Global and Regional Supply Chains: The Services Dimensions

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Services and Value Chains

- Widespread understanding at present of **supply chains in goods (WTO-JETRO 2011 Report on "Made in the World") but insufficient attention has been paid to the role of services in supply chains**
- Telecommunications reforms and the application of digital technology to a widening range of business services have allowed services to be off-shored and to support production fragmentation in goods and operation of supply chains
- **Services intermediates (generally known as knowledge-intensive** business services) going into supply chains are now **the fastest growing component of world trade**

Embodied and Embedded Services in Supply 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.**

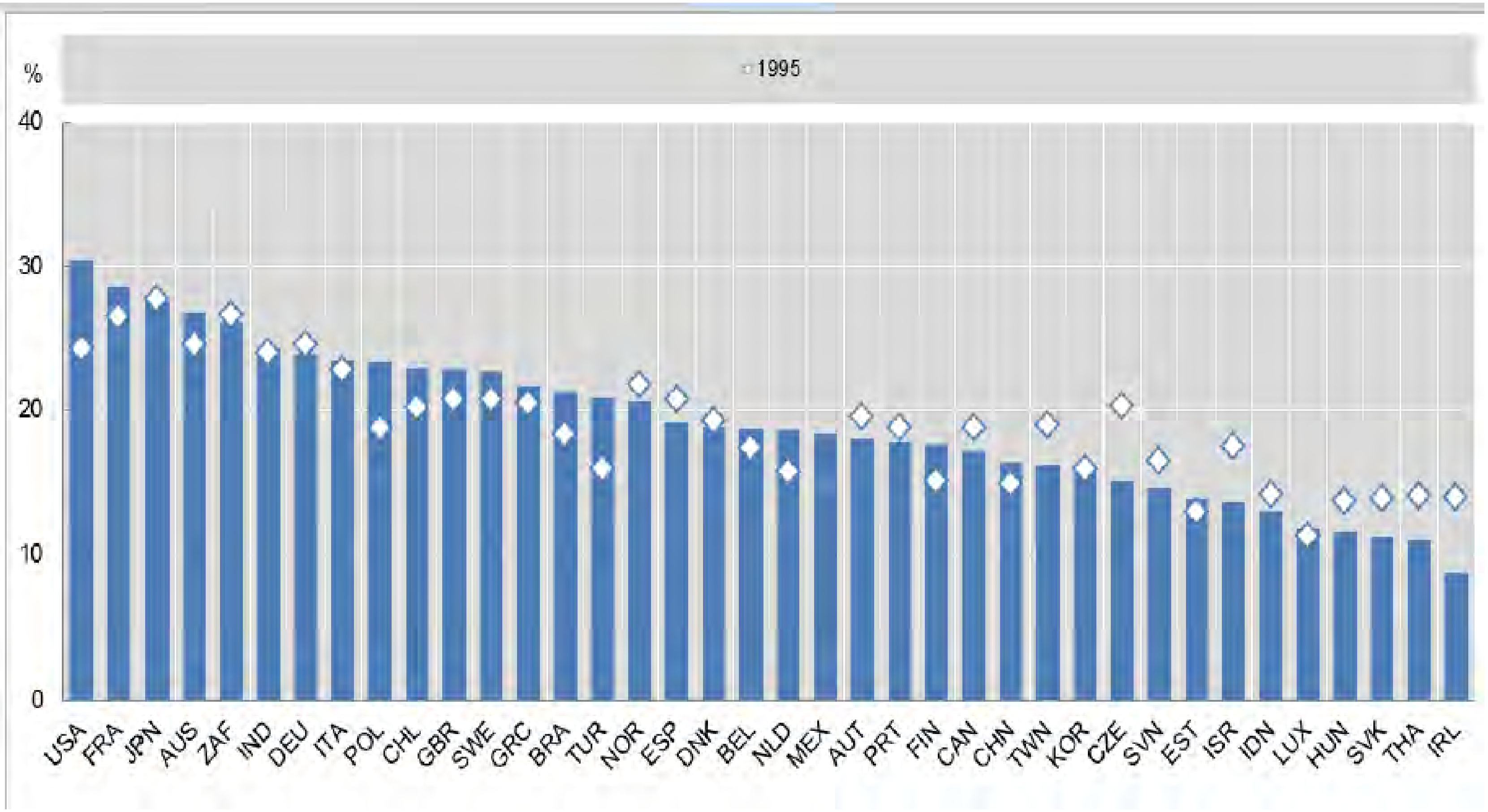
EMBEDDED SERVICES

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.**

Embodied Services

- All traded Goods embody Services, on average around 25%, often more
- Embodied services represent an even higher share of value-added of high tech goods
- Embodied services are present in trade through “intermediates”
- These were not measured before; only the final value of the good or service was counted in trade statistics
- Now we have a better picture with new value-added data bases: WTO-OECD; UNCTAD

