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Operationalizing Trade Preferences and Rules of Origin in Light of Global Trade Developments

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European University Institute

April 20, 2015



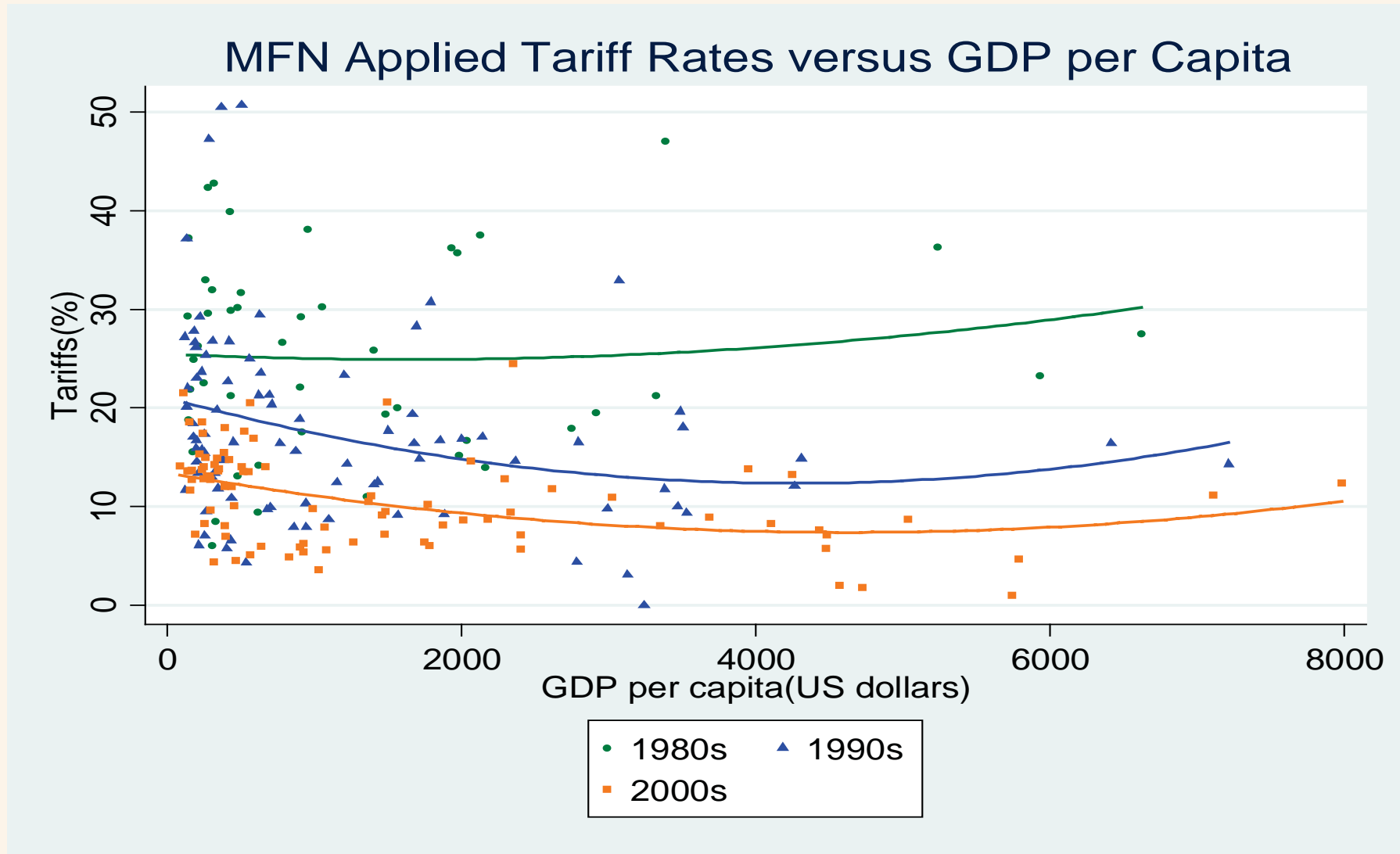
Rapidly Changing Global Context

- Rise of emerging economies – especially China
 - More competition; more opportunities
 - South-South trade and FDI
- Technological change
 - ICT (e-commerce; mobile internet; services trade)
 - Splintering of production: value chains
- Shift by majors towards (mega-) regional trade agreements and away from the WTO
 - TPP, TTIP, TiSA...
 - No progress in DDA on key agriculture issues
- Shift in policy away from tariffs towards a mix of facilitation, NTMs and subsidies



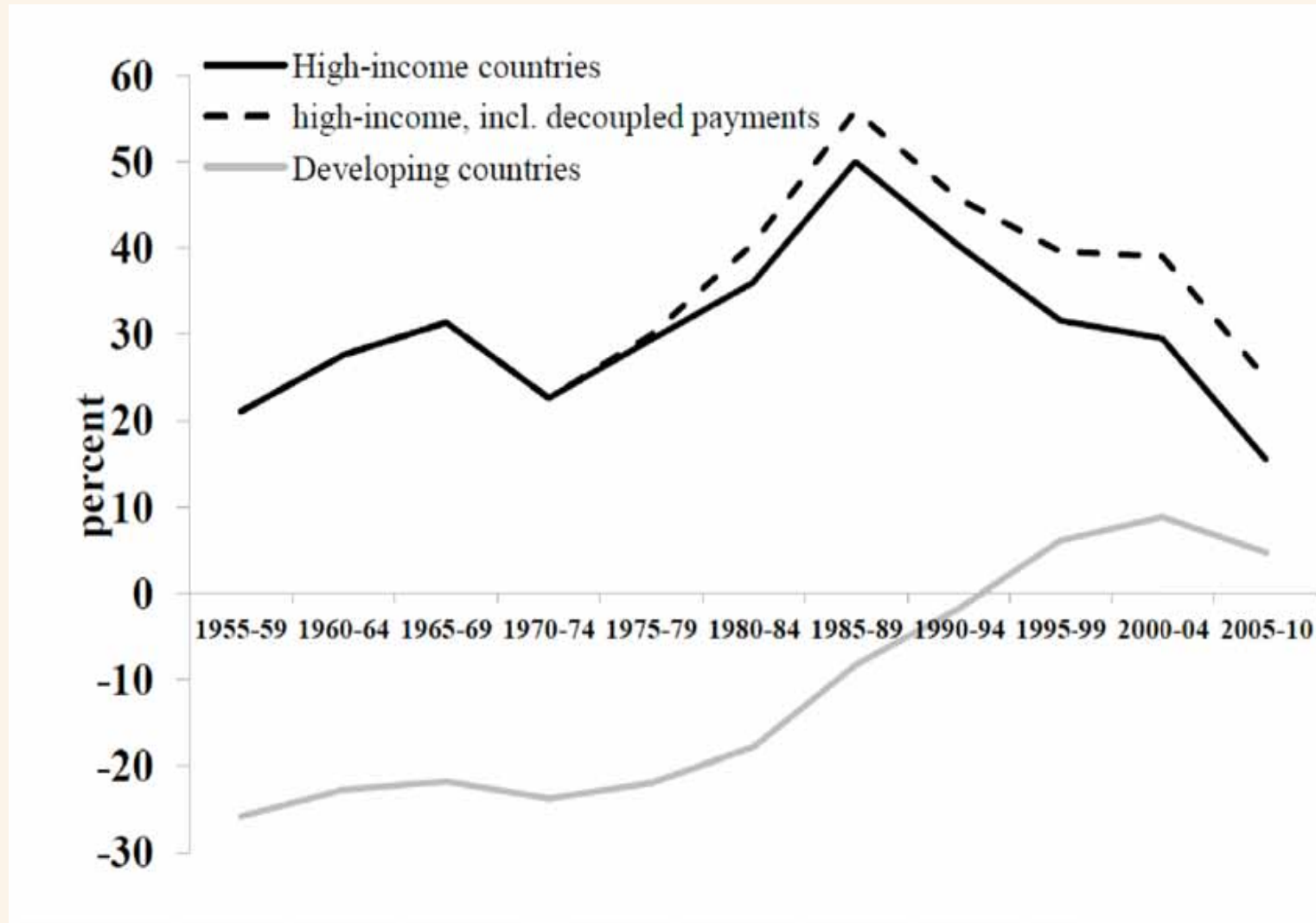
Tariffs becoming less important

3





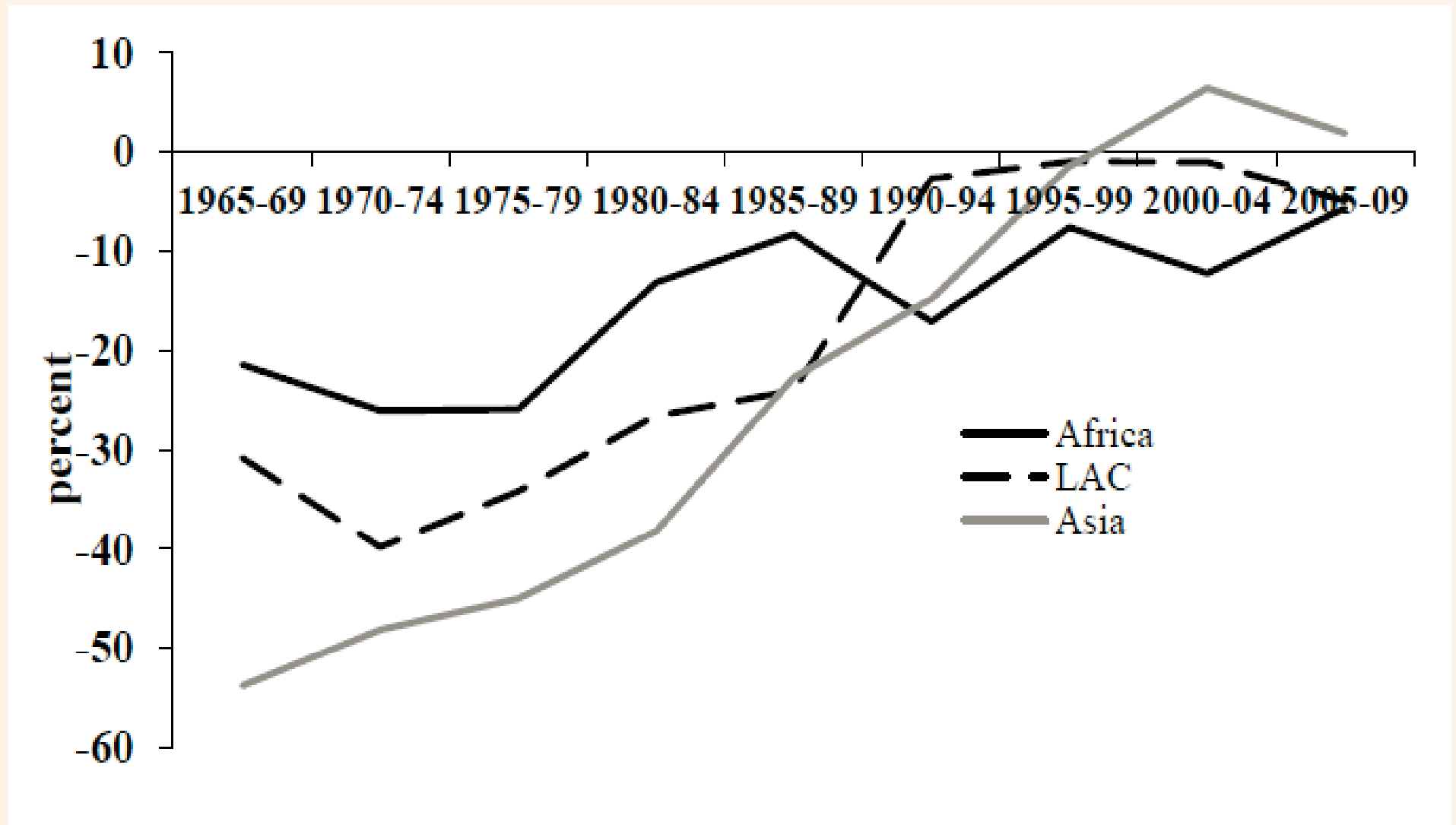
Nominal rates of assistance to agriculture



Source: Anderson (2012)



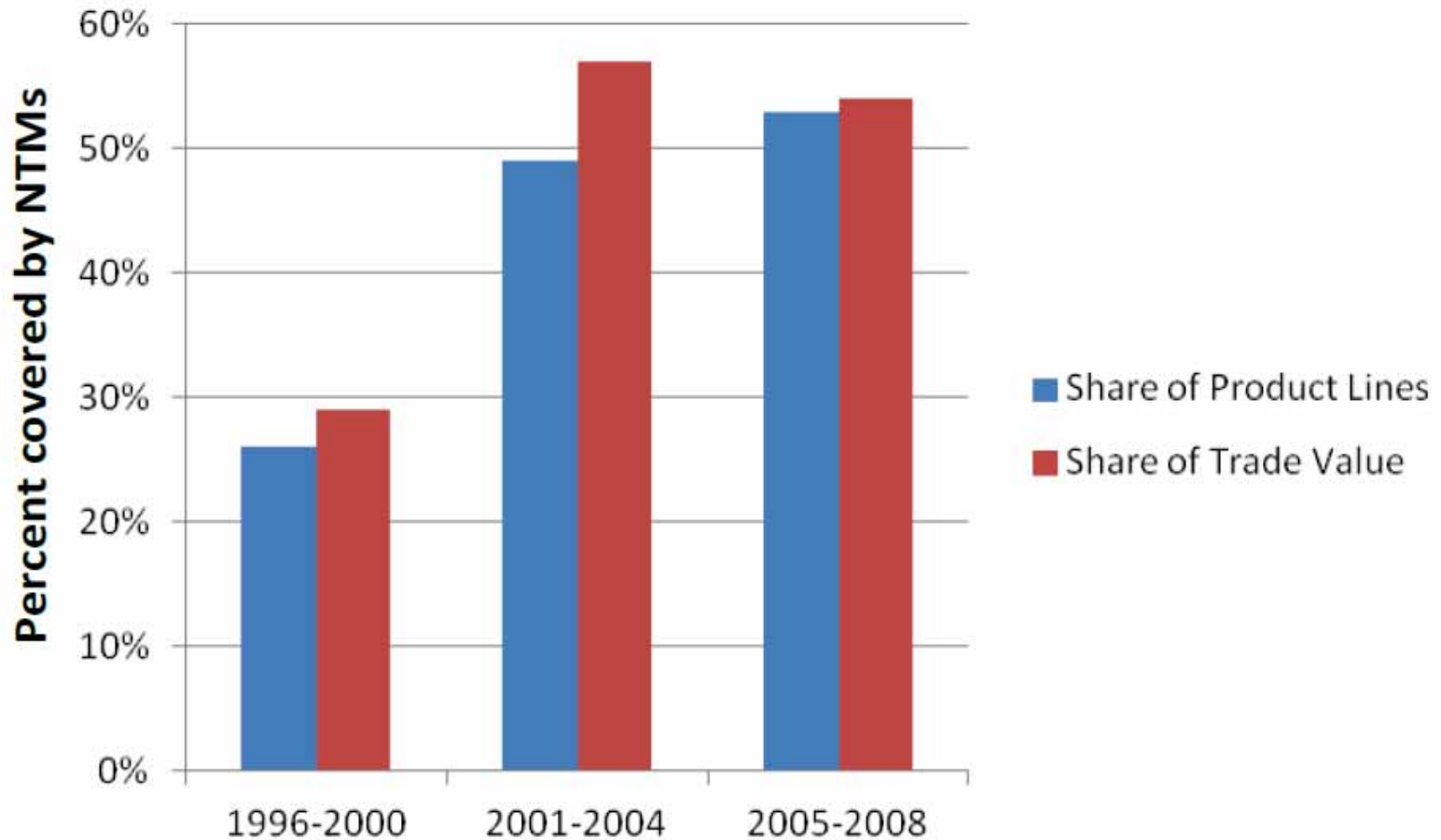
Relative rate of assistance to agriculture



Source: Anderson (2012)



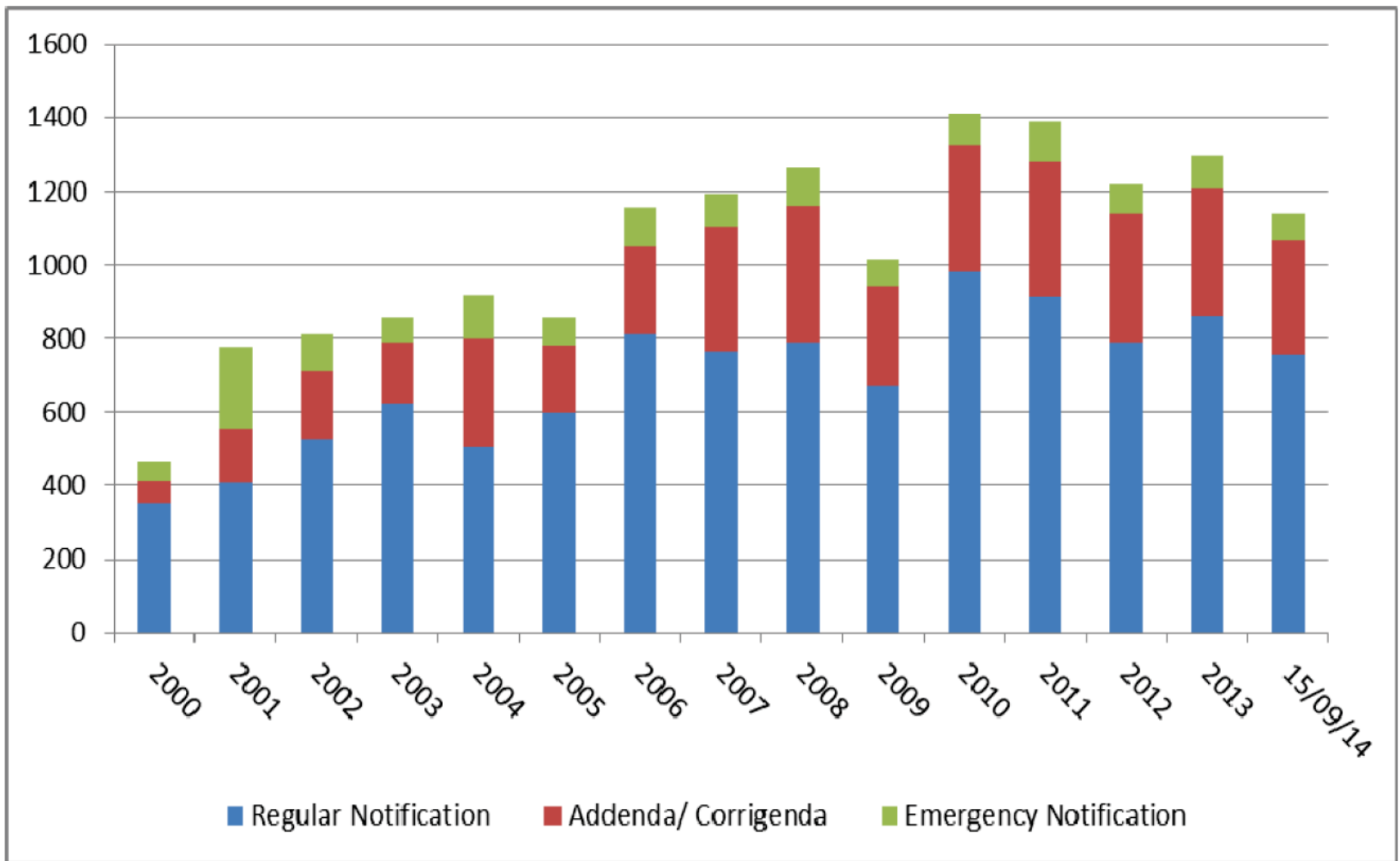
Non-tariff measures increasing



Source: WTO (2012) based on UNCTAD TRAINS.



