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The Growth of Services and the Evolution of Comparative Advantage

by

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



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July 2017

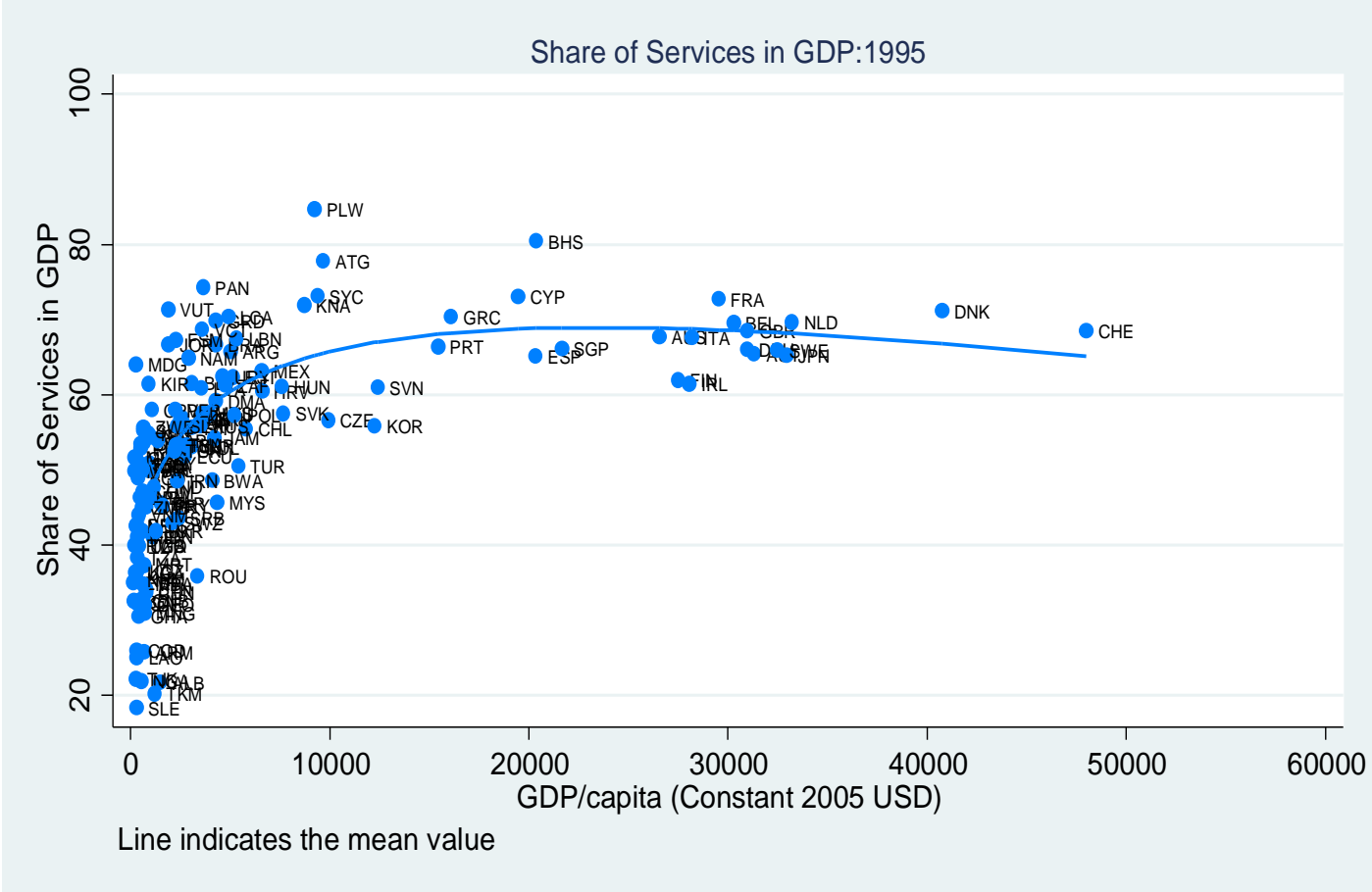
UNCTAD, Geneva

Three points

- I. Services are growing in importance: in GDP, trade and FDI
- II. Demographics and digitization are driving services growth
- III. Skills and institutions determine dynamic comparative advantage

The importance of services for all countries...

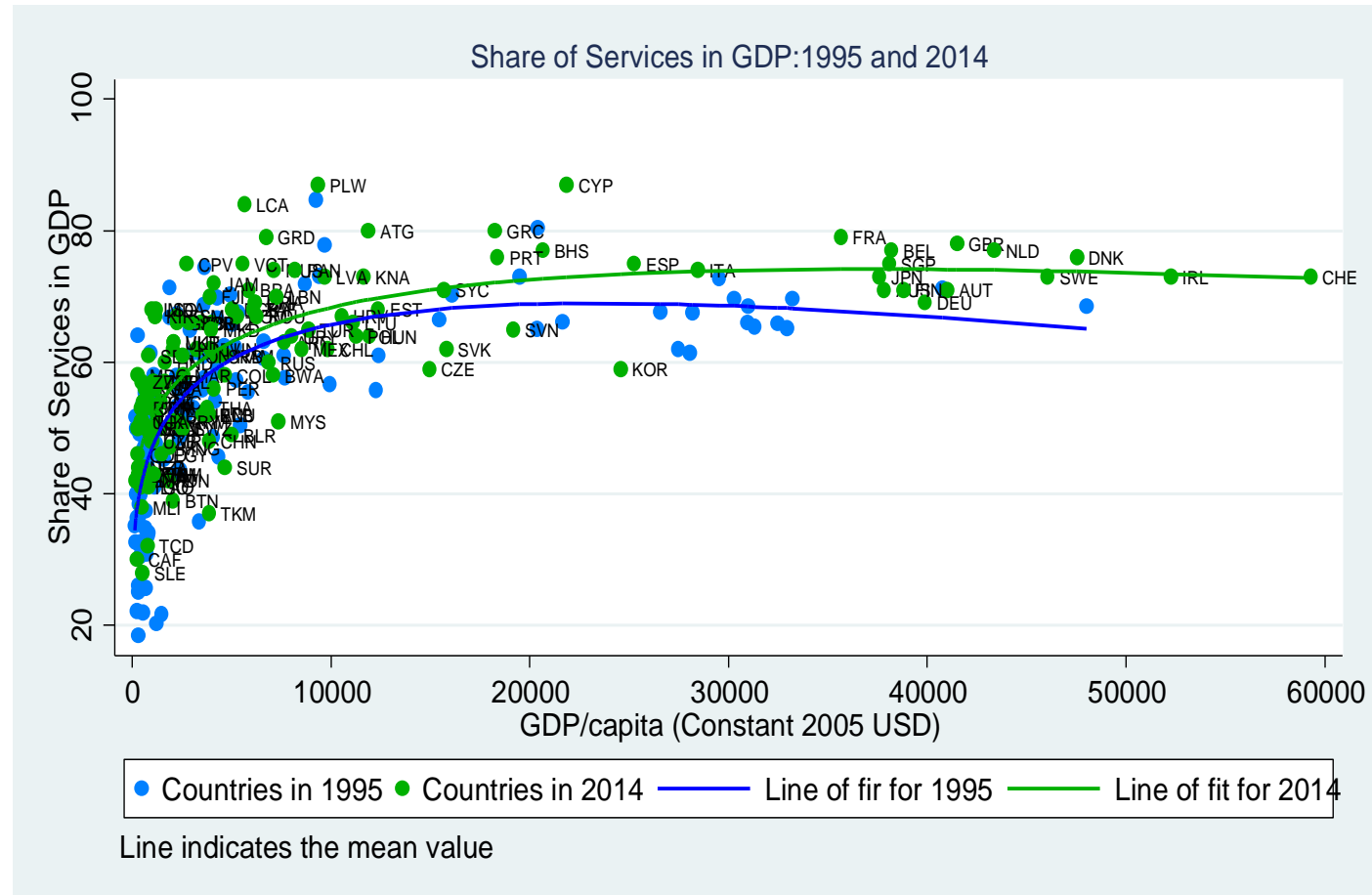
Share of services in GDP and GDP per capita, current USD, 1995



