

Roles of Services in Global Value Chains: a review

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Outline

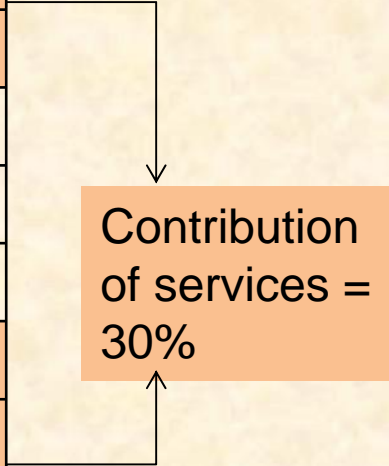
- Roles of services in GVCs
 - Enabling GVCs in goods
 - Creating GVCs of its own
- Issues and challenges for analytical work on services GVCs
- Current architecture: what do we know so far?
- Policy implications

Roles of services in GVCs

Role 1 “Enablers” of GVCs in goods

Ex1. Automotive GVCs

Value added of a typical US car (services are highlighted)

1. R&D (Japan)	17.5%	
2. Design	about 3%	
3. Assembly (ROK)	30%	
4. Assembly (US)	37%	
5. Supply of minor parts (TW)	4%	
6. Advertising & marketing (UK)	2.5%	
7. Data processing (Ireland & Barbados)	2%	
8. Transport and insurance	about 4%	

Role 1 (cont.)

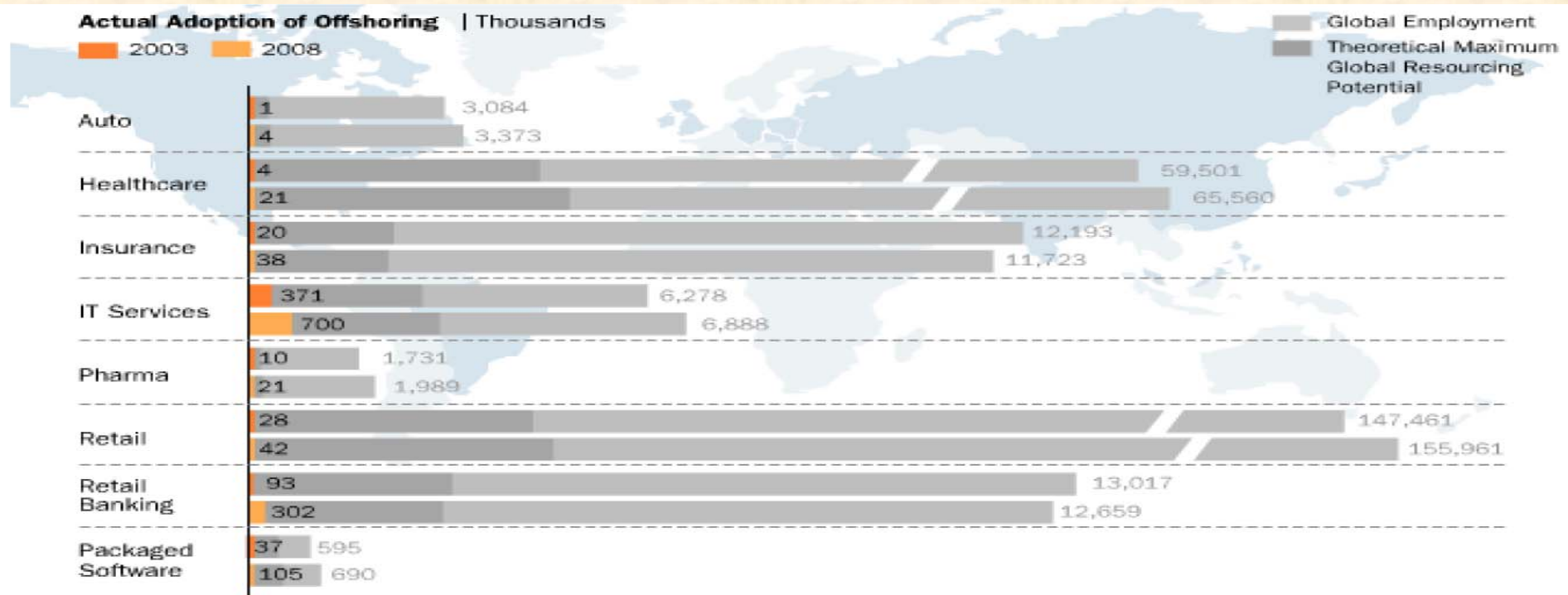
Ex2. Texas Instrument

GVCs of a high-speed telecom. chip (TCM9055)
(services are highlighted)

1. IT experts	Design quality improvement strategies (Ericsson, Sweden)
2. Designers	Create a blueprint for the chip (France)
3. Produce prototype	(Japan)
4. Chip production	(worldwide)
5. Engineering services	Fixing problems remotely through telecom. system (TW)
6. Packaging process	Southeast Asia
7. Chips implanted	US, Mexico, Australia
8. Transport and insurance	(worldwide)
9. Distribution	(worldwide)

Role 2: Creating GVCs in services

- Services are disaggregated and traded as separate ‘tasks’, thus creating value chains
- “Intermediates” represent 73% of trade in services , while 56% of trade in goods for OECD (Miroudot et. al., 2009).



Source: (McKinsey Global Institute, 2009)

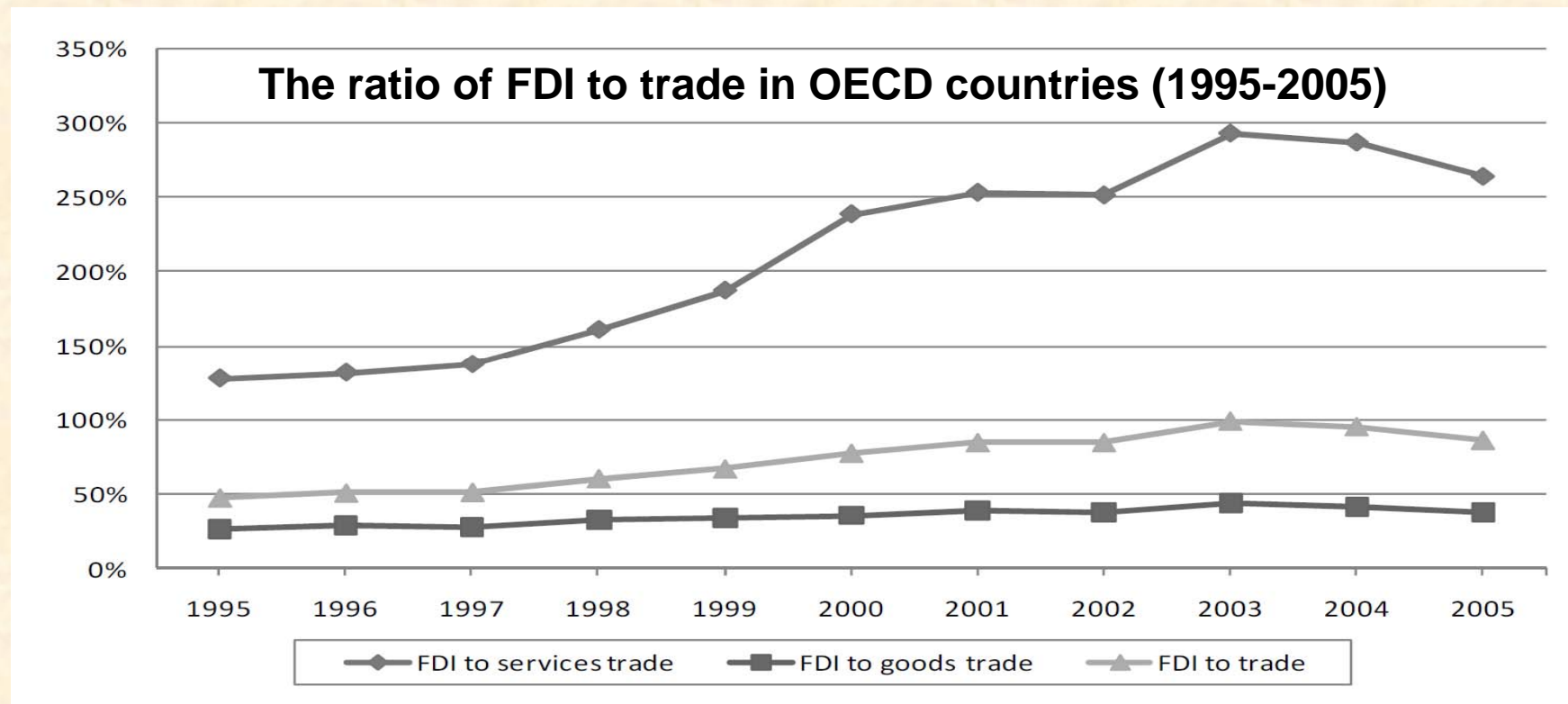
* Adoption of offshoring assesses the current and projected level of offshoring to low-wage countries within a sector

* *Theoretical Maximum Global Resourcing Potential* describes the percentage of a sector or function may be performed remotely.

Data issues and challenges

Issues and challenges

- Sizes of services GVCs tend to be underestimated.
 - A large part of transactions in services GVCs is under mode 3 (commercial presence, ie. FDI) which is not included in services trade data.

