

The Challenges of Productive Integration between Latin America and Asia Pacific:

How to integrate value chains and escape from dependency?

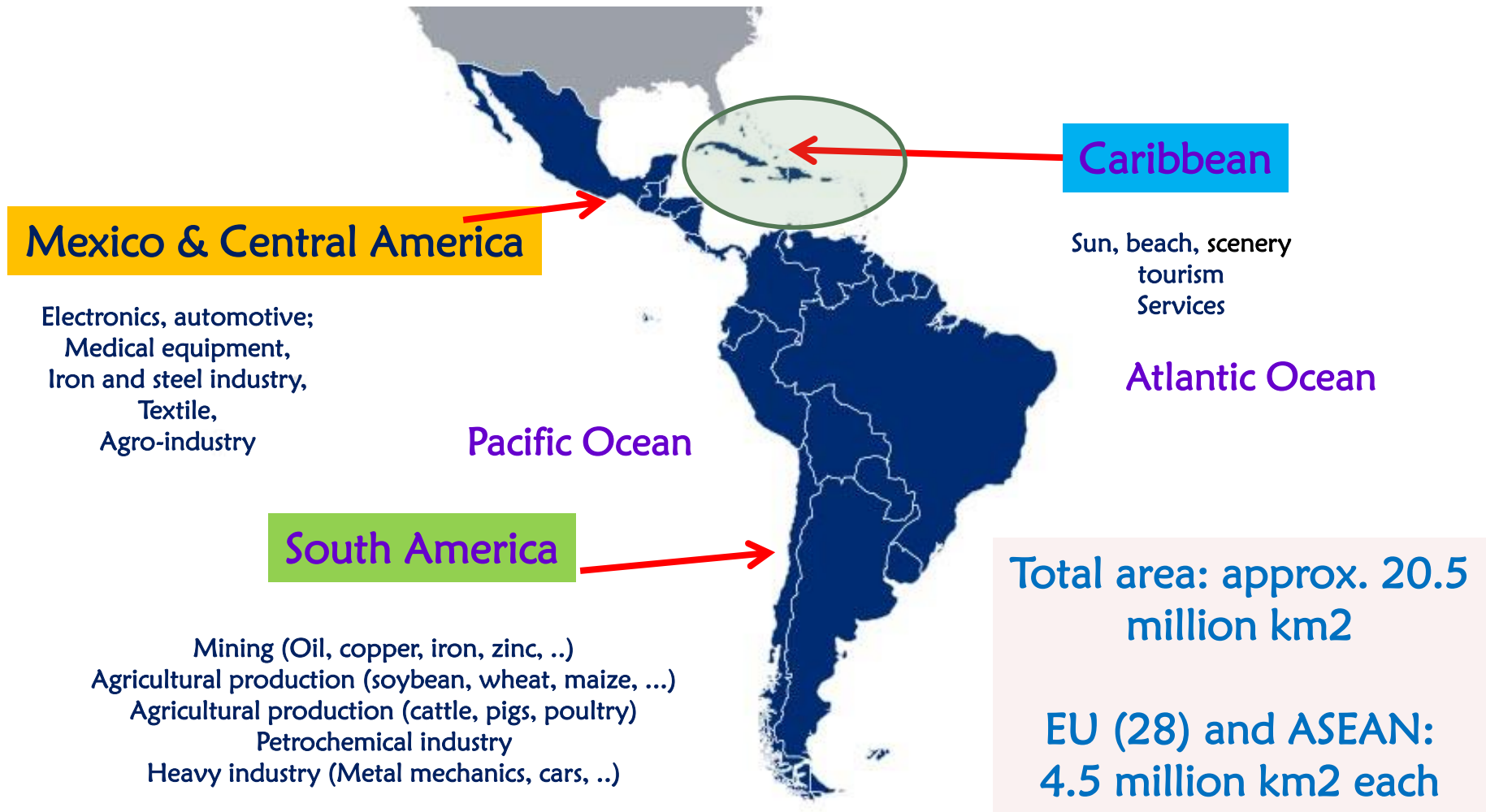
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Motivation

- Show the development of value chains in Latin America and the Caribbean.
- Value Chains: The measurements that link trade and production. This concept has been gaining relevance in recent years. Multiple approaches have been used (trade analysis, trade and production link in Input Output approach; business surveys – custom microdata analysis)
- Questions to answer
 1. Do LACs countries participate in GVC? Are there intra-regional value chains? In ~~what~~ which sectors? ~~What~~ Which countries are participating?
 2. How deep is the interregional integration between Latin America and Asia Pacific?
 3. Are there spaces for greater regional and intraregional integration?