Source: Work in progress with Aldo Pazzini Bortoluzzi drawing upon World Development Indicators

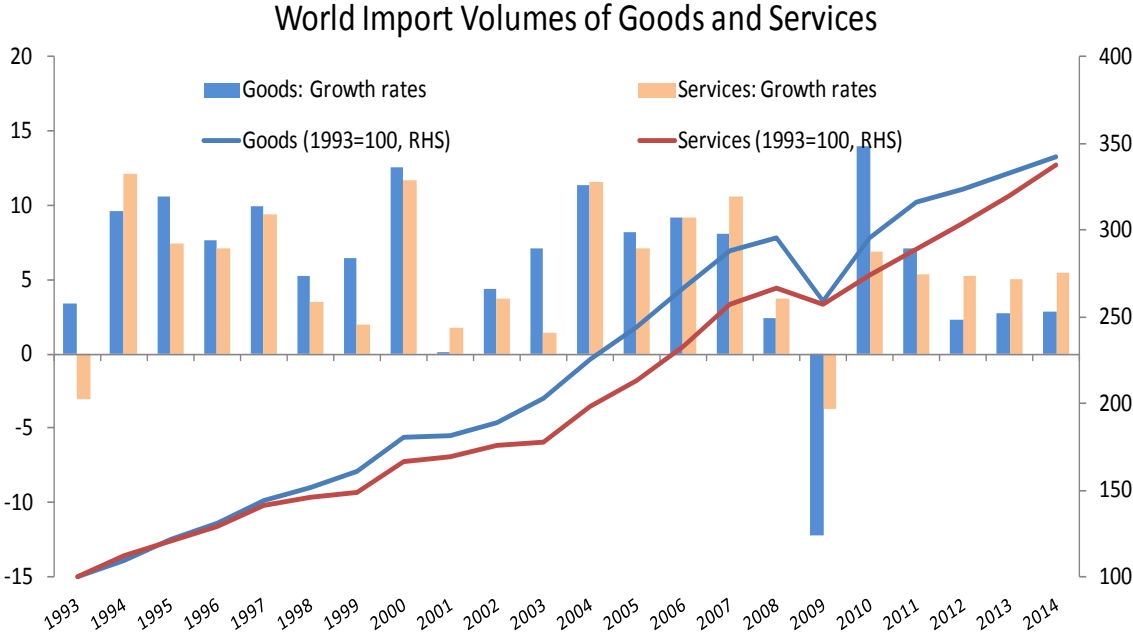
The flip side of premature deindustrialization is premature servicification

Share of services in GDP and GDP per capita, current USD, 1995 and 2014



Source: Work in progress with Aldo Pazzini Bortoluzzi drawing upon World Development Indicators

Goods trade stumbles, but services trade does not fall



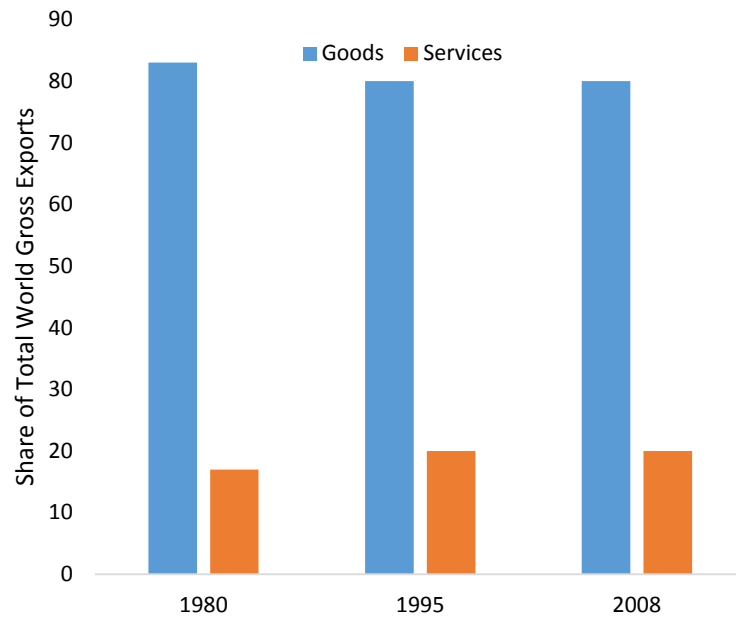
Source: IMF World Economic Outlook

Source: Constantinescu, Mattoo and Ruta (2016), work in progress, building on “The global trade slowdown: cyclical or structural?,” World Bank Policy Research Working Paper 7158.

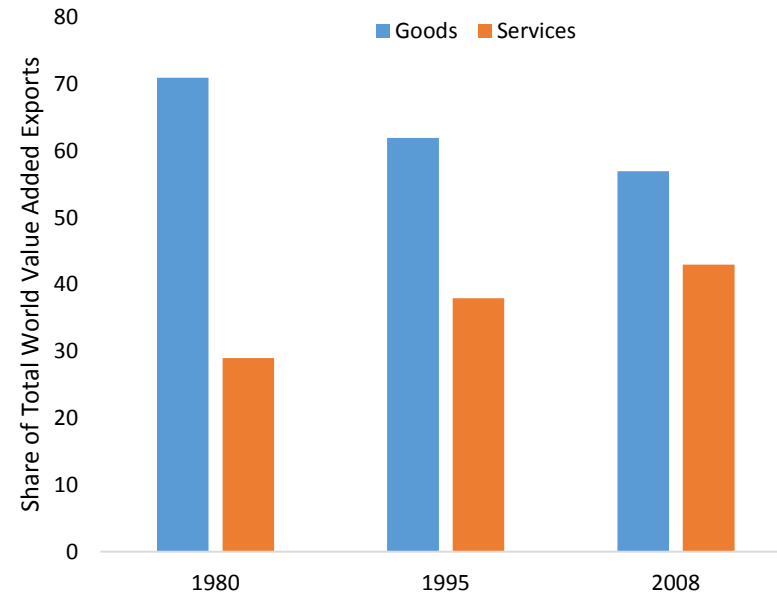
Services trade declined less during the crisis and has grown faster after the crisis

The share of services in trade in value-added terms is higher and has increased more sharply than in gross terms.