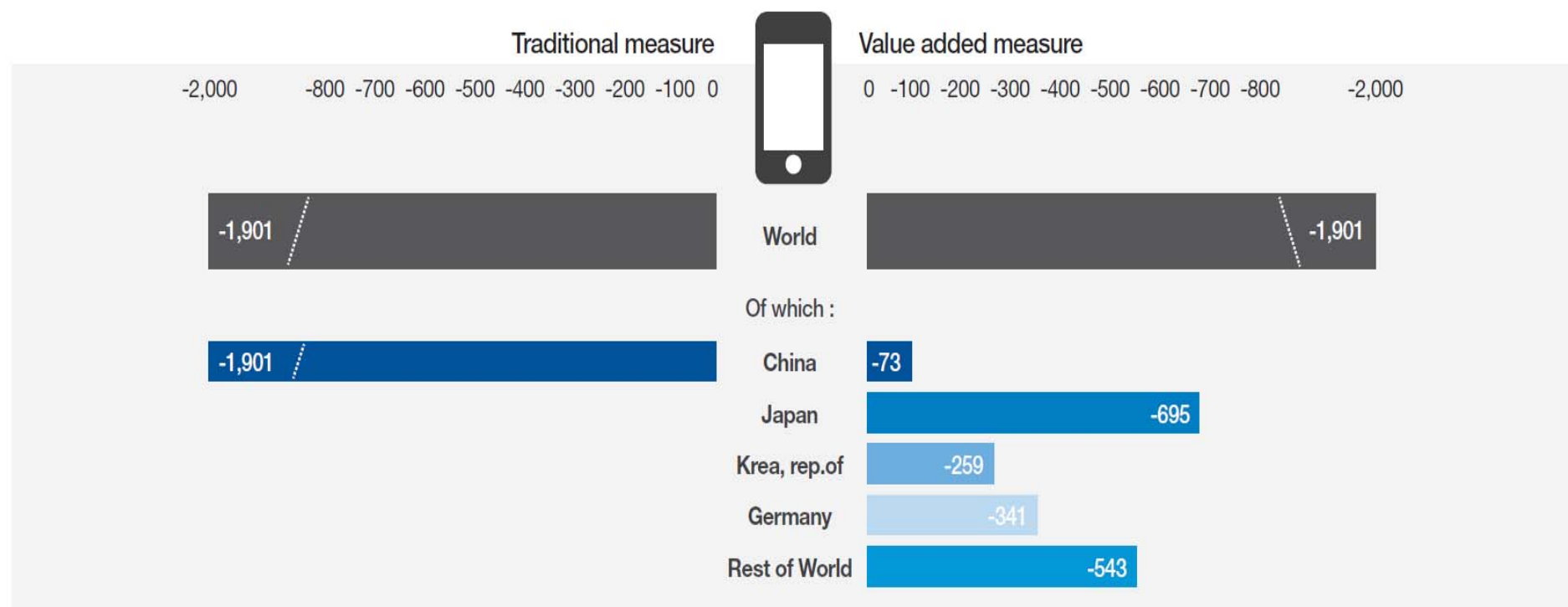


Source: Miroudot et.al. (2009)

Issues and challenges

- The need for measuring goods and services on a value added basis
 - What is the contribution of services to final goods?
 - Value-added measures may give a totally different picture of world trade (e.g. i-phone case)

2009 US trade balance in iPhone (in millions of US\$)



Source: Meng and miroudot (2011).

(cont.)

- Measuring services on a value added basis is a complex task because of lack of data.
 - Attempts have been made to categorize services by value added, based on intensity of human capital.
 - e.g. Gereffi and Fenandex-Stark (various years)

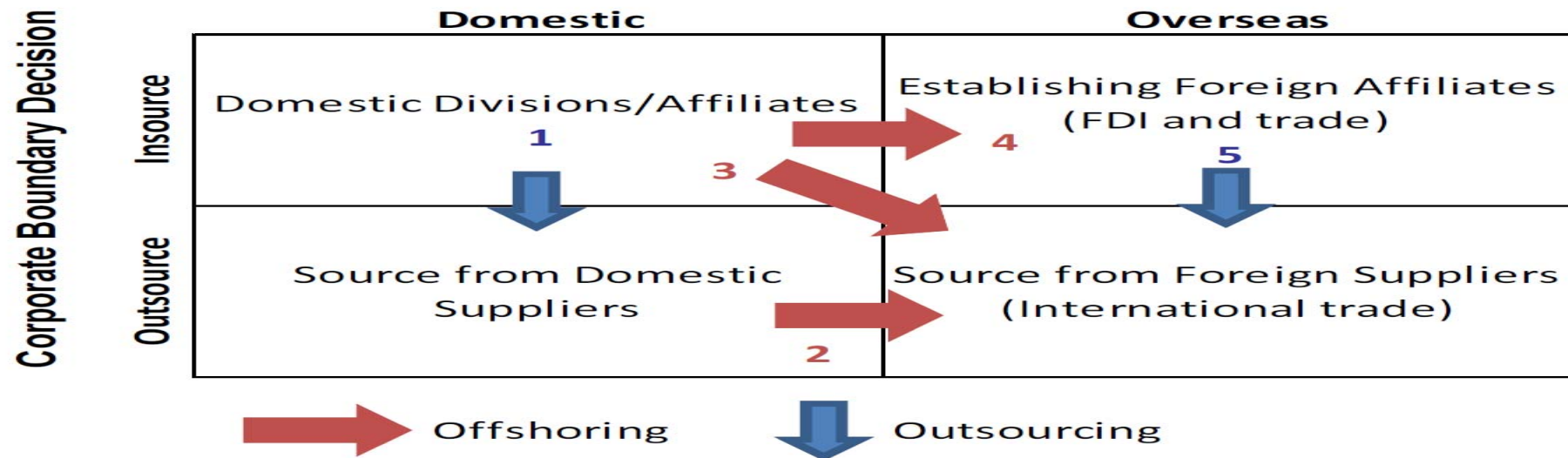
Current architecture of services GVCs

What do we know so far?

1) It is growing at a fast pace.

- The enabling services in GVCs, in general, fall into the “other commercial services” category.
- The “other commercial services” include a number of varieties such as communications, insurance, finance, computer and IT services, and other business services
- The “other commercial services” increased its share from 40 to 53% of services trade from 1995 to 2010.
- ‘Business and ICT services’ was the fastest growing component of world trade over the past decade.

2) Business models of services GVCs are quite similar to goods



Source: (Sako, 2005)

Arrow 1: local outsourcing. e.g. Embrarer (Brazil)- CPM Braxis (Brazil)

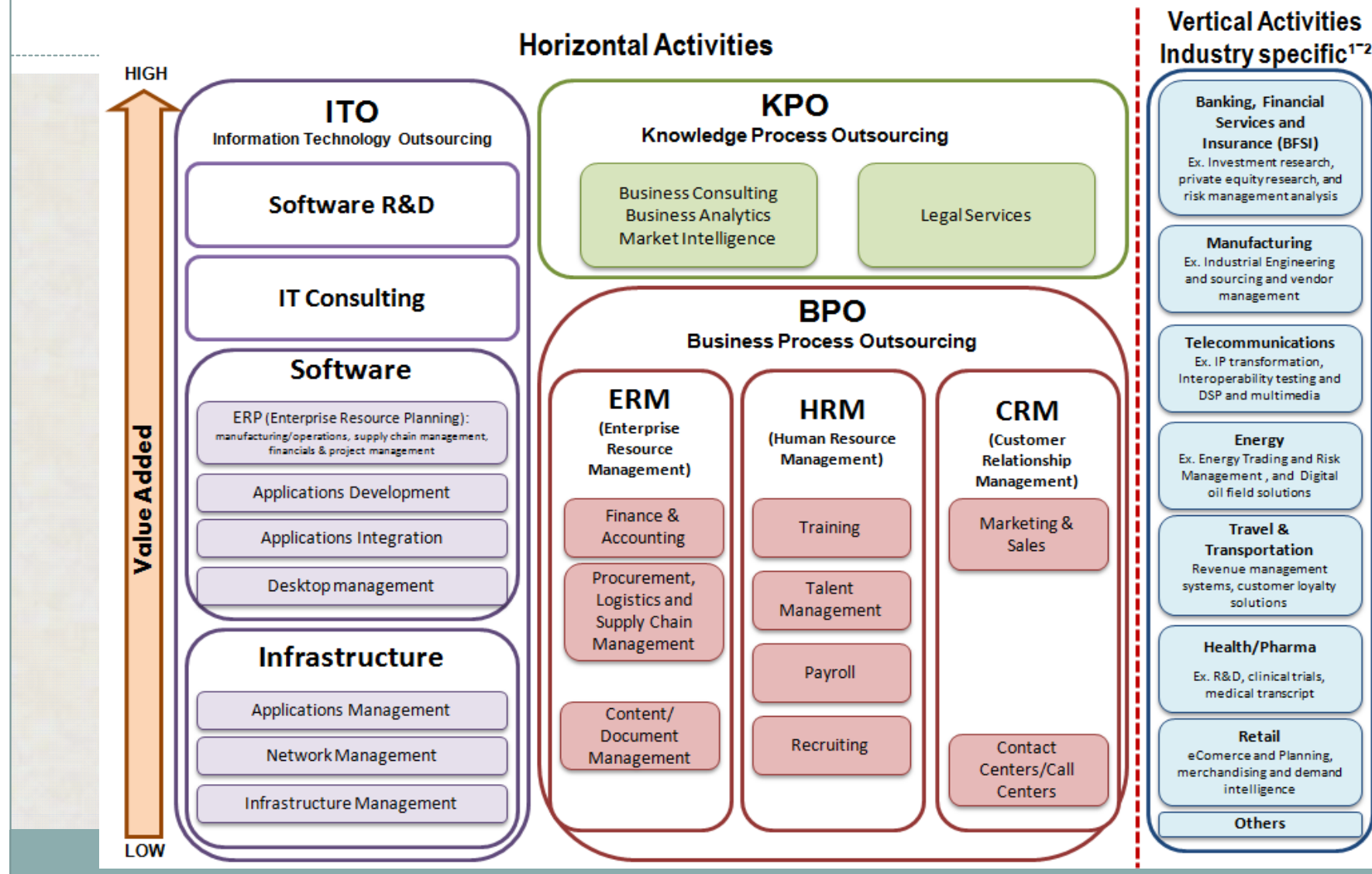
Arrow 3: Offshore outsourcing. e.g. British telecom (UK) – Tech Mahindra (India).