Latin America and the Caribbean has 3 sub regions, with different insertion patterns



Non tariff barriers are higher than tariff protection

Latin American and the Caribbean: tariff and non tariff protection in intra-regional trade, 2015^a (In percentages)

	Applied tariff (1)	Equivalent ad valorem due to NTBs (2)	Tariff and non tariff protection (3)=(1+2)	Share of non tariff protección protection in total protection (4)=(2/3)*100	Administrative Barriers (EAV) (5)
Andean Community	1.3	2.1	3.4	61.7	12.7
South American Common Market	1.4	5.1	6.5	78.4	13.4
Central America	2.5	2.3	4.9	47.9	17.7
Pacific Alliance	1.6	3.8	5.4	70.6	14.6
The Caribbean	6.4	1.4	7.8	17.9	26.0
Mexico	3.9	6.3	10.3	61.6	17.6
Latin American and the Caribbean	2.0	3.8	5.8	64.8	15.4

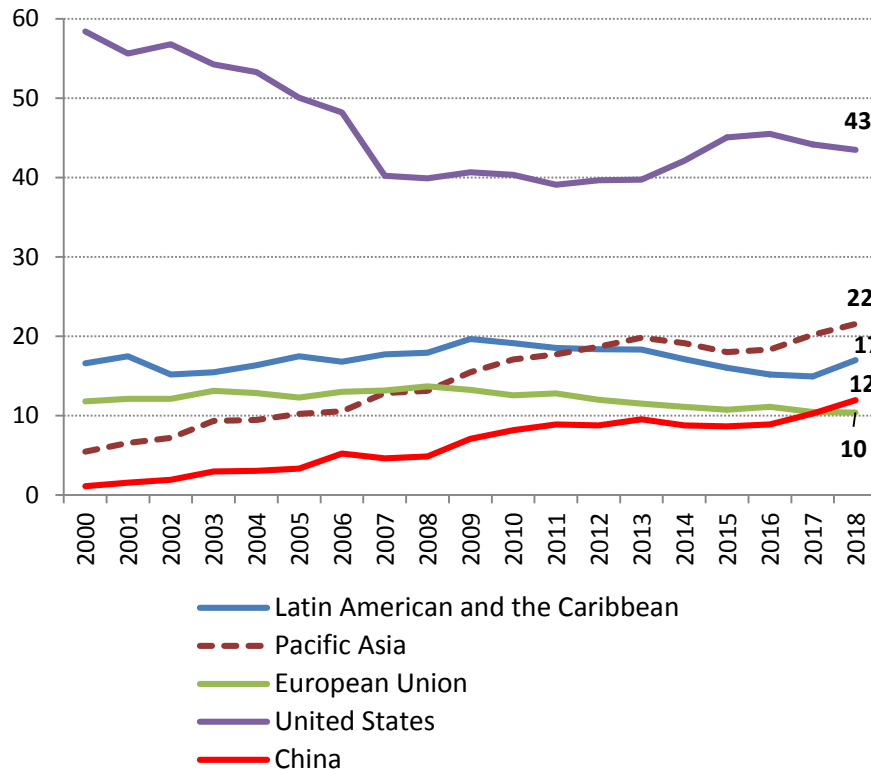
Source: Own elaboration based on intraregional tariff preferences and EAV estimations

^a weighted average

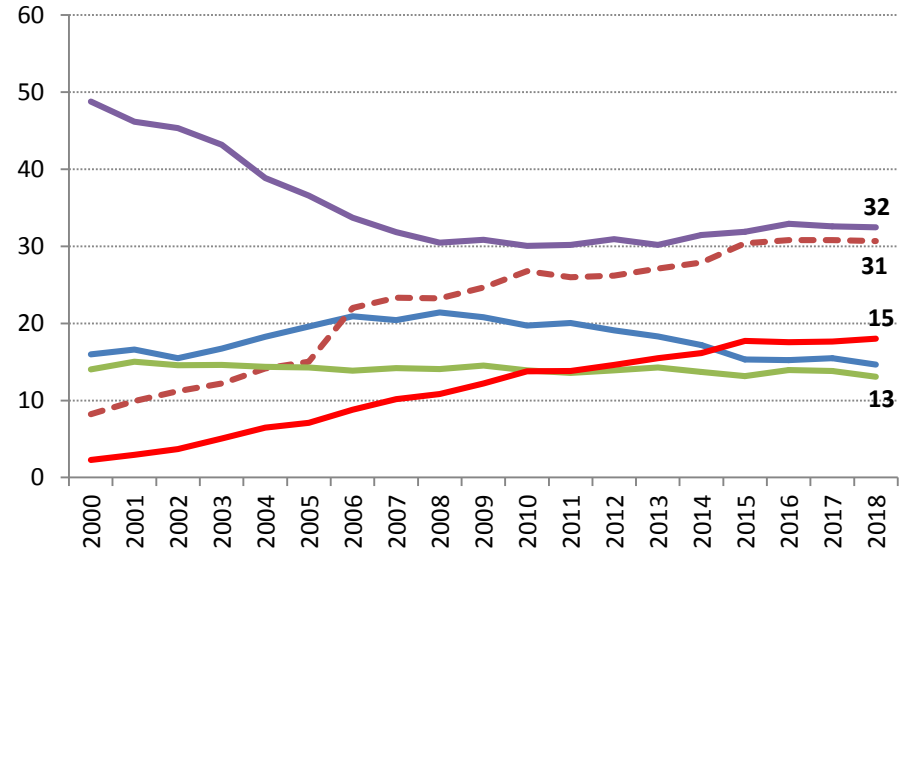
Asia is now LAC's second largest trade partner after the United States

Latin American and the Caribbean total merchandise trade, 2000-2018
(share of selected partners in percentages)