Services Value-added Embodied in Manufacturing Output, 2005



Source: OECD Input-Output Database, May 2011

Embodied Services in the Nokia

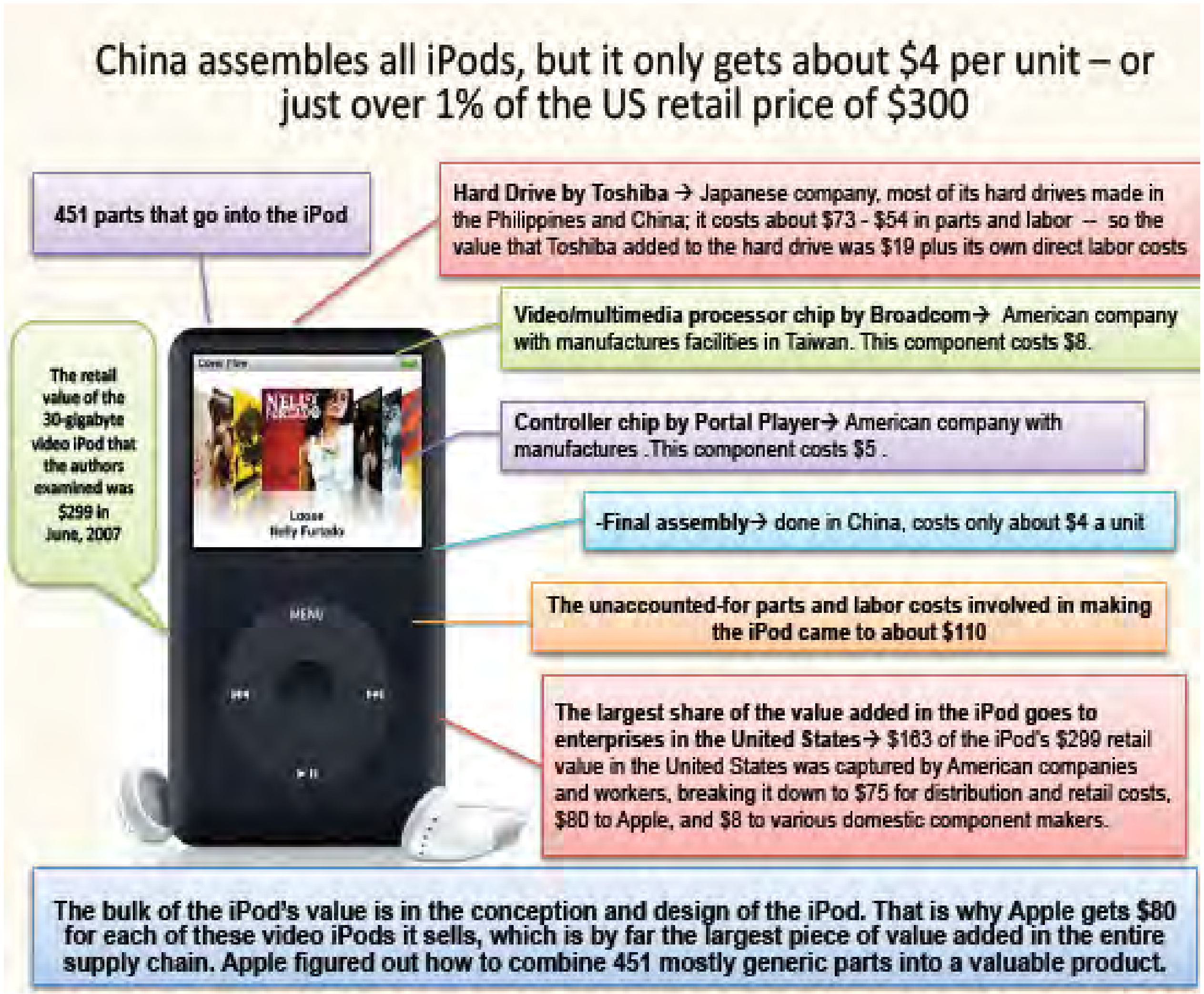
Integrated Circuits: 6%
Camera: 3%
Other parts: 11%
Licences: 4%
Value Added in Nokia's internal support functions: 31%
Nokia Operating Profit: 16%
Final Assembly: 2%
Distribution: 4%
Retailing: 11%

SERVICES ARE 50% of the value of the NOKIA phone

Source: Al- Yrkko, J et al (2011)

Embodied Services in the iPod

More than 50% of the iPod's value has nothing to do with merchandise components and all to do with services activities involved in conception, design, software development



SERVICES – 46% OF WORLD TRADE

<u>**NEW OECD-WTO DATA BASE ON TRADE IN VALUE ADDED**</u>

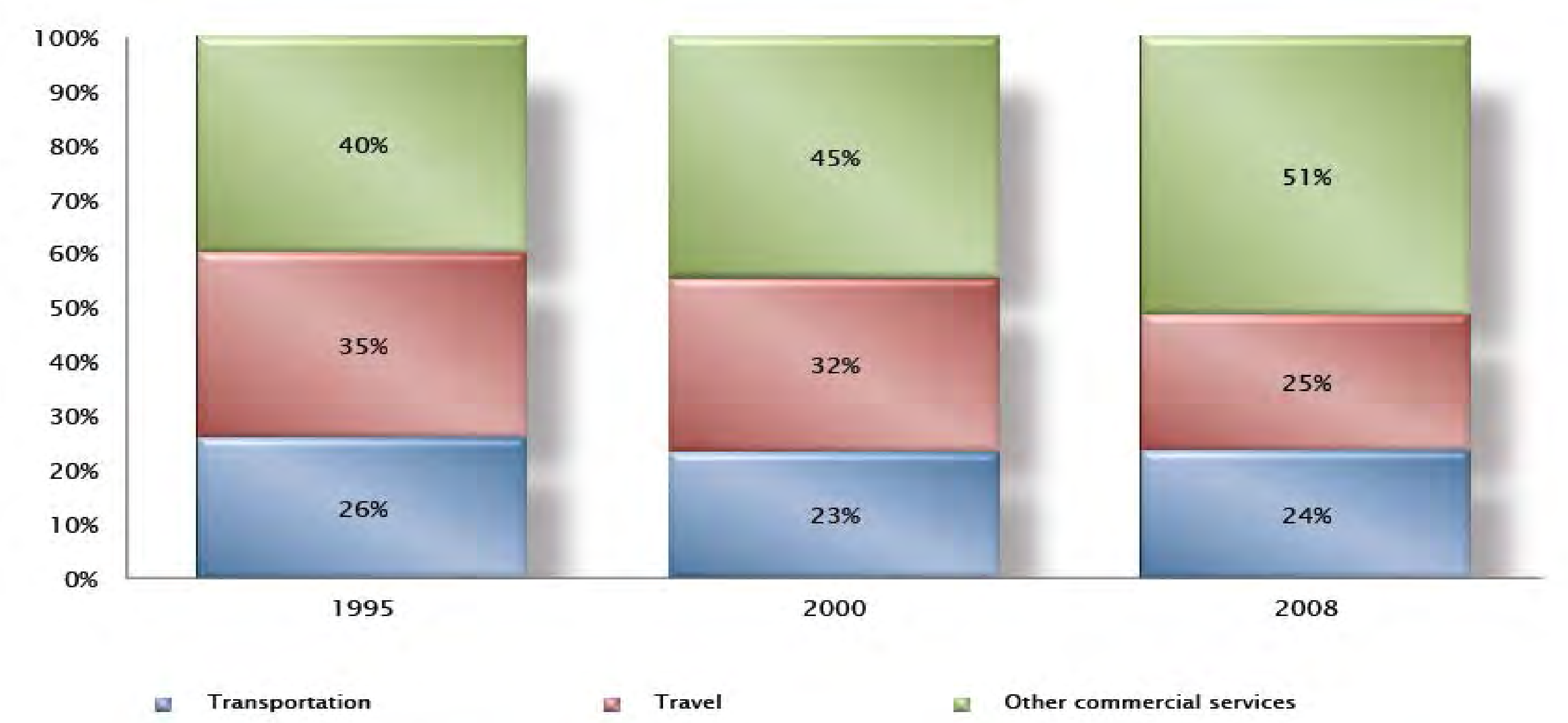
- **Shows that SERVICES represent not 20% of world trade, as formerly reported, but HALF of total trade → 50% on average for OECD countries' exports and 46% for world average (Note: this is only cross-border trade)**
- **Why? Because services add significant value to manufacturing and agricultural output**