(Arrow 2 is indirect offshore outsourcing)

Arrow 4: “Captive” offshoring (FDI). e.g. BHP Billiton (Australia) established a service centre in Malaysia

Arrow 5: Shifting from FDI to offshore outsourcing. e.g. BHP Billiton (Australia) established a service centre in Malaysia

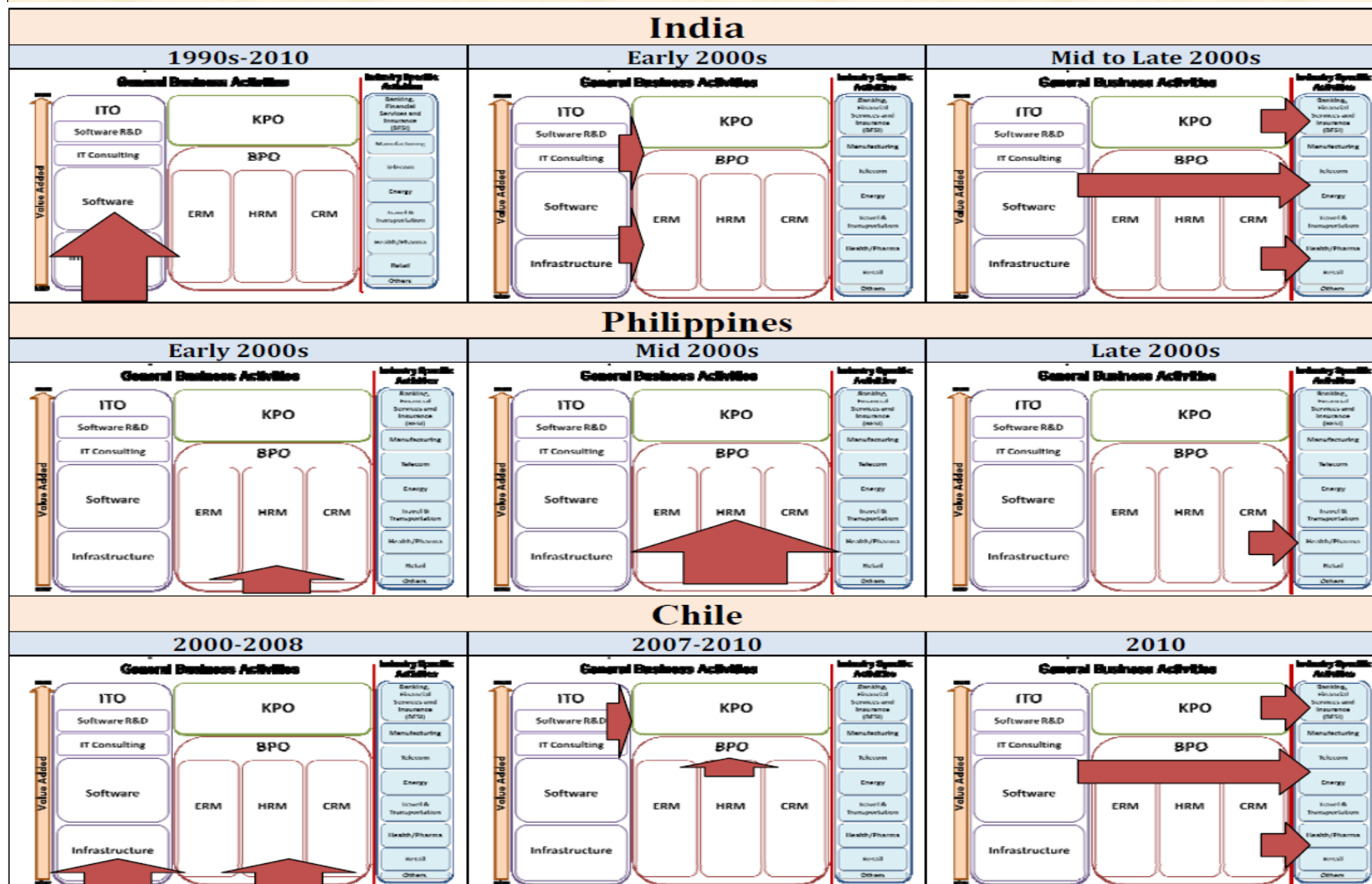
3) Offshore Services Value Chain



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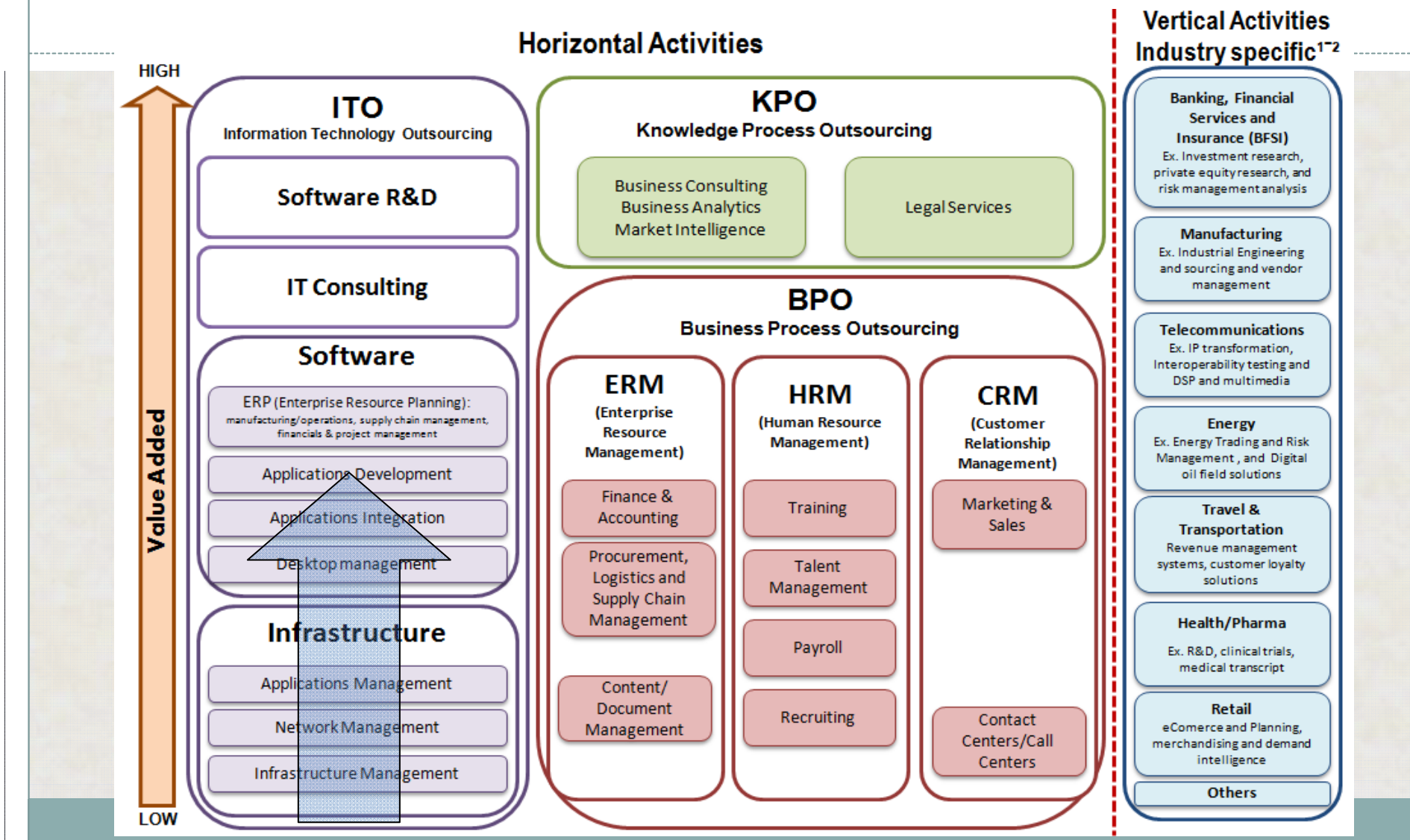
Source: Gereffi (2011), *Global Value Chain Analysis and its Implications for Measuring Global Trade*.

A highly dynamic sector



Source: Gereffi (2011), Global Value Chain Analysis: a primer.

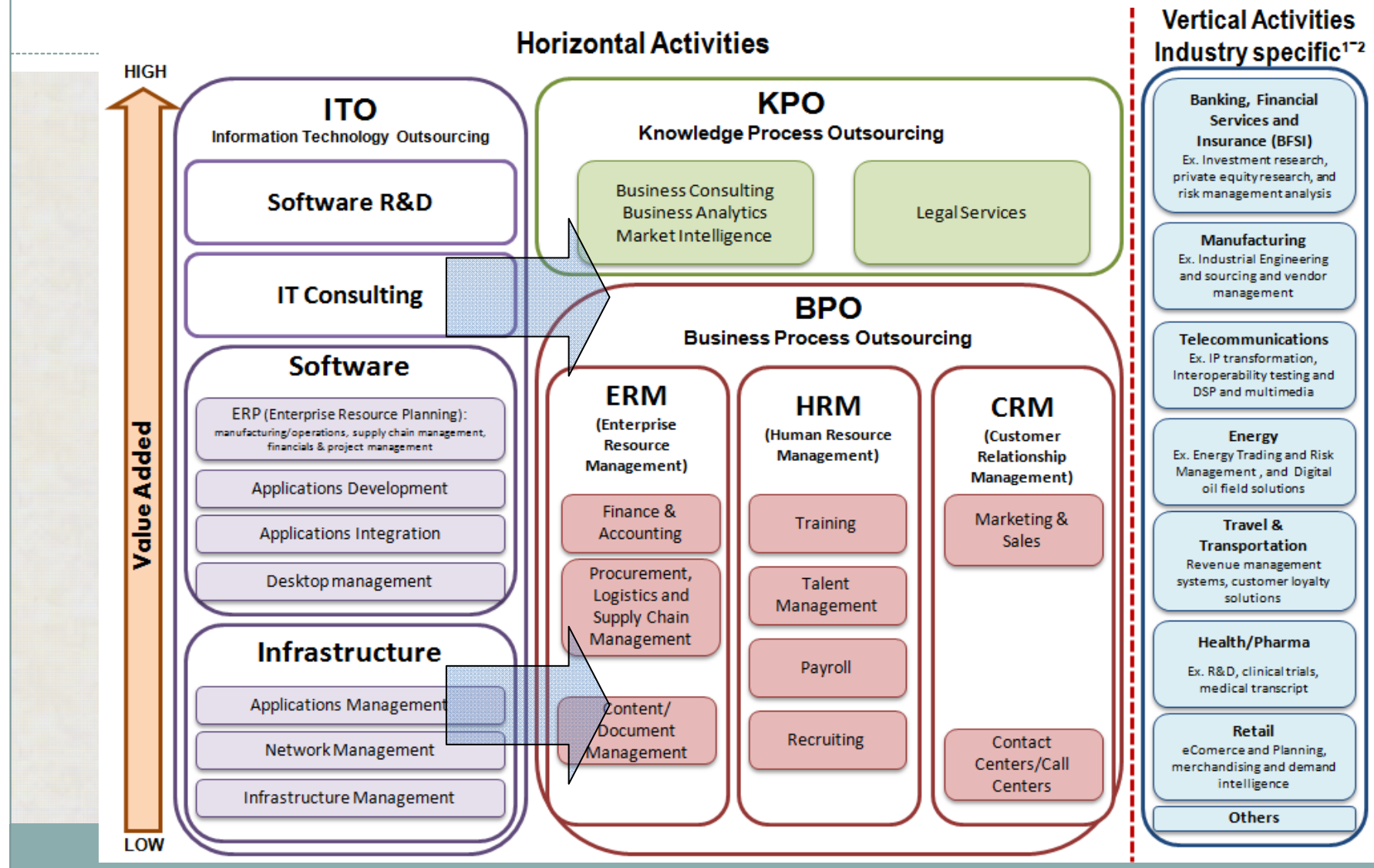
India the 1990s -2010



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Source: Gereffi (2011), *Global Value Chain Analysis and its Implications for Measuring Global Trade*.

