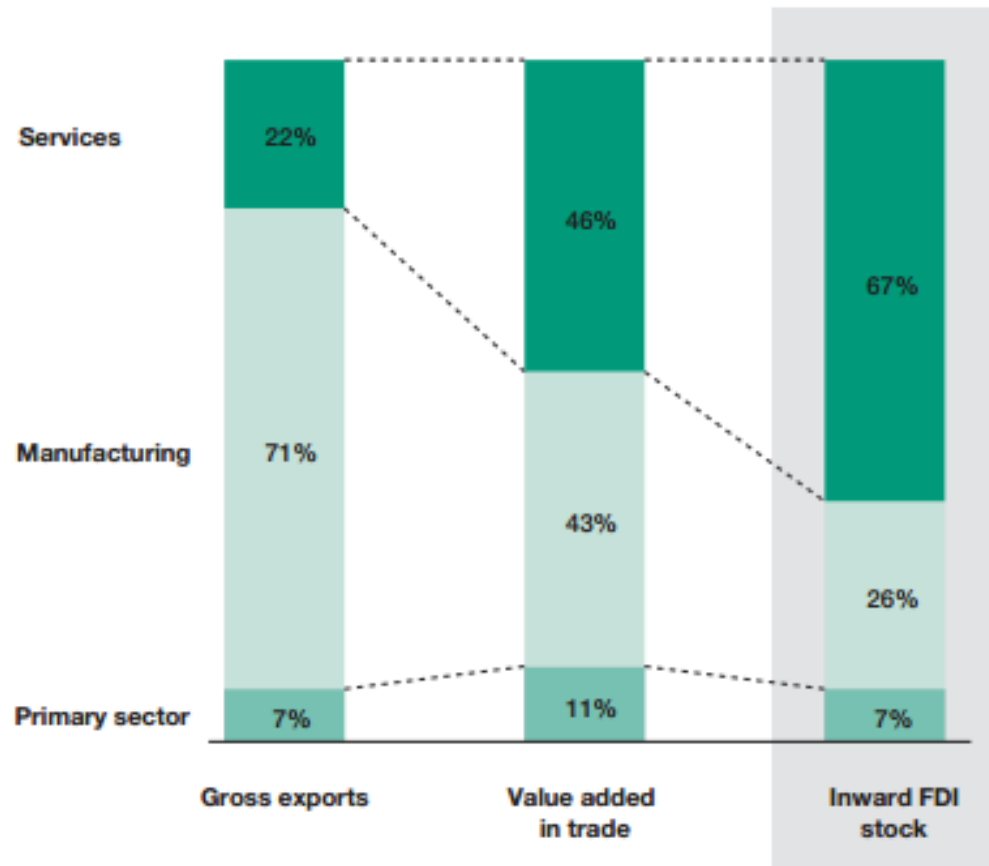
**Services enable Global Value Chains (GVCs) to operate**

**Services play a double role:**

- 1. They are enablers of GVCs, acting as the glue among the different productions segments (many off-shored services go into GVCs)**
- 2. They constitute services value chains on their own (examples: tourism value chain; medical services value chain; financial services value chain)**

# Services have most weight in trade and in FDI : enable GVCs

Services weight in Trade (in gross and value added terms) and Inward FDI Stock (2010)

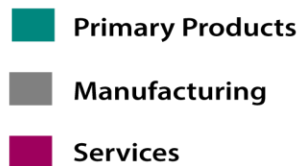
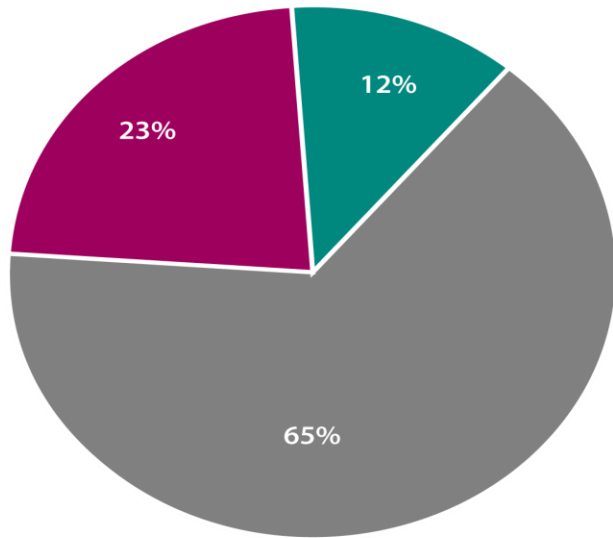