Joint OECD-WTO Data Base for 58 economies (95% world output)

http://www.oecd.org/industry/industryandglobalisation/measuringtradeinvalue-addedanoecd-wtojointinitiative.htm

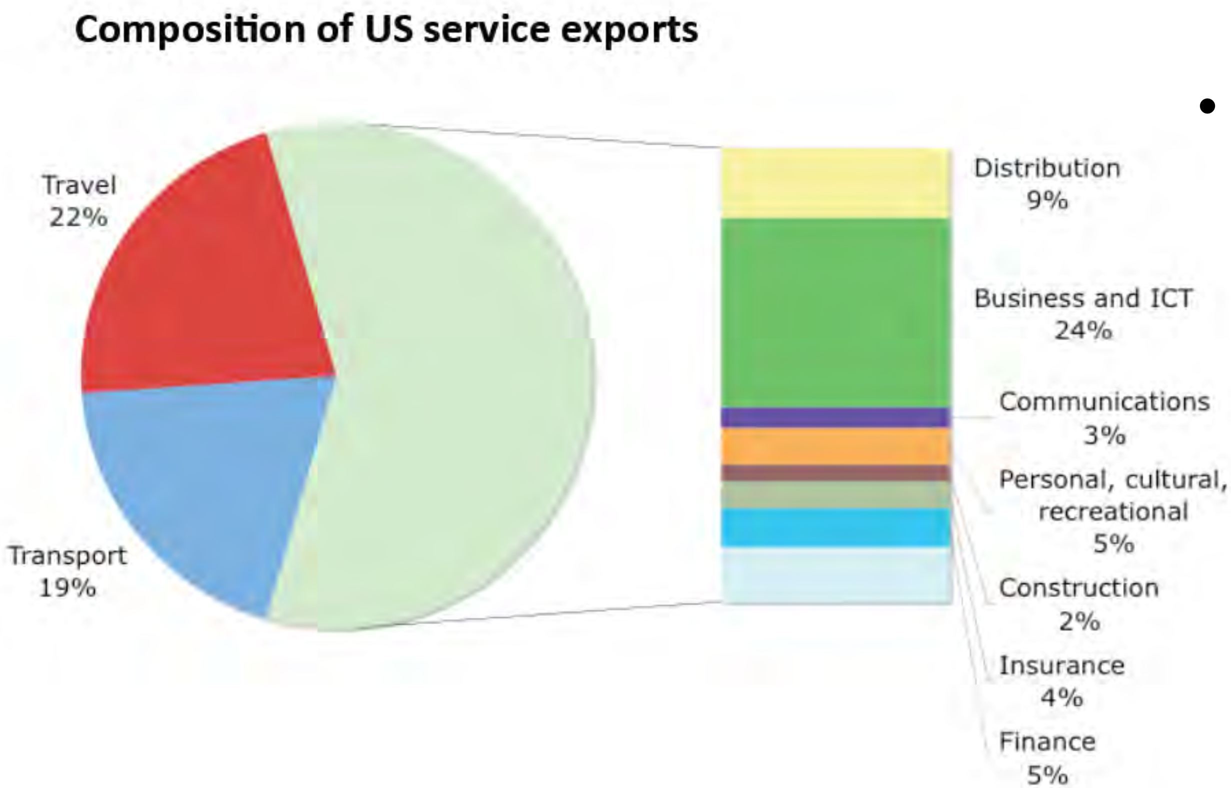
Which Services underpin Growth of Intermediate Trade & Supply Chains?

- "Other Commercial Services" have become more important than "travel" and "transport"



Source: Saez (2011)