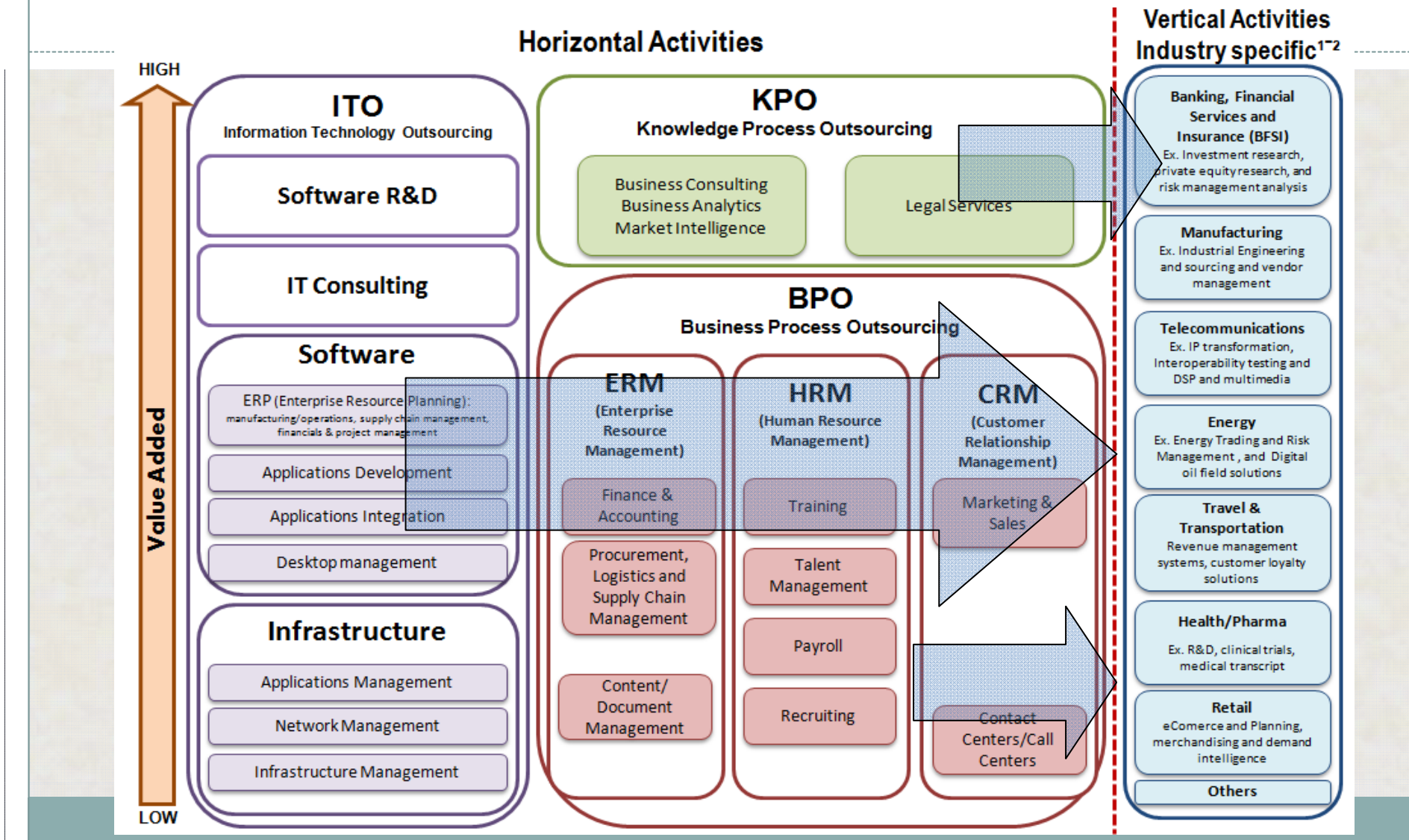
India in the early 2000s



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Source: Gereffi (2011), *Global Value Chain Analysis and its Implications for Measuring Global Trade*.