Gross Exports of Goods and Services as a share of Total World Gross Exports



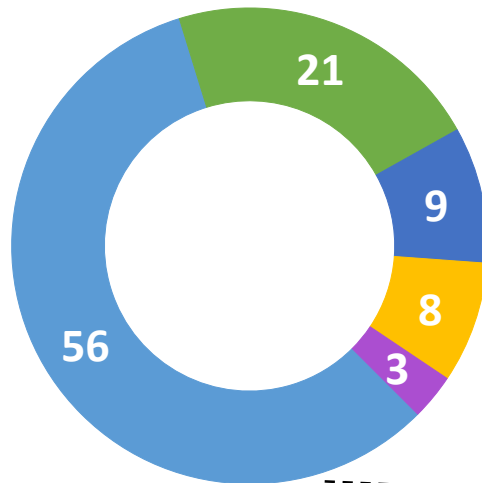
Value Added Exports of Goods and Services as a share of Total World Value Added Exports



In Africa, as elsewhere, most FDI is going into services

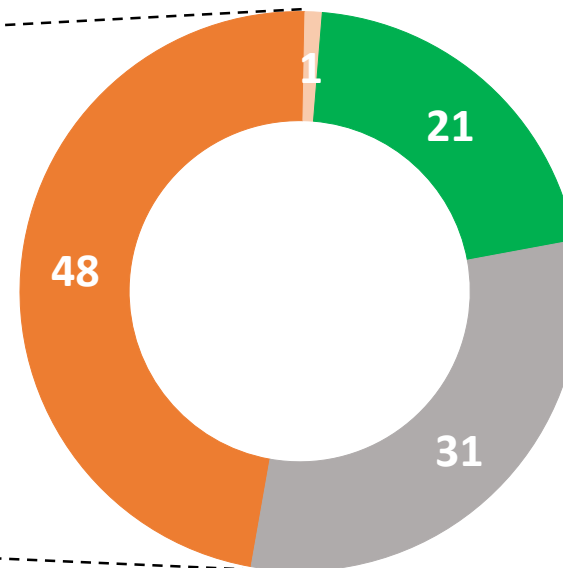
Services FDI stock, by industry in Africa, 2012

(Percent of Africa's inward FDI stock in services)



Inward FDI stock by sector for Africa, 2012

(Percentage of total inward FDI stock in region)



II. What is driving services trade?

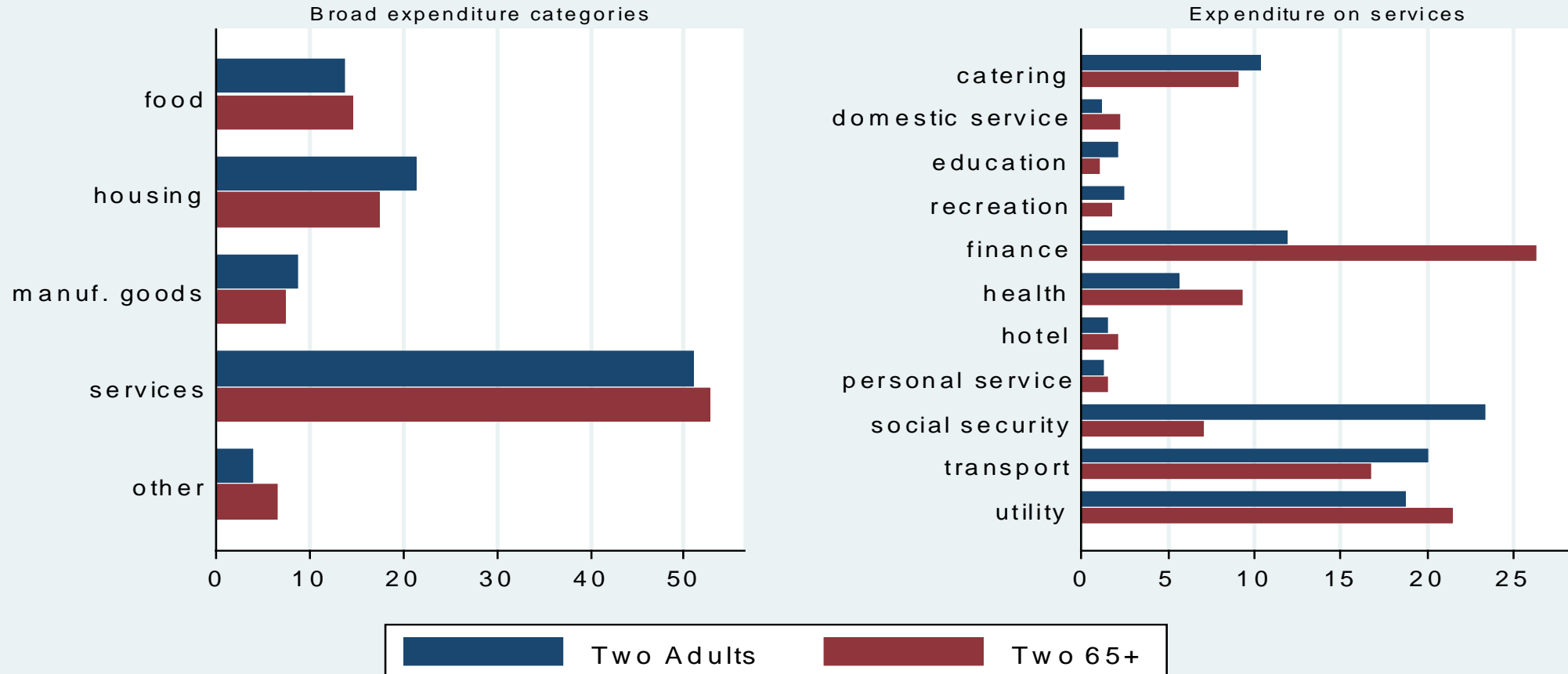
The interplay between :

- Demographic change
- Digitization

Drivers of services trade 1: Demographic Change

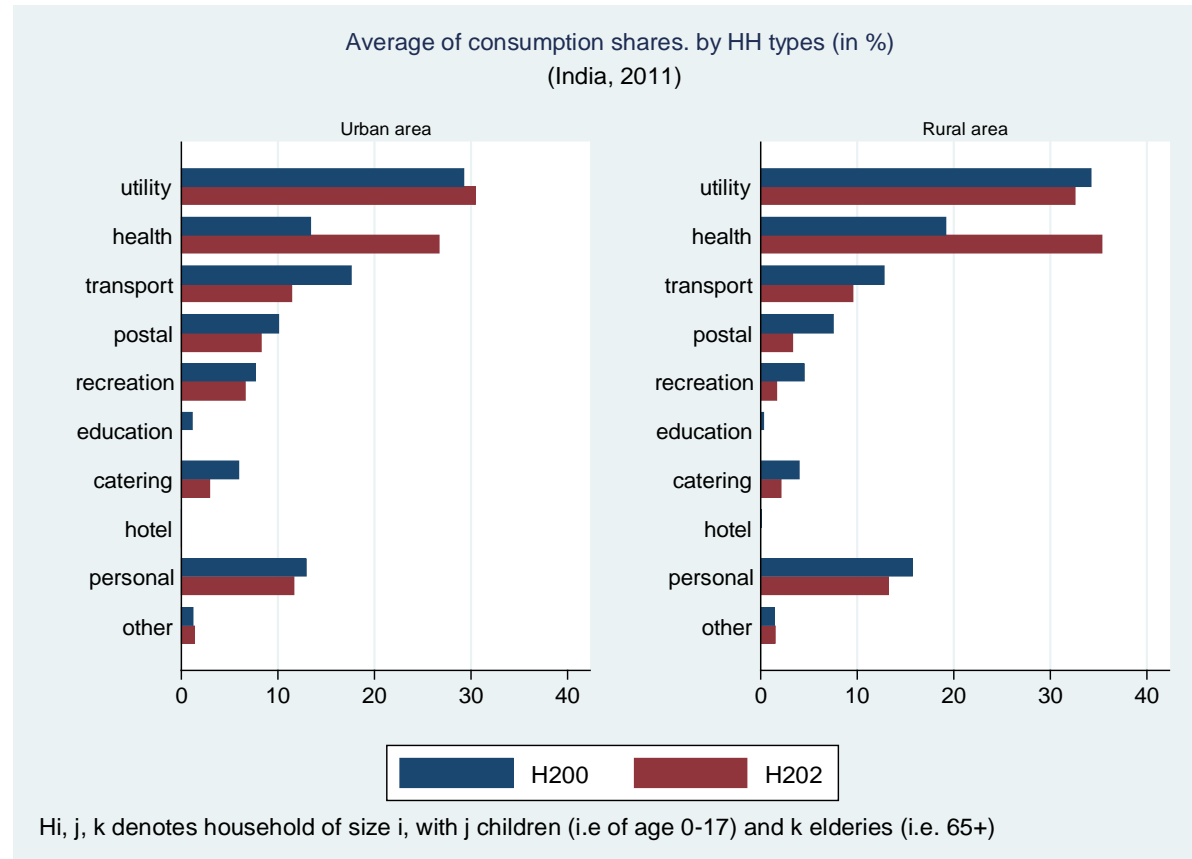
Young and old have different patterns of demand, e.g. USA