- ▶ SERVICES → More important than the manufacturing and primary sectors in both trade and FDI
- ▶ FDI in services is “leading” the operation of GVCs

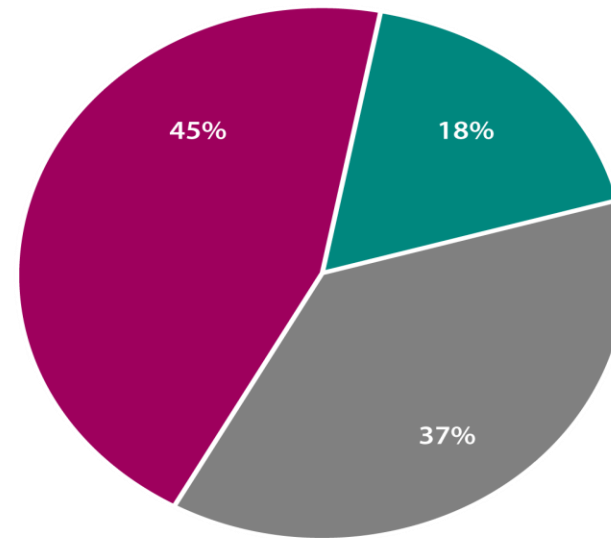
Source: UNCTAD-Eora GVC Database, UNCTAD FDI Database.

# Better Measurement now available of Services Contribution to Trade on a Value-Added Basis

Structure of world exports in  
gross terms



Structure of world exports in  
value-added terms



Gross and value-added measures (2008, based on OECD-WTO data; taken from new OECD-WTO Data Base on Trade in Value-Added )



# **How do Services generate Value-added in Trade?**

- Services facilitate “trade in tasks” by connecting the points in a goods or services value chain
- Contribution to the value chain is measured through “value added” by each task
- Services can either be “EMBODIED” or “EMBEDDED” in products –

**Very often the largest component of value in traded products is created by services inputs/tasks**

# Embodied and Embedded Services in Global Value Chains

- Services play a double role in the globalized economy and in GVCs

## EMBODIED SERVICES

Services are “embodied” during the production process into agricultural and manufacturing products (e.g. energy, transport, communications, insurance, accountancy, design, software, and other technical expertise) – **delivered within the product.**