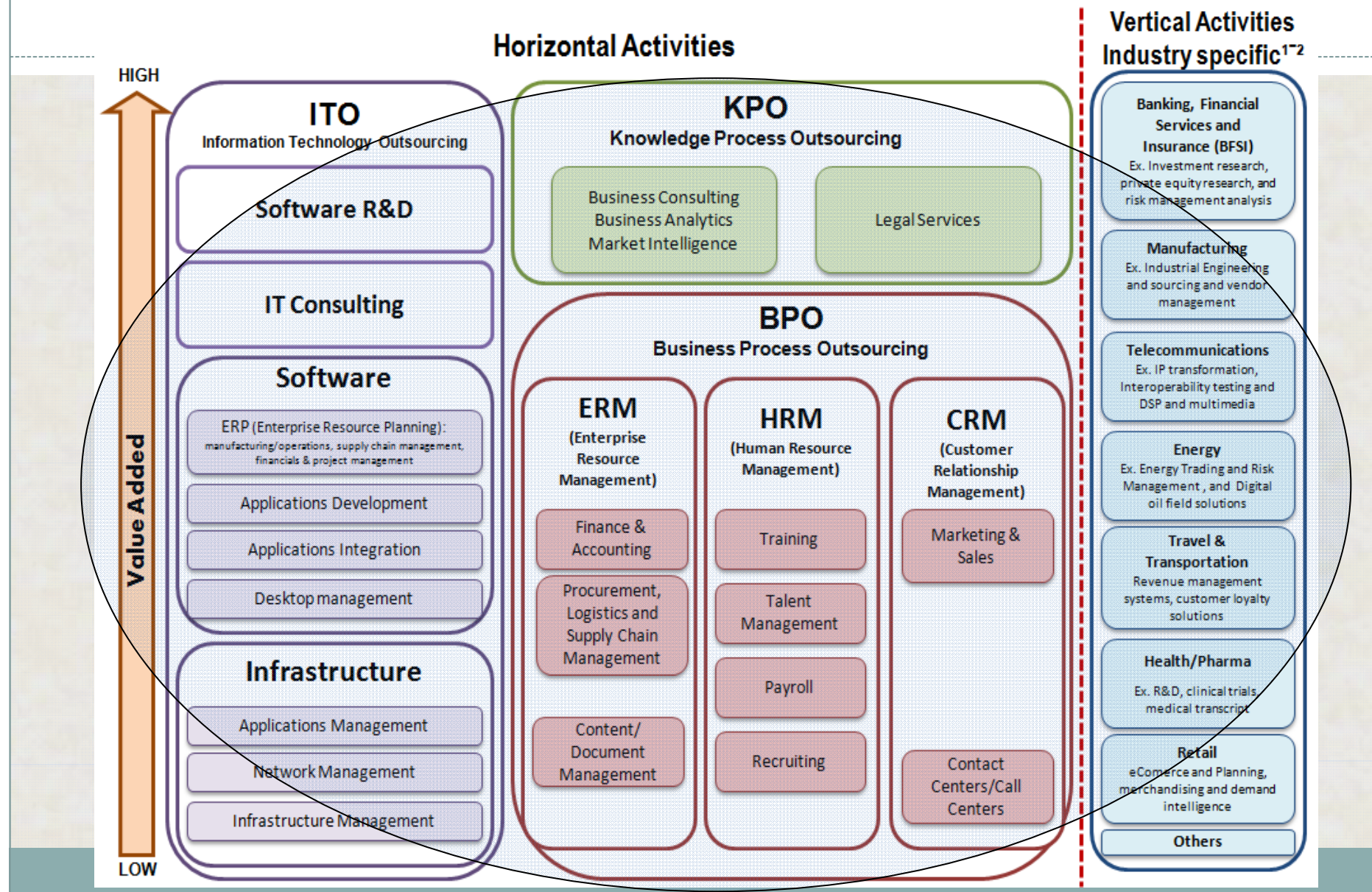
India from the mid 2000s



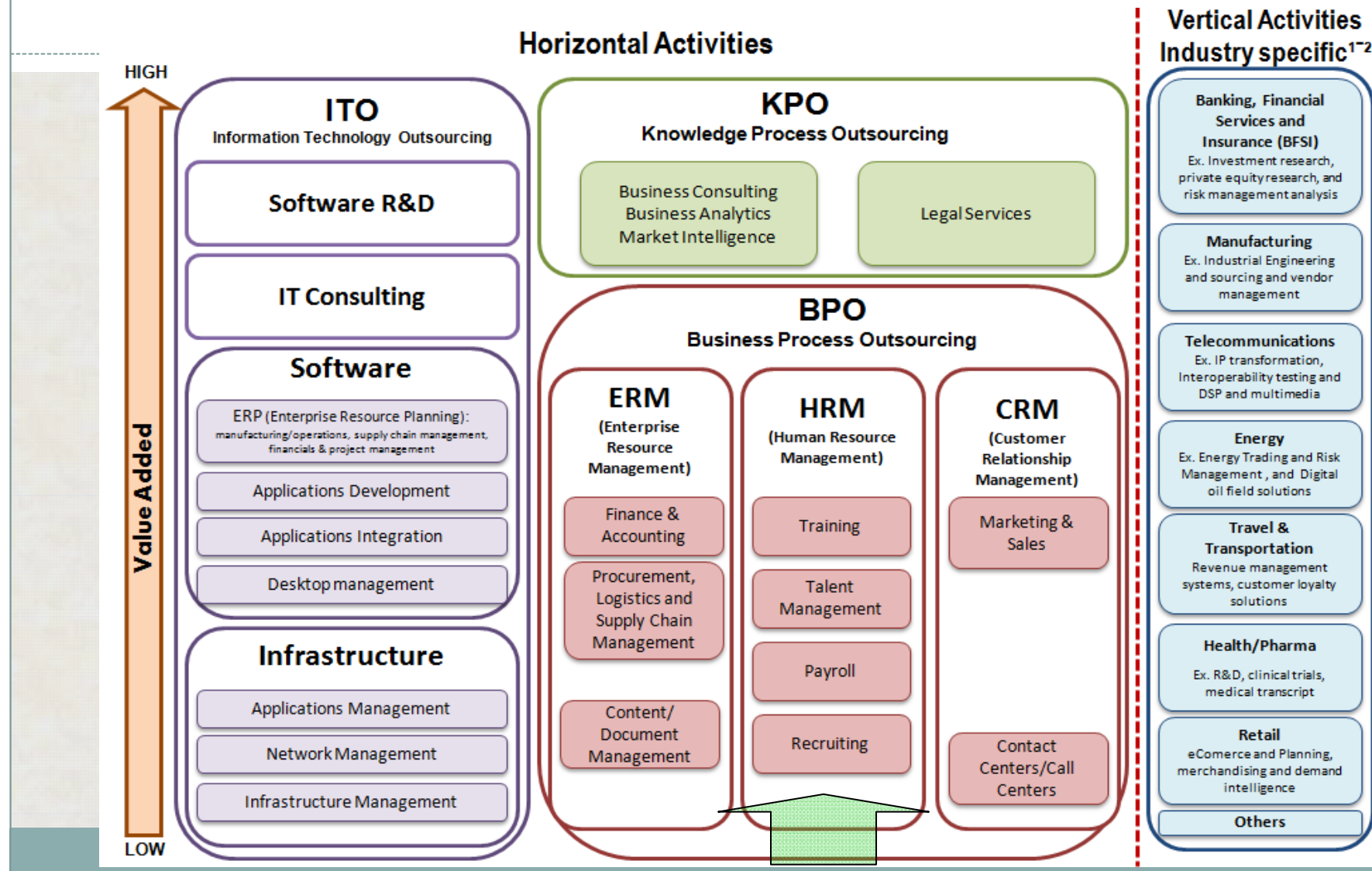
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Source: Gereffi (2011), *Global Value Chain Analysis and its Implications for Measuring Global Trade*.

Offshore Services Value Chain : India



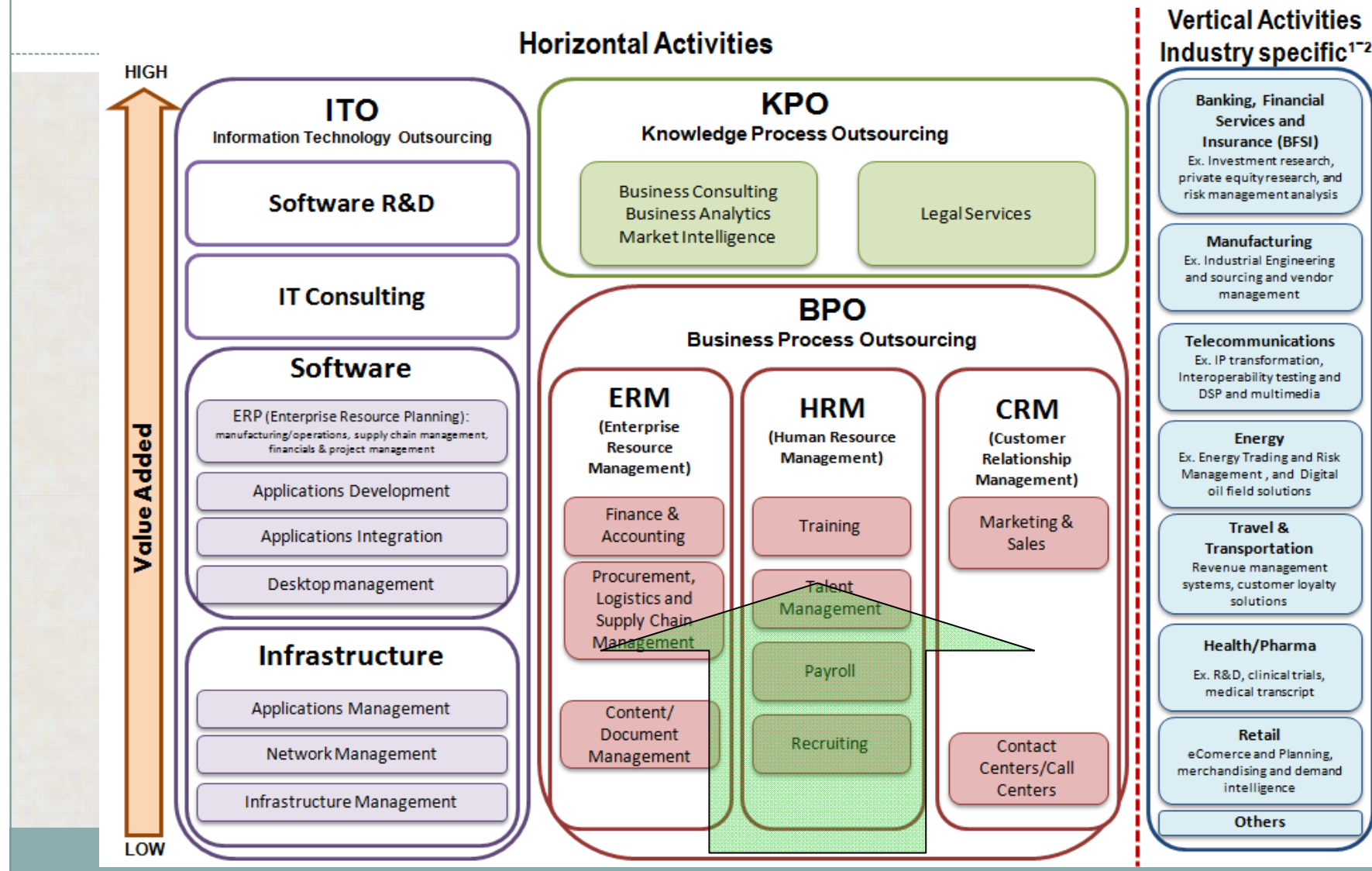
Philippines in the early 2000s



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Source: Gereffi (2011), *Global Value Chain Analysis and its Implications for Measuring Global Trade*.