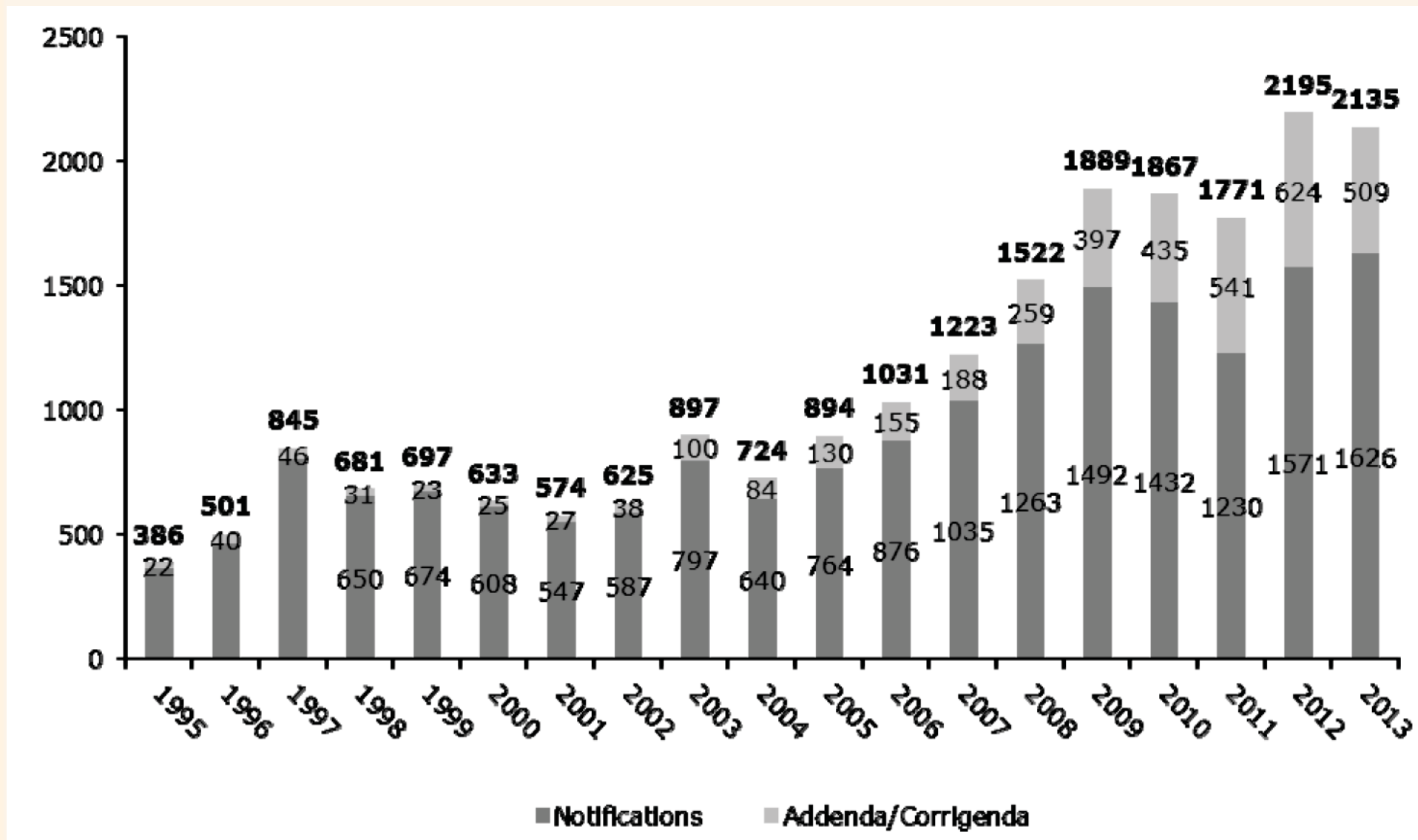
SPS notifications to the WTO



Source: WTO secretariat



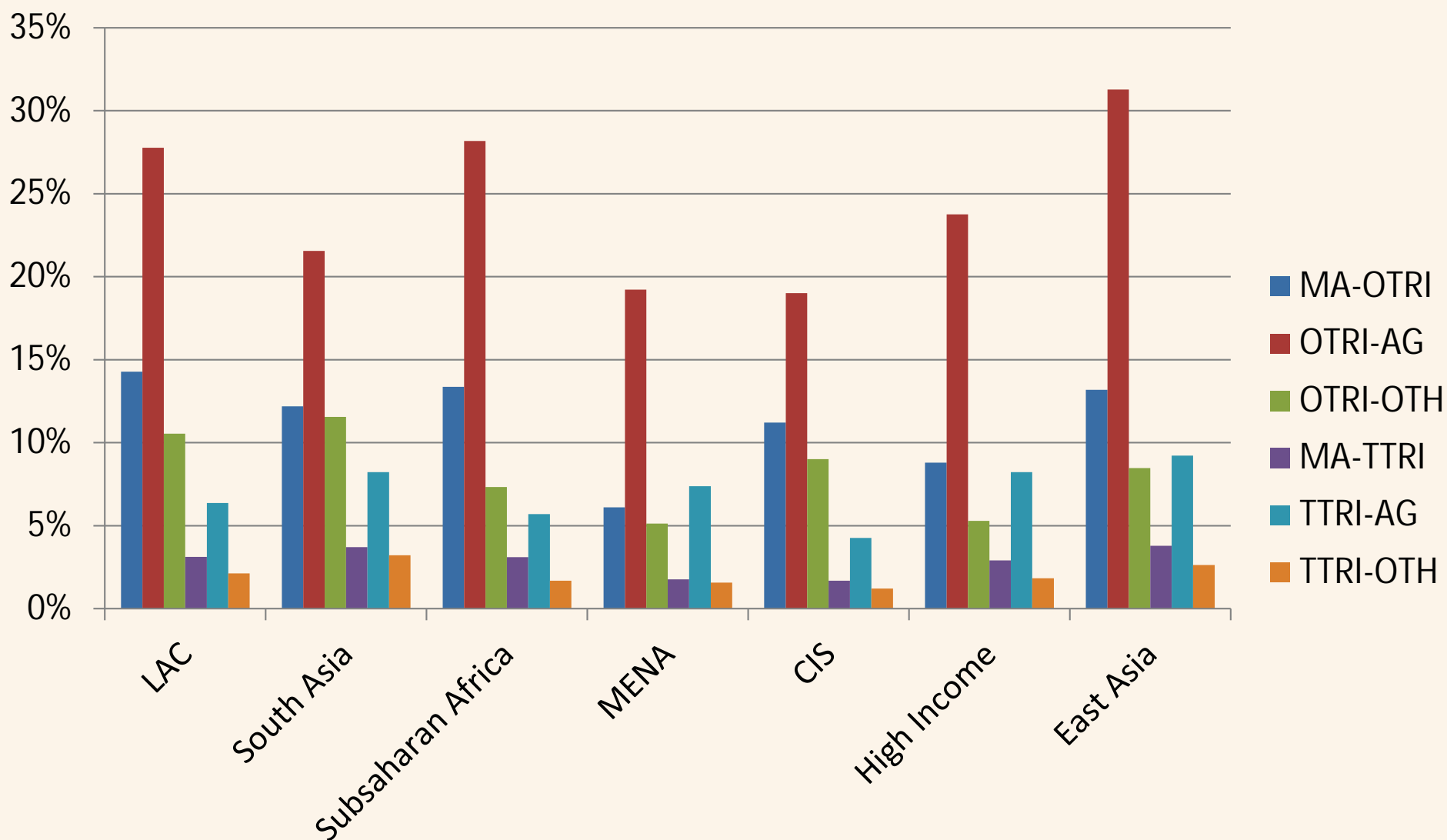
TBT notifications to the WTO



Source: WTO secretariat



Market access restrictions, overall and tariff-only

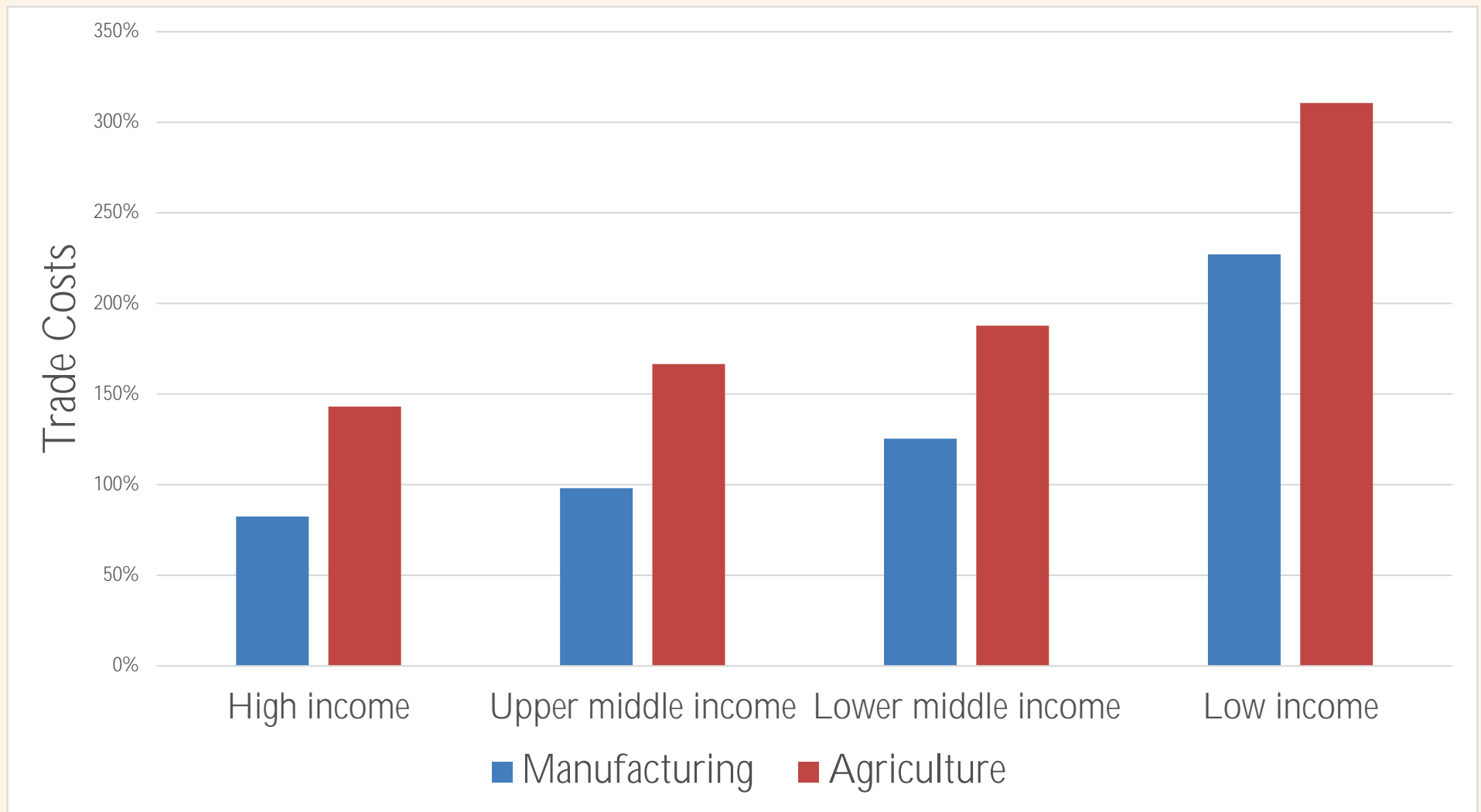




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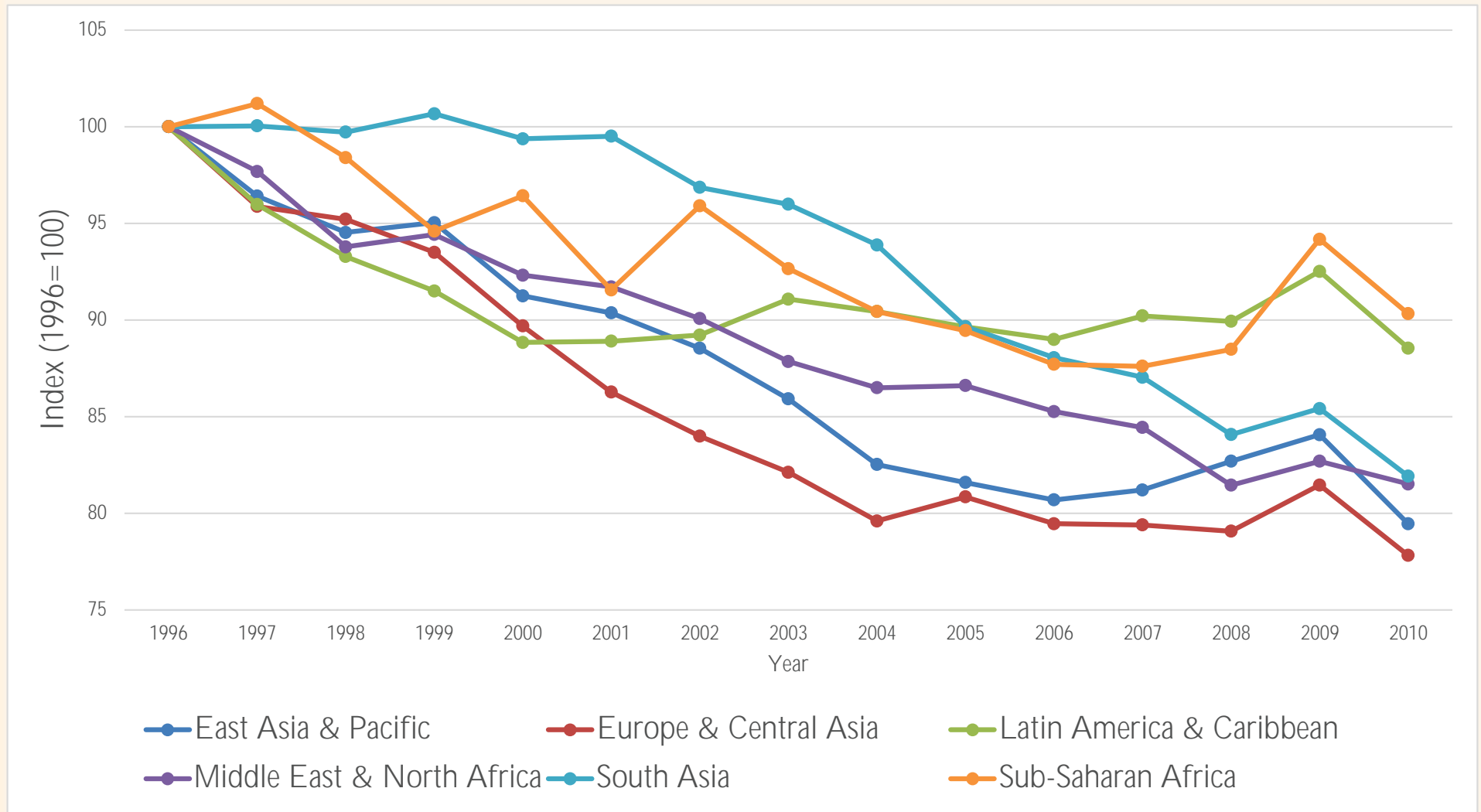
Trade costs, 2010 (% ad valorem equivalent)



Source: UNESCAP-World Bank Trade Costs Database



Trade costs indices for manufactures (1996=100)



Source: UNESCAP-World Bank Trade Costs Database



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Removing tariffs vs. lowering trade costs

*Countries improve trade facilitation
halfway to global best practice*

*Countries improve trade facilitation
halfway to regional best practice*

All tariffs removed globally



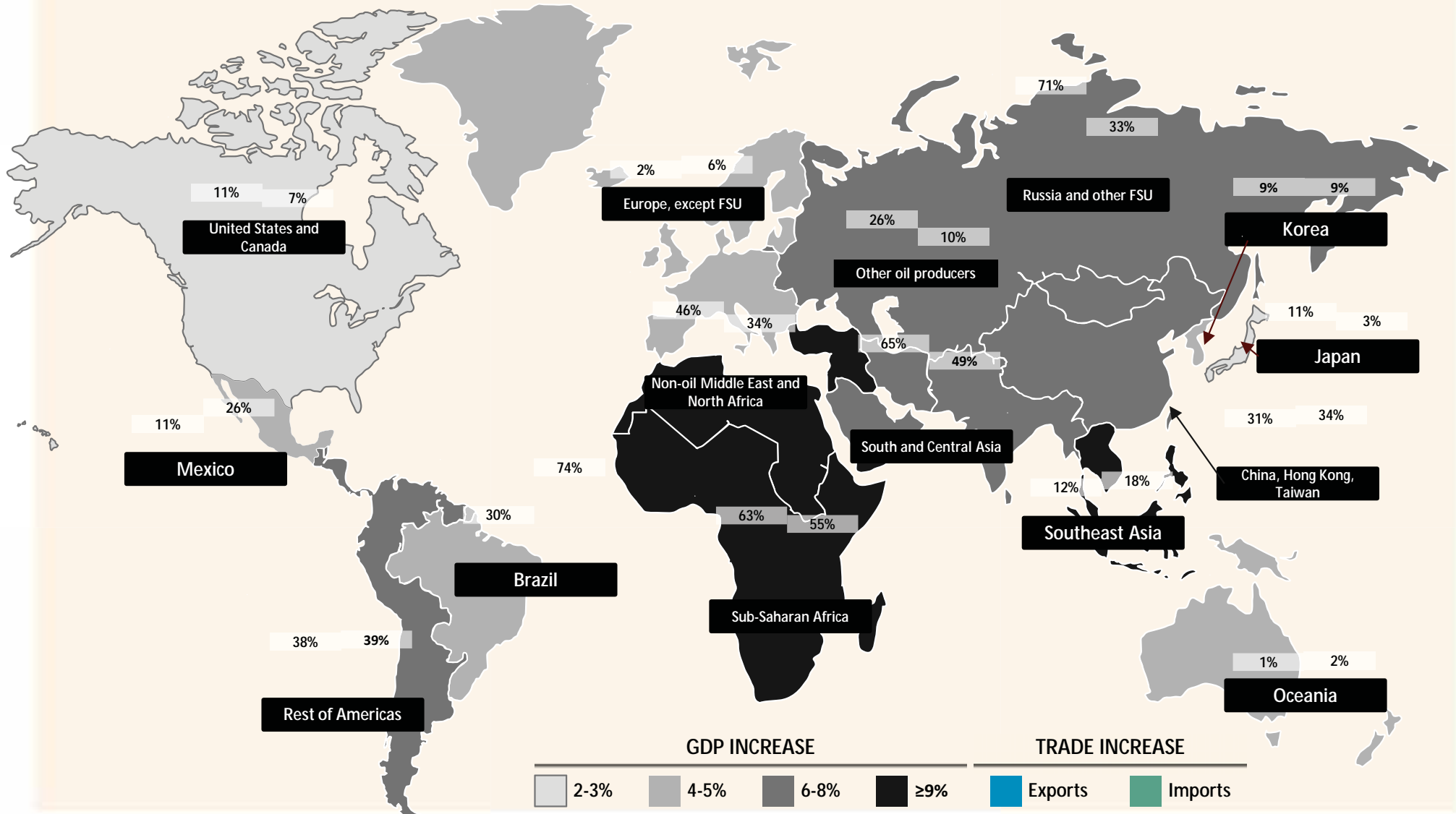
The GDP effect of trade cost reduction is much higher than for tariffs



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Potential gains from trade cost reductions



Source: Ferrantino, Geiger and Tsigas: The Benefits of Trade Facilitation- A Modeling Exercise, based on 2007 base line; Ambitious Scenario