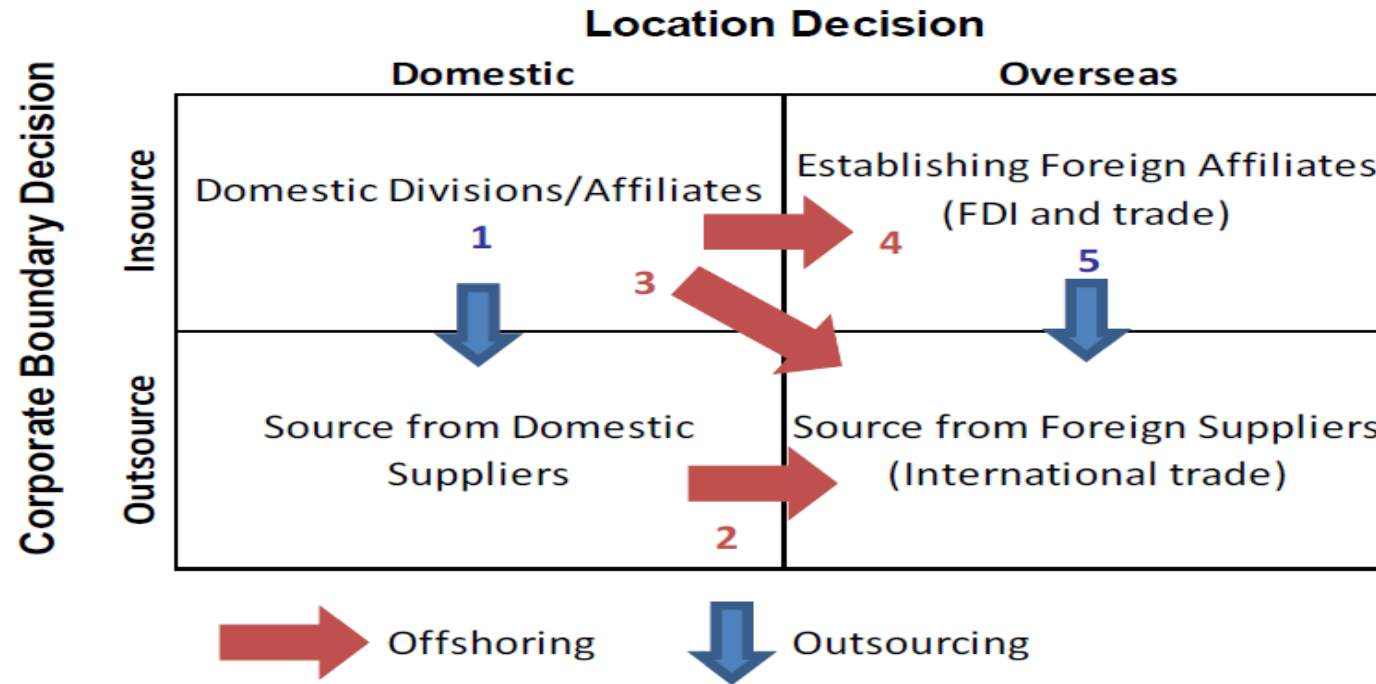
## EMBEDDED SERVICES

Services are “embedded” at the point of merchandise sale, for example financing, training, maintenance, repair, product insurance, product leasing, and other after-sales service – **delivered alongside the product.**

# **Services and Value Chains: the modern decision to “Off-shore” Services**

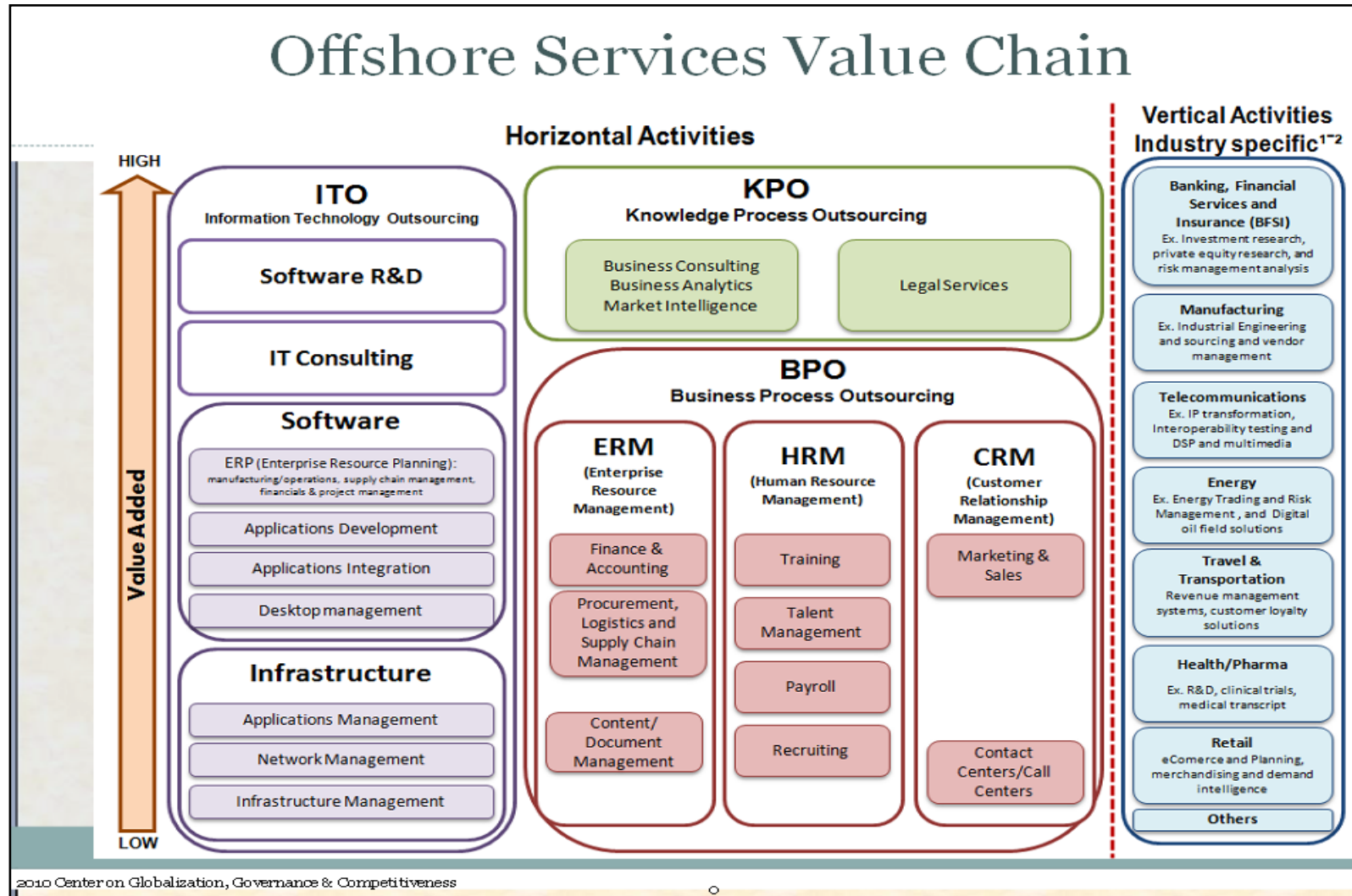
- ◆ Defragmentation of production of goods and services have opened up numerous possibilities for firms to decide what to do “in-house” and what to source “out-of-house”
- ◆ So... what to outsource or offshore? → Possibilities are vast and will depend on each particular business strategy, cost structure and attractiveness of outsourcing options
- ◆ Tendency is to retain areas closest to “core” competency of firm and outsource other services