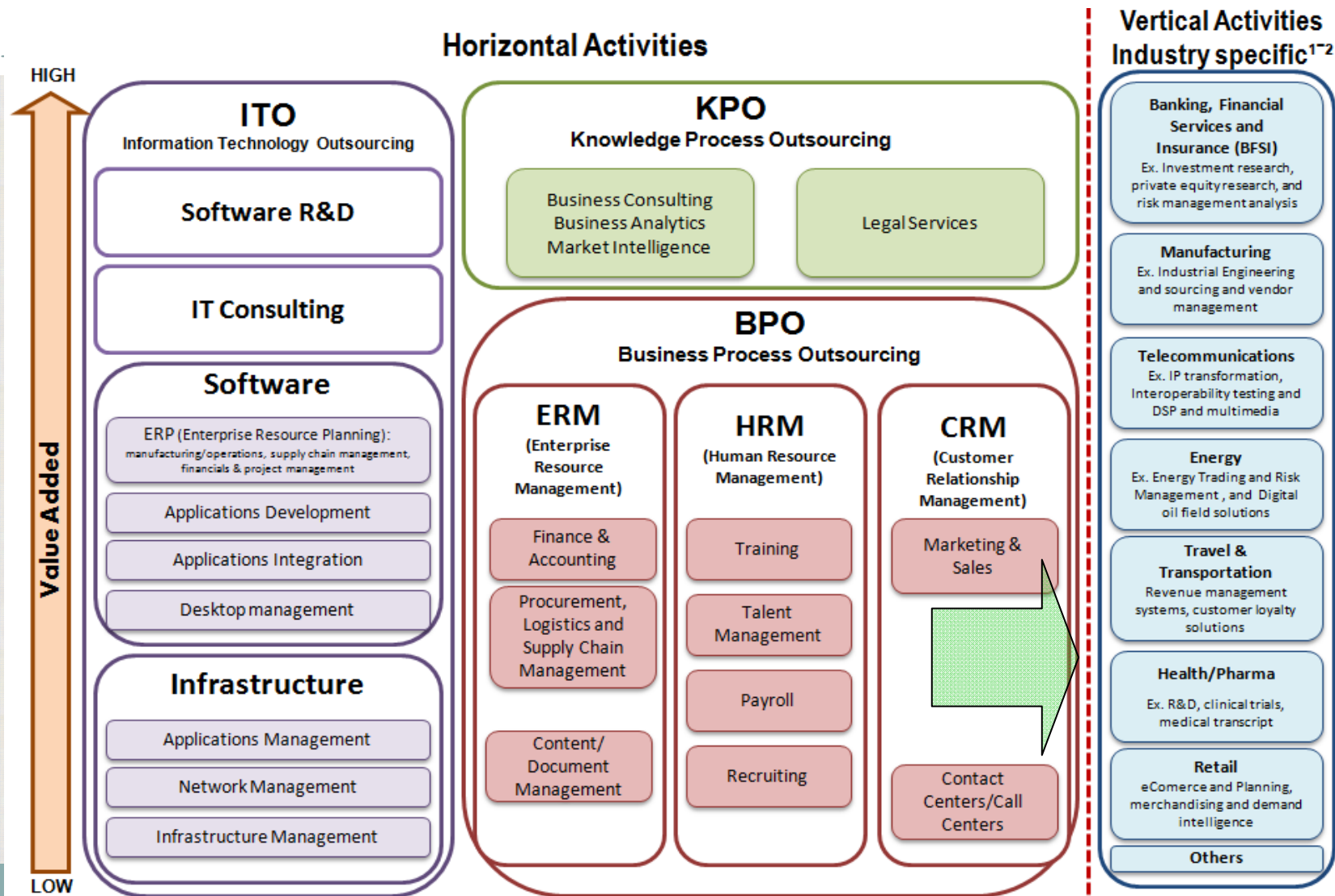
Philippines in the mid 2000s



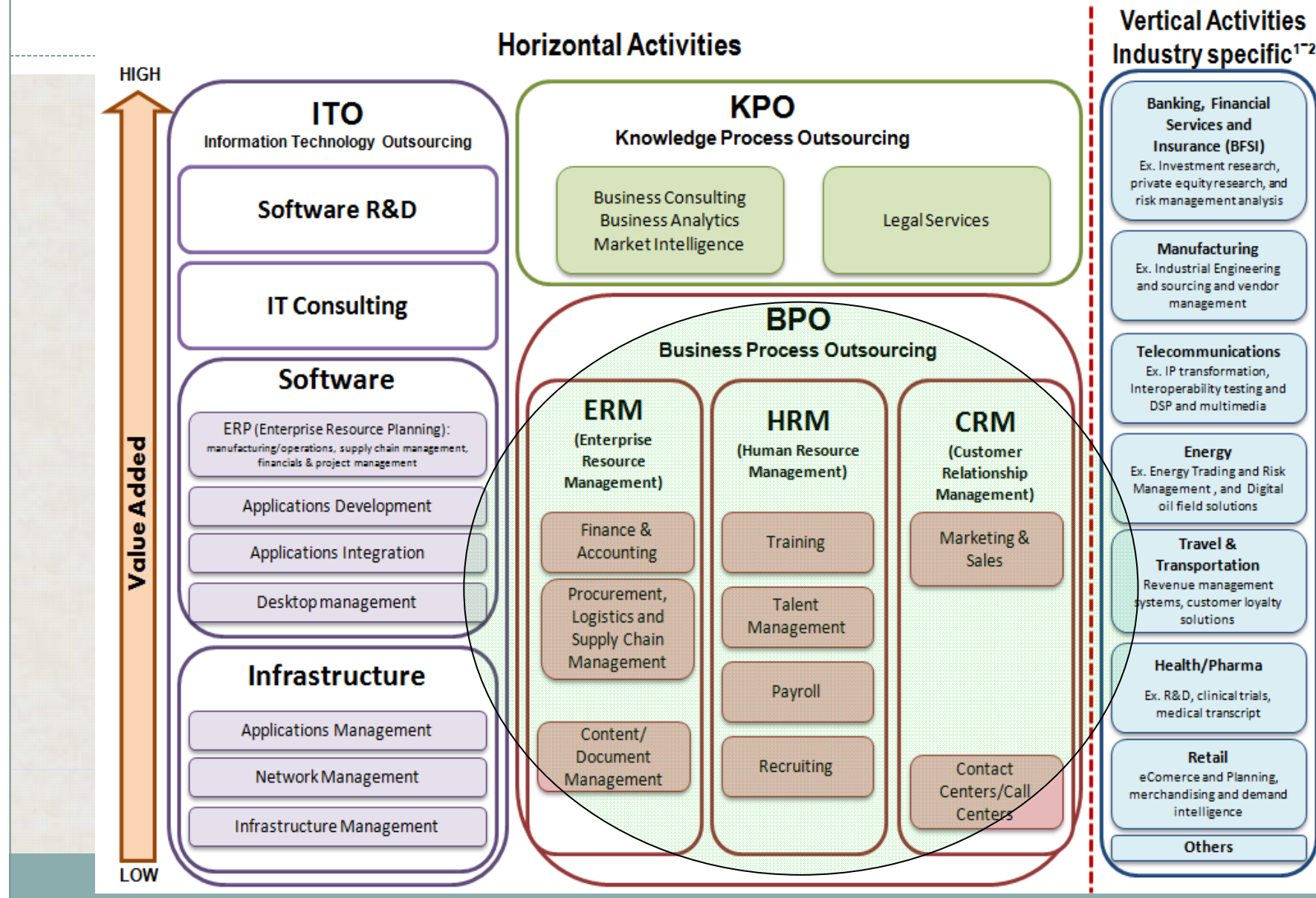
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Source: Gereffi (2011), *Global Value Chain Analysis and its Implications for Measuring Global Trade*.