Business and ICT Services: fastest growing component of Trade

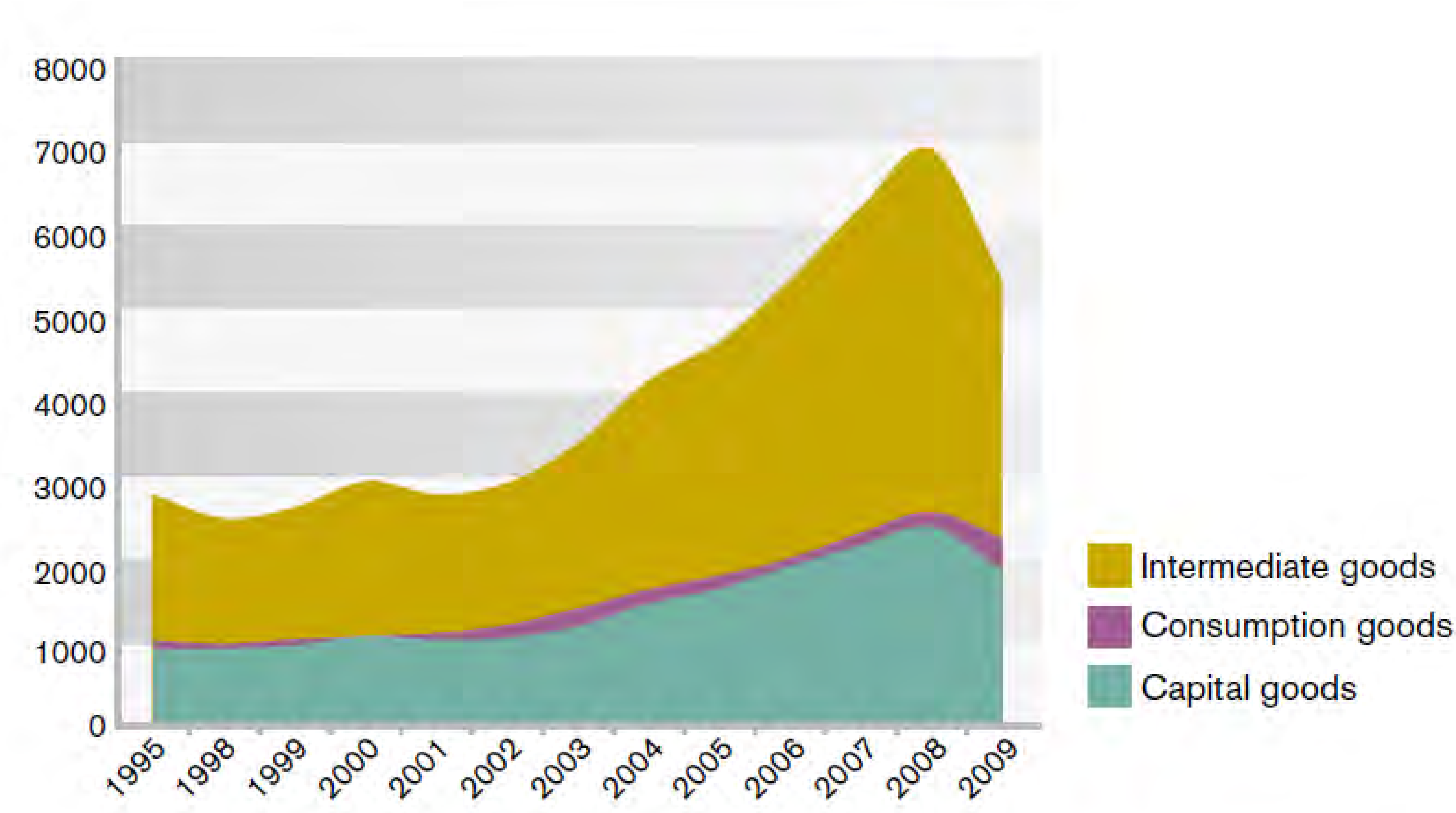


- What composes "Commercial Services"?
  - Business services, ICT
  - Communication
  - Distribution
  - Construction
  - Financial
  - Insurance
  - Personal, cultural

Source: US BEA from Francois 2011

Services are Contributing to Growth of Trade in Intermediate Goods & GVCs

Growth of World Trade in Intermediate Goods,1995-2009
(billions of USD)



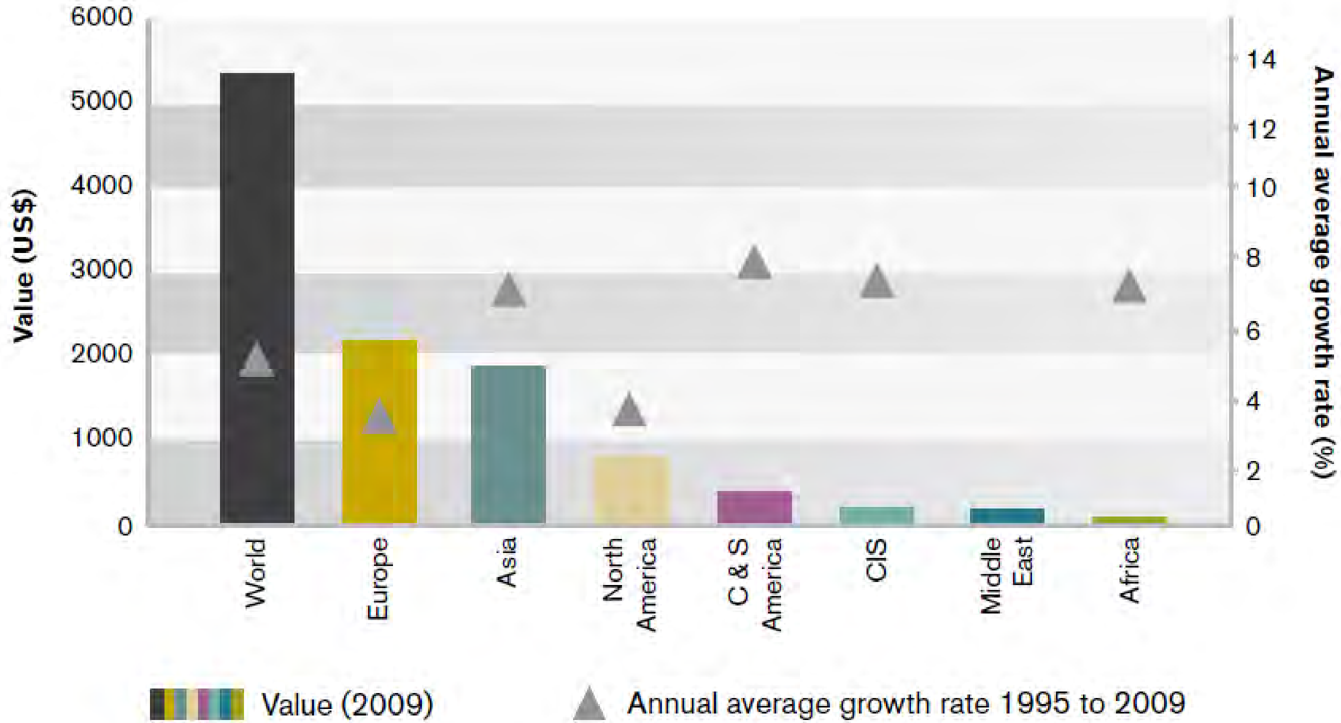
Sources: UN Comtrade Database and WTO estimates

Asia is the Most Dynamic Exporter of Commercial Services

Source: World Trade Developments (2010). WTO

- Asia's commercial services exports grew by 22% in 2010
- Commercial services exports in Asia are led by India and China

Asia is also a Dynamic Exporter of Intermediate Goods



- Asia has the second highest value intermediate goods in total exports after Europe and one of the highest growth rates