Exports

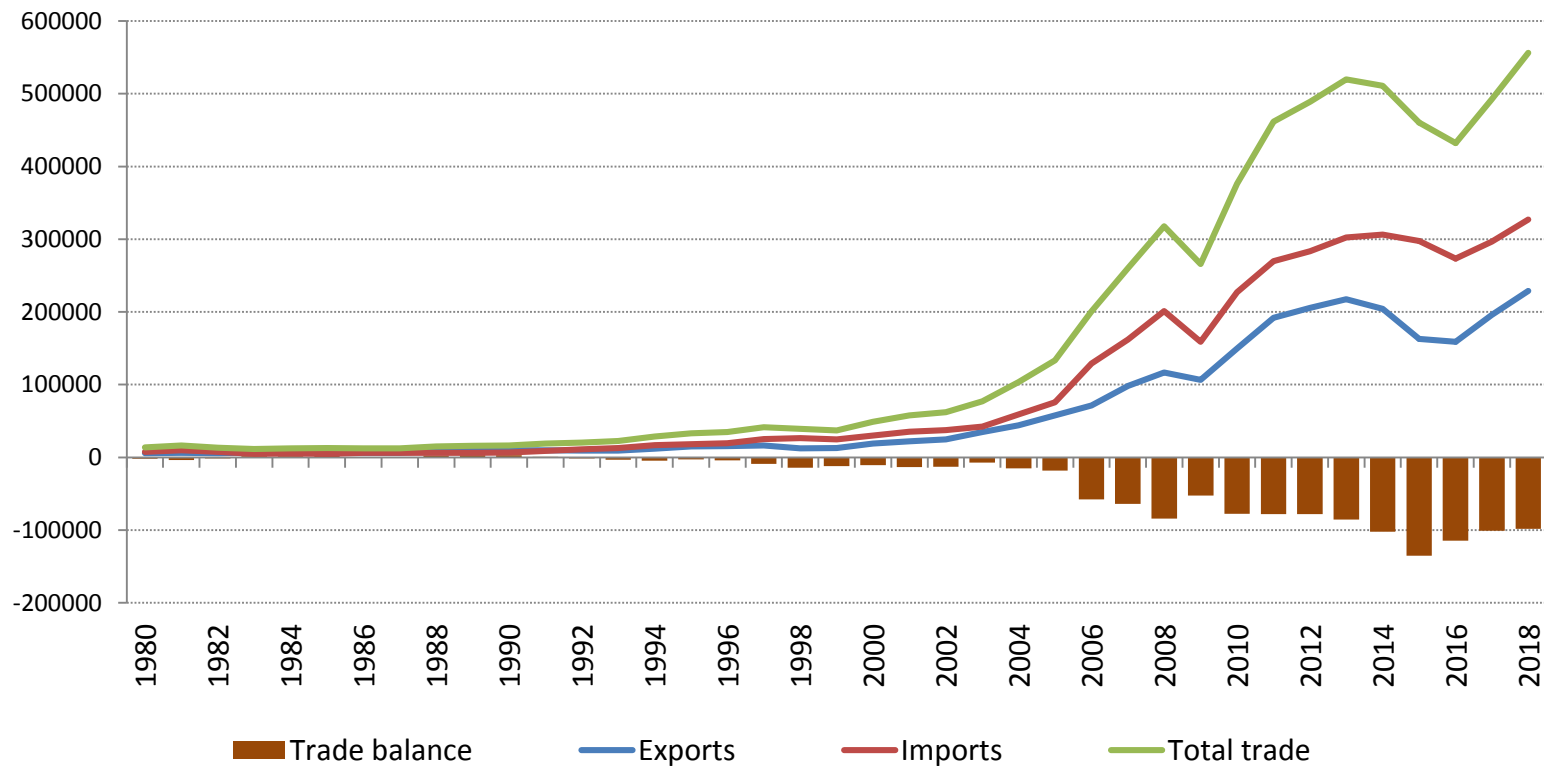


Imports



LAC trade with Asia-Pacific boomed in the last years after decreasing in triennium 2014-2016

LAC merchandise trade with Asia-Pacific, 1980-2018
(USD millions)



Source: ECLAC based on official national data

What about value chains in Latin America and the Caribbean?