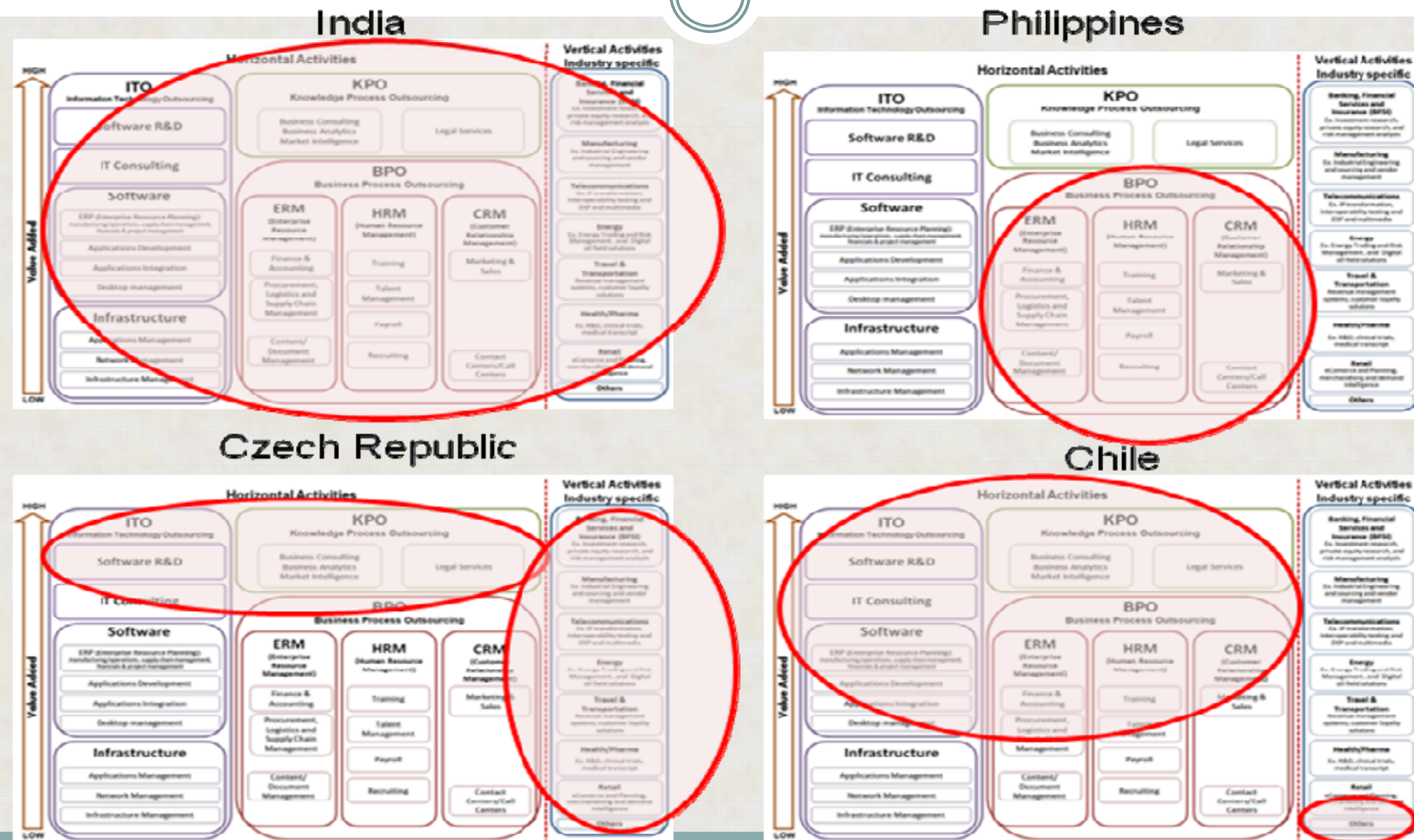
Philippines in the late 2000s



Offshore Services Value Chain : Philippines

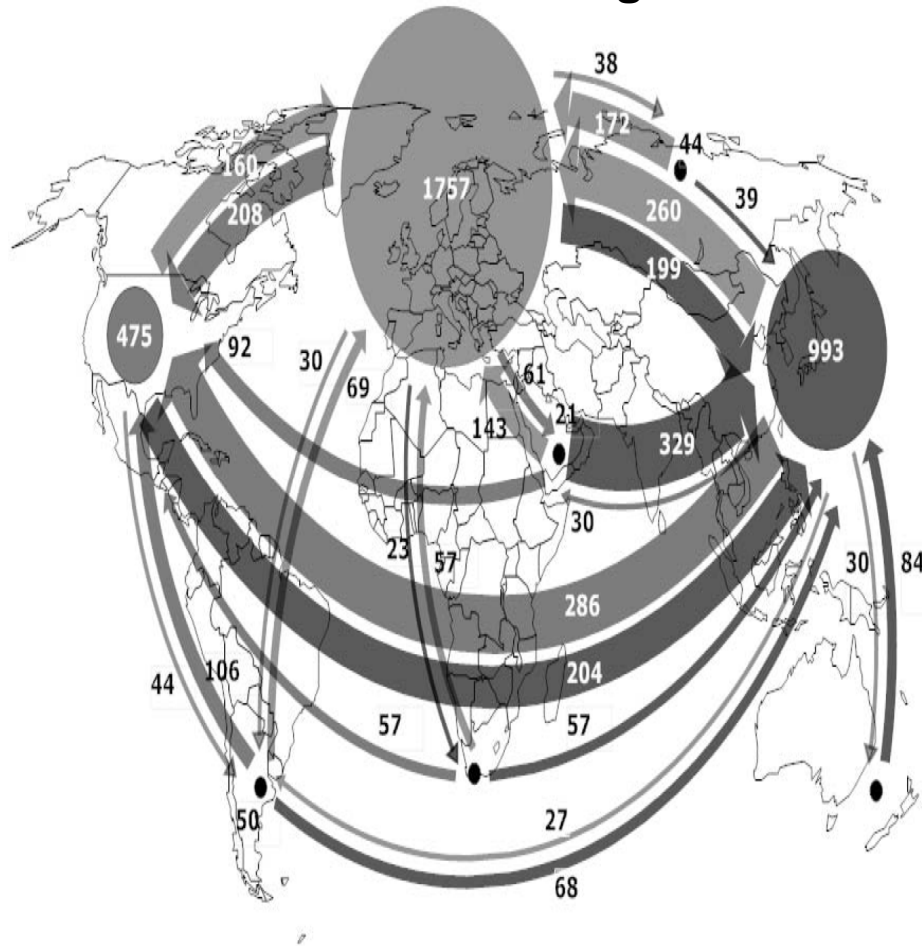


Mapping Selected Countries in the Offshore Services Value Chain

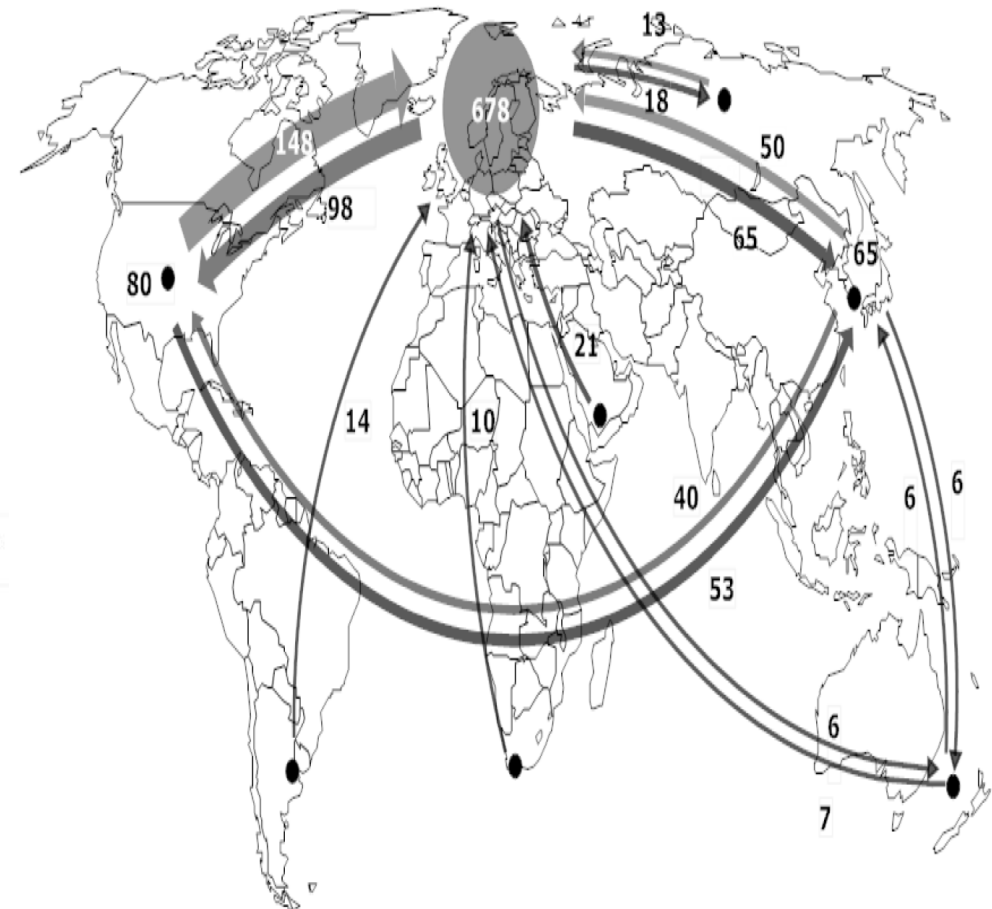


4) Developing countries and intra-regional trade still play a minor role

Trade in intermediate goods



Trade in intermediate services



The LHS map represents imports of intermediate goods above 20 billion USD, while the RHS map represents that of services above 5 billion USD. Circles stand for intra-regional imports and arrows for inter-regional imports. Arrows and circles are proportional to the value of the flows. Source: Maroudot et al. (2009)

Figure 5. Share of regions in world intermediate goods imports (2006)

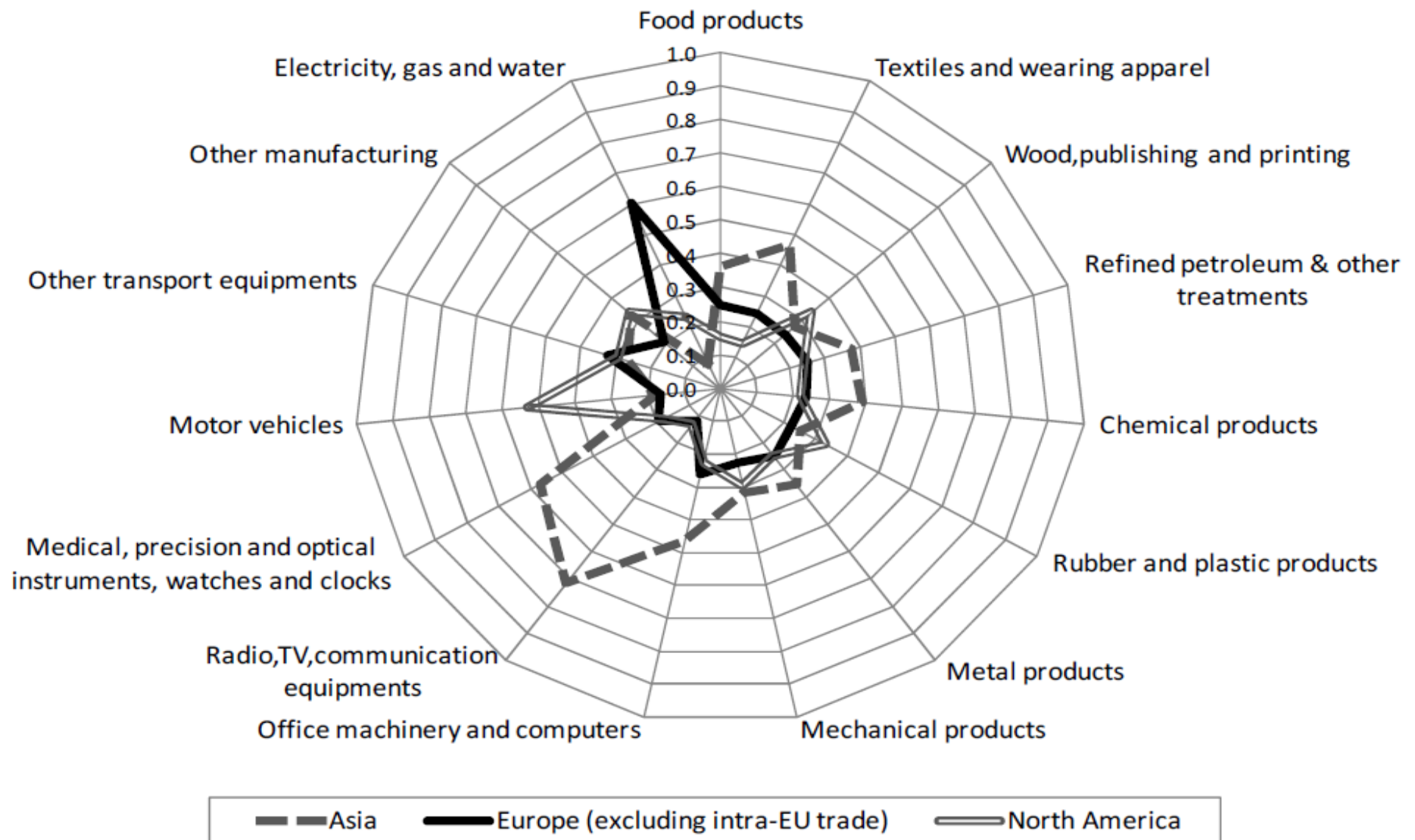
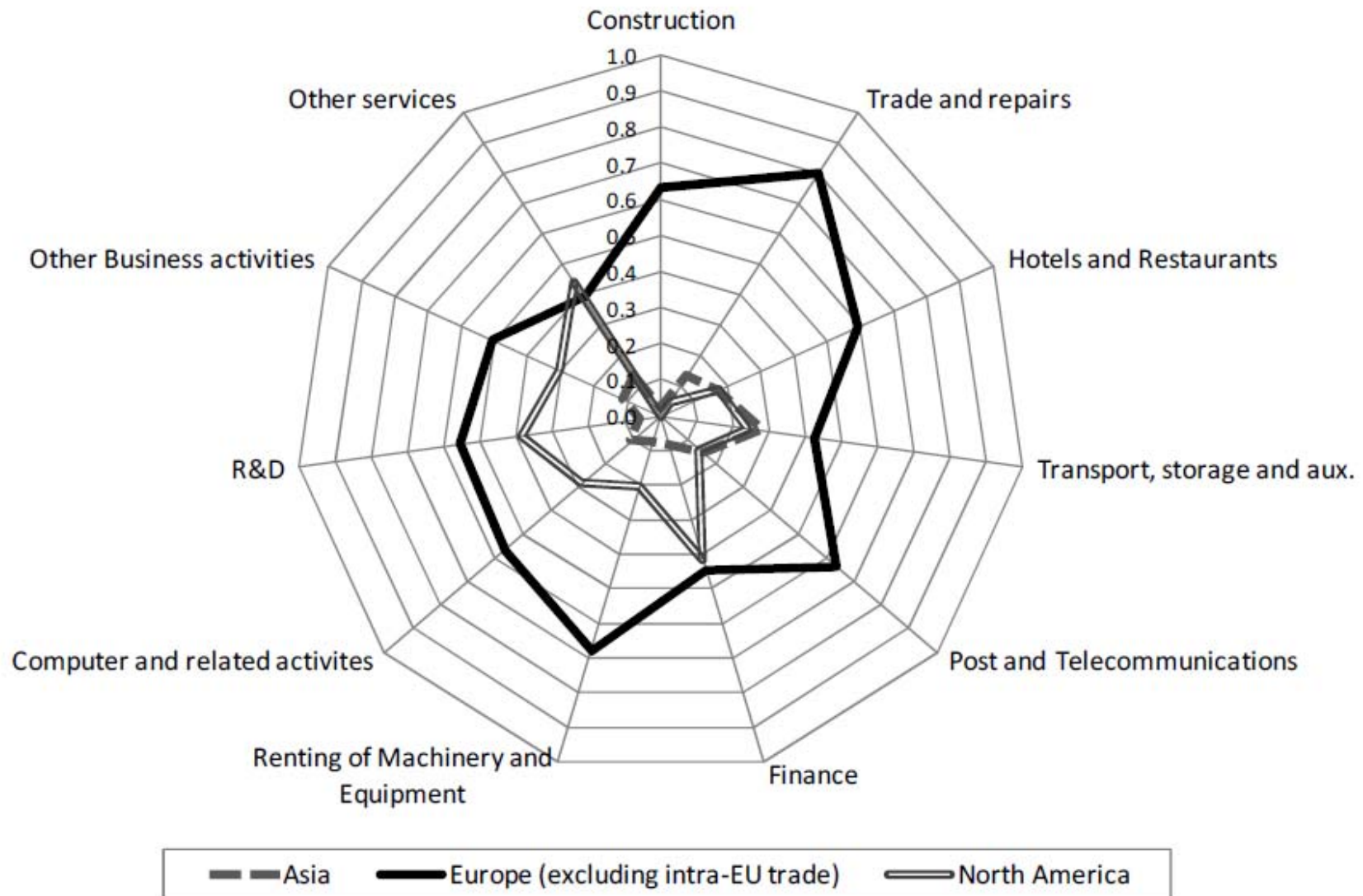
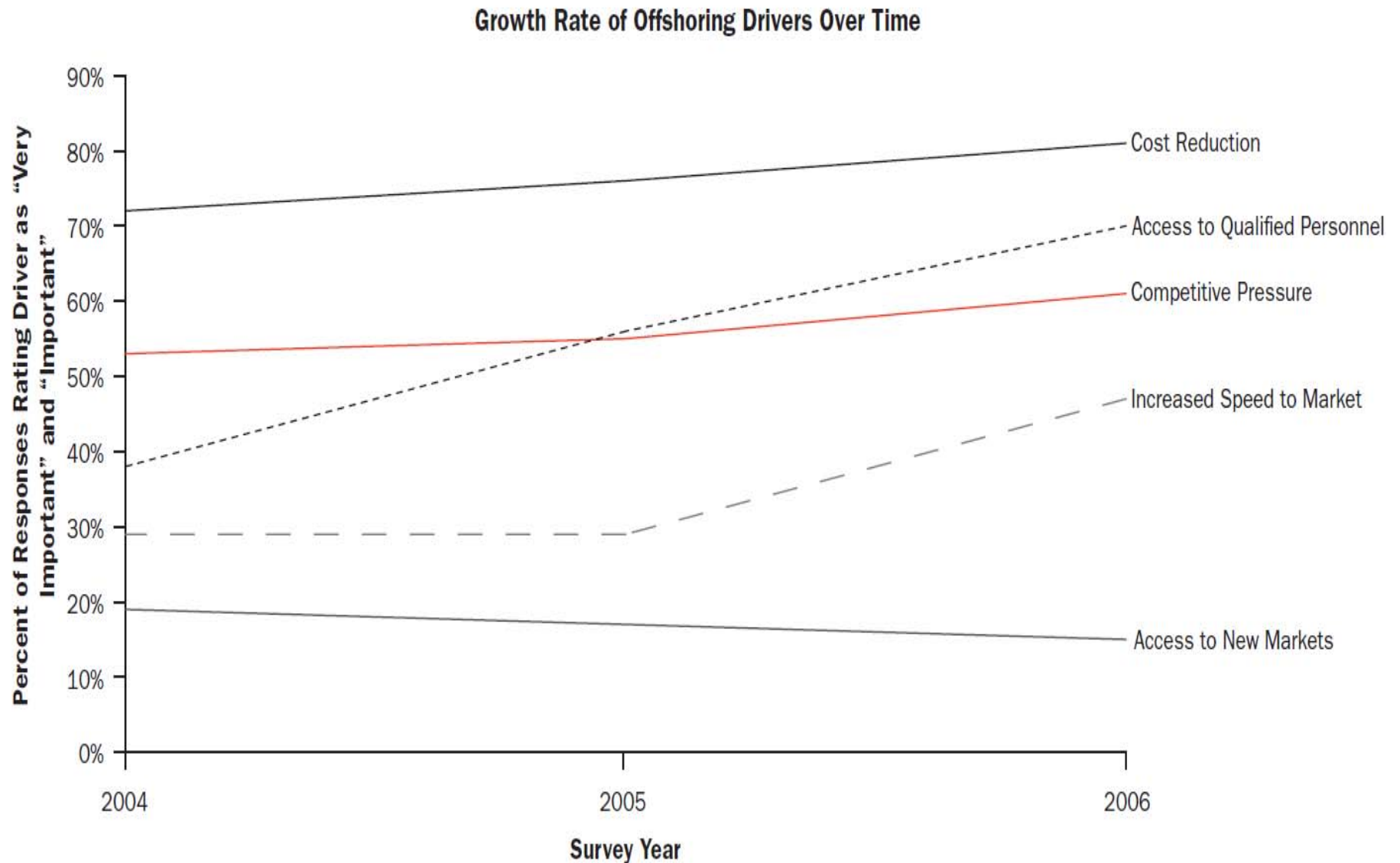