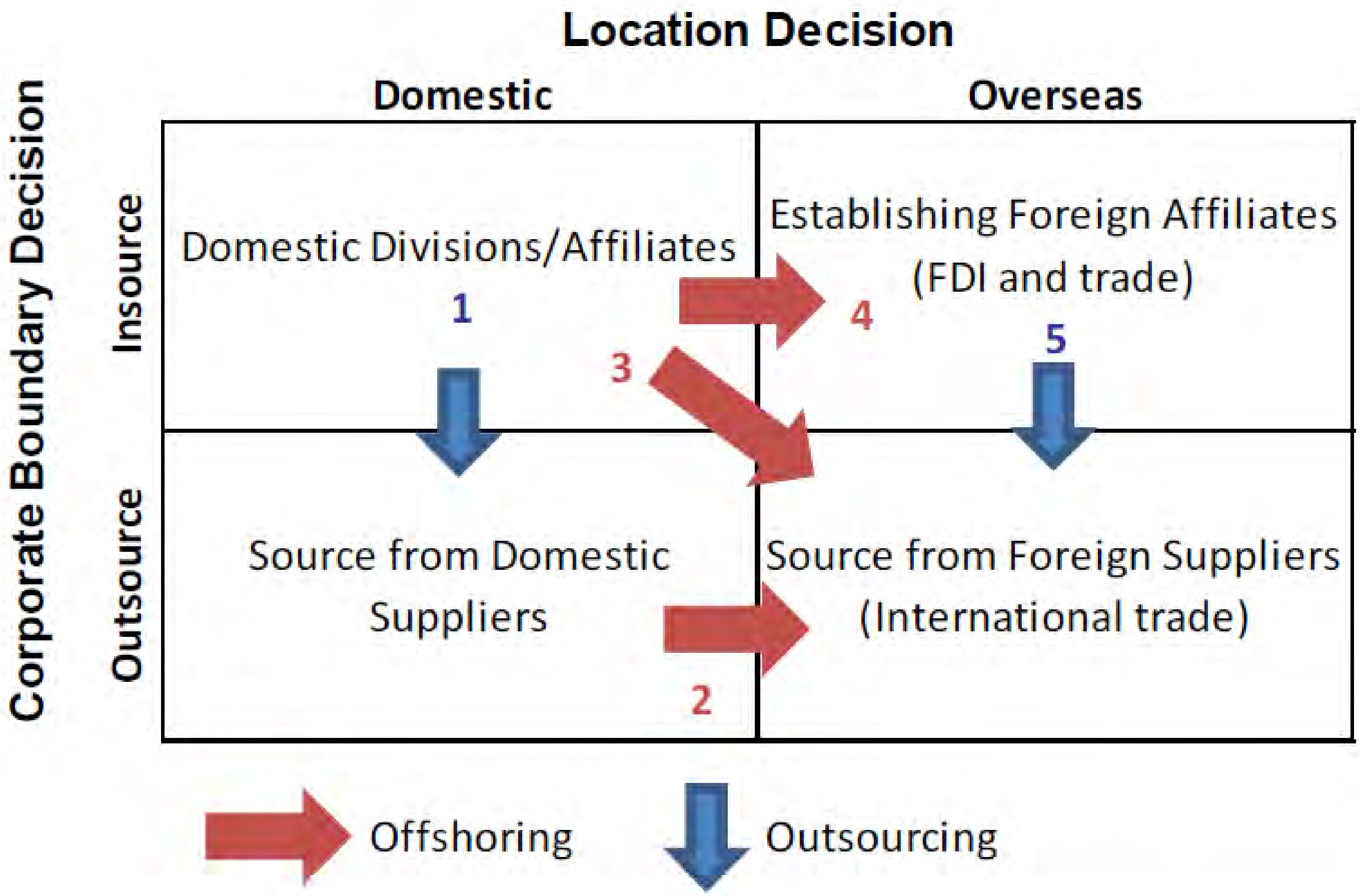
Sources: UN Comtrade Database and WTO estimates

Services 'enable' the export of intermediate goods

Services and Supply Chains: the decision to “Off-shore” Services

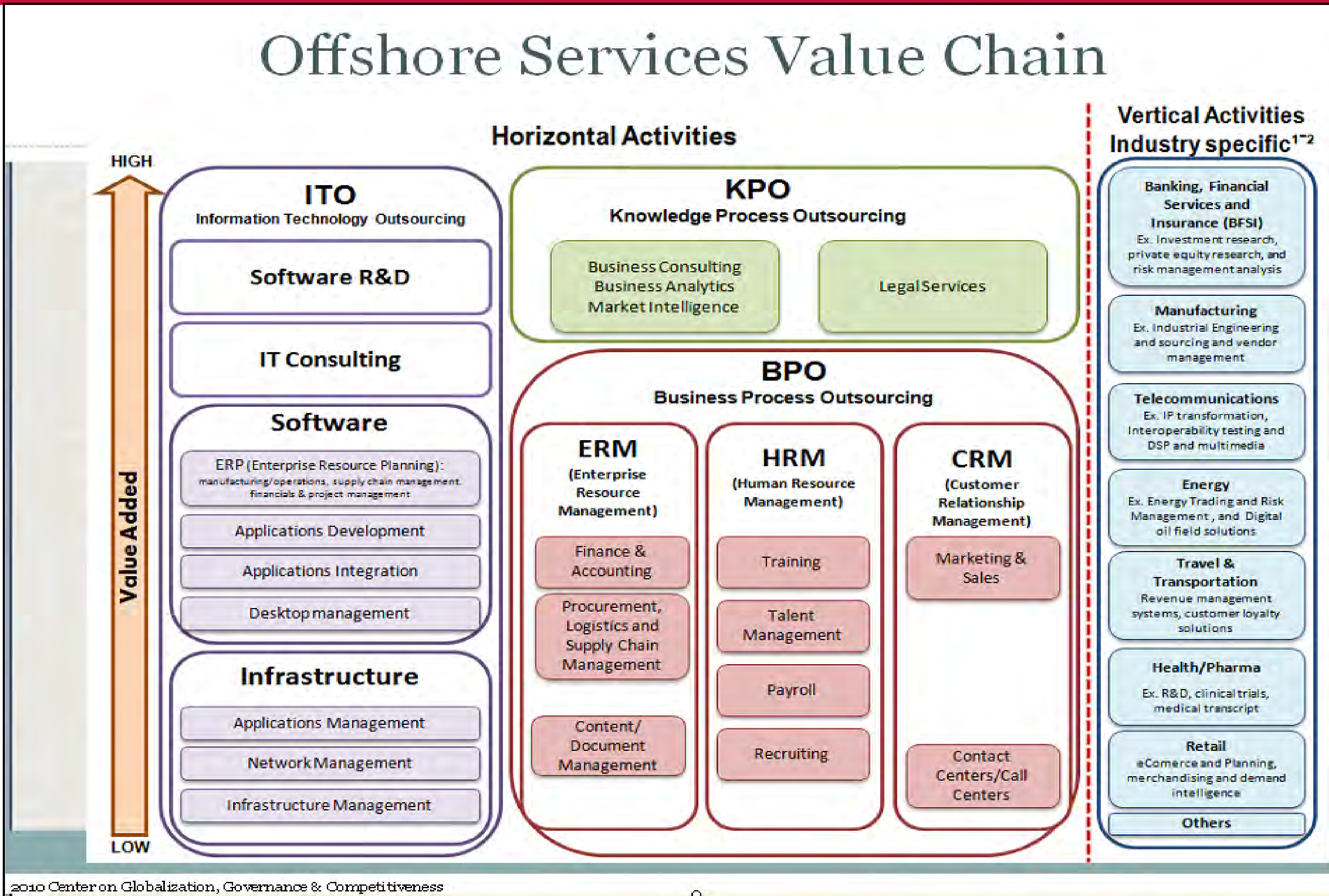
- Defragmentation of production of goods and services have open up the possibilities for enterprises to decide what to do in-house and what to do out-house
- But… what really adds value these days? → SERVICES
- So… what to outsource or offshore? → Possibilities are vast and will depend on each particular business strategy, cost structure and attractiveness of outsourcing options