# Outsourcing and Off-shoring Decisions by Firms operating in Value Chains



Source: Sako, Mari. (2005). Outsourcing and Offshoring: Key Trends and Issues. Paper presented at the Emerging Markets Forum.

# Main Offshore Services going into Value Chains: BPO; ITO; KPO Outsourcing



Source: Gary Gereffi (2010). "The Offshore Services Global Value Chains".

# Upgrading Services in Value Chains: which services add the most value?

The challenge is to move up the value chain into higher value-added tasks while deciding which activity to outsource / offshore

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



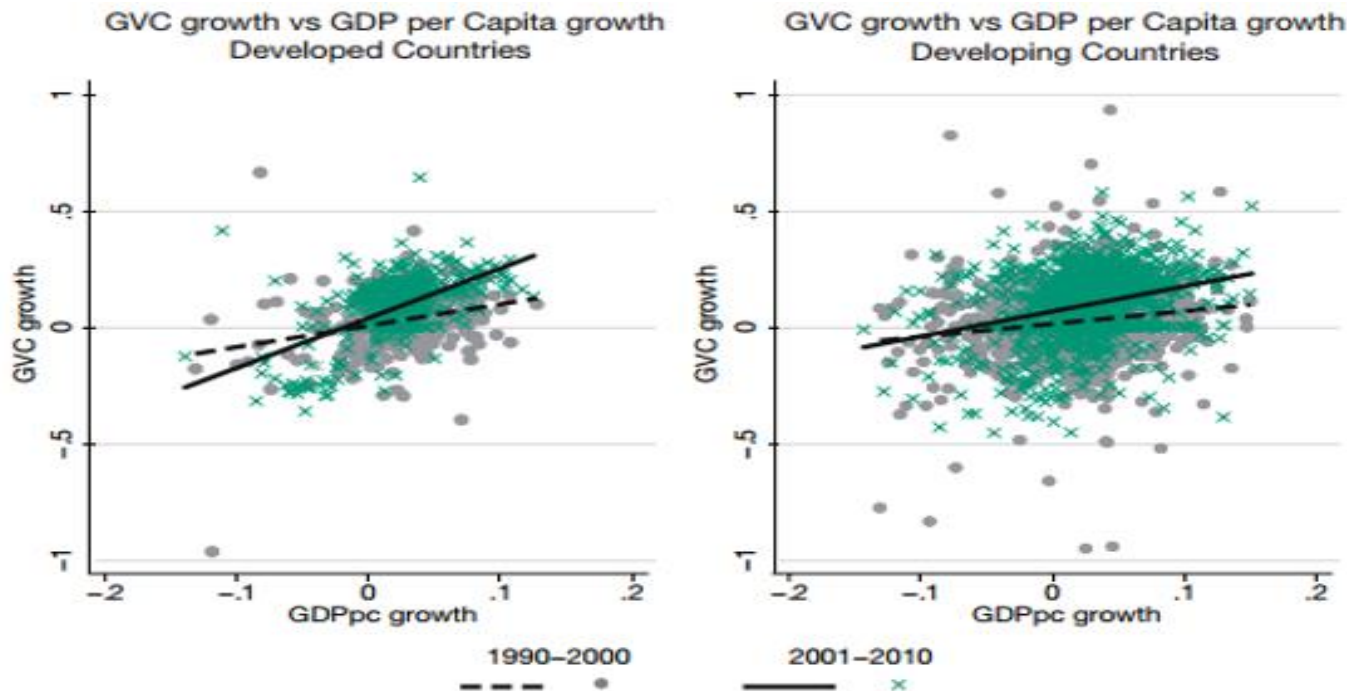
Source: Business Week Online. May 16, 2005.

# **Entering and moving up the value chain : A growth strategy for developing countries?**

- **UNCTAD Report: Developing countries that participate in GVCs grow faster on average than others**
- **Where should the entry focus be? On capturing a task and entering the value chain; or on targeting a specific value-added level of activity?**
- **This choice may imply different development strategies**

**Moving up the value chain may help  
developing countries escape the  
middle income trap**

# Positive Correlation between Growth in GVC Participation and Growth in GDP



- ▶ Economies with the fastest growing GVC participation have GDP per capita growth rates some 2% above the average
- ▶ Countries that increased their participation in GVCs and their domestic value added in exports experienced GDP per capita growth of 3.4%, compared to 2.2% for countries that only increased their participation in GVCs without “upgrading”

Source: UNCTAD-Eora GVC Database, UNCTAD analysis.