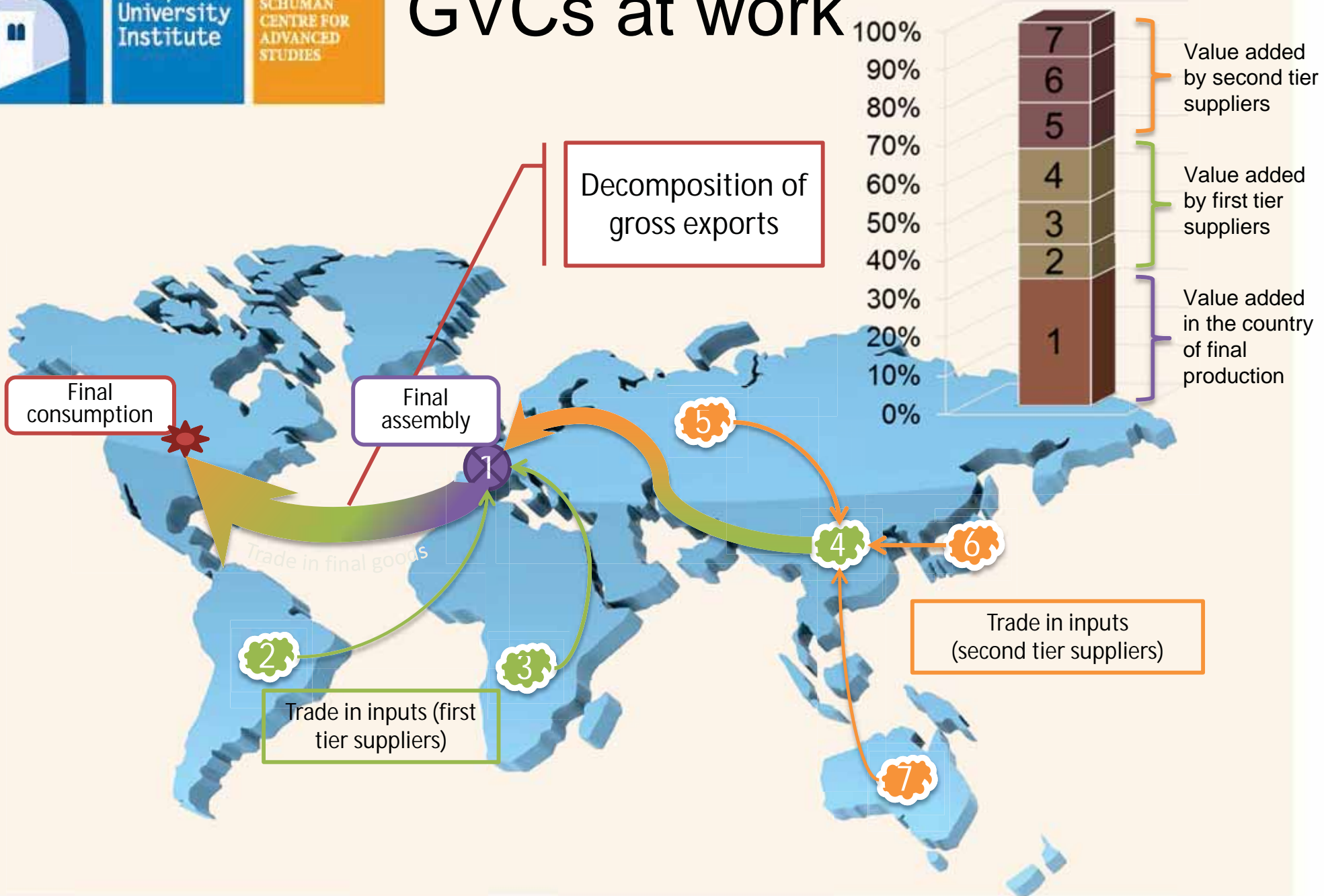


Value chains and rise of international production

- Supply chains
- Global value chains
- International production networks
- Vertical specialization
- Unbundling
- Trade in tasks
- Outsourcing
- Offshoring

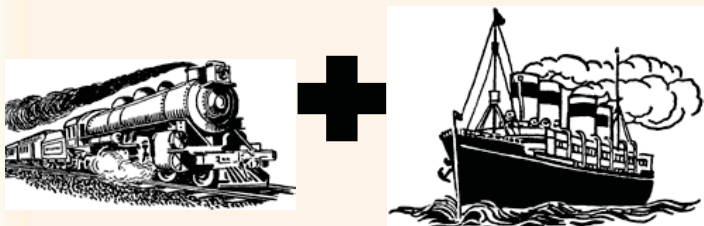


GVCs at work

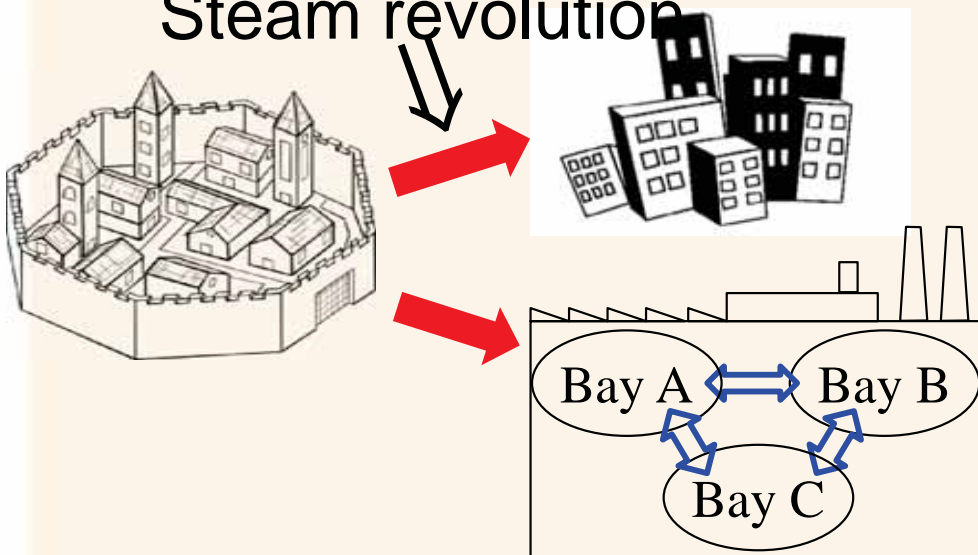




1st unbundling: shipping costs fall

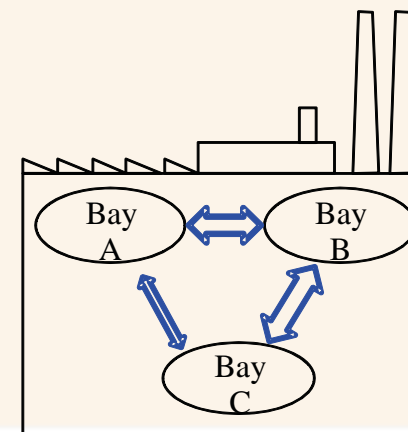
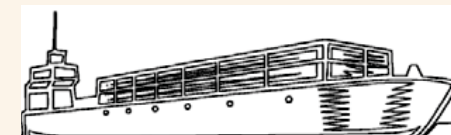
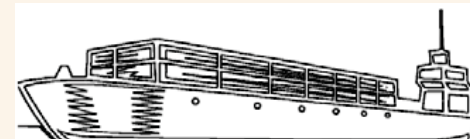
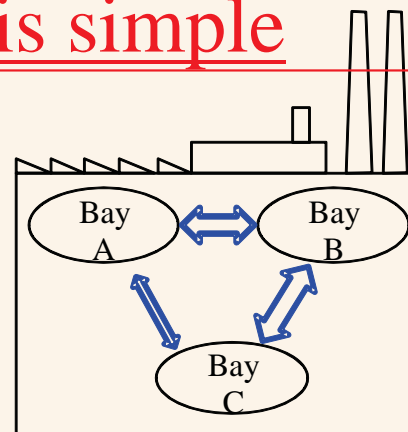


Steam revolution



- 1) Global dispersion of production.
 - 2) Local clustering into factories.
- Coordination costs constraint binds*

Trade is simple

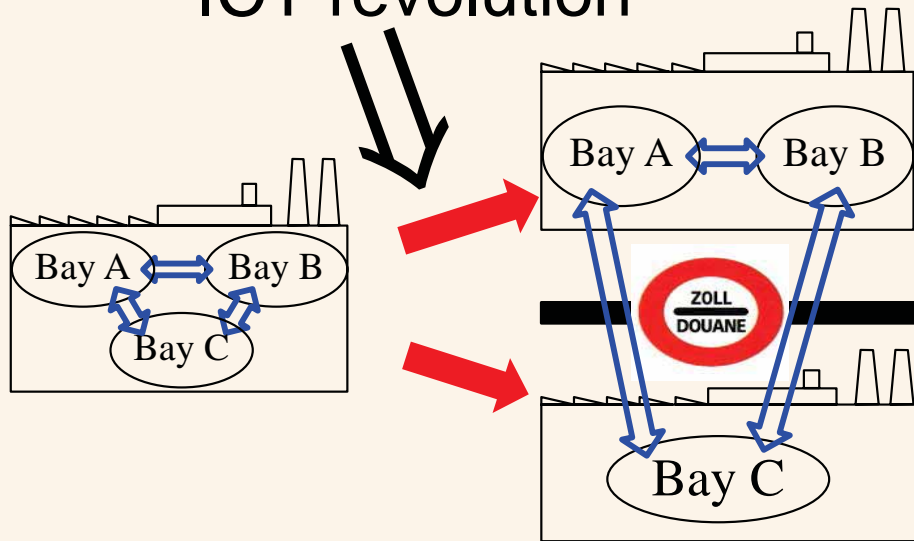




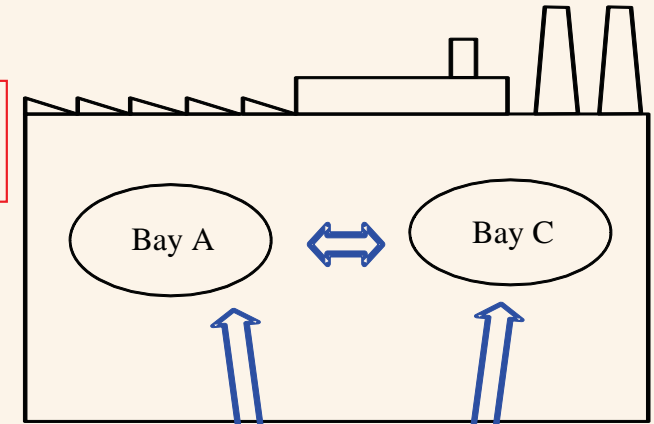
'Supply chain trade'

2nd unbundling: coordination costs fall

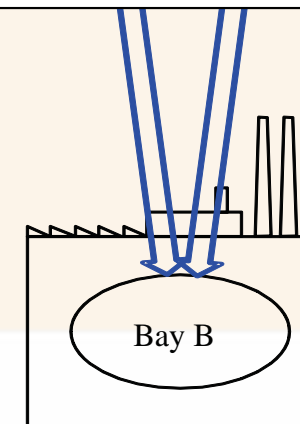
ICT revolution



- 1) Dispersion of production stages.
- 2) Regional clustering (Factory Asia, Factory EU, Factory North America)

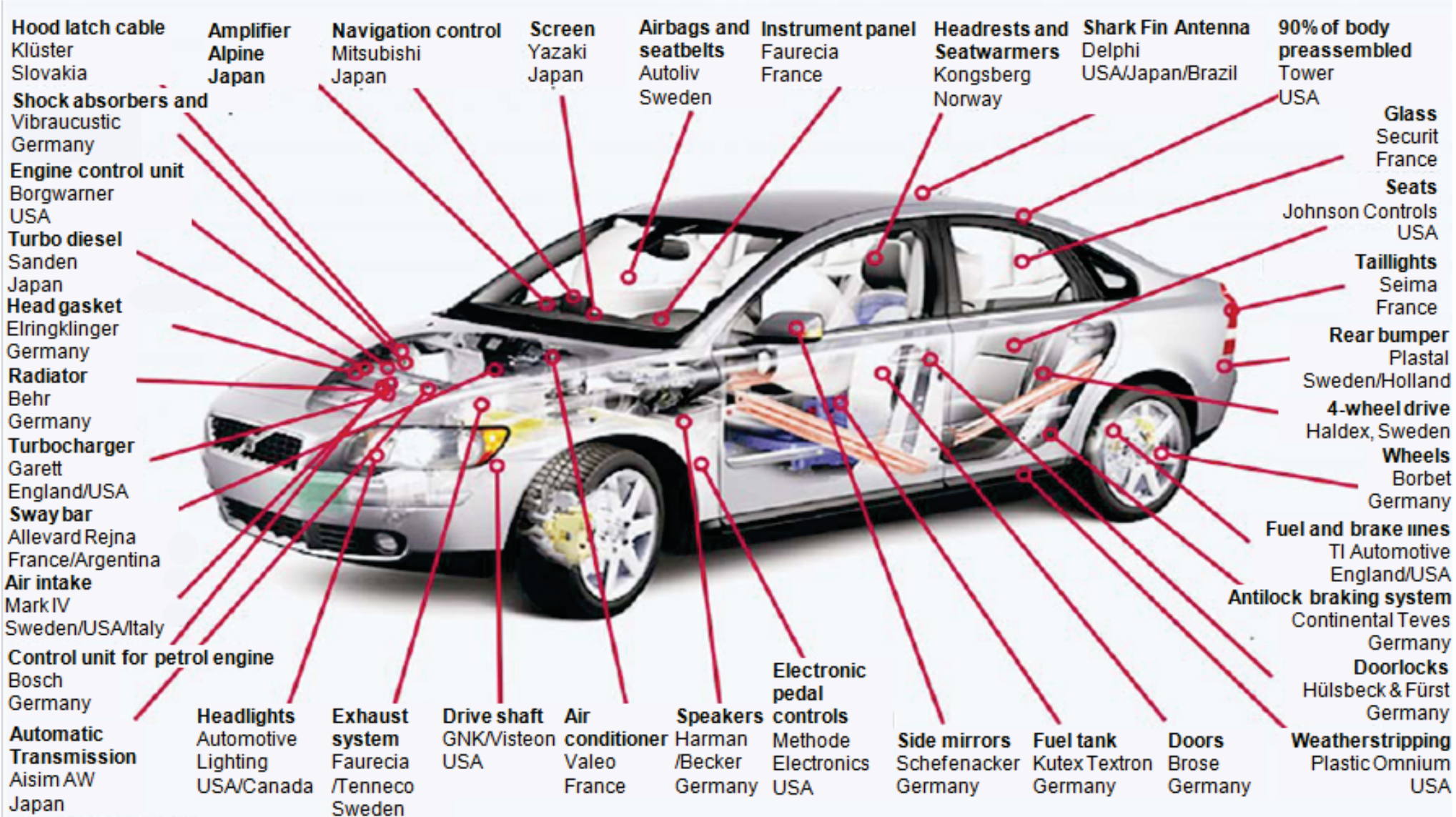


- 1) Two-way flows of goods, ideas, technology, capital & technicians.
- 2) Investment & application of firm-specific know-how





Vertical specialization





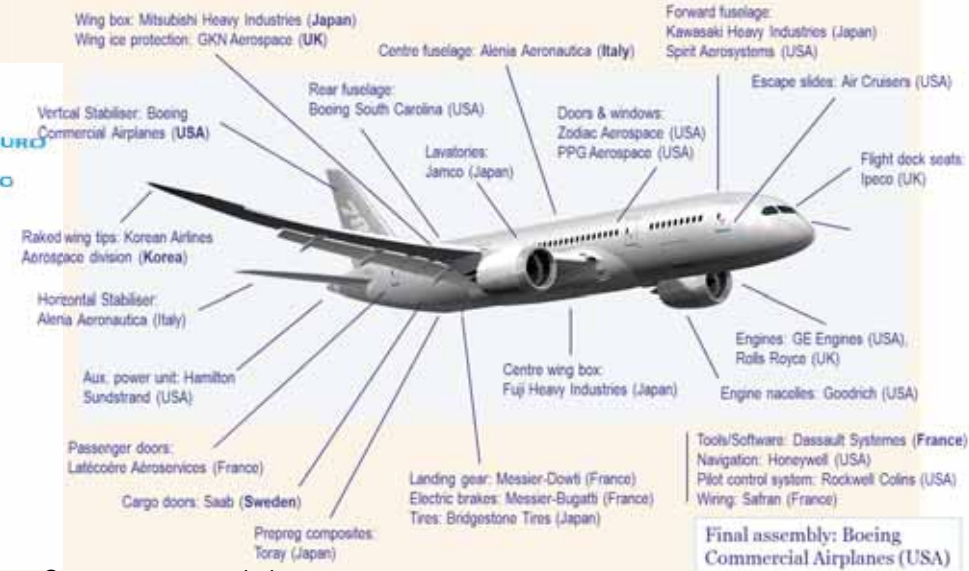
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Some more examples

A commercial airplane assembled in the US

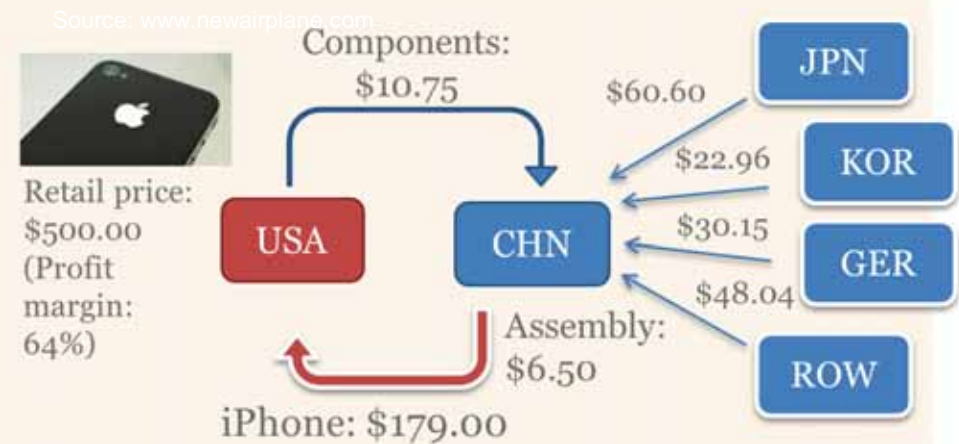
Sport shoe: 100 EUR (final retail price)