Outsourcing and Off-shoring Decisions by Firms- Supply Chains



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

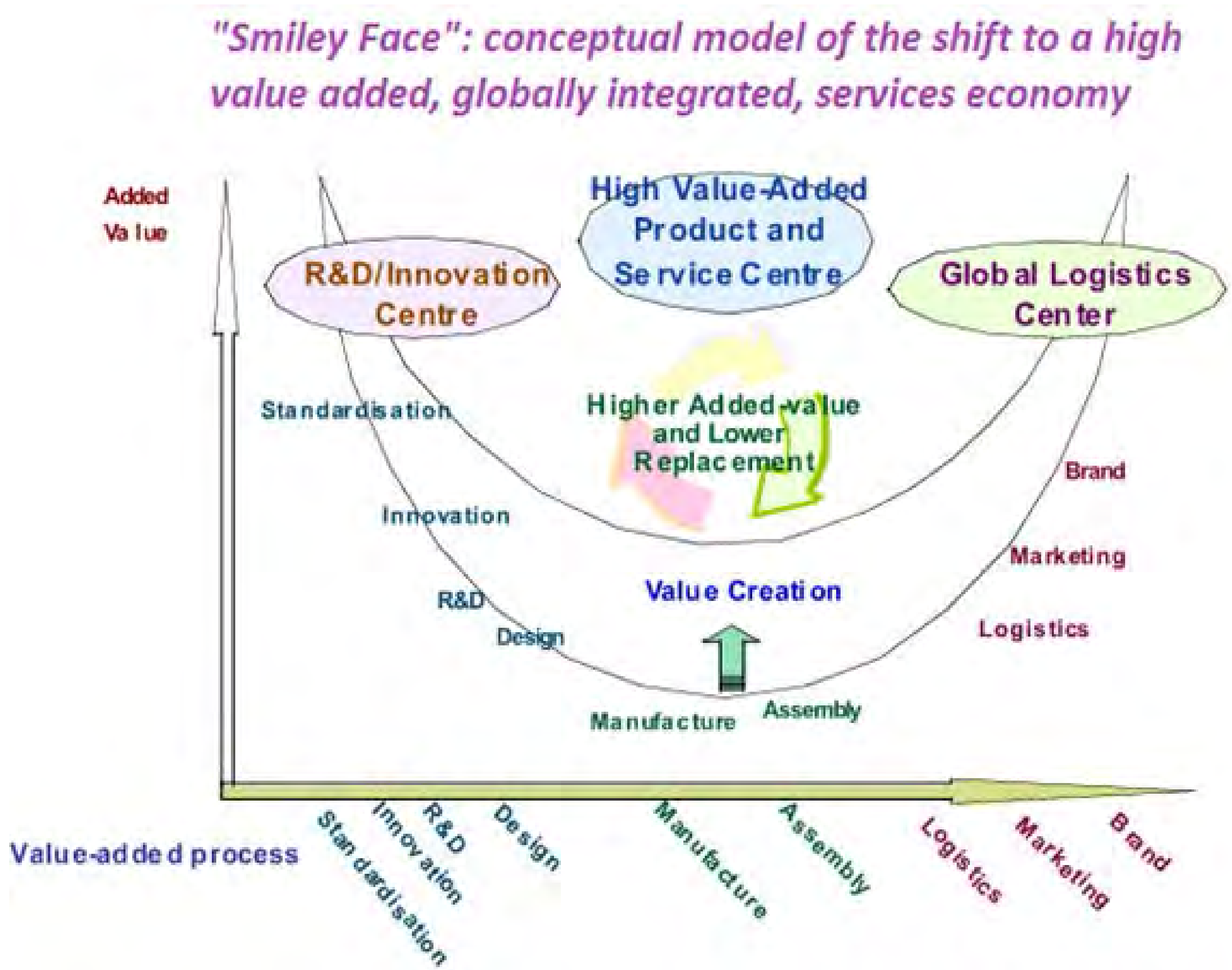
Services Off-shoring Activities going into Supply Chains



Source: Gary Gereffi (2010), “The Offshore Services Global Value Chains”.

Upgrading in Value Chains

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



Source: Business Week Online. May 16, 2005.

Capturing a Services 'Task' in a Supply Chain

- No longer necessary to "build" an entire supply chain at home; countries can **capture one 'task'** of the supply chain
- Often easier to do in services than goods – why?
- Because **services require less capital intensive investments; the greatest investment is in human capital**
- Services are also suited to smaller economies of scale and especially to **SME** operations