Average of consumption shares. by HH types (in %)
(USA, 2012)



Housing includes interest on mortgage and property tax

Young and old have different patterns of demand especially within services: India

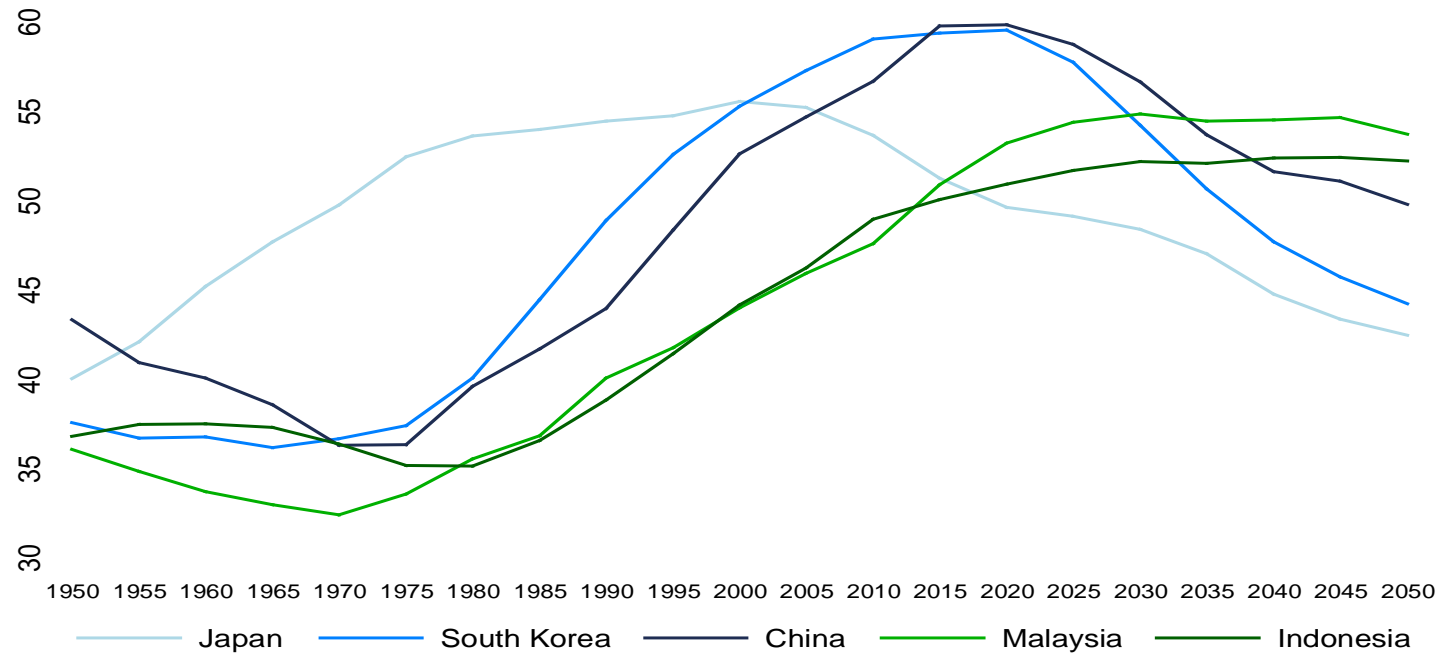


Source: Work in progress with Erhan Artuc, Zovanga Louis Kone, Maggie Liu and Caglar Ozden