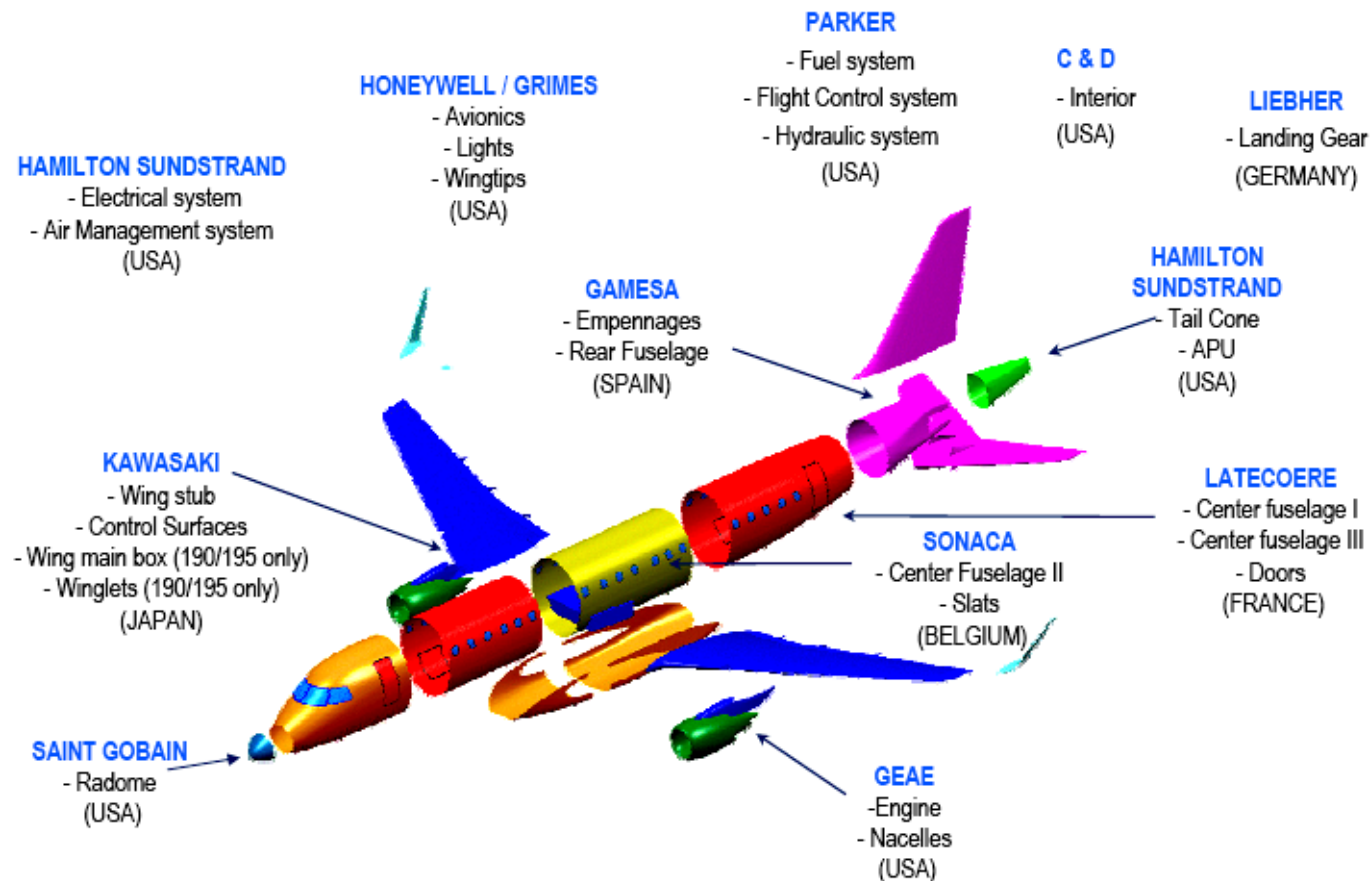
- International trade is increasingly centered around several types of value chains: national and regional – those that have recently leaned toward the creation of “mega-regions” such as the North America Factory, Asia Factory and Europe Factory
- In the last forty years global trade has been driven by value chains.
- In the last few decades, Latin America and the Caribbean also experienced an increase in this correlation. Notwithstanding the levels reached, it is still a far reach from the European Union or Asia Factory.

What do we mean by Value Chain?

- A value chain describes the wide range of production activities that a company and its workers undertake to develop a product from raw material to final product.
- The stages and processes of chaining are varied:
 - **Backward:** The ability of a sector to incorporate other sectors linked to it by its demand for required intermediate imported goods from other sectors. **Foreign content of VA.**
 - **Forward:** The ability of a sector to boost other sectors by its supply capacity, that is the sale of its products, which in turn are intermediate inputs from other industries in other countries through export. **(Value Added embodied in the exports of partners countries)**
- Linkages can be national, regional, inter-regional or global.

The civil aeronautic industry in Brazil is an example of a Global Value Chain

Some EMBRAER international suppliers in the production of a small plane ERJ 170-190



Source P. Figueiredo, G. Silveira y R. Sbragia, "Risk sharing partnerships with suppliers: The case of EMBRAER", Journal of Technology, Management and Innovation, 2008, Volume 3, Issue 1.

How do we measure LAC's participation in global and regional value chains?

- The most adequate methodology to measure the participation of Latin American countries in regional value chains is to utilize an interconnected input-output matrix.
- ECLAC built a regional input-output Table (IOT) that includes 18 countries, 40 sectors and 37 partners (including Asia Pacific)
- The approaches used were:
 - ✓ Vertical specialization (Hummels, Ishii and Yi, 2001)
 - ✓ Valued Added in total Export (Johnson and Noguera, 2012)
 - ✓ Decomposition of gross exports (Koopman, Wang and Wei (2014) in eight categories (domestic and foreign content)
 - ✓ Calculation of Grubel-Lloyd Index (intra-industry trade);

The First Latin American (18) Input-Output Table

Andean Community IOT
MERCOSUR IOT
Central American IOT

+

Mexico

+

Chile

+

Dominican Republic

Subregional
IOTs

National
IOTs

18 National Matrices
40 X 40

Years: 2011 and 2014 (ongoing)



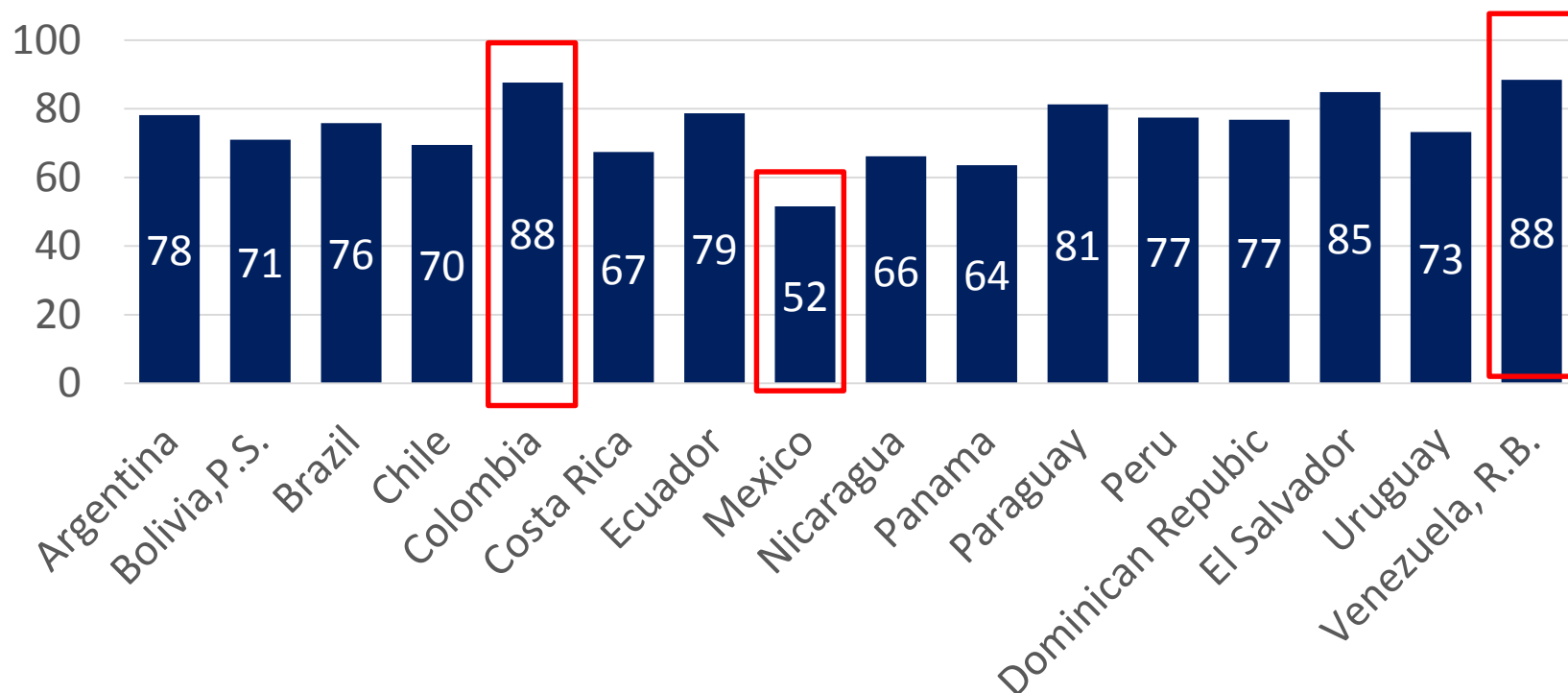
18 LAC
countries
with
55 partners

Intermediate Use (18 LAC countries)								Final Use (18 LAC countries)								Exports (Asia Pacific and R of World)												
Argentina	Brazil	Costa Rica	Dom. Rep.	Mexico	...	Uruguay	Venezuela	Argentina	Brazil	Costa Rica	Dominic Republic	Mexico	...	Uruguay	Venezuela	United States	Canada	EU	India	Australia	Brunei	Cambodia	Japan	China	Thailand	...	R of World	Product Gross Value Added
40x40								40x2								40x1												40x1
40x40																												

16 FEALAC extra regional partners:
Australia, Brunei, Cambodia, Japan, China,
Thailand, Malaysia, Mongolia, New Zealand,
Laos, Myanmar, Mongolia, Indonesia,
Philippines, Singapore, Vietnam.

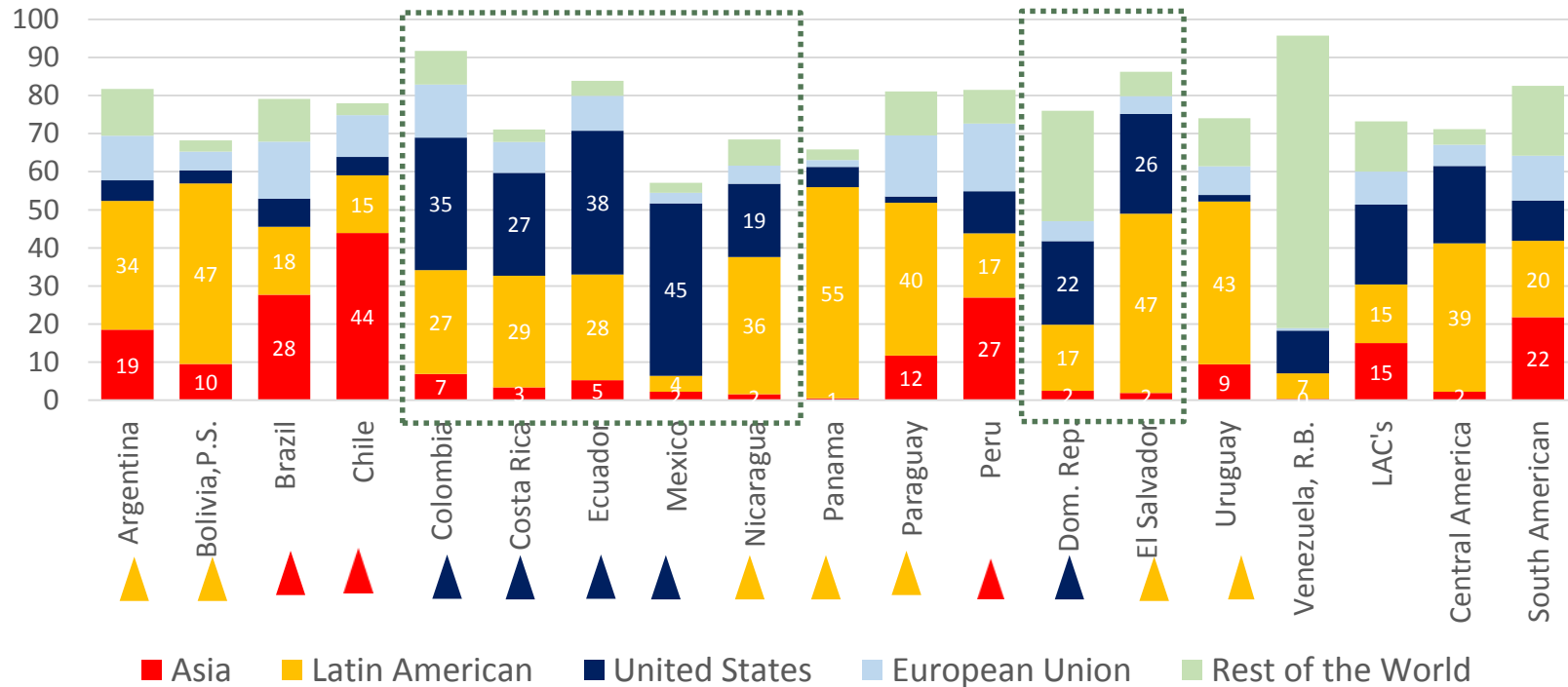
The average VA embodied in total LAC export is 73%, with Mexico having the lowest share, and Colombia and Venezuela the highest

Latin American (16 countries): Domestic Valued Added content in Total Exports,
2011
 $(VA/XT)*100$



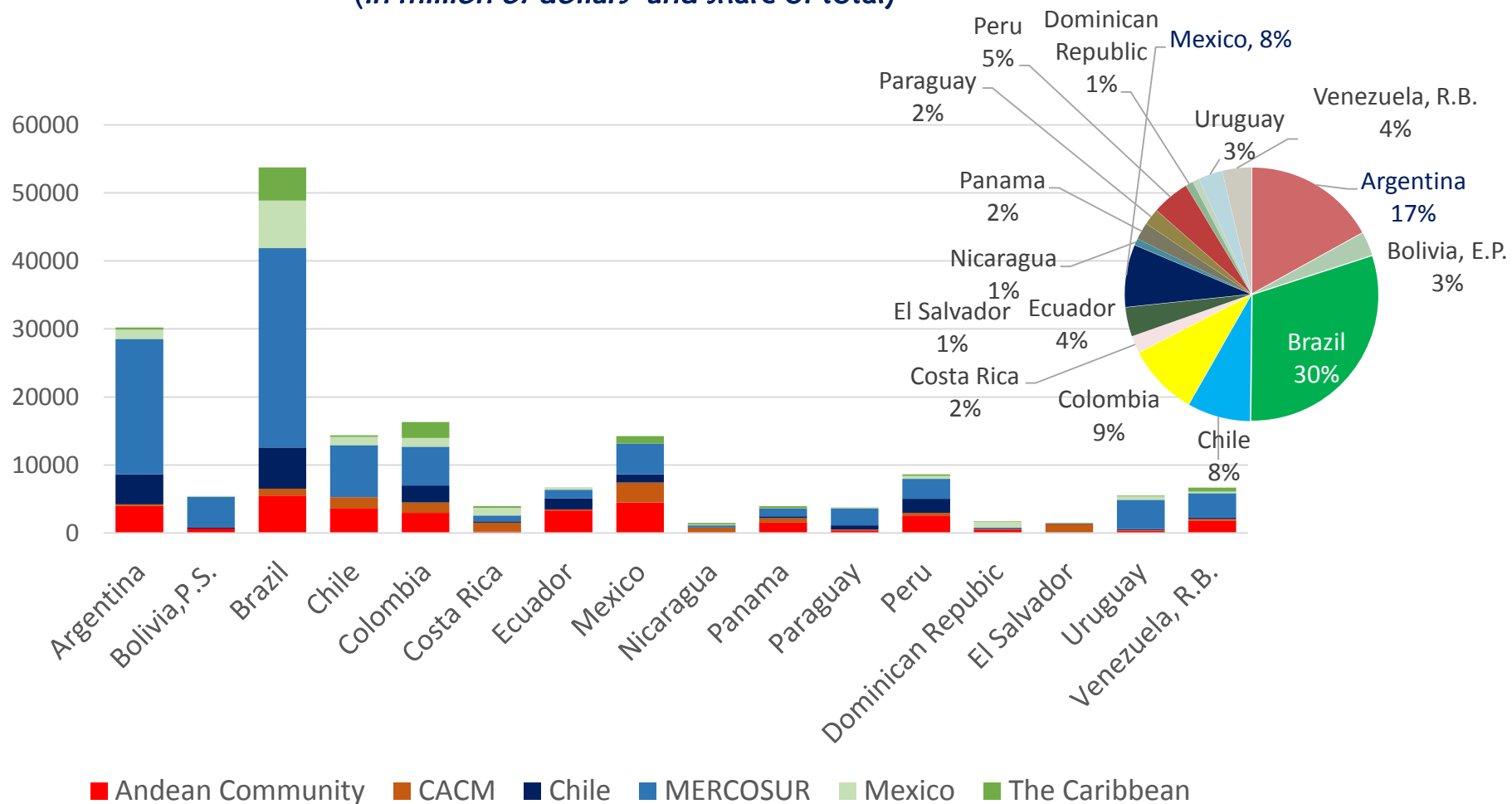
South America is more connected to Asia Pacific than Central America and Mexico. 22% of the domestic value added incorporated in total exports goes to Asia Pacific

Latin American (16 countries): Domestic Valued Added content in
Total Exports by origin, 2011
(VA/XT)*100



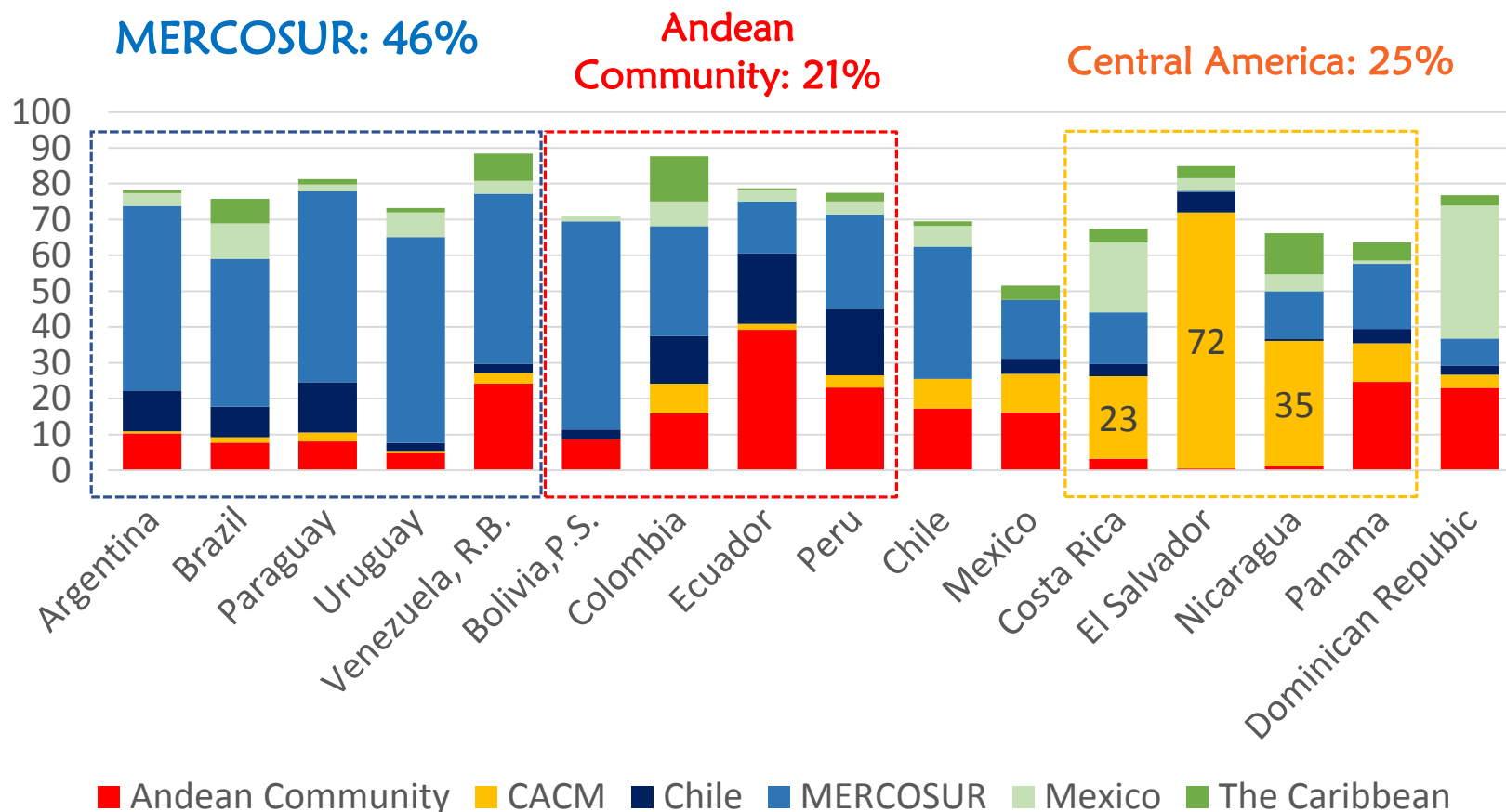
Brazil, Argentina, Colombia, Mexico and Chile are the countries from the region with more VA embodied in total exports

Latin American (16 countries): Domestic Valued Added content in Total Exports by origin, 2011
(in million of dollars and share of total)



Regarding the intra-regional VA, the greatest link is given within the integration schemes in the region

Latin American (16 countries): Domestic Valued Added content in Total Exports to Latin America, 2011 (VA/XT)*100



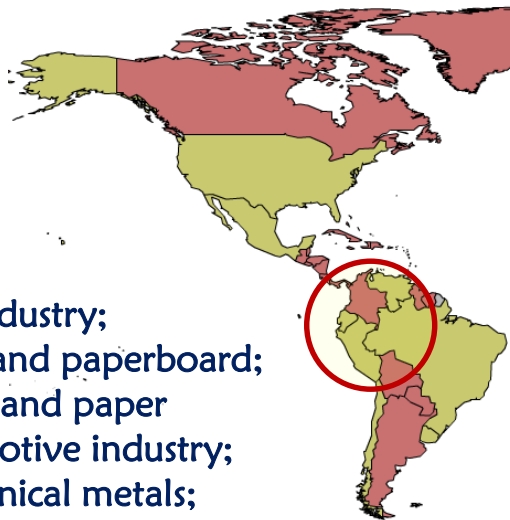
At a regional level, the main productive chains are between countries that are geographically close

Brazil with Argentina



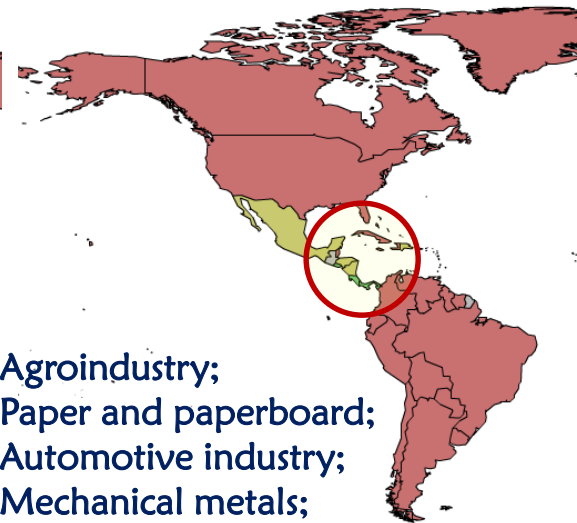
Automotive industry;
Metal mechanics
Iron and steel industry
Machinery and equipment
Chemical and petrochemical

Colombia with Ecuador and Peru



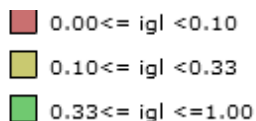
Agroindustry;
Paper and paperboard;
Wood and paper
Automotive industry;
Mechanical metals;
Chemical and petrochemical

Central America



Agroindustry;
Paper and paperboard;
Automotive industry;
Mechanical metals;
Chemical and petrochemical

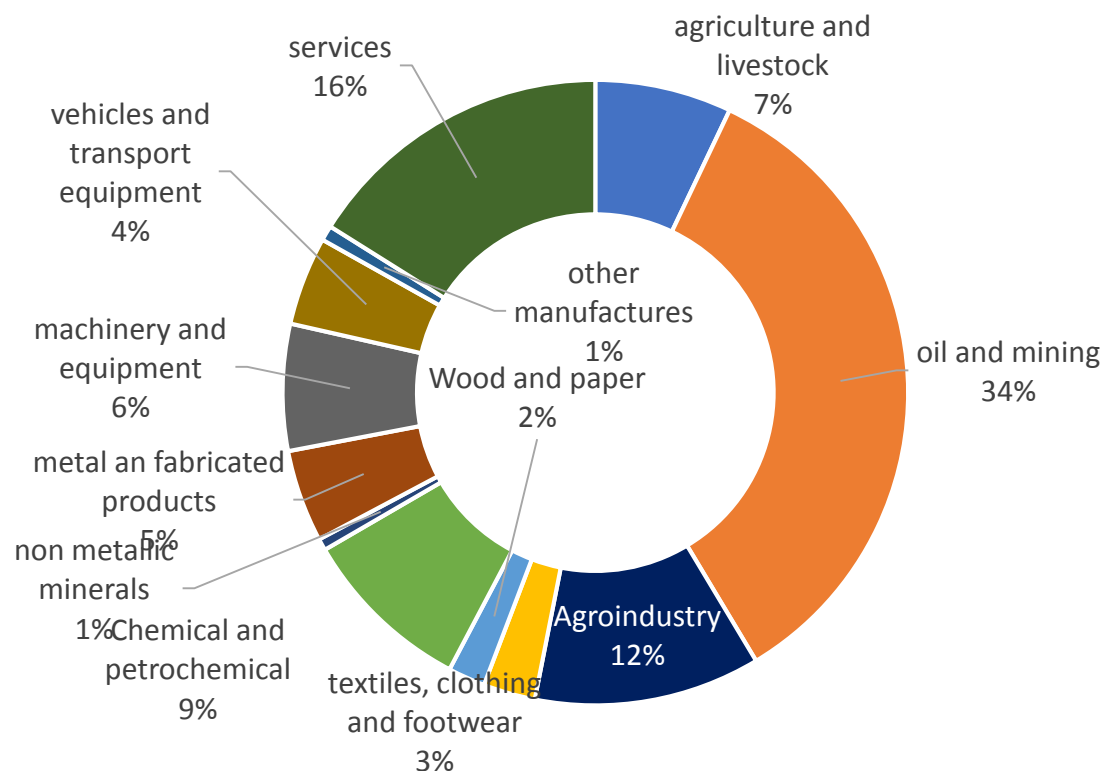
Mexico with Central America



Inter-industrial trade
Potentially intra-industrial
Intra-industrial trade