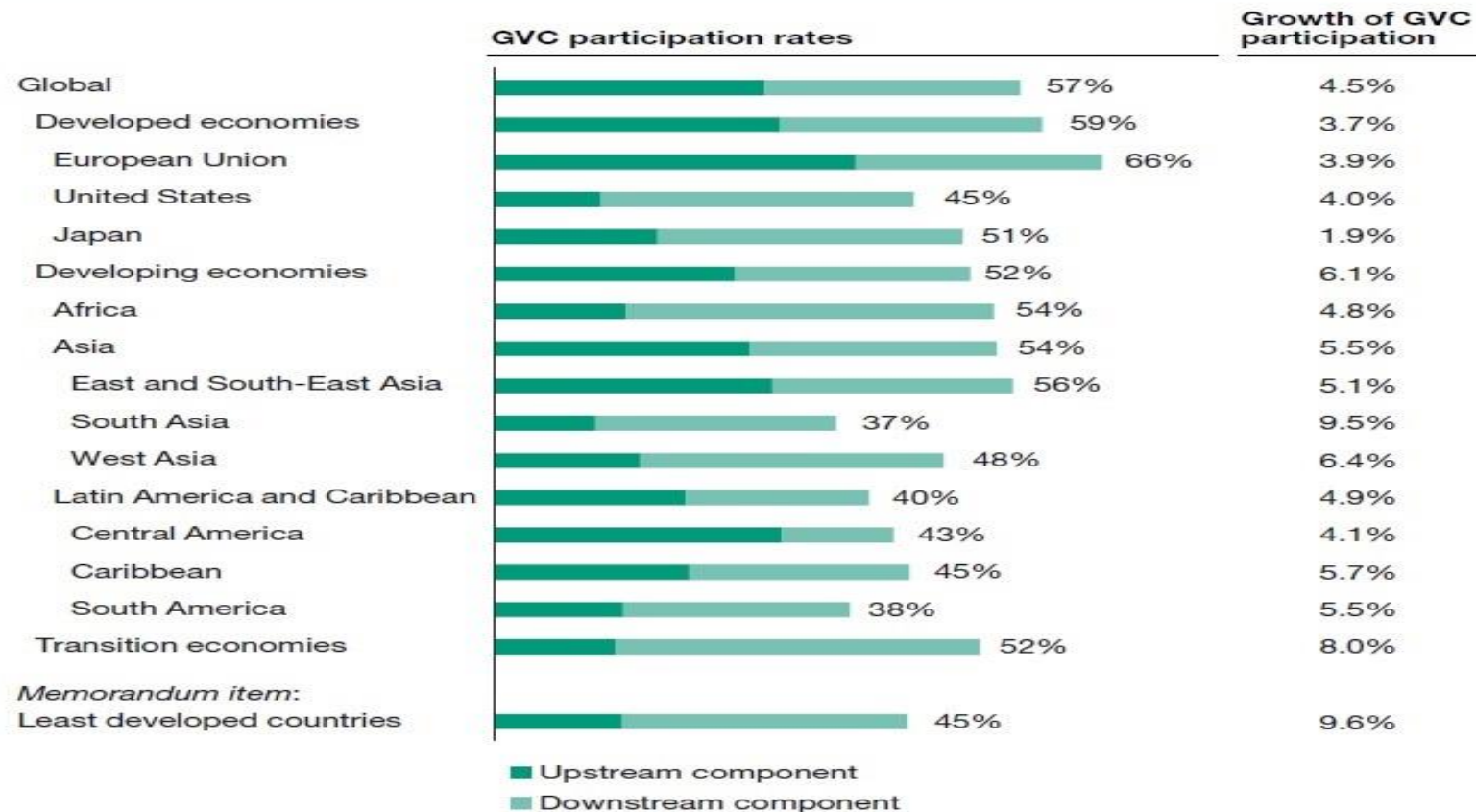
Note: the regression between the annual GDP per capita (in PPS) growth and annual GVC participation index growth, in logs, shows a positive and significant correlation, at the 5% level. This relation also holds, at the 5% level, dividing the sample in developed and developing countries, and in two time periods (1990-2000 and 2001-2010). To avoid picking-up a compositional effect resulting from the correlation between a country's total value added (used as a component to calculate the GVC participation index) and its per capita GDP, all regressions use lagged (one year) GVC growth rates.

**Source: UNCTAD (2013). *World Investment Report 2013. GVCs: Investment and Trade for Development***



# Value Added by Developing Regions in Trade is increasing

Figure IV.8. GVC participation, 2010, and GVC participation growth rates, 2005–2010

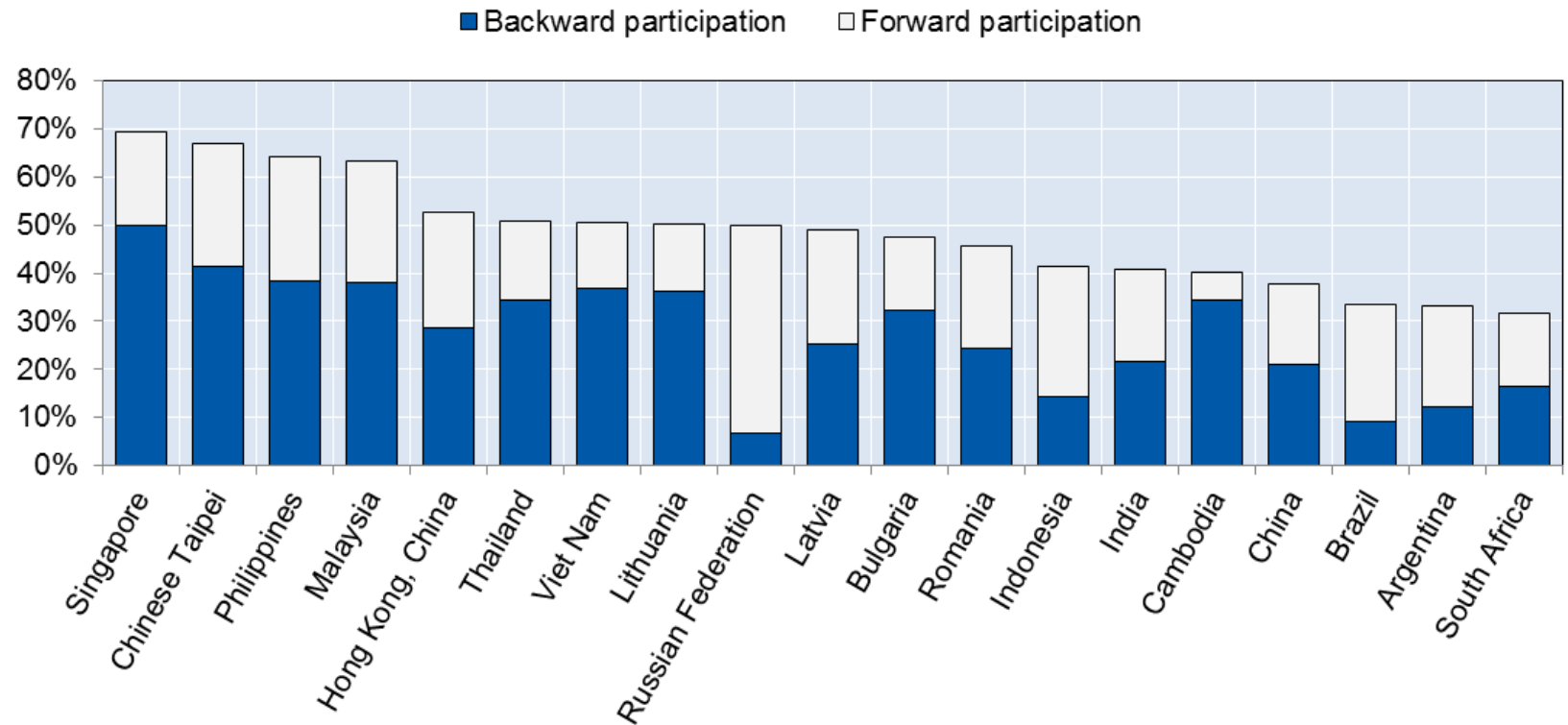


Source: UNCTAD-Eora GVC Database.