Therefore, demographic change is influencing services trade

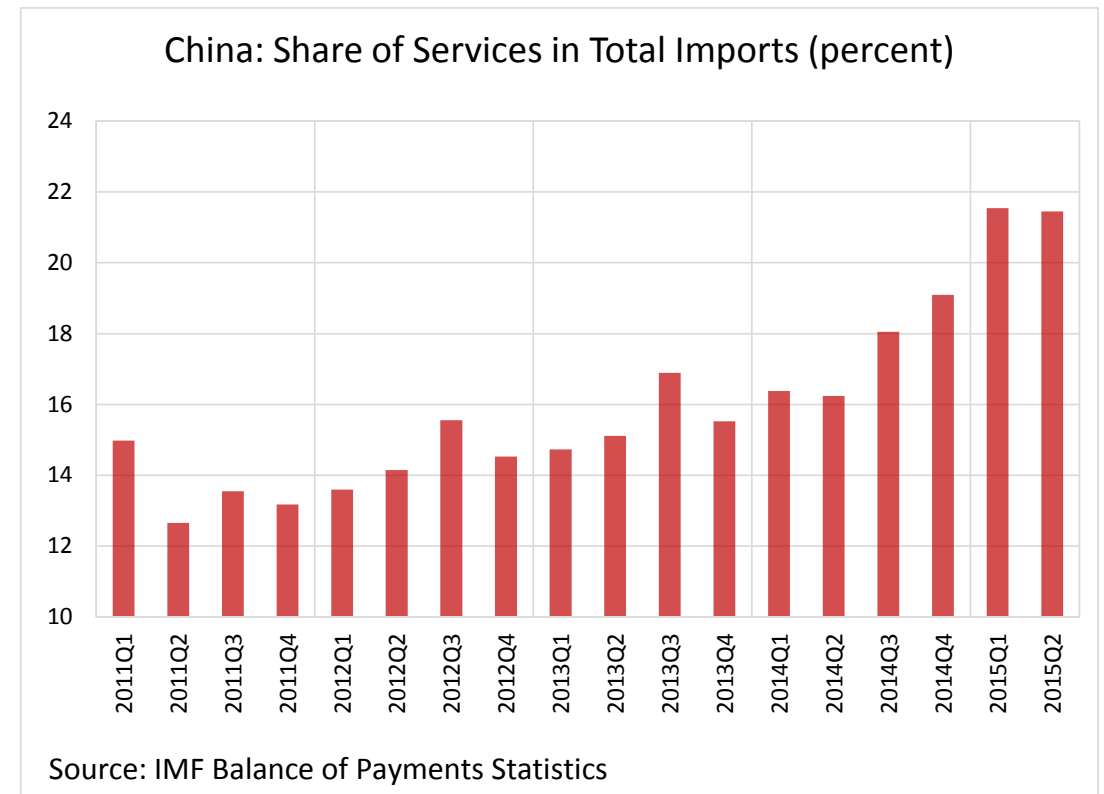
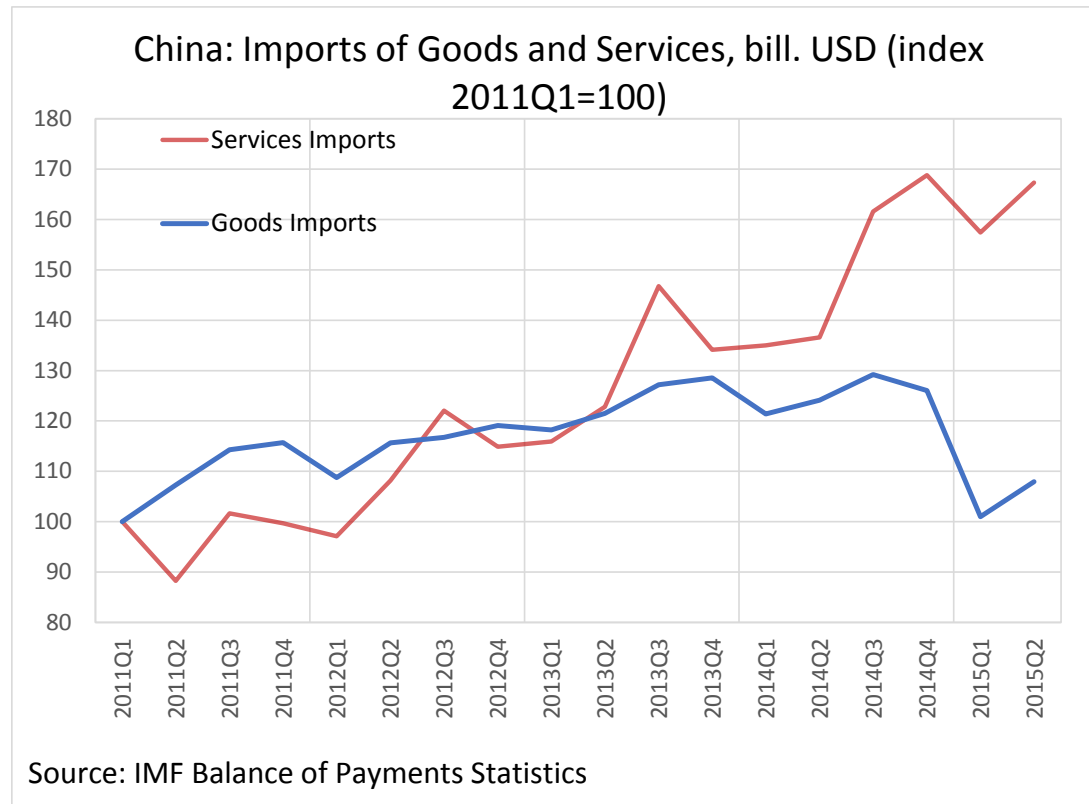
Shifting dependency ratios...

**Working Age Population Ratio:
Japan, South Korea and China
vs. Malaysia and Indonesia**



by affecting the demand and supply of services

China's rebalancing and demographics are already shifting demand towards services



Source: Constantinescu, Mattoo and Ruta (2016), work in progress, building on “The global trade slowdown: cyclical or structural?,” World Bank Policy Research Working Paper 7158.

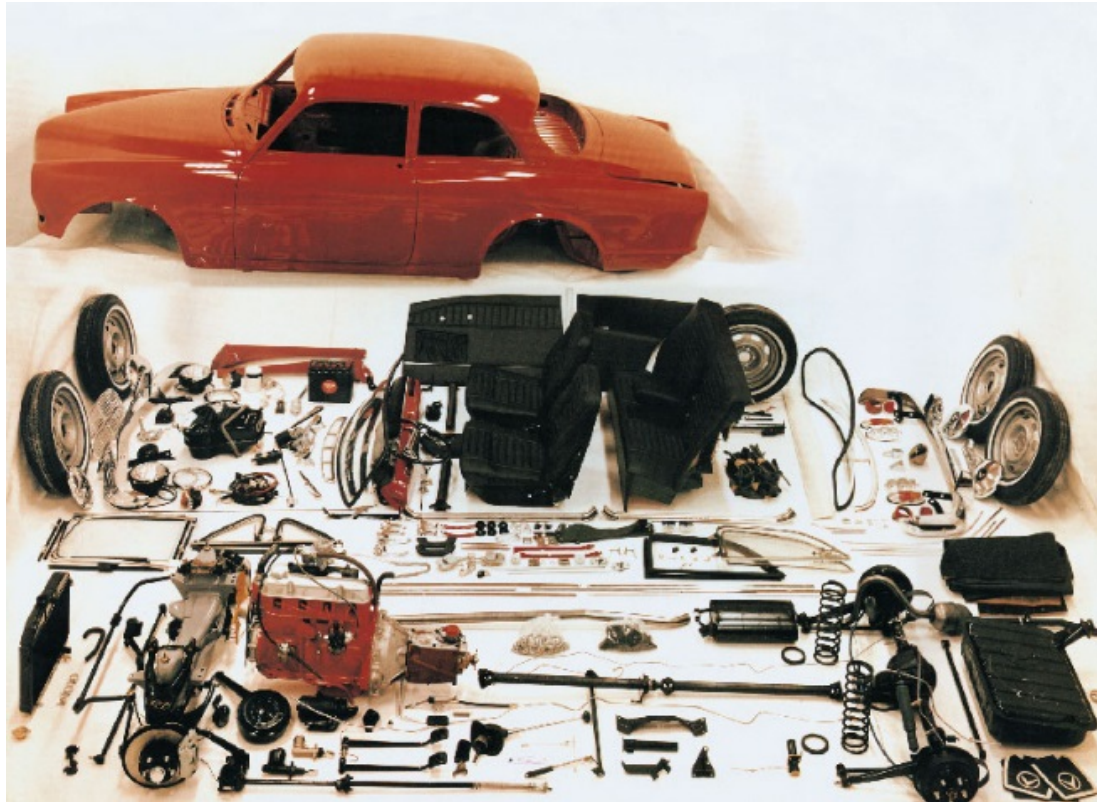
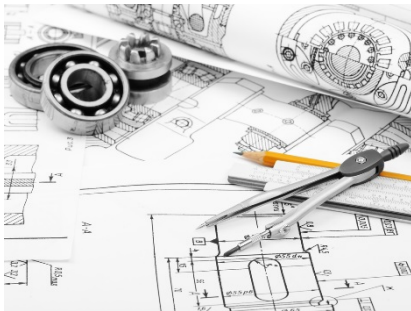
Drivers of services trade 2: Digitization

The international fragmentation of goods production includes both goods parts and services tasks

Software development



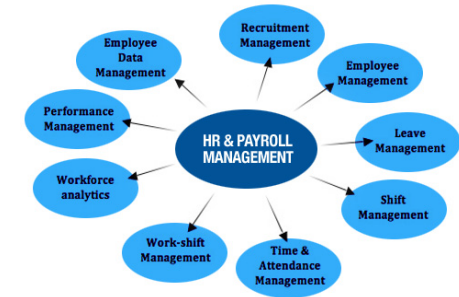
Product design



Accounting



HR and payroll management



Driven by, and boosting demand for, information, communication and transport services

In parallel, the international fragmentation of services production

Call Centre for customer service, etc.