Figure 7. Share of regions in world intermediate services imports (2005)

For countries where 2005 data were not available for services, we use data for the latest year available at 2005 prices.

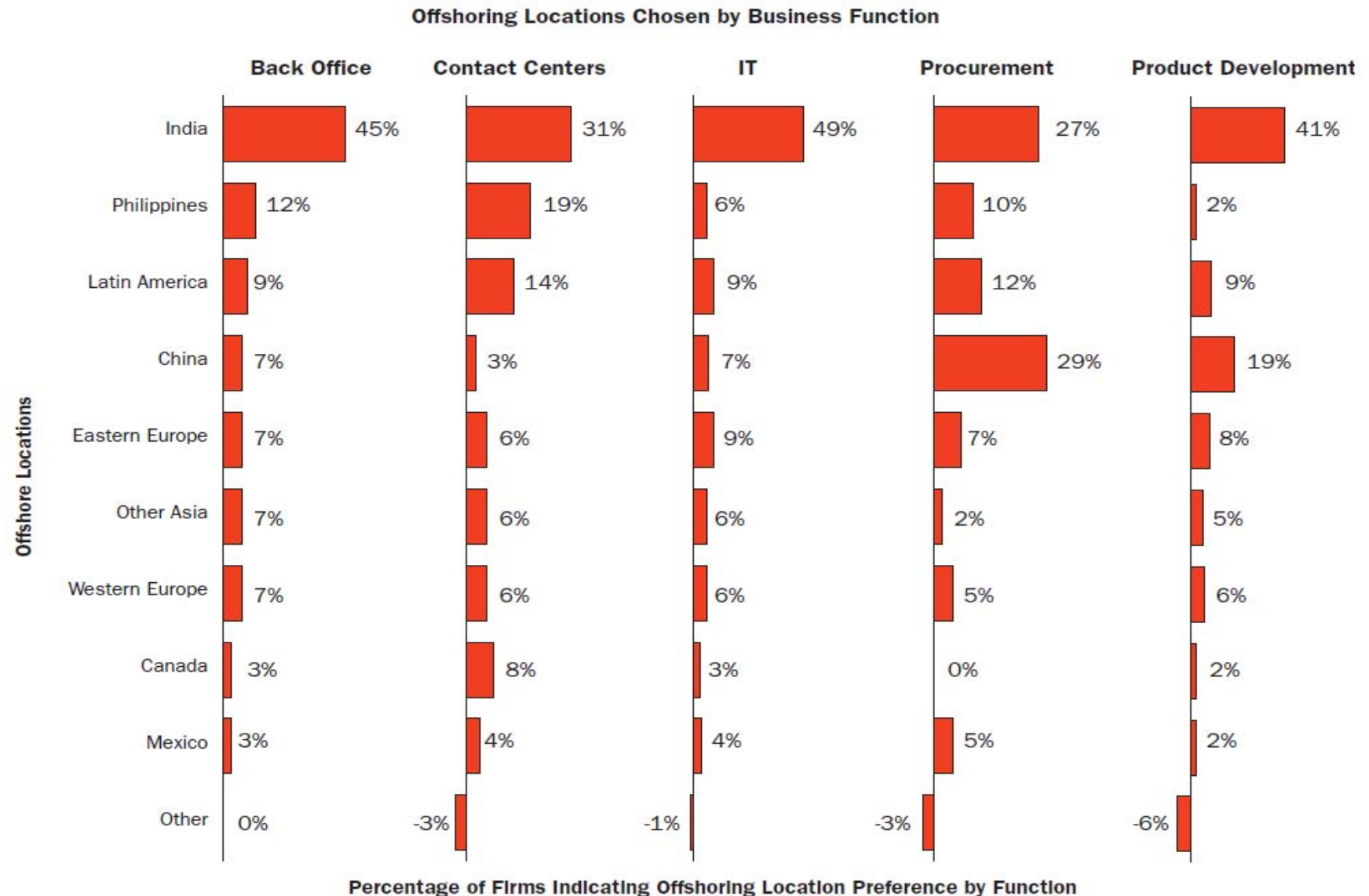


5) Cost advantage is not enough for a country to attract Service MNCs



Source: Duke University/Archstone Consulting Offshoring Research Network 2004 and 2005 Surveys; Duke University/Booz Allen Hamilton Offshoring Research Network 2006 Survey.

Cost advantage is not enough (cont.)



5) Asian economies are an attractive location for mid-end tasks of services GVCs

Locations Mapped by Cost of Labor, Talent Availability, and Nature of Work Offshored



- Virtually all offshore implementations in these countries are entirely for commodity work
- ◐ Offshore implementations in these countries are focused largely on commodity work
- ◑ Offshore implementations in these countries are focused equally on commodity and high-end work
- Offshore implementations in these countries are heavily skewed towards high-end work

Note: Shading of circles indicates degree to which high skilled work is currently offshored to the specific country.

Source: Booz Allen Hamilton/Duke University Offshoring Research Network 2006 Survey.

Policy implications

Policy implications

- 1) Although the location decisions are decided at the firm level where sourcing strategies are determined, a positive environment can be created by national government policies
 - Development of human capital and skilled personnel
 - Efficient infrastructure requires pro-competitive policy in infrastructure sector such as telecom sector.
 - Quality of institutions is also important for the MNCs' location decisions.

Policy implications

2) Services liberalization should be modal neutral.

- Services MNCs will choose modes of supply based on cost efficiency.

3) Although new RTAs in Asia have services and investment commitments, their impacts on regional services network may be small.

- Services GVCs depend mainly on inter-regional trade.
- Liberalization on unilateral and multilateral level will be more effective.

Thank you
for your attention!