# GVC Participation Index: Developing Economies

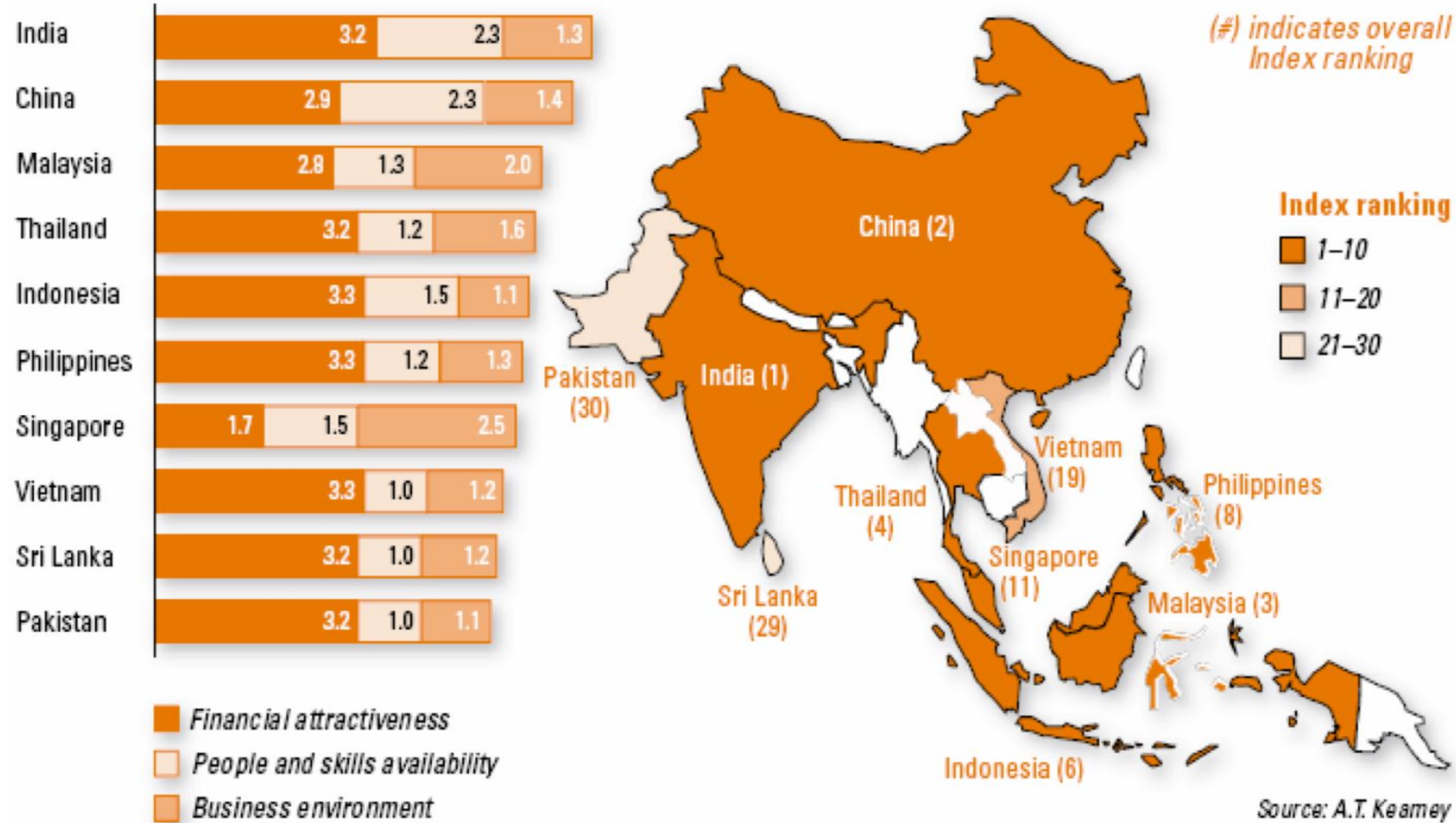
For non-OECD economies: Asian countries participate more in GVCs; others much less

Non-OECD economies	Backward participation	Forward participation
Singapore	50%	19%
Chinese Taipei	42%	25%
Philippines	38%	26%
Malaysia	38%	25%
Hong Kong, China	28%	24%
Thailand	35%	16%
Viet Nam	37%	14%
Lithuania	36%	14%
Russian Federation	7%	43%
Latvia	25%	24%
Bulgaria	32%	15%
Romania	24%	21%
Indonesia	14%	27%
India	22%	19%
Cambodia	34%	6%
China	21%	16%
Brazil	9%	24%
Argentina	12%	21%
South Africa	17%	15%



SOURCE Miroudot, S. and K. De Backer (2013), "Mapping Global Value Chains", OECD Science, Technology and Industry Working Paper, OECD Publishing, forthcoming.

# Asian Destinations are Attractive Locations for Services Off-shoring Activities



# **Questions raised by Services and Global Value Chains**

- 1) Who captures the value in Global value Chains (GVCs)? Does the position of the service task in the GVC make a difference?**
- 2) Is targeting global value chains useful as a development strategy?**
- 3) What services tasks are “better” to capture for participating in GVCs? Or is there a “better”?**
- 4) What policies are useful for promoting services participation in GVCs?**
- 5) Is enough being done?**

# **Factors affecting Competitiveness in Services for Participation in GVCs**

- 1) Human Capital (talent, education, skills, ideas)
- 2) Cost considerations (financial attractiveness)
- 3) Enabling Digital Infrastructure – efficient telecoms
- 4) Investment in Intangible Assets (copyright, business methods, brands)
- 5) Quality of Institutions
- 6) Open trade and investment framework
- 7) Efficiency of Domestic Regulation
- 8) Policy Focus on Services: Mainstreaming into Development Strategy Reports and Policy

**GOV'T CAN DO A LOT TO SHAPE SERVICES EFFICIENCY !**

**THANK YOU!**