Web hosting and webmaster services



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Medical transcription services

Dt of Service	Provider	Patient	Status	Template	# Lines	# Pages
S:1/21/2007 Dt: 1/19/2007	Ronald Sabraw	Smith, Brenda [NEW]	Pending	40105_V_HEMAT_F_LMF 4010P13175039.wav		
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S:1/19/2007 Dt: 1/18/2007	Ronald Sabraw	Coder, Michele	Under Correction	PULM-FUNCTION-TEST	8 Lines	1 Pages
Corrections: 2005.07.27 (Severe Issue) patient name is missing						
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S:1/19/2007 Dt: 1/24/2007	Ronald Sabraw	Johnson, Barbara	Signed	GEN SURGERY 4010P110350604.wav	15 Lines	1 Pages
S:1/18/2007 Dt: 1/18/2007	Ronald Sabraw	Smith, Alex [NEW]	Pending	4010-CYSTOSC_REP_NOR(M) 4010P13178084.wav		

Outsourced consultations and diagnostics



is creating new opportunities for trade

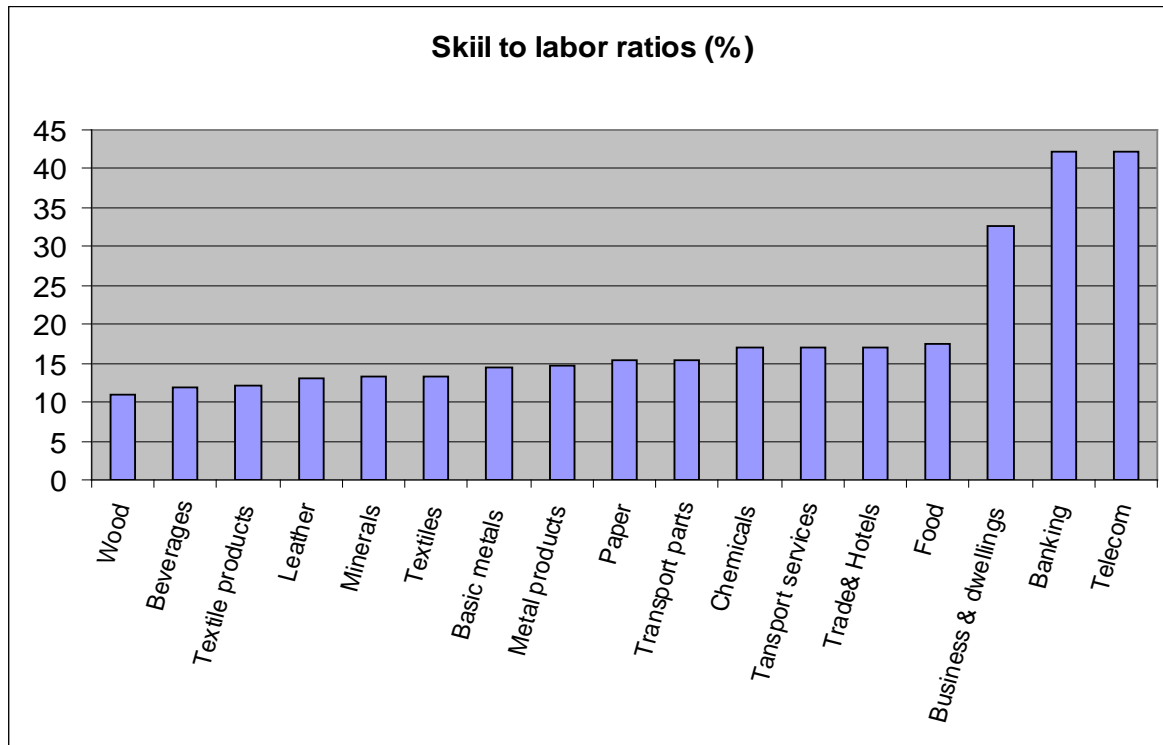
III. What determines comparative advantage in services trade?

The interplay between :

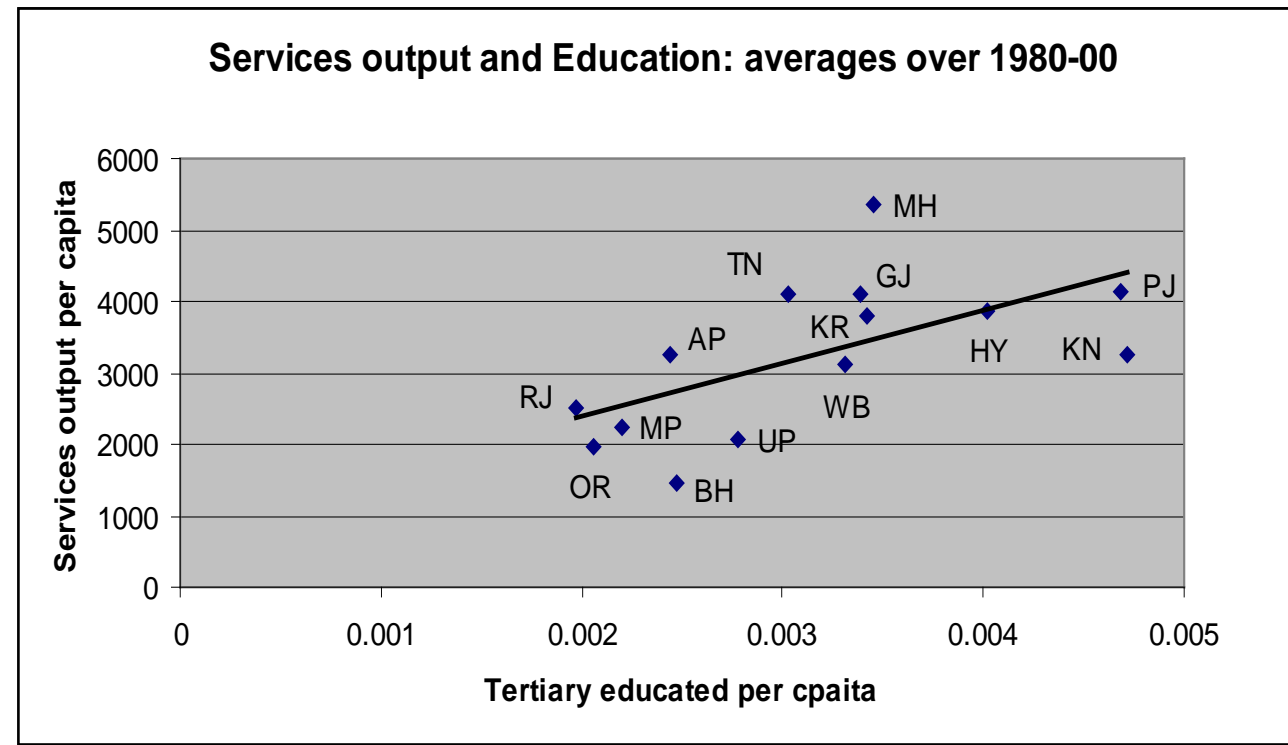
- Endowments, especially of skills
- Infrastructure, especially telecommunications
- Institutions, especially regulatory