A suit made in China, sold in the United States

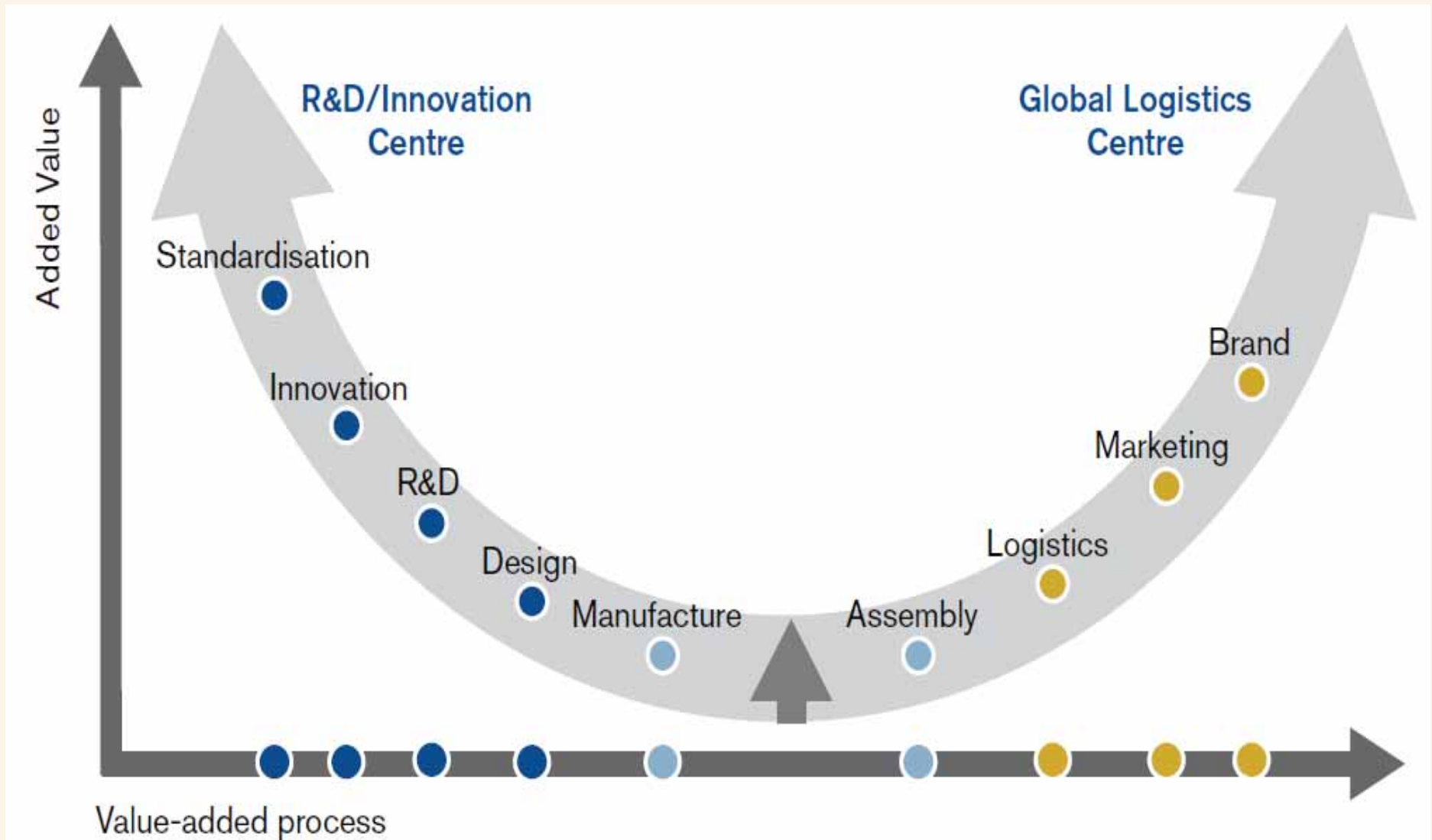


Smart phone: designed in the US; assembled in China





The value added “smiley” graph



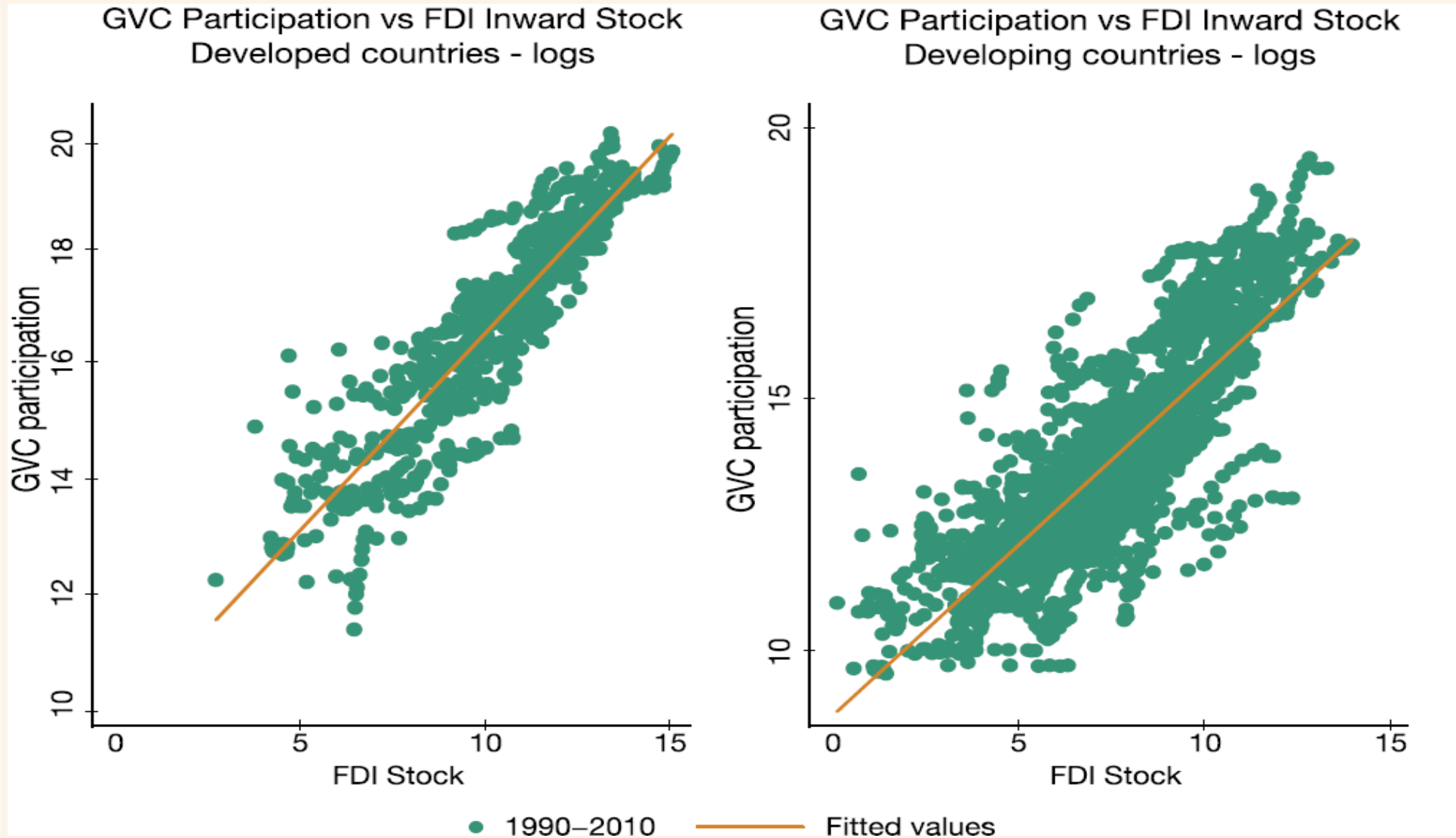
Source: World Economic Forum (2012)



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GVC participation and FDI





GVC participation index (% of gross exports in 2009)

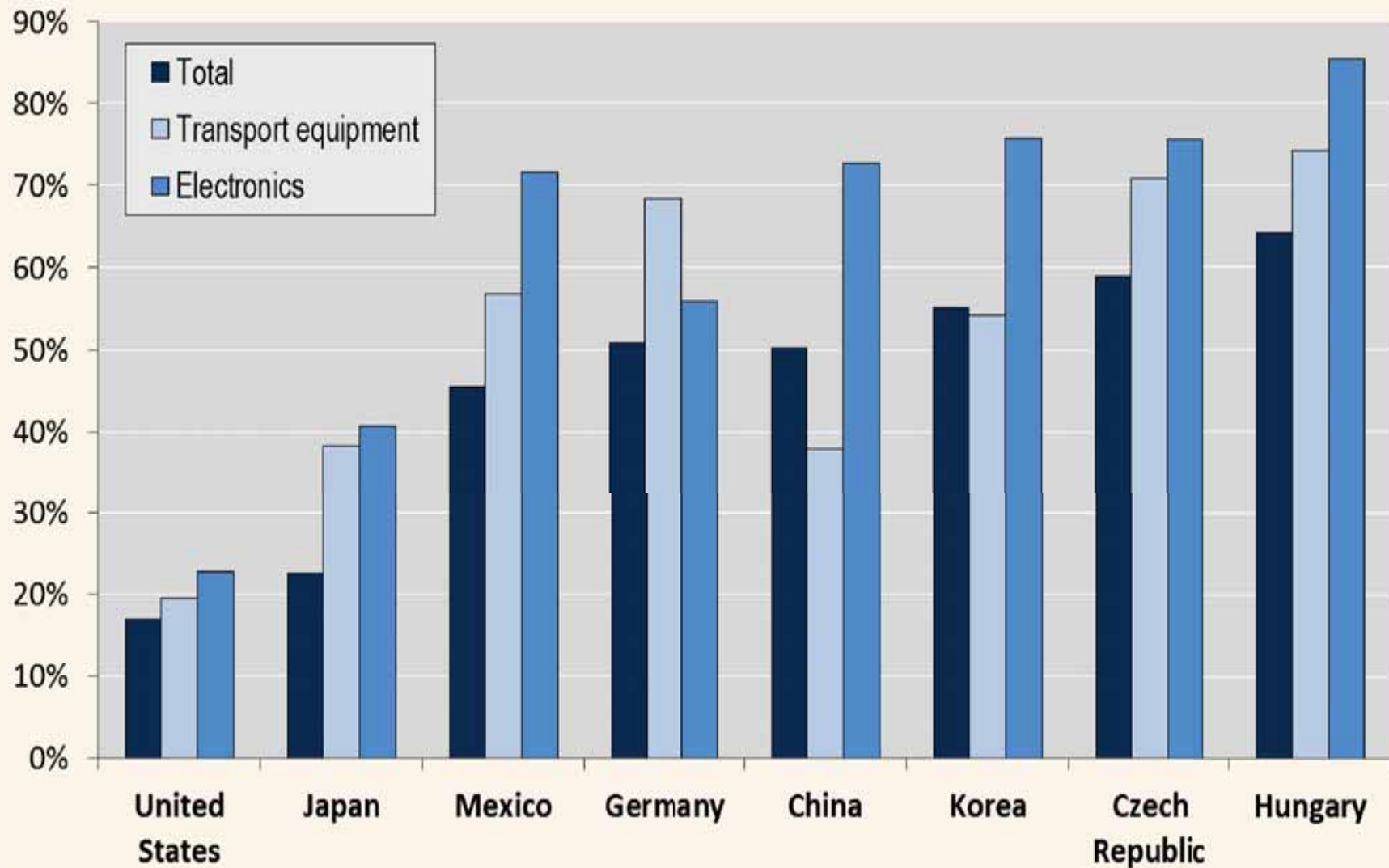


“Forward”: exports of intermediates used to produce exports in receiving country

“Backward”: imported inputs used in exports

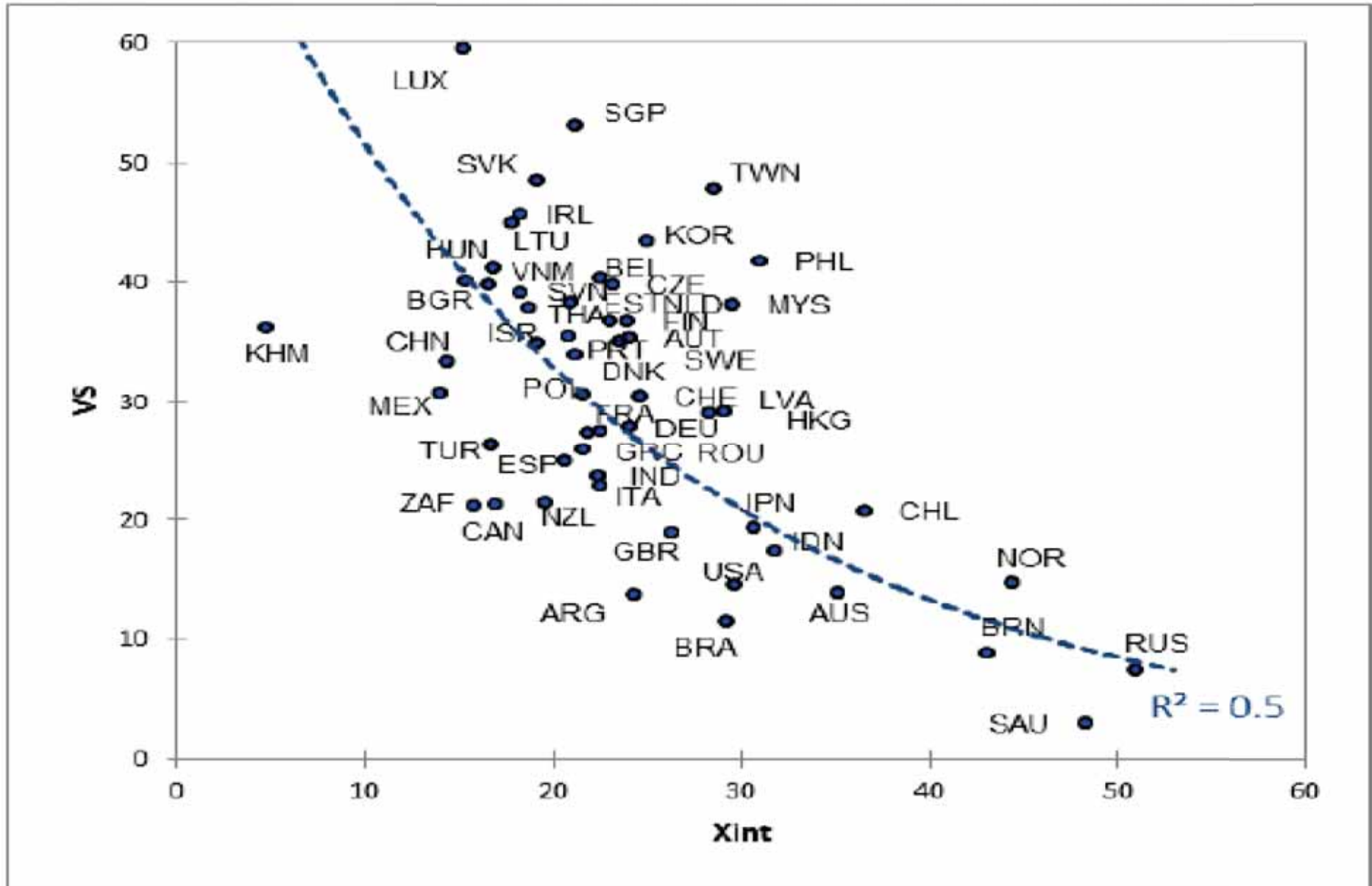


Use of intermediate imports in exports (% of total intermediate imports, 2009)





VCS: foreign content and domestic exports of inputs

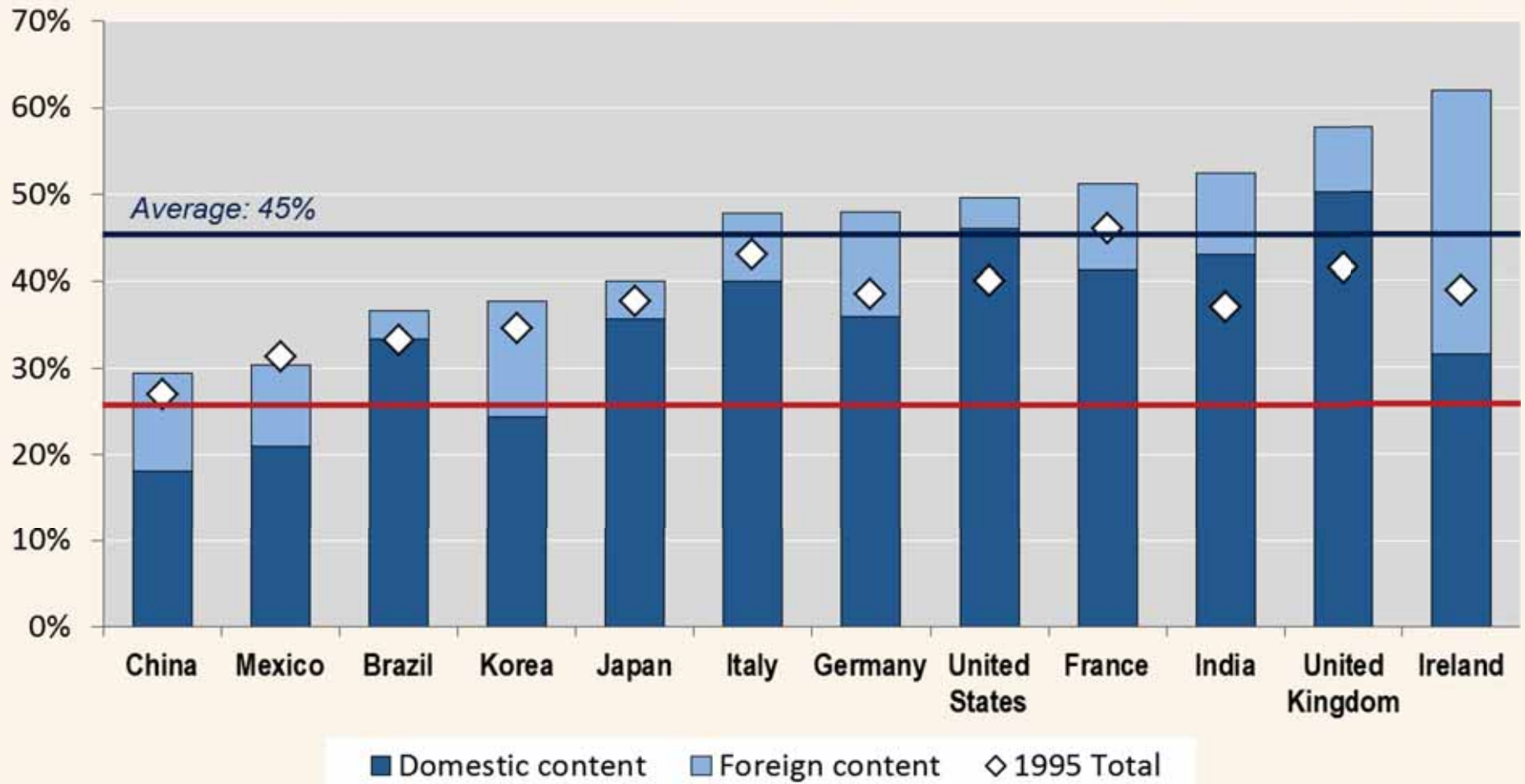


Source: Escaith 2014; VS = vertical specialization



Services and GVC participation

Services value added embodied in gross exports, 2009

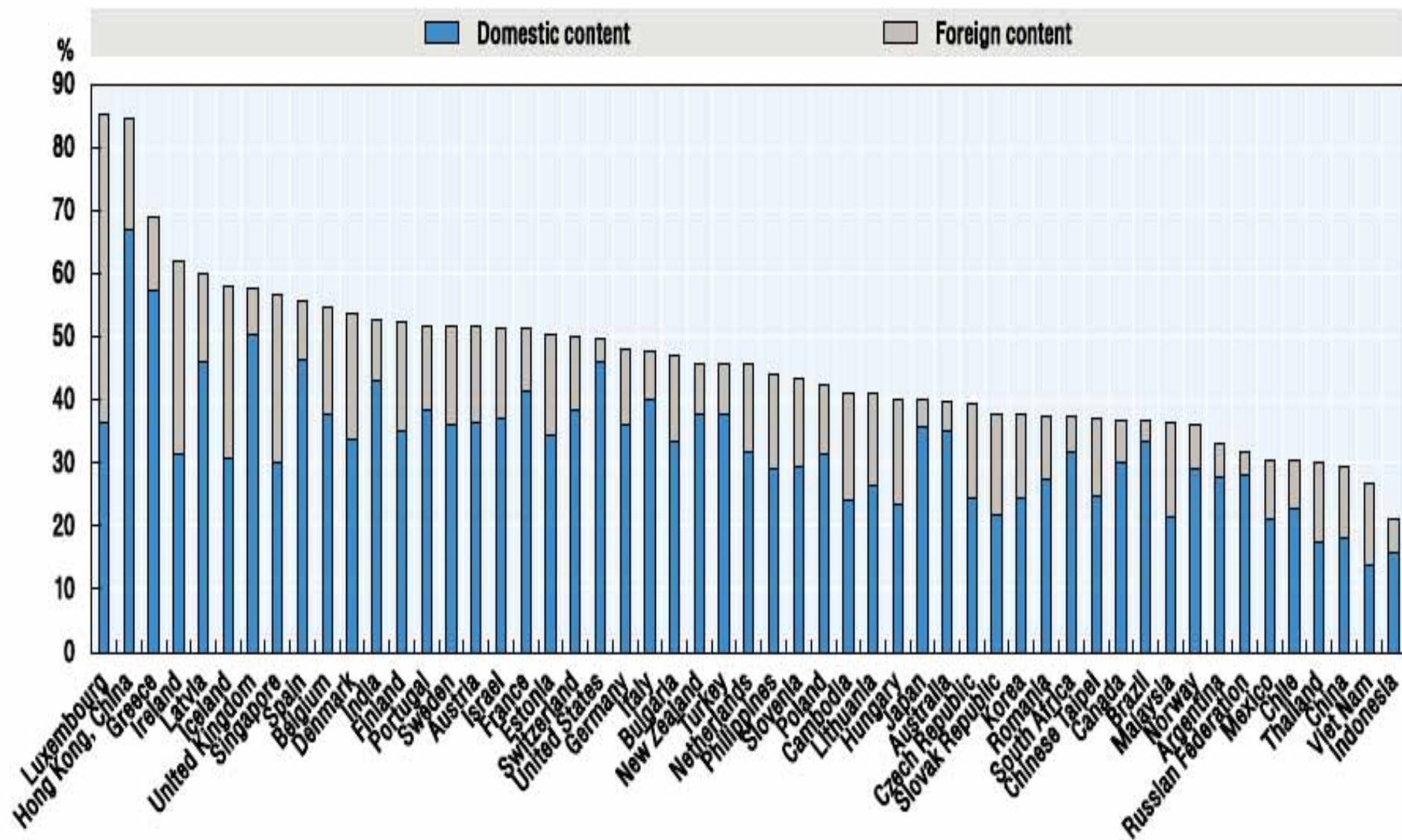


Memo: Services share of gross global trade: 24%

Source: OECD Trade and Agriculture Directorate

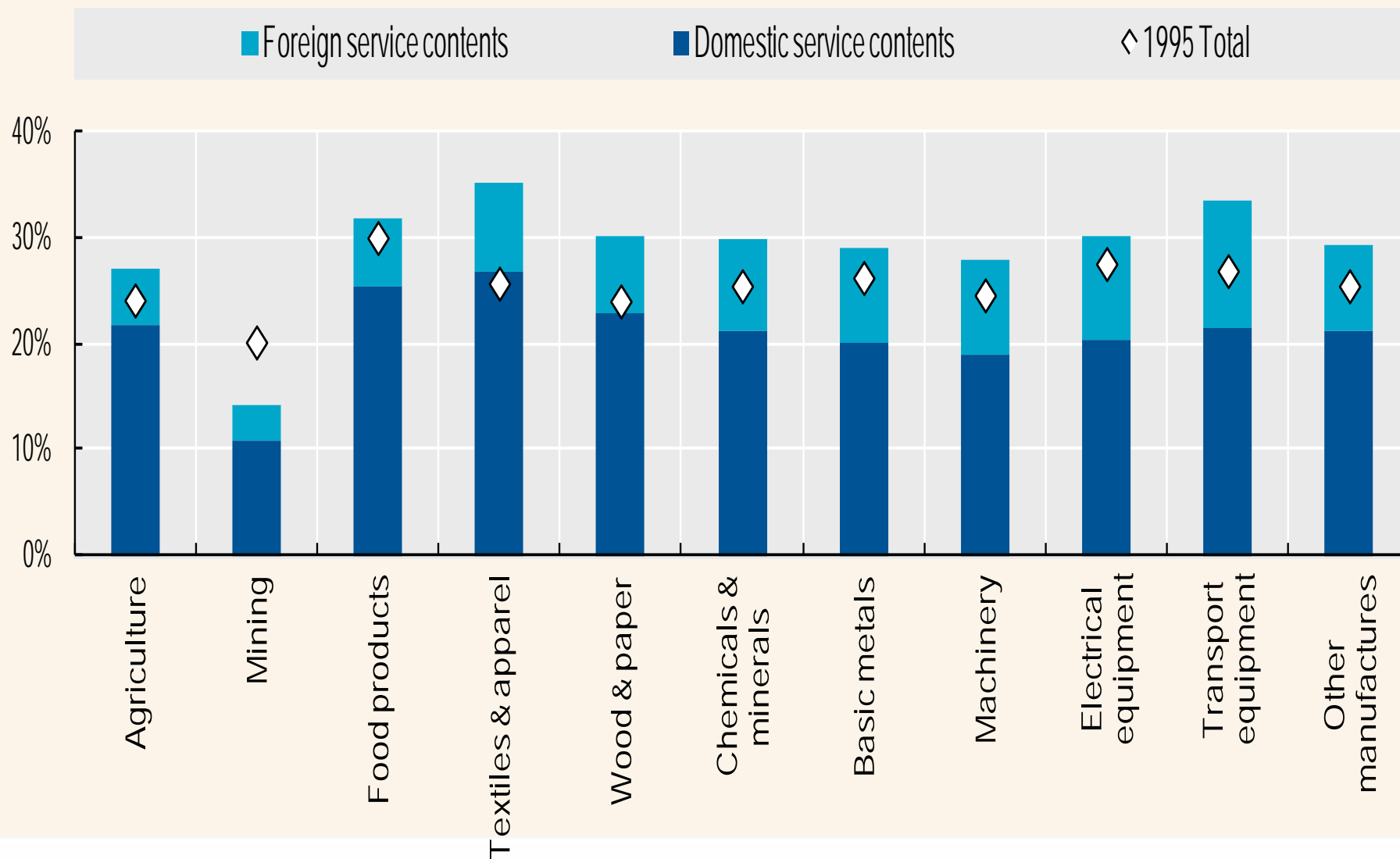


Services share of total value added embodied in exports, 2009





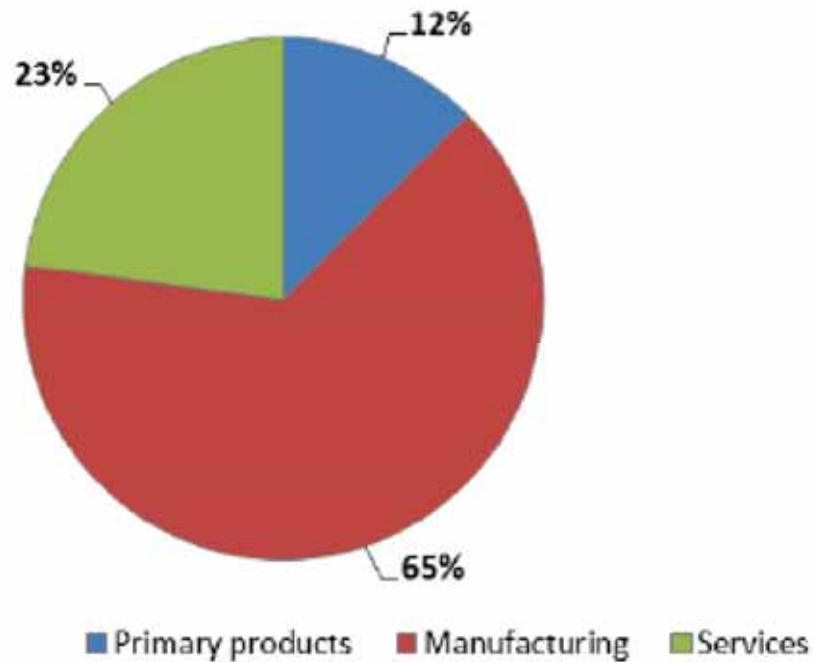
Services content of gross exports, by industry, 2009



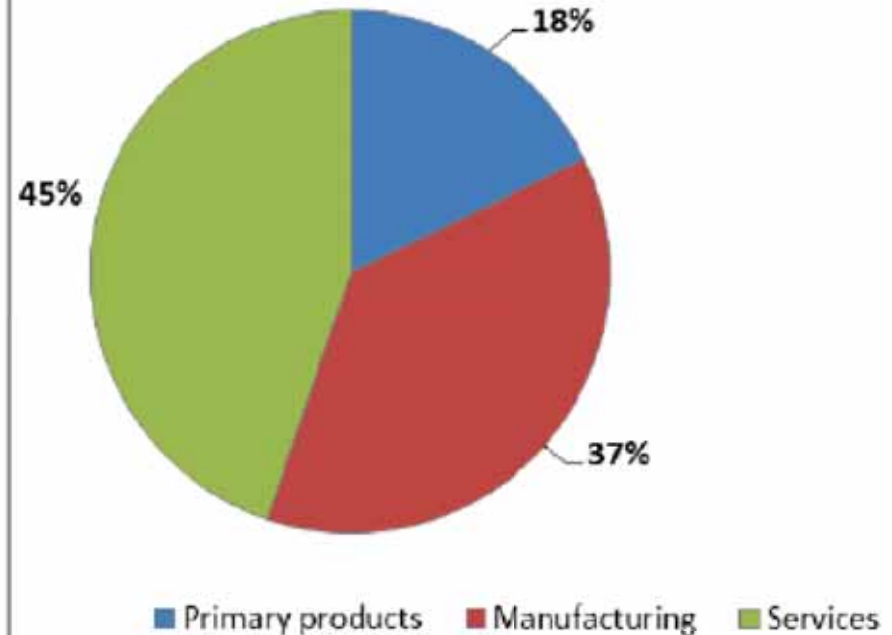


Services and value added trade

Structure of world exports in gross terms, 2008



Structure of world exports in value added terms, 2008



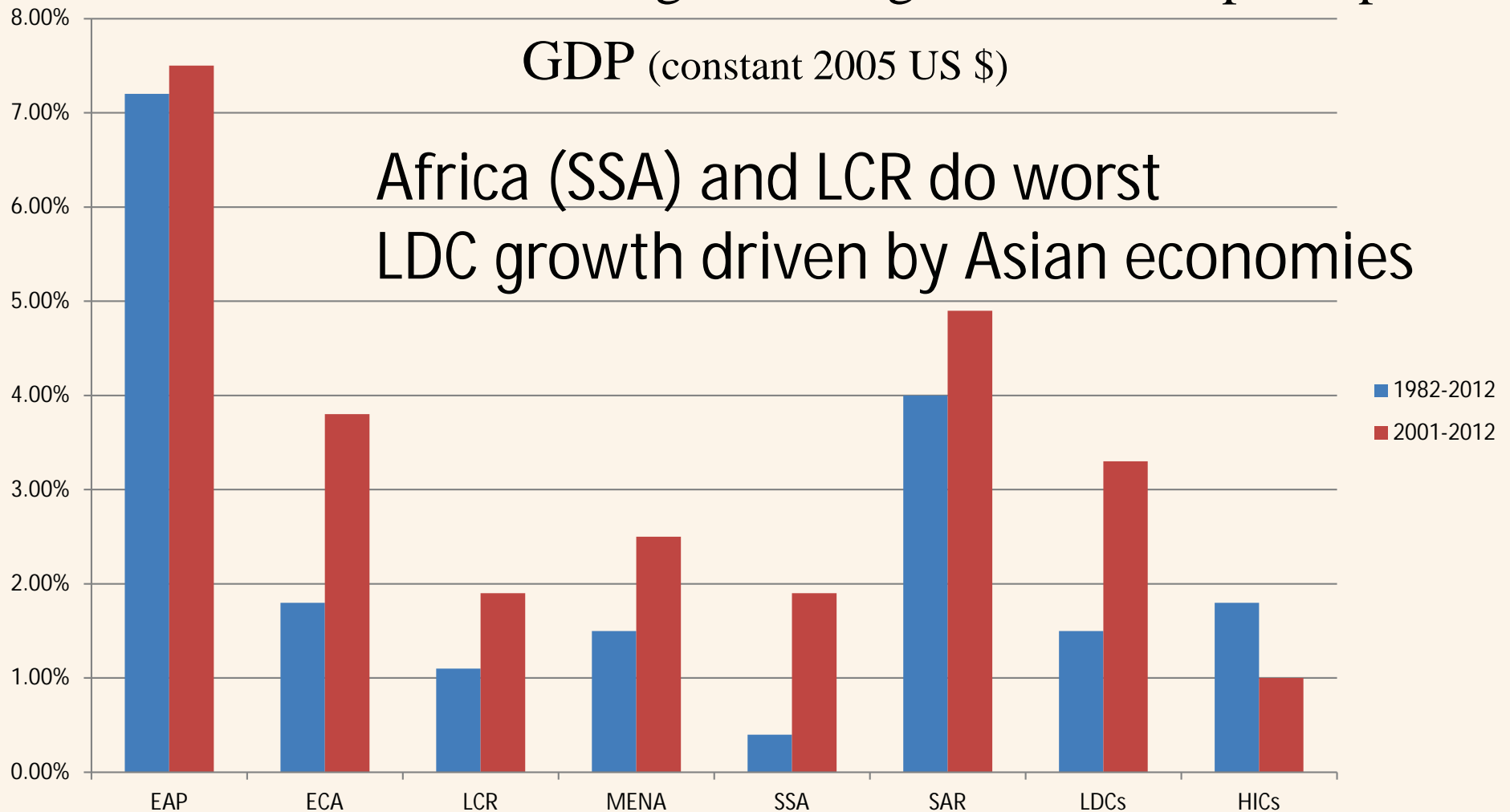
Source: OECD-WTO TiVA database.



VCs matter: VC-intensive regions *tend* to do better

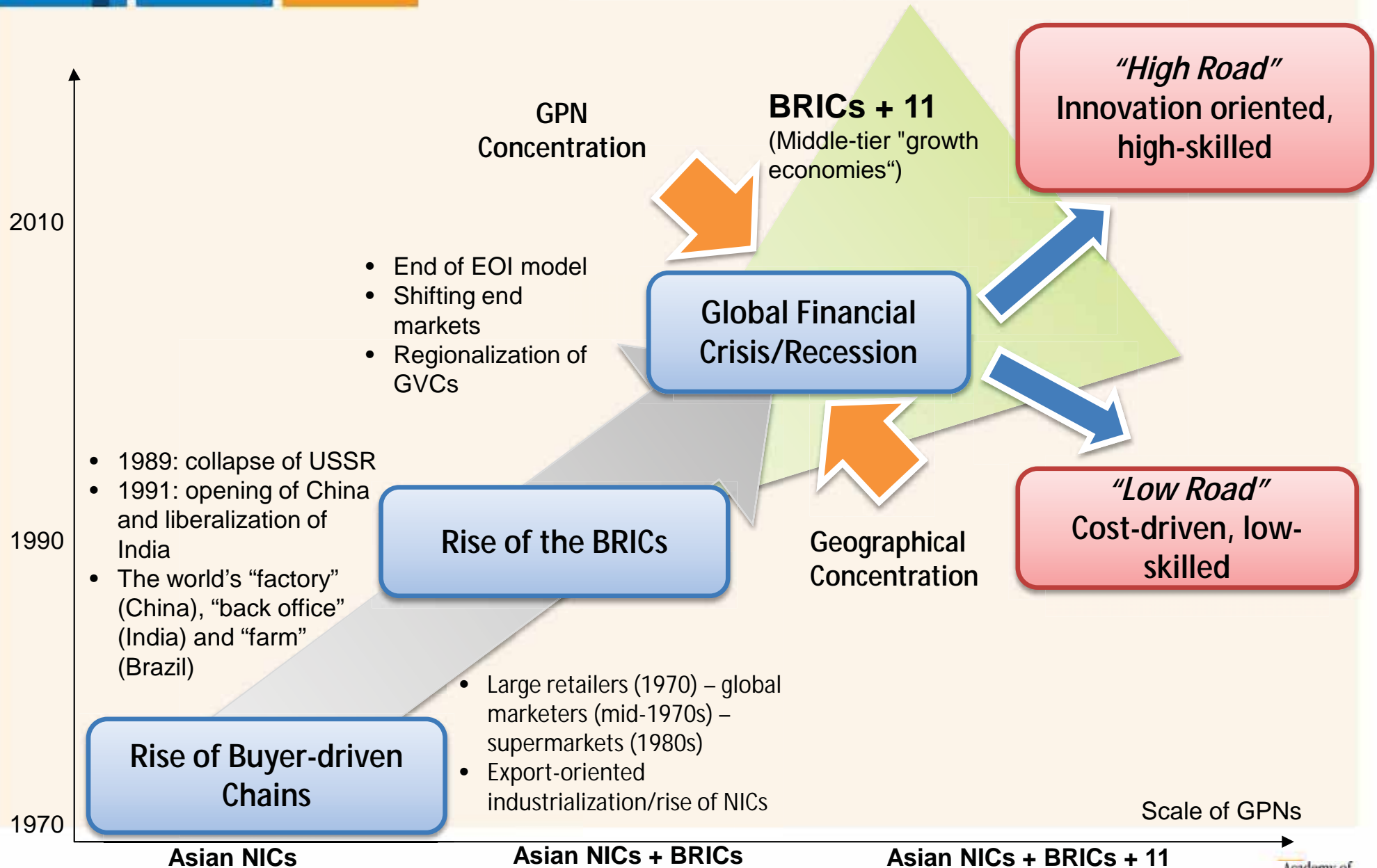
Average annual growth rate of per capita

GDP (constant 2005 US \$)





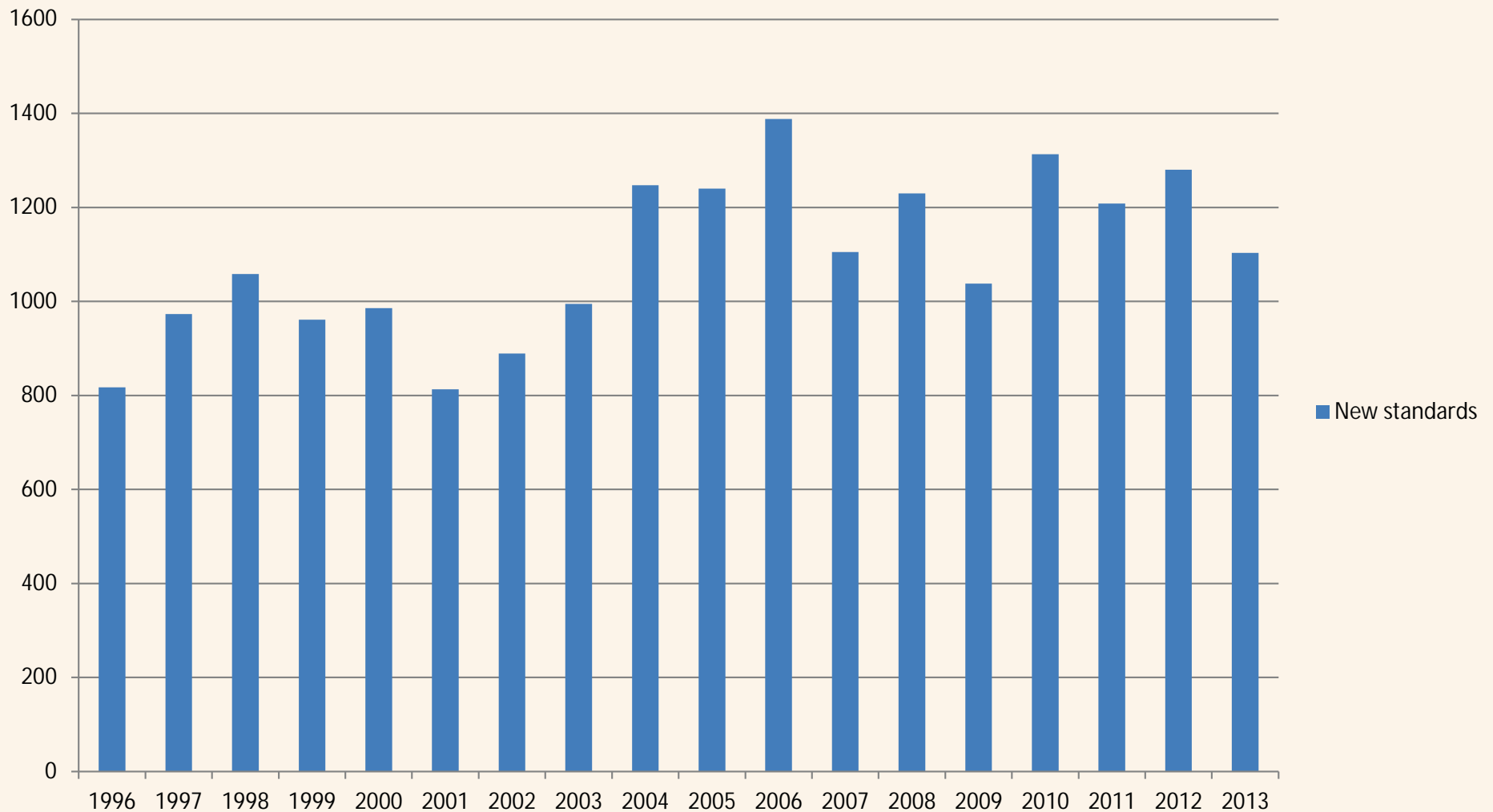
Dynamics of Global Value Chains





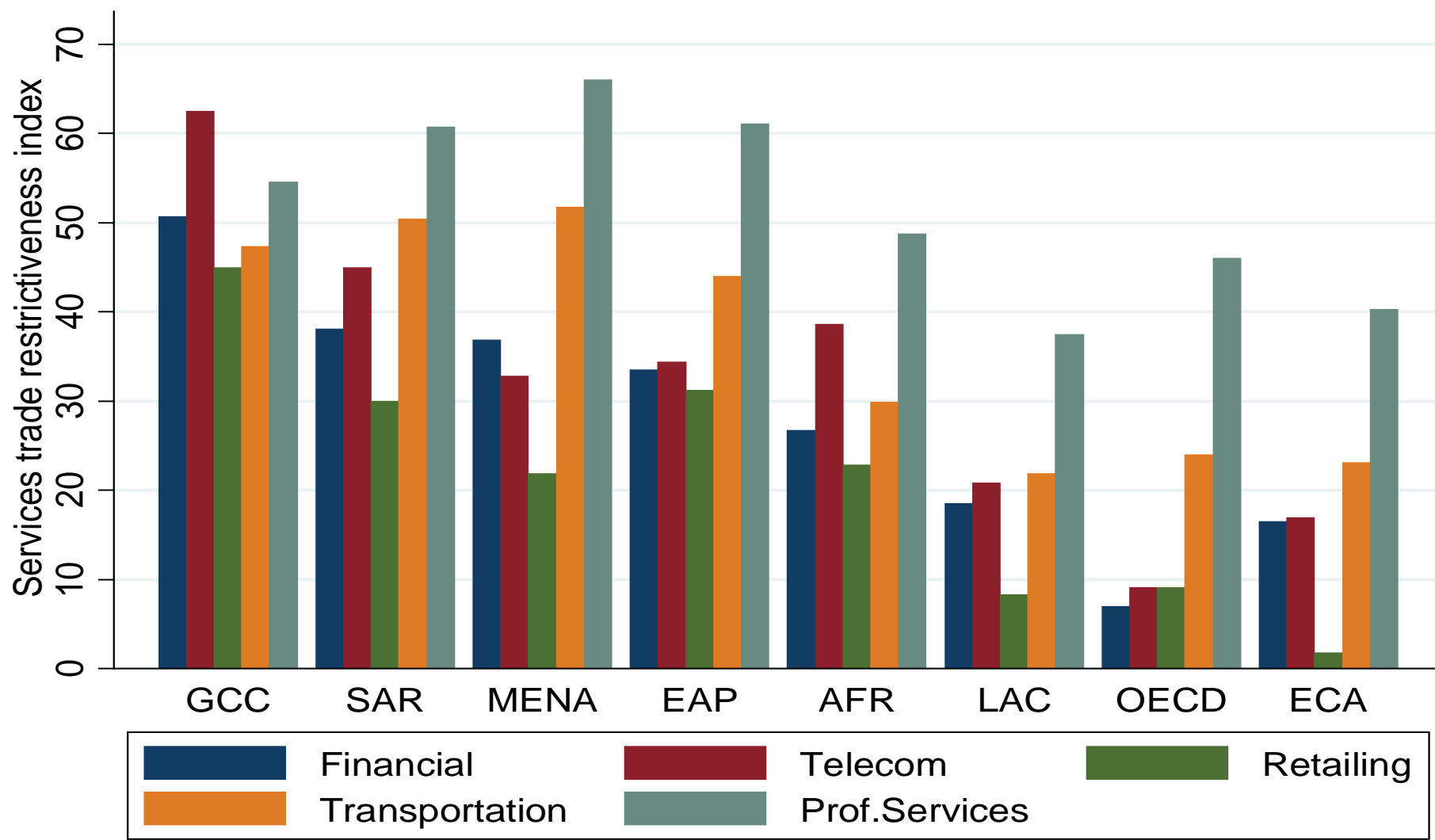
Production standards critical

Annual number of new standards issued by ISO





Services trade/investment policies

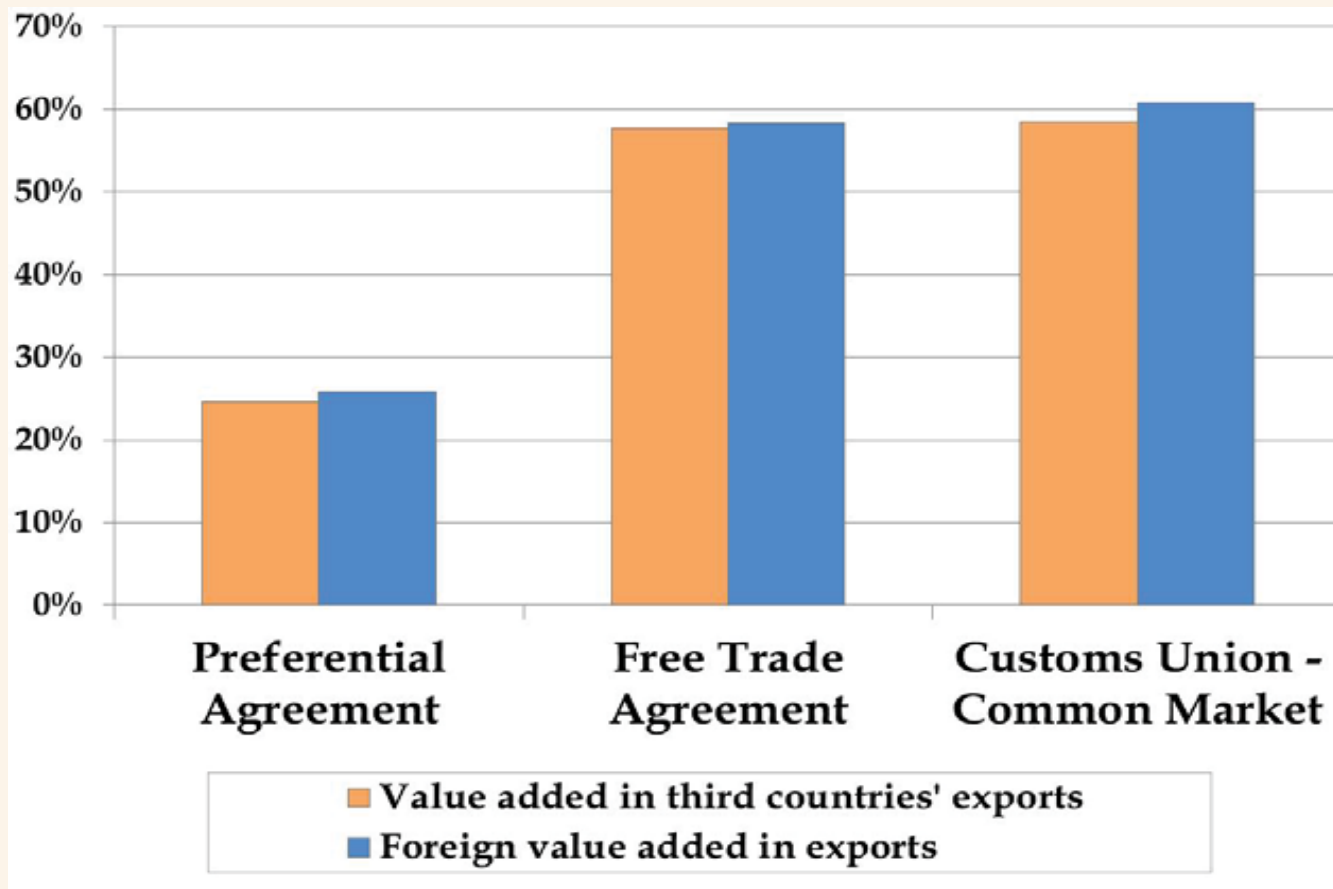


Note: 103 countries included.



Impact of trade agreements on GVC participation

- Deep integration is associated with more cross-border production sharing because they go beyond reduction of tariff rates



Source: Juan Blyde, IADB based on data from GTAP and gravity equations

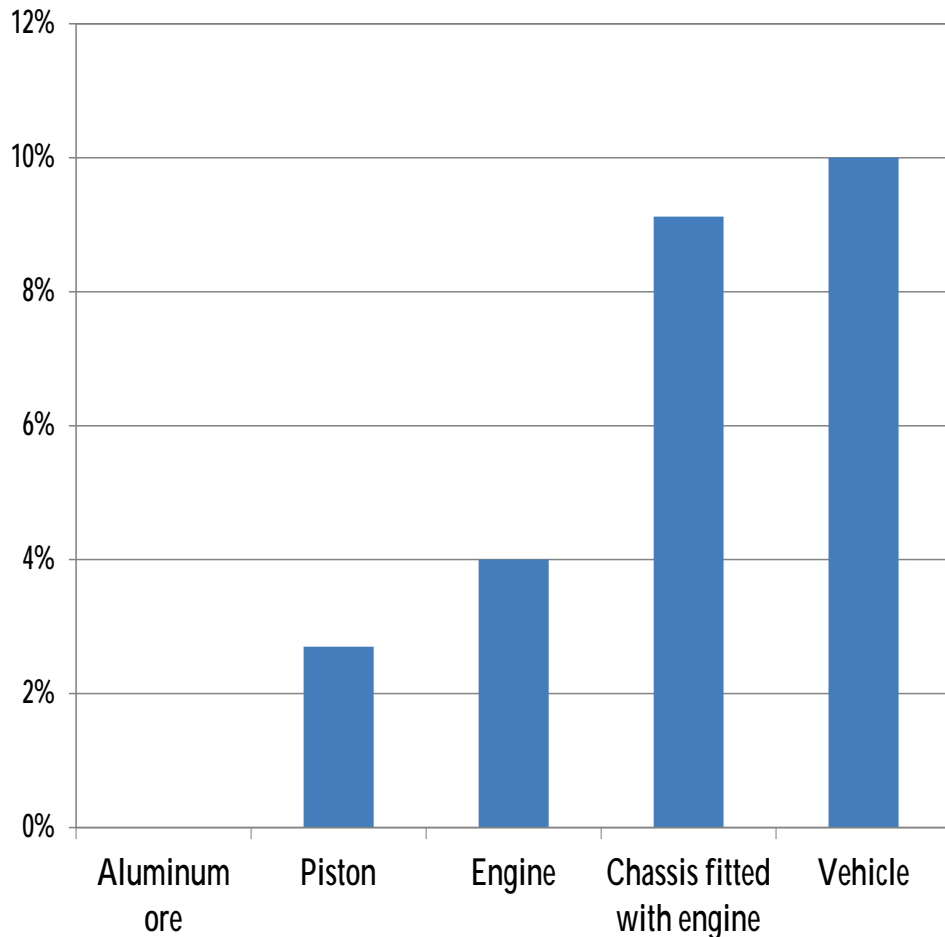


Notwithstanding all this ...tariffs
continue to be used and thus still matter



1. Tariff escalation

EU average unweighted MFN applied tariff



Source: IDB based on data from TRAINS

- An exporter paying MFN duties faces no tariffs in the EU for exports of aluminum; if the aluminum is used to produce pistons the tariff increases to 2.7%; if a firm exports an engine the tariff is 4%; if the engine is mounted on a chassis it rises to 9% ...



Tariff escalation

- Tariff escalation generates disincentives for developing countries to enter higher-value added segments of supply chains in industrial countries

Average un-weighted applied MFN tariffs, 2011

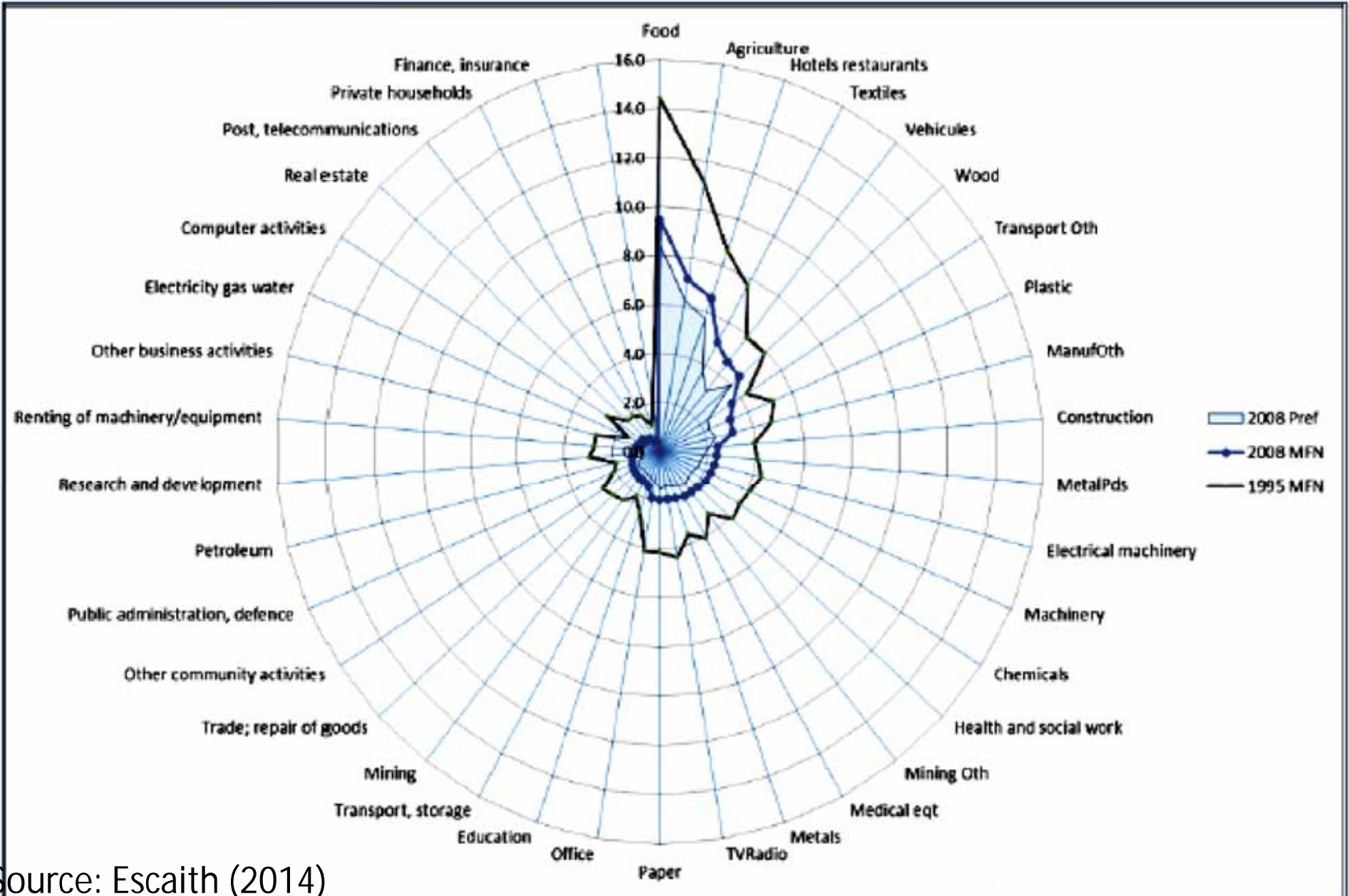
	European Union			United States		
	Raw materials	Semi-finished	Finished	Raw materials	Semi-finished	Finished
Fish and fish products	9.33	12.50	14.31	0.41	1.65	3.36
Fruit and vegetables	6.69	10.30	15.44	5.37	7.04	10.85
Coffee, tea, mate and cocoa	3.07	8.73	9.46	0.58	0.00	5.96
Minerals products and precious metals	0.12	2.19	3.14	0.33	0.84	3.38
Metal ores	0.00	1.57	2.81	0.09	1.18	2.00
Wood, pulp, paper and furniture	0.00	0.59	0.62	0.00	0.12	0.63
Textiles and clothing	2.98	6.57	9.73	3.47	9.40	8.52
Leather, rubber, footwear	0.07	2.43	6.00	0.00	2.02	5.60

Source: WITS

Note: The table shows the average un-weighted applied MFN tariffs in the EU and the US for various categories of products. The tariffs are shown in MTN-categories, i.e. Multilateral Trade Negotiation.



ERP: cost of duties on inputs, incl. services and preferences

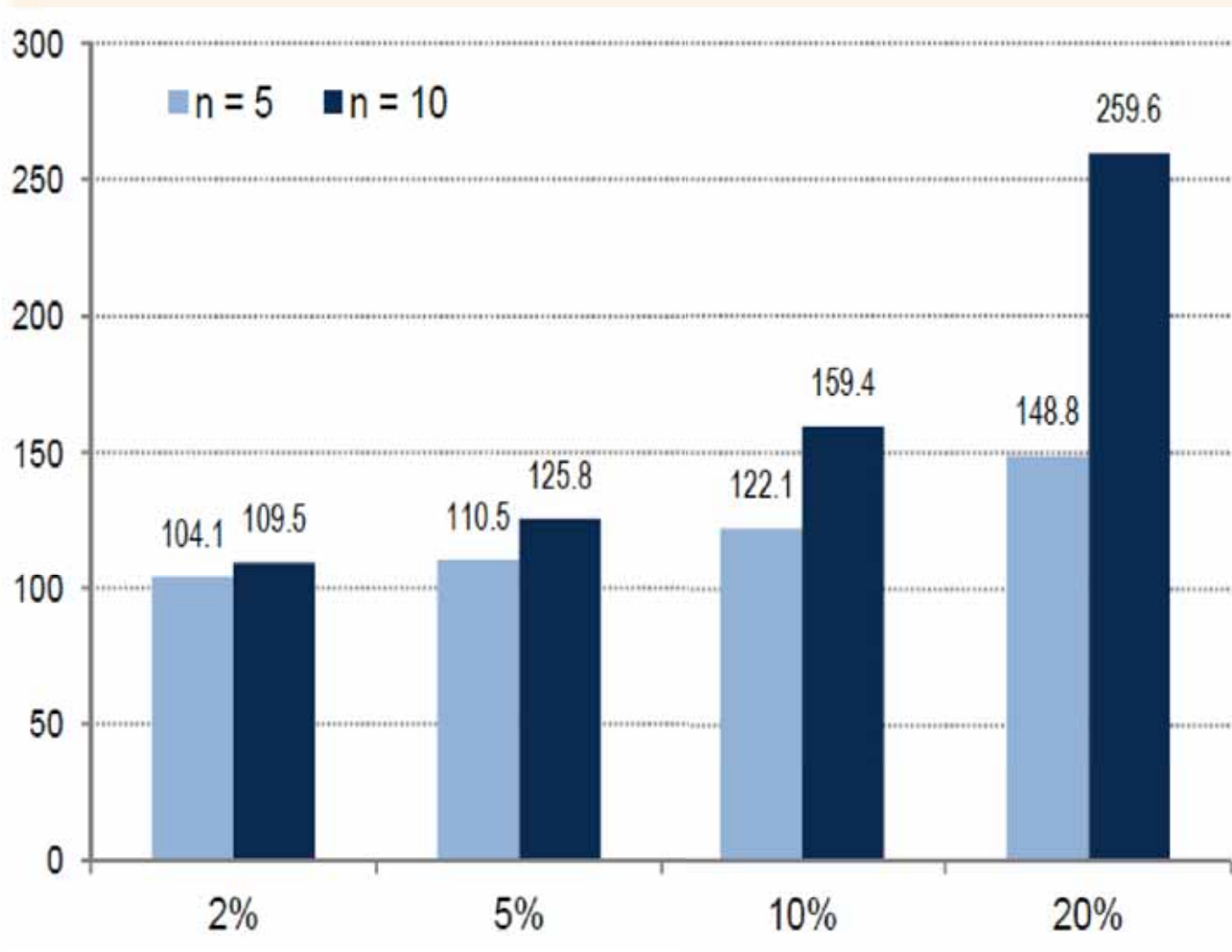


Source: Escaith (2014)



2. Tariff amplification: tariffs matter more for VCs

(Effective tariffs as a function of # of border crossings)

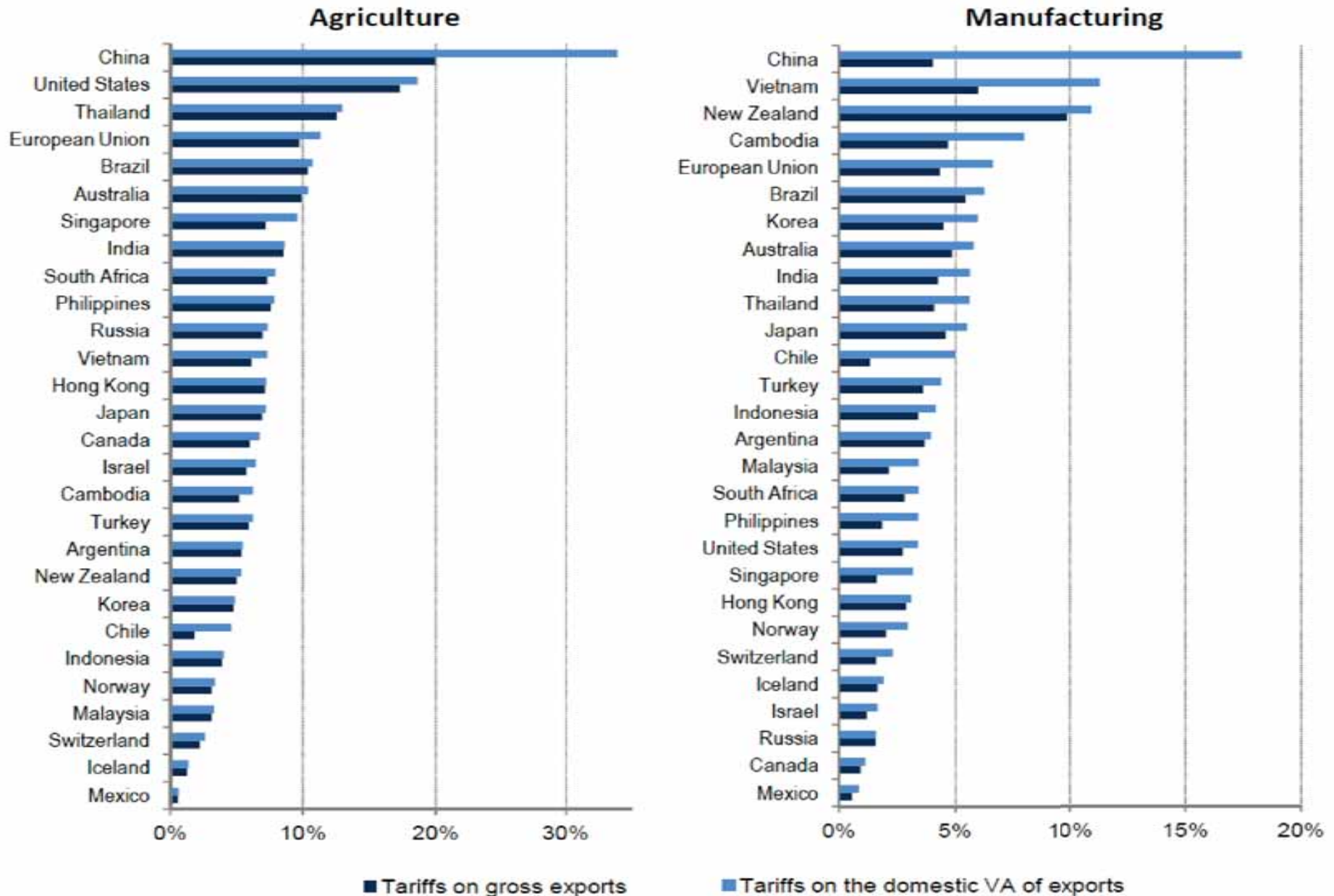


Assume a good has value added of 100 that is produced in n stages (countries)

A 5% tariff on each stage increases total cost by 25.8% if there are 10 stages and by 10.5% if there are 5 stages

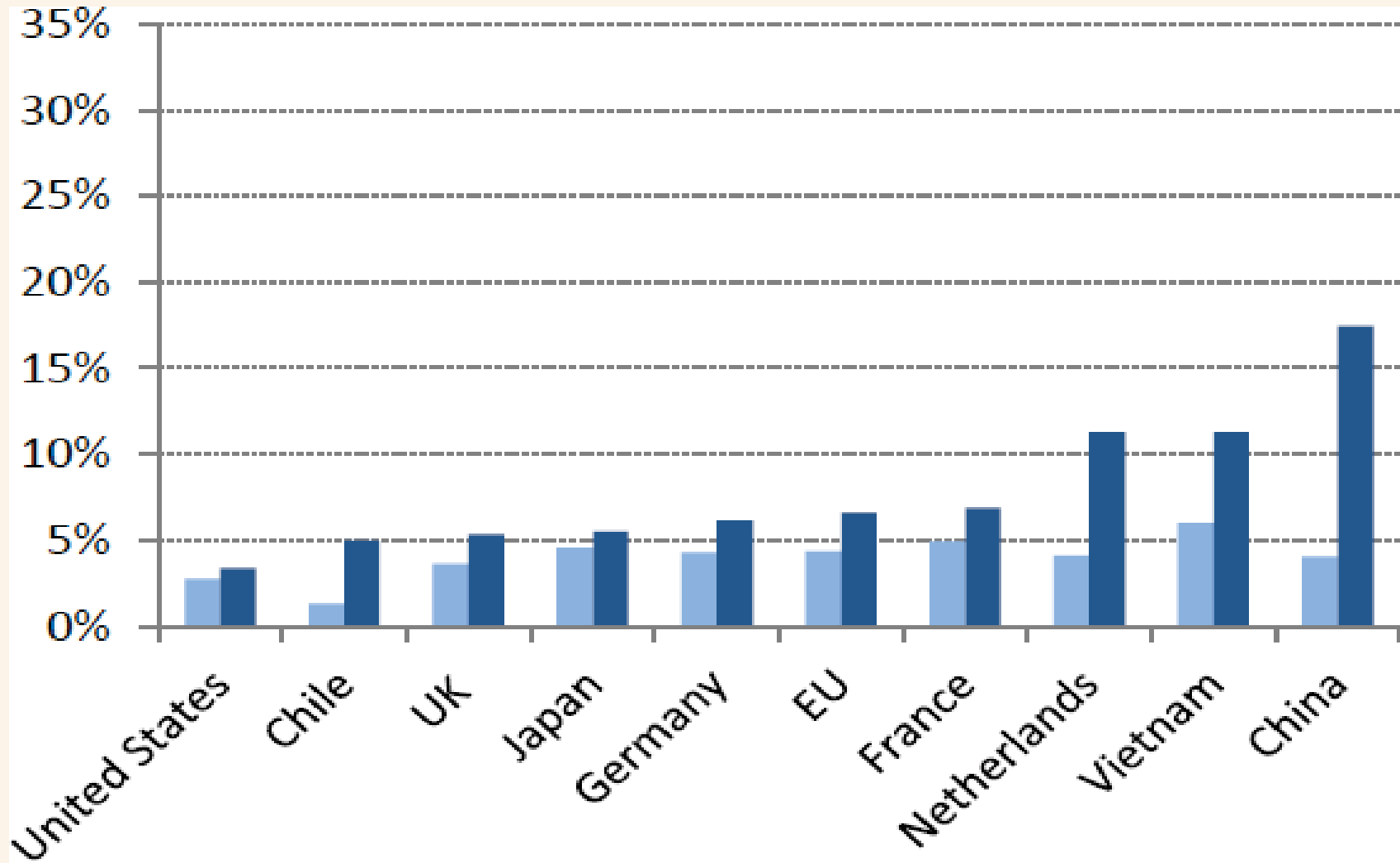


Tariff amplification: domestic value added vs. gross exports





Effective protection of domestic value added (AVE)



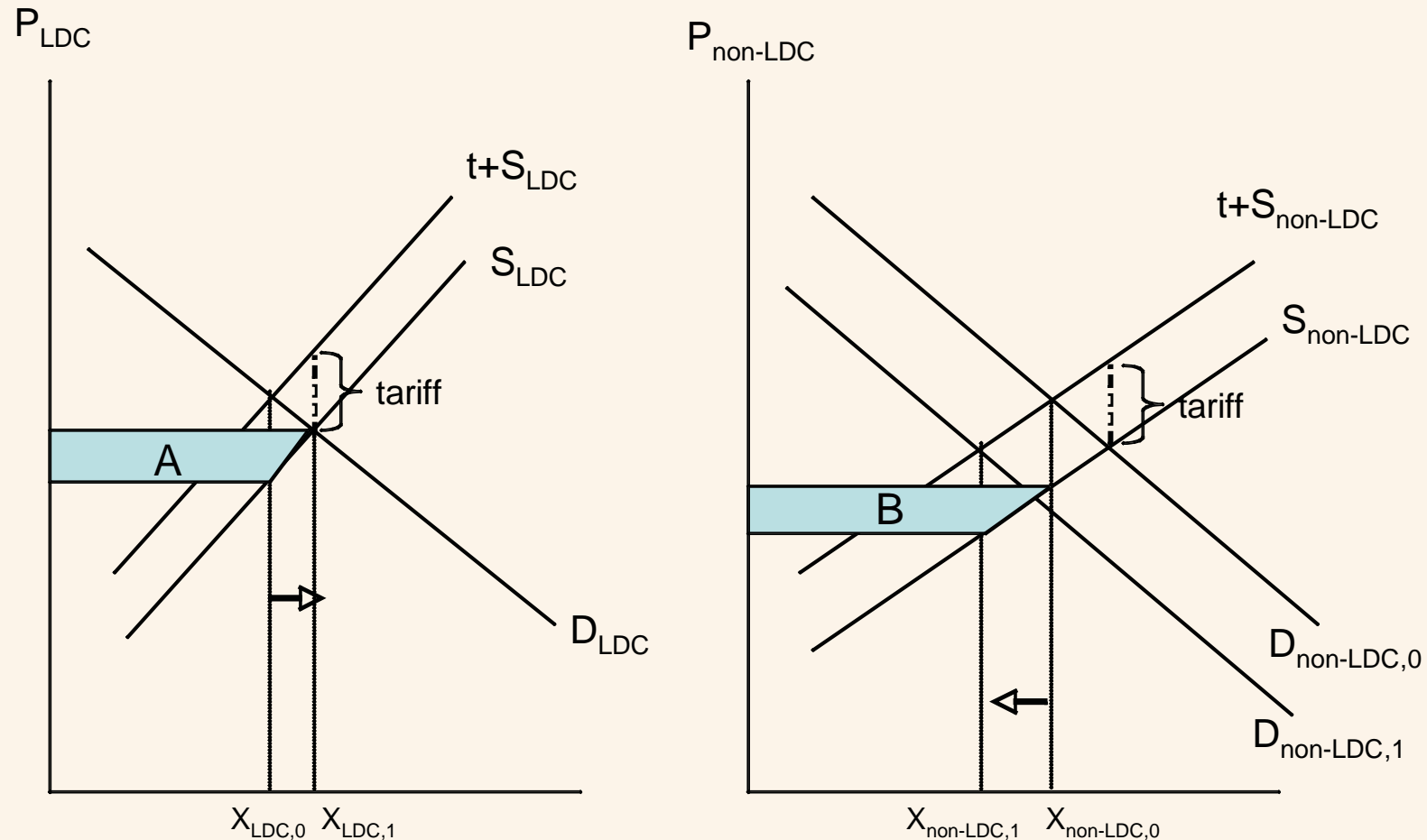
Source: OECD, 2013 (Interconnected Economies: Benefitting from GVCs)



As long as tariffs persist, tariff preferences can help LDC exporters



Effect of a tariff preference



Trade preferences reduce the tariff applied to imports from an LDC. This increases LDC exports from $X_{LDC,0}$ to $X_{LDC,1}$. The LDC gains area A. Other exporters lose area B. How large A and B are depends on the elasticities of demand and supply and the degree on competition (substitutability) across exporters.



Tariff preferences: 50 years of experience

- Non-reciprocal means unilateral—a “best endeavors” commitment in GATT/WTO
 - Product coverage determined by importing country
 - Result: ‘sensitive’ products often excluded
 - Preference margin not = 100% (not DFQF)
 - Political and economic conditionality (labor standards, environment; human rights...)
 - Uncertain—often time-bound (e.g., AGOA; GSP in US)
 - Market share thresholds (limits)
 - Rules of origin and related administrative procedures



How large are the gains?

- Function of the level of the MFN tariff
 - Value arises in ‘peak’ tariff items and agricultural products with price support
 - MFN tariff reductions erode value of preferences
- Function of who else gets preferences
 - PTAs may offer *better* treatment
 - Effective tariff preferences depend on treatment of competitors in a given market
- Function of costs of compliance – including rules of origin
- Utilization often much less than 100%



Deep preferences can boost exports

- ***Australia***: 40% per year increase during 2003-2010 following 100% DFQF
- ***Canada***: post-2003 imports from LDCs rose five-fold; LDC share in total imports grew 3 fold to 1%
- ***AGOA***: Lesotho's exports grew from US\$150 million in 2000 to \$320 million today, employing 40,000 people, up from less than 20,000 in 2000
- ***But not a panacea***: Lot of competition; much depends on actions to increase productivity and competitiveness



But, recognize that effective preference margins often low

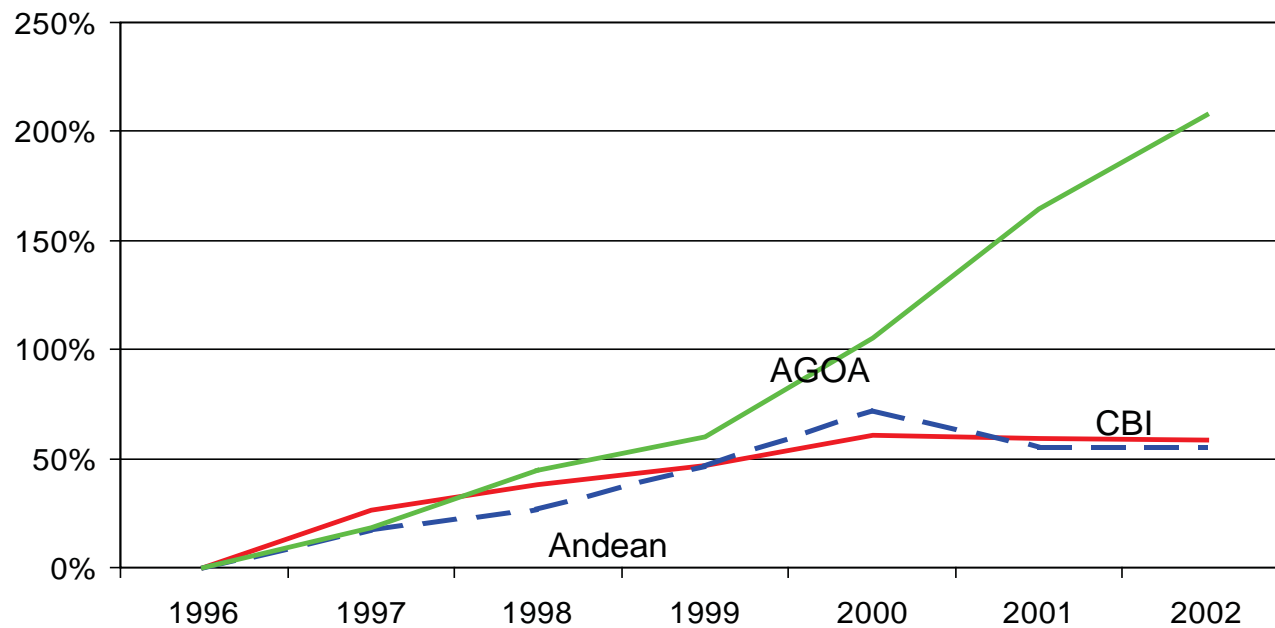
Table 4. *Relative preference margins for selected african countries in high income markets, 2006 (percentage points)*

Exporter	Australia and New Zealand	Canada	European Union	Japan	USA	Other High Income Countries
Angola	4.70	0.00	0.04	0.03	0.08	0.02
Benin	0.00	2.72	0.02	0.23	0.18	0.02
Burkina Faso	4.23	1.02	0.60	0.02	0.40	0.27
Cent.African. Rep	1.93	0.65	0.06	0.07	0.03	0.03
Chad	4.61	0.78	0.08	0.00	0.17	0.01
Cote D'Ivoire	-0.04	-0.04	0.36	0.04	-0.02	0.24
Cameroon	-0.02	-0.16	0.40	0.01	1.16	0.27
Congo	0.00	0.01	0.07	0.08	0.27	0.01
Ethiopia	0.11	0.34	0.50	0.06	0.01	0.76
Ghana	-0.15	0.06	0.92	0.02	0.38	0.59
Kenya	-0.04	-0.48	1.25	0.08	-0.92	0.68
Madagascar	1.43	7.53	3.89	0.83	-0.97	2.92
Mali	1.89	1.63	0.43	2.84	0.24	0.29
Mozambique	0.54	0.17	4.46	0.53	-0.18	2.76
Mauritania	0.37	4.37	0.37	6.95	0.00	0.22
Malawi	0.04	0.35	0.02	0.05	-2.96	0.01
Niger	2.27	0.52	0.04	0.43	2.01	0.02
Nigeria	-0.29	0.03	0.06	0.00	0.13	0.05
Rwanda	4.20	0.14	0.02	0.20	0.05	0.01
Sudan	1.33	0.00	0.06	0.00	0.00	-0.03
Senegal	1.41	0.60	2.29	2.99	0.22	0.98
Togo	0.00	0.06	0.32	0.28	1.42	0.12
Tanzania	0.15	0.00	1.13	0.05	0.32	2.33
Uganda	0.03	0.16	1.45	0.22	-0.01	1.22
Zambia	0.37	0.82	0.13	0.82	0.56	-0.32
Zimbabwe	-0.10	0.04	0.60	0.01	0.02	0.25



AGOA—Export Response

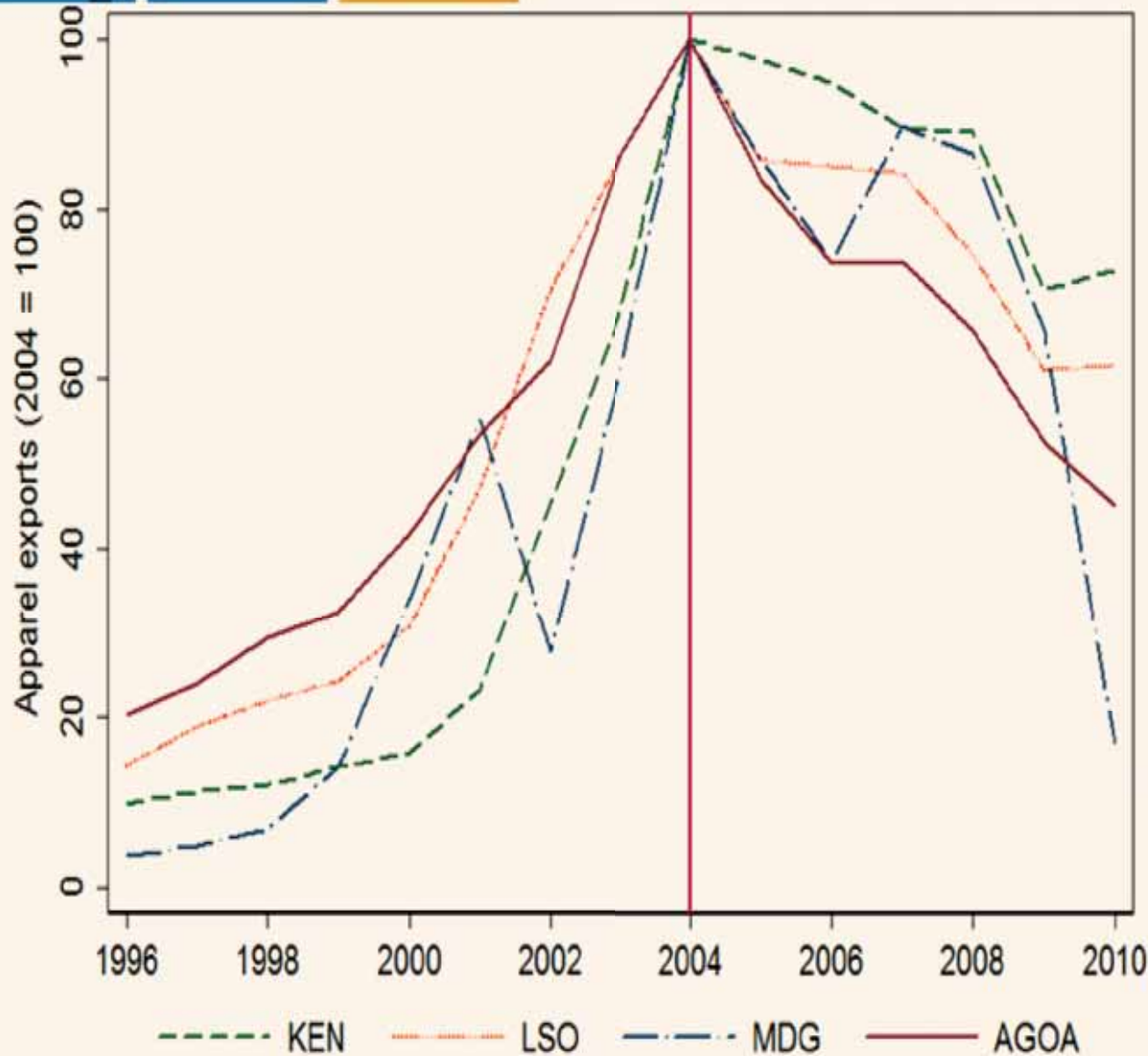
Figure 6.5 Growth of apparel exports to the US relative to 1996 (%)



Source: US ITC



But, exports not sustained



Why?

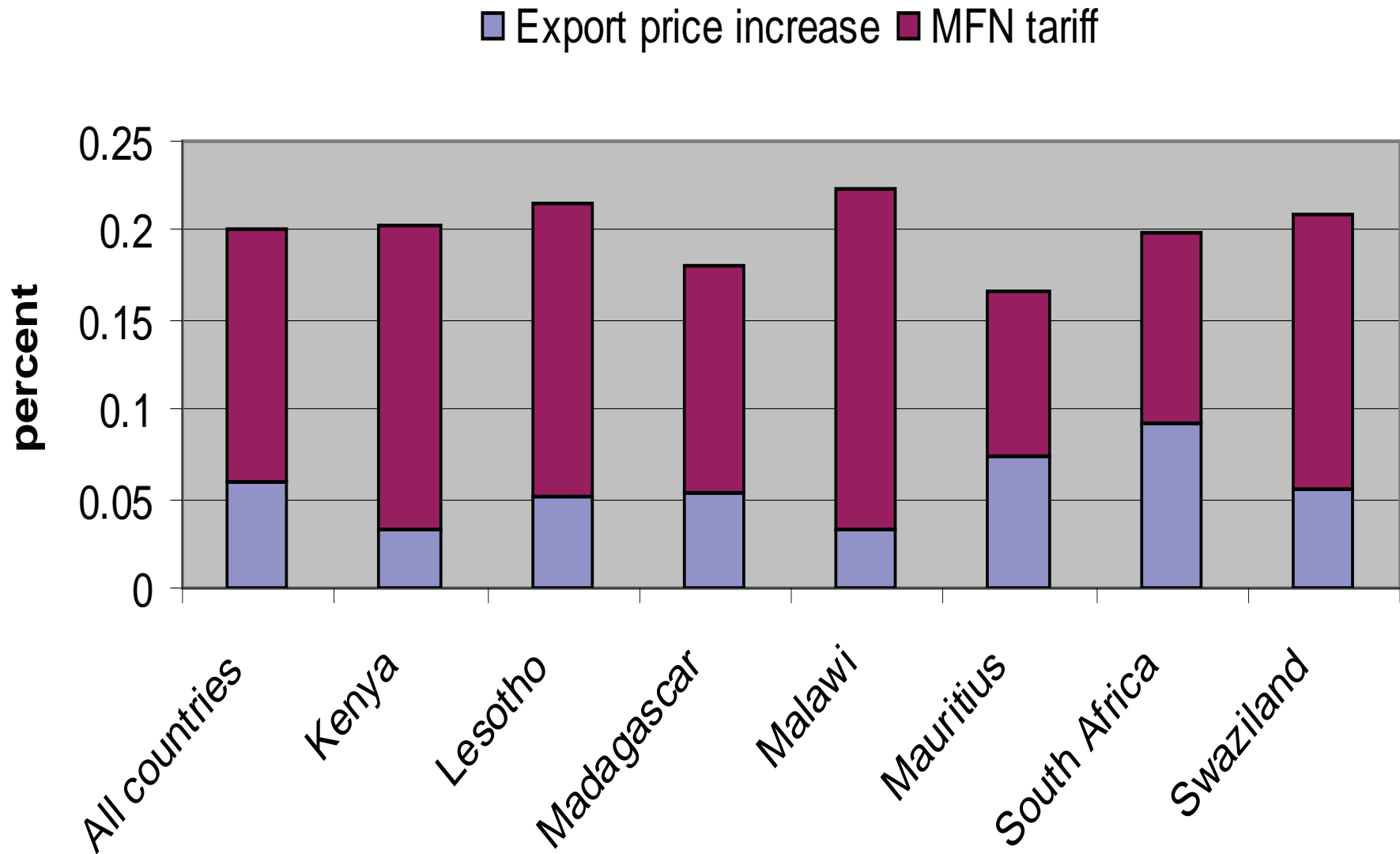
WTO – ATC (China quotas removed in 2005)

Liberal rules of origin under AGOA encouraged trans-shipment

Once quotas removed, China and other countries more competitive



AGOA apparel exporters' share of the tariff rents





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Rules of origin



Rationales for ROO

- Basic rationale of a ROO: prevent trade deflection
 - If an LDC has DFQF access, importing nation wants to make sure that other countries are not benefitting by trans-shipping goods through the LDC
 - So demand that a minimum amount of value has been added in the exporting LDC
 - [different ways of doing this ...discussed later]
- But in the process may create frictions for VCs
- And, may also have other potential motivations



Protectionist possibilities

1. Exclude some goods from preferences on a *de facto* basis by making ROO very difficult to satisfy
 - Result: no tariff reduction for the goods concerned
2. If not prohibitive, ROO make products less competitive so less pressure on domestic industry
3. Export protection: induce use of higher cost inputs from the preference-granting country so as to be eligible for the preference
 - Result: trade diversion for third countries for both the inputs as well as the final product
 - In effect the ROO act as local content restrictions



Two types of impacts of ROO

1. If ROO increase costs for firms they reduce the value of the preferences relative to what they could have been
 - May completely nullify the preference
2. Administrative/implementation costs
 - Even if from a technical cost impact perspective the ROO is not a binding constraint for an LDC firm, transactions costs may also be high
 - I.e., process of documenting that the ROO has been met – no matter what the ROO – may nullify the preference



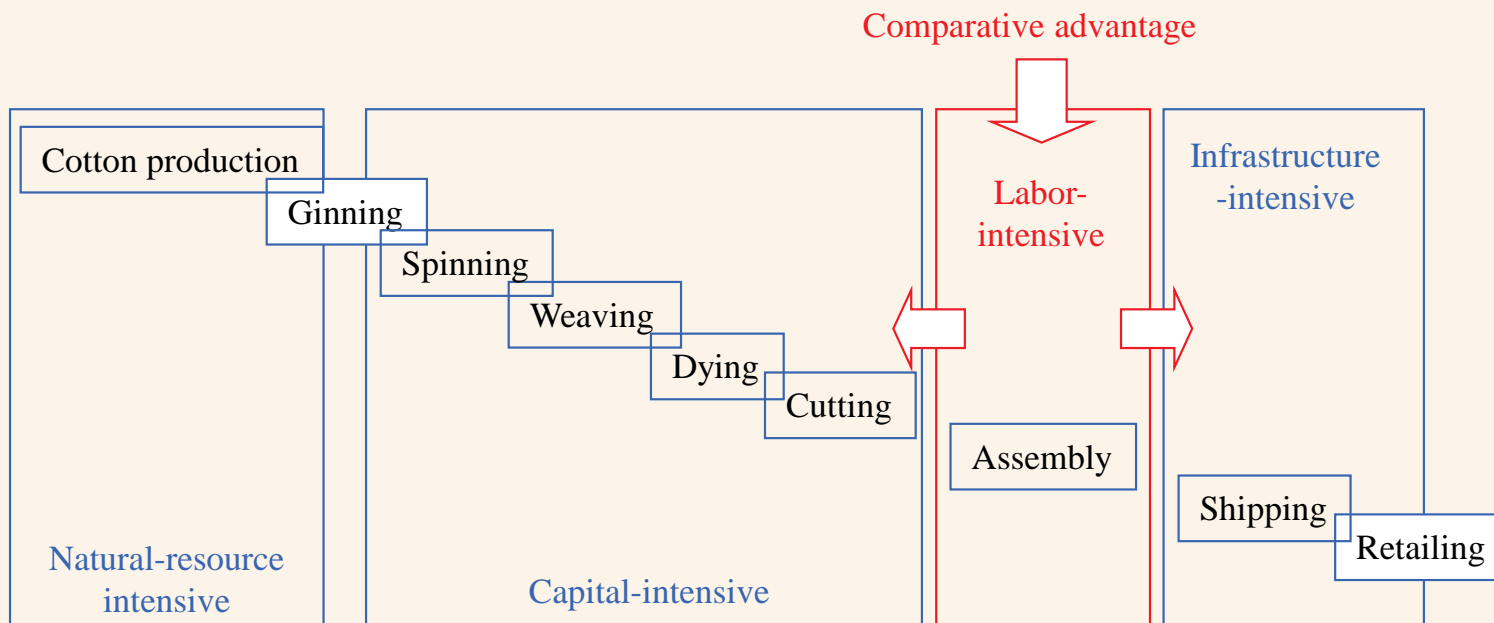
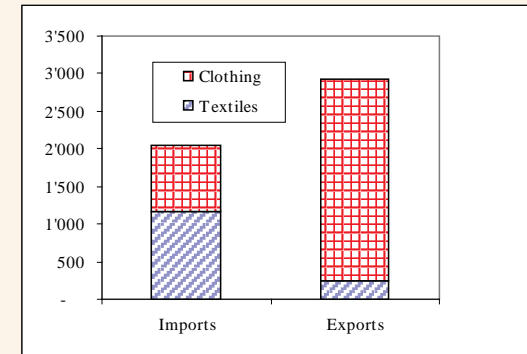
ROO as a means of industrial upgrading?

- ROO sometimes argued to be a mechanism to create incentives for linkages and industrial development
 - If tariff preference is high enough and ROO is restrictive may induce investment in upstream (supplier) activities
 - This argument a feature of the case made for the GSP
- ROO may also act as a sorting device in that only the most productive firms can satisfy them, who then benefit from the fact that other firms cannot and exit
 - Same argument as for product standards



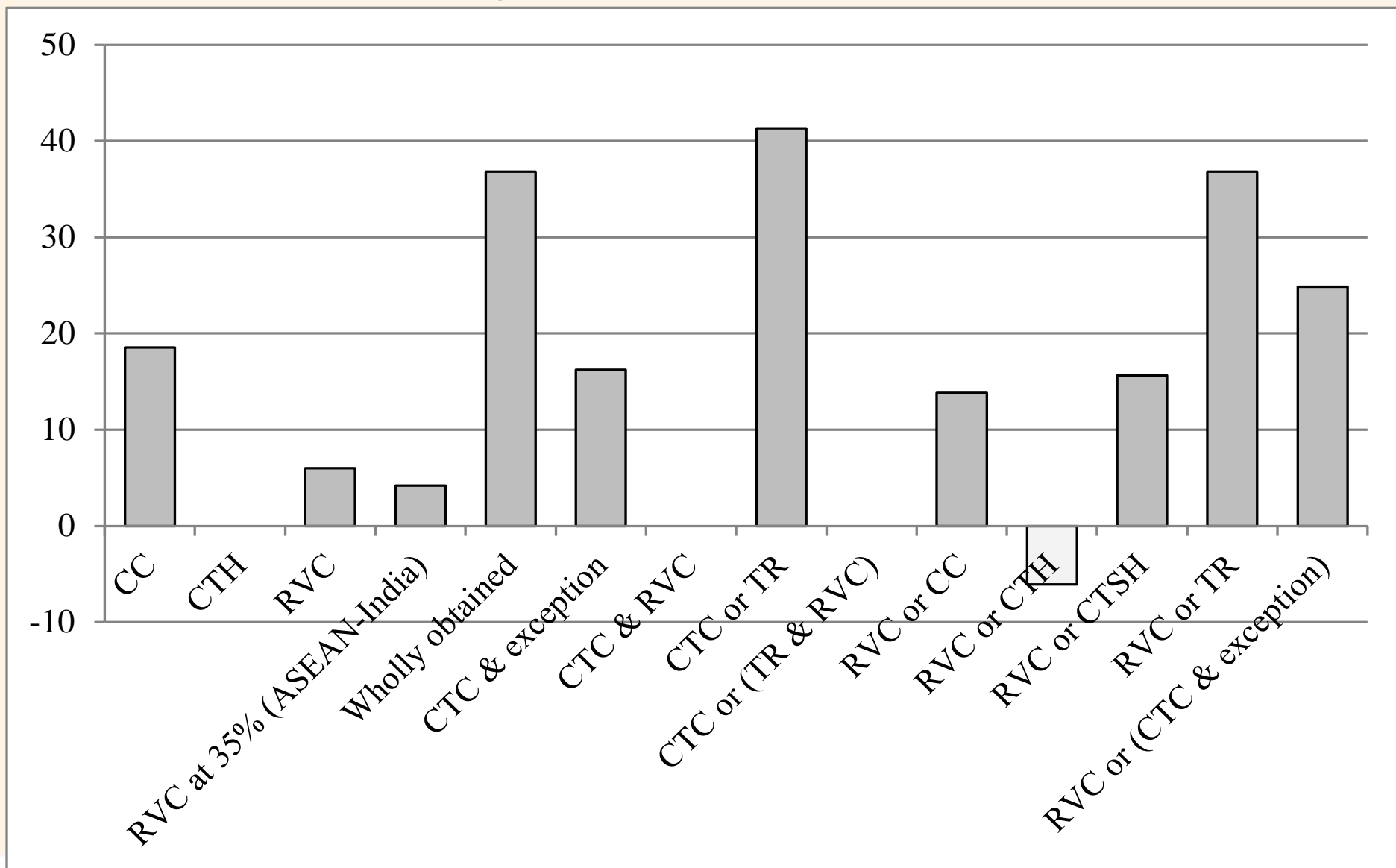
Why RoOs hurt: slicing up the value chain

A country may import most of the value content of a product as part of supply chain. Restrictive rules of origin may preclude vertical specialization in small part of a chain.





Estimates of AVEs of different types of ROOs (ASEAN)





Elements of a DFQF “package” — impacts for selected LDCs

	Estimated DFQF income gain, 2004 baseline, minus 40% to adjust for post-2004 DFQF action (1)	Relaxation of rules of origin by G20 (4%) (2)	Cost saving of 2% for total export value (3)	Total (i)+(2)+(3)	Comparison: Effect of a 10% increase in net ODA
Ethiopia	0.57	0.4	0.46	1.43	1.34
Madagascar	0.23	0.4	0.96	1.59	0.54
Malawi	6.45	0.9	0.82	8.17	1.75
Mozambique	0.37	1.0	0.68	2.05	2.76
Tanzania	0.40	0.3	0.40	1.10	1.36
Uganda	0.05	0.2	0.52	0.77	1.16
Zambia	0.25	0.4	0.76	1.41	1.11
Bangladesh	0.43	0.5	0.38	1.31	0.12
Myanmar	0.50	0.2	1.14	1.84	0.12
Cambodia	2.03	1.3	1.74	5.07	0.75
Laos	0.12	0.3	0.52	0.94	0.72



How trade restrictive are rules of origin?

- Recall: Function of the level of the MFN tariff and who else gets preferences; and
- Function of costs of compliance with origin rules
- Empirical research suggests prevailing ROO are equivalent to a tariff of 2 to 4 percent
- Francois, Hoekman, Manchin (2008): 4%
- Cadot and Ing (2014): Average AVE: 3.5%; trade-weighted AVE: 2.1%.
- Implication: preferences on matter if the *effective* margin $>$ cost of satisfying the ROO



Trade preferences: Beyond tariffs/rules of origin

- Services
- NTMs abroad
 - But also at home
 - ITC survey of firms reveals that many NTMs are local
- Trade facilitation at home
- Productivity and competitiveness
 - FDI ... etc.

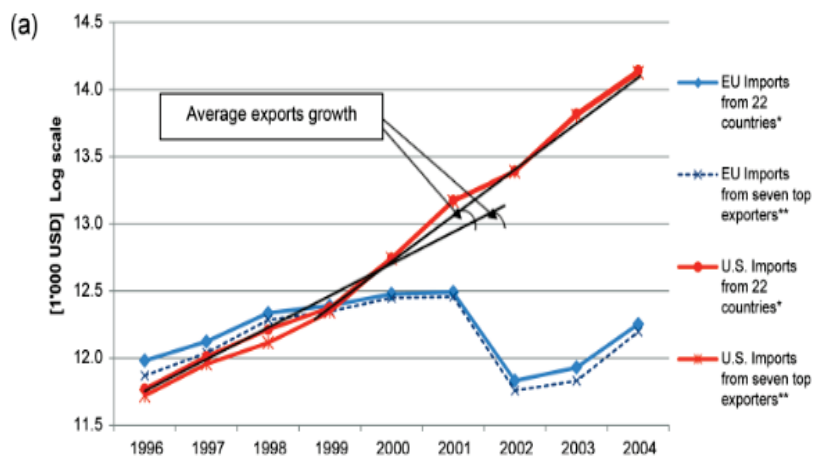
Back to AGOA example

Liberal rules of origin can make a difference – but are not enough

Recall impact of AGOA relaxation of yarn forward rule

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FIGURE 1(a). Apparel Exports of 22 Countries Benefiting from the AGOA Special Rule by 2004



Notes: Yearly data from 1996 to 2004 are presented. The 22 sub-Saharan countries benefiting from the AGOA Special Rule by 2004 as well as ACP are Benin, Botswana, Cameroon, Cape Verde, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Swaziland, Tanzania, Uganda, and Zambia. The top seven exporters are Botswana, Cameroon, Ghana, Kenya, Lesotho, Madagascar, Namibia, Nigeria, and Swaziland.

Source: Authors' calculations on data from COMTRADE.