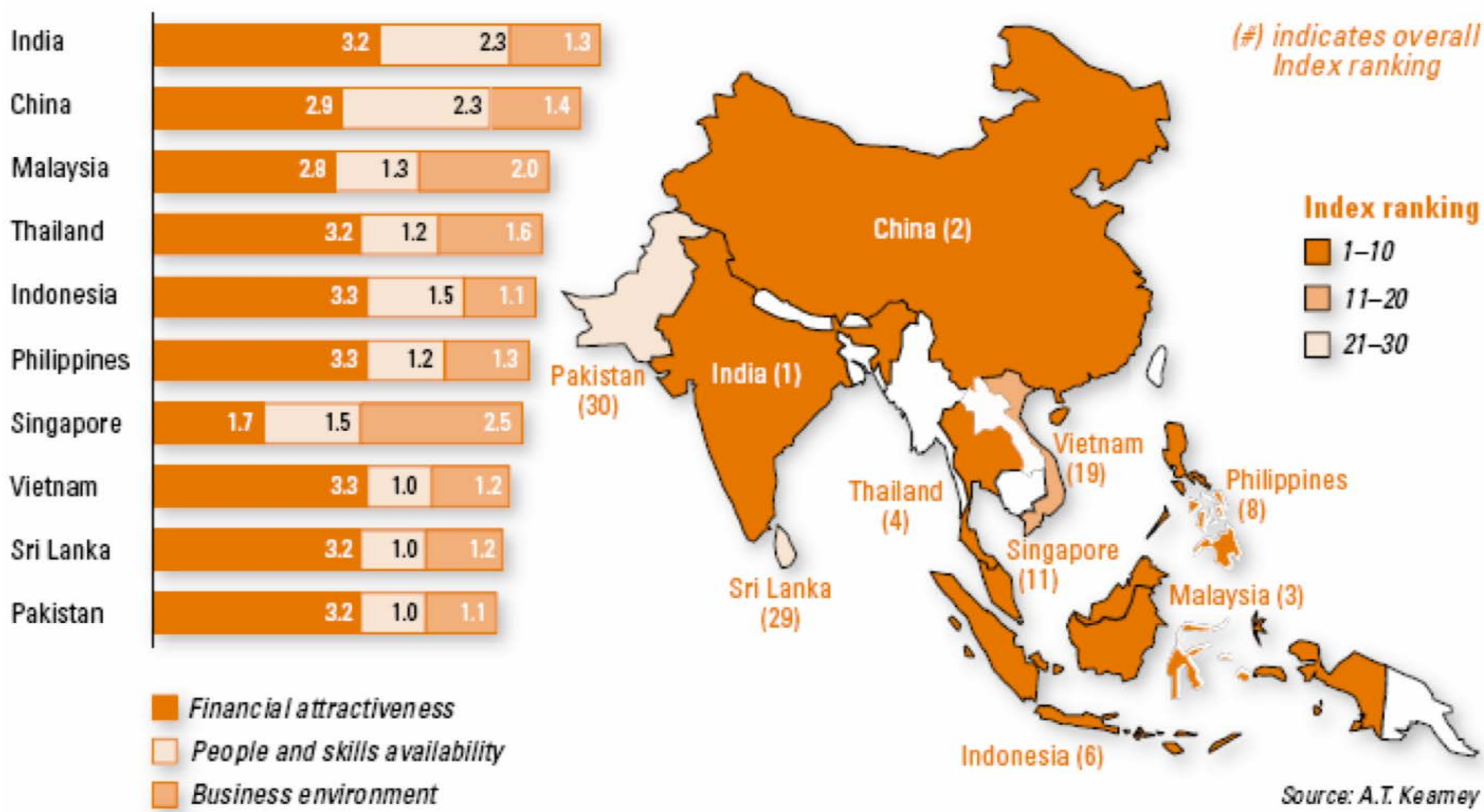
- Some commonality in the business functions involved in any supply chain, but **the factors affecting competitiveness in supply chains for goods and for services are different**

Factors affecting Competitiveness in Services for Supply Chains

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: Mainstreaming Services

THE GOVERNMENT CAN DO A LOT TO SHAPE SERVICES EFFICIENCY

Attractiveness: Asian Destinations for Services Outsourcing / Off-shoring



Source: Chanda and Pasadilla, 2011

The AT Kearney Global Services Location Index 2011

Rank	Country	Financial attractiveness	People skills and availability	Business environment	Total score
1	India	3.11	2.76	1.14	7.01
2	China	2.62	2.55	1.31	6.49
3	Malaysia	2.78	1.38	1.83	5.99
4	Egypt	3.10	1.36	1.35	5.81
5	Indonesia	3.24	1.53	1.01	5.78
6	Mexico	2.68	1.60	1.44	5.72
7	Thailand	3.05	1.38	1.29	5.72
8	Vietnam	3.27	1.19	1.24	5.69
9	Philippines	3.18	1.31	1.16	5.65
10	Chile	2.44	1.27	1.82	5.52
11	Estonia	2.31	0.95	2.24	5.51
12	Brazil	2.02	2.07	1.38	5.48
13	Latvia	2.56	0.93	1.96	5.46
14	Lithuania	2.48	0.93	2.02	5.43
15	United Arab Emirates	2.41	0.94	2.05	5.41
16	United Kingdom	0.91	2.26	2.23	5.41
17	Bulgaria	2.82	0.88	1.67	5.37
18	United States	0.45	2.88	2.01	5.35
19	Costa Rica	2.84	0.94	1.56	5.34
20	Russia	2.48	1.79	1.07	5.34
21	Sri Lanka	3.20	0.95	1.11	5.26
22	Jordan	2.97	0.77	1.49	5.23
23	Tunisia	3.05	0.81	1.37	5.23
24	Poland	2.14	1.27	1.81	5.23
25	Romania	2.54	1.03	1.65	5.21
26	Germany	0.76	2.17	2.27	5.20
27	Ghana	3.21	0.69	1.28	5.18
28	Pakistan	3.23	1.16	0.76	5.15
29	Senegal	3.23	0.78	1.11	5.12
30	Argentina	2.45	1.58	1.09	5.12

Note: 8 of the top 10 locations for services off-shoring are in APEC:

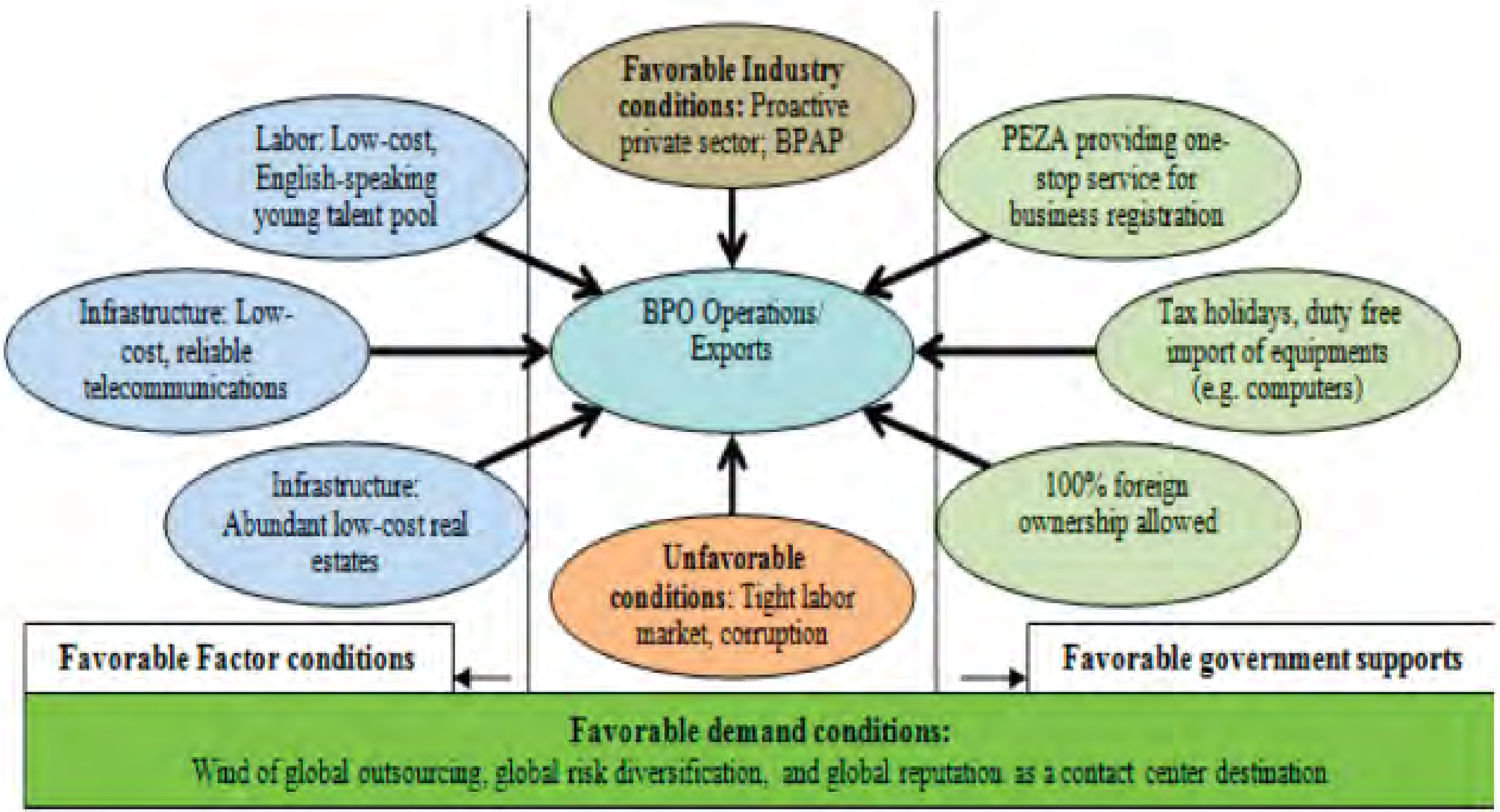
- China
- Malaysia
- Indonesia
- Mexico
- Thailand
- Vietnam
- Philippine
- Chile

Source: The AT Kearney Global Services Location Index 2011

Successful Services Exporters-GVCs The PHILIPPINES & BPO Services

- **PHILIPPINES** largest BPO Exporter in World
  - Philippines is now the largest exporter of BPO services in the world, having surpassed India; BPO exports grew by 46% annually 2004 to 2008
  - BPO Exports estimated to have earned US$ 7.3 billion in revenue and provided 442,164 jobs
- Reasons behind success:
  - Low cost, educated labor
  - Low cost, reliable telecommunications
  - Favorable factor conditions combined with favorable government support programs

Factors accounting for Philippines' success



Source: Yi (2011)

Successful Services Exporters-GVCs
SINGAPORE & LOGISTICS SERVICES

- **Singapore → top performer in Logistics Performance Index (LPI) in 2012**

Logistics Industry in Singapore → is a knowledge-intensive industry that contributes 9.4% of GDP and employs over 180,000 workers

Source: Logistics Performance Index. WB (2012)

Successful Services Exporters-GVCs
CHILE & ITC SERVICES EXPORTS

- 60% of all Chile's service exports concentrated in three areas:

1) **KPO** (33%) - engineering services and financial services;
2) **ITO** (20%) of software applications
3) **BPO** (18%)

Chile is focusing on high value services offshoring of engineering services and application software

- Exports of professional and IT services grew from US $188 million in 2000 to US $707 million in 2008 (or from 31% to 44% of services exports)
- Reasons behind success:
  - Liberalization and deregulation of the telecoms sector as of 1994
  - highly educated work force

Successful Services Exporters-GVCs
HONG KONG CHINA & OFF-SHORING SERVICES

- **HONG KONG CHINA** has developed many successful off-shoring services to enable GVCs
  - Services such as finance, logistics, maritime services, and trade related services of all kinds have developed largely in response to the need to enhance the efficiency of the dynamic manufacturing base in the Pearl River delta
  - These services are firmly embedded in goods exports from the region and support operation of GVCs
  - Hong Kong is #1 services economy of APEC
  - Made possible by liberal trade environment

Successful Services Exporters-GVC

MALAYSIA & MEDICAL TOURISM

Malaysia: Services Outlook

- In 2009, this services sector contributed **56% of GDP** and **59% of total employment**, including employment in government services

- The Malaysian government believes that the service sector is potentially an engine of economic growth and aims to increase its contribution to GDP from 56% (2009) to 67% - the contribution observed in developed countries - by 2020

- Second and Third Industrial Master Plans, addressing, respectively, the service sector enhancing manufacturing, and selected services such as health and education.

Source: Exporting Services. A Developing Country Perspective. WB (2012)

Successful Services Exporters-GVC
MALAYSIA & MEDICAL TOURISM

- ❑ Procedures in demand by medical tourists are procedures for coronary heart disease, plastic surgery, hip and knee implants, dental implants, and high-end diagnostic services → not specific niches identified
- ❑ Most medical services from Malaysia are exported within the ASEAN region (80% in 2007), although Malaysia also attracts European and Japanese patients
- ❑ Within the ASEAN region, Indonesia accounts for more than 95% of patients visiting Malaysia for treatment.

Government support to Services Sector → aims to increase its contribution to GDP from 56% (2009) to 67% by 2020

Country	Share in Global Medical Tourism Market (%)	Share in Global Medical Tourism Market (US$ million)
Thailand	3,75%	US$750 million
Singapore	2.13%	US$425 million
Philippines	0.63%	US$125 million
Malaysia	0.27%	US$54 million

Source: Exporting Services. A Developing Country Perspective. WB (2012)

Services and Supply Chains: Trade Policy Implications

- With trade in intermediates and services -**cost of protectionism is higher than is generally understood, so more important than ever to maintain open markets for cross border and FDI**
- **Operation of supply chains in goods shifts focus on trade barriers from tariffs to logistics**: recent WEF-World Bank report showed that improving logistics halfway to world best practice could increase world GDP 6 X more than removing tariffs
- Among the logistics barriers, **efficient services play a key role, especially telecoms and transport**

APEC Economies Have Tremendous Potential in Services

- More efficient services are basis for sustained economic growth and participation in GVCs
- Potential of APEC economies as off-shoring services locations is huge
- Services are key to improving connectivity in both infrastructure and people

APEC – TIME FOR A FOCUSED POLICY ON SERVICES AND AN APEC-WIDE SERVICES INITIATIVE?

THANK YOU

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