Skills matter: Evidence from Indian states

Skilled to total labor ratios across sectors



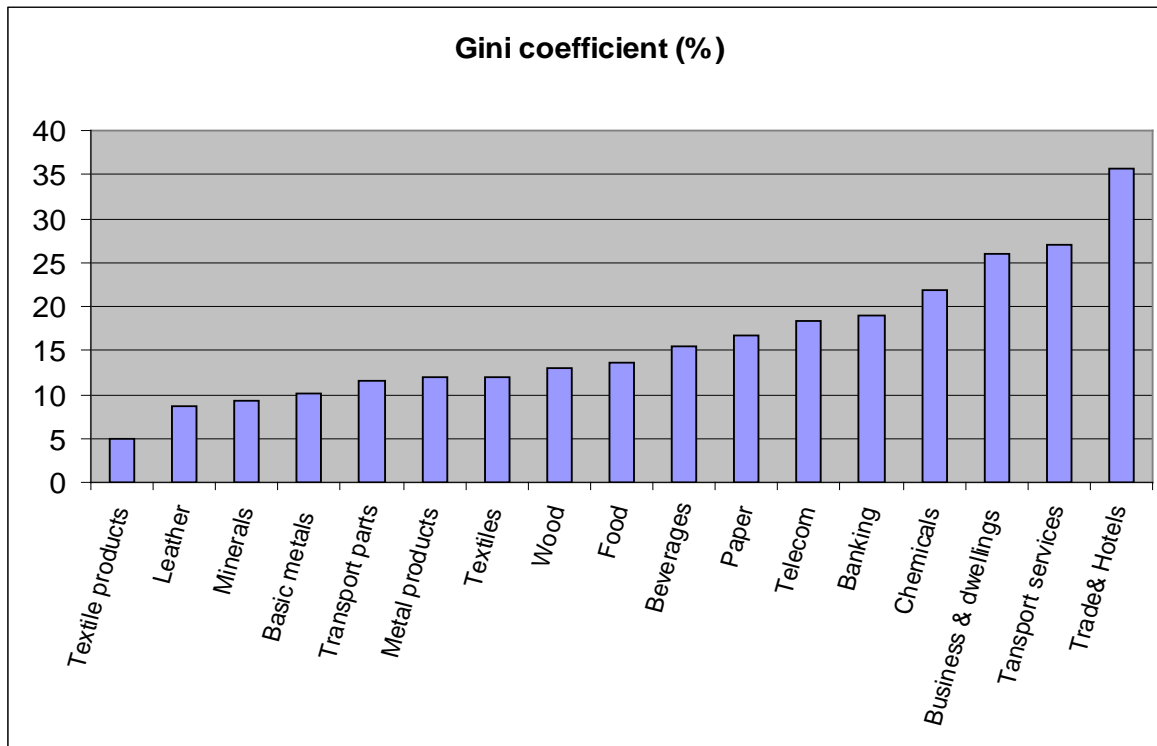
Services output per capita against tertiary educated per capita



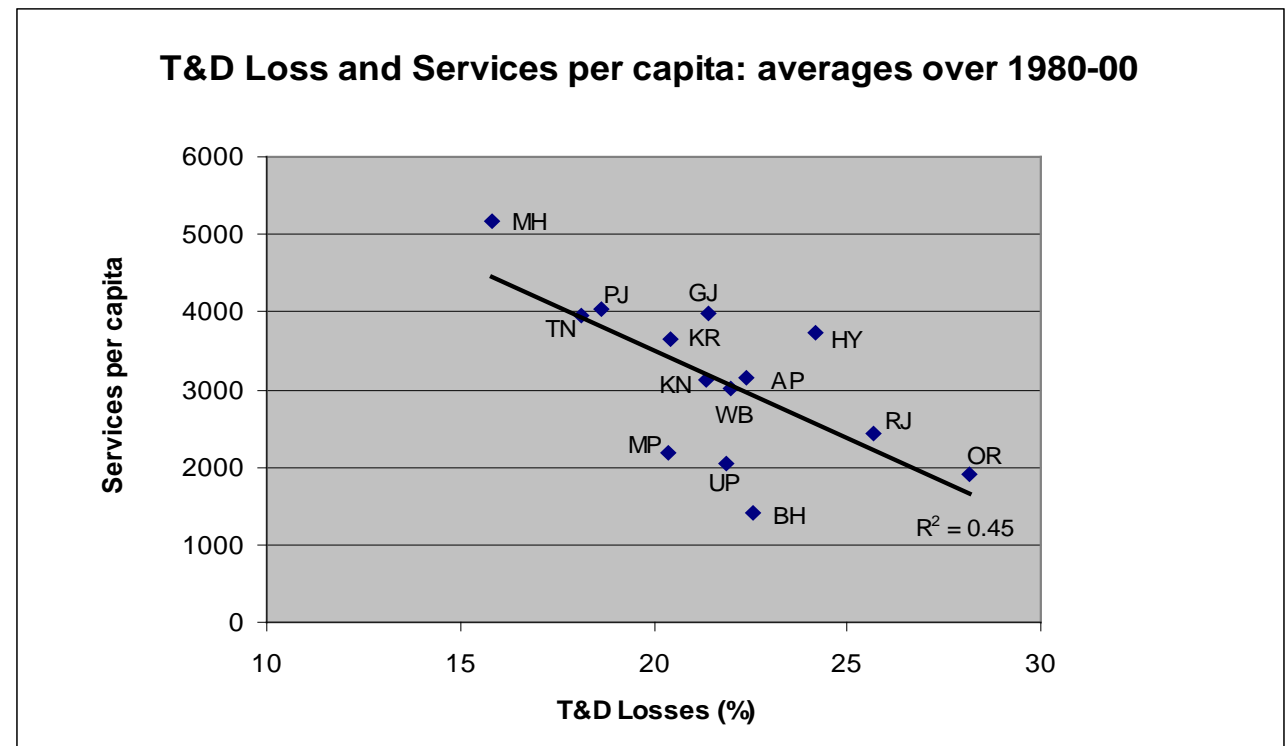
Source: Amin and Mattoo (2006).

And the quality of institutions matter: Evidence from Indian States

Diversity of input sources and output destinations across sectors as measure of institutional dependence



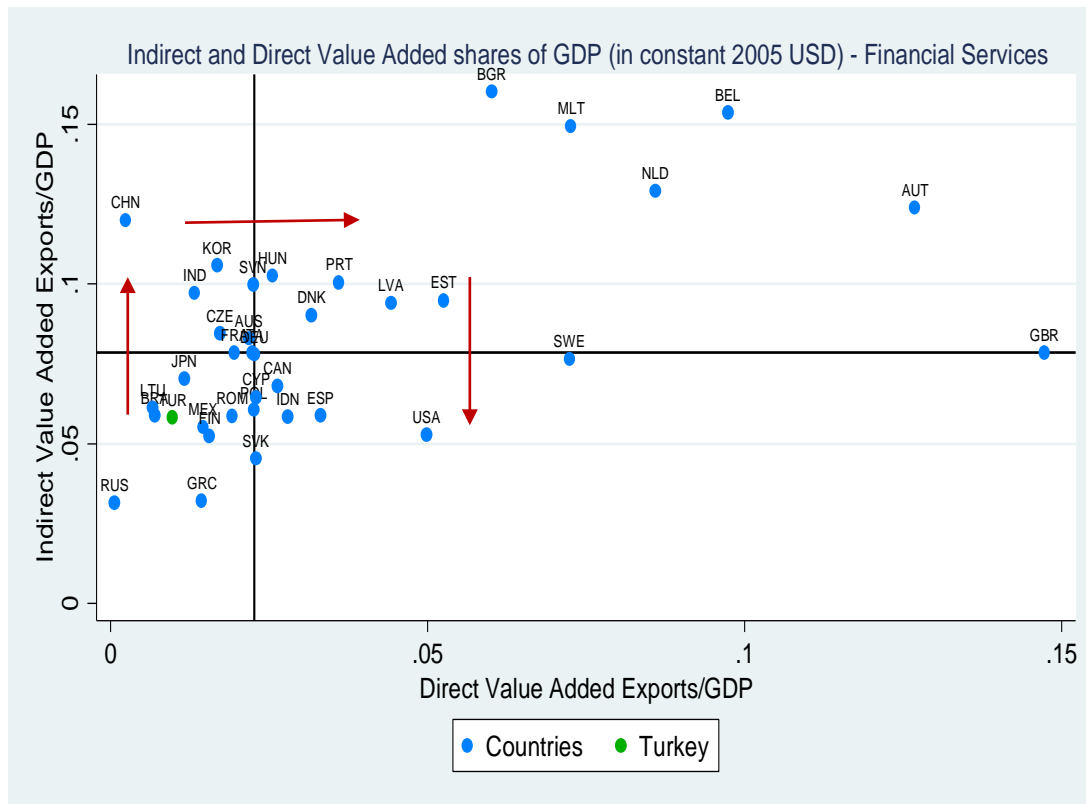
Services output per capita against a proxy for institutional weakness (T&D losses of electricity utilities)



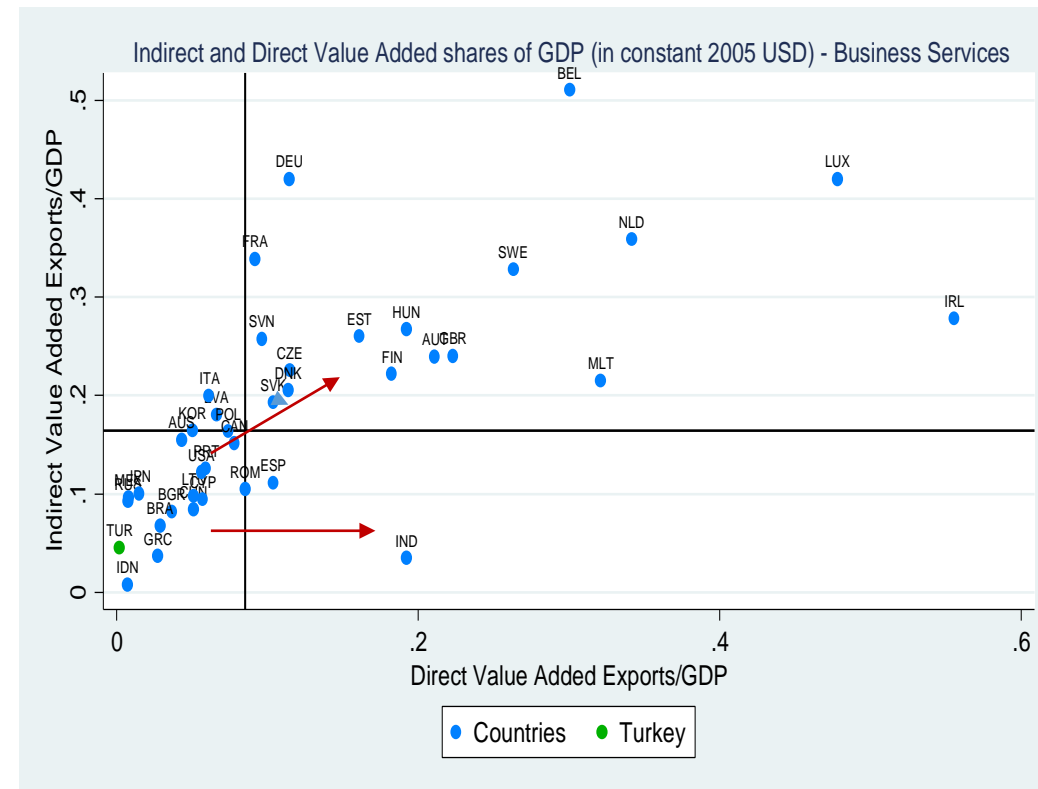
Source: Amin and Mattoo (2006).

The evolution of comparative advantage and structural change: Insights from new value added trade data

Direct and indirect value added exports of financial services, share of GDP, 1995-2009



Direct and indirect value added exports of business services, share of GDP, 1995-2009



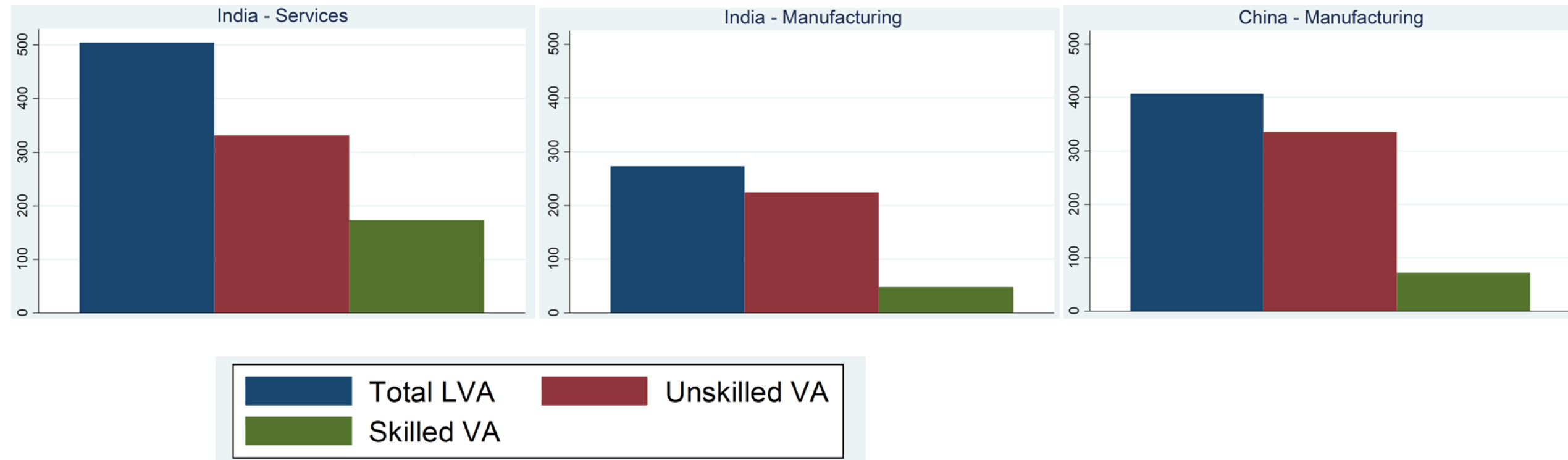
Source: Liu, Mattoo, Wang and Wei (2015)

Note: Does not include Ireland and Luxembourg

Skill endowments rather than skill intensity may constrain unskilled employment

The surprisingly high unskilled labor value added in services exports

Labor value added (LVA) in \$1000 of exports



Source: Joint work with Alen Mulabdic based on Cali et al (2016), "The Labor Content of Exports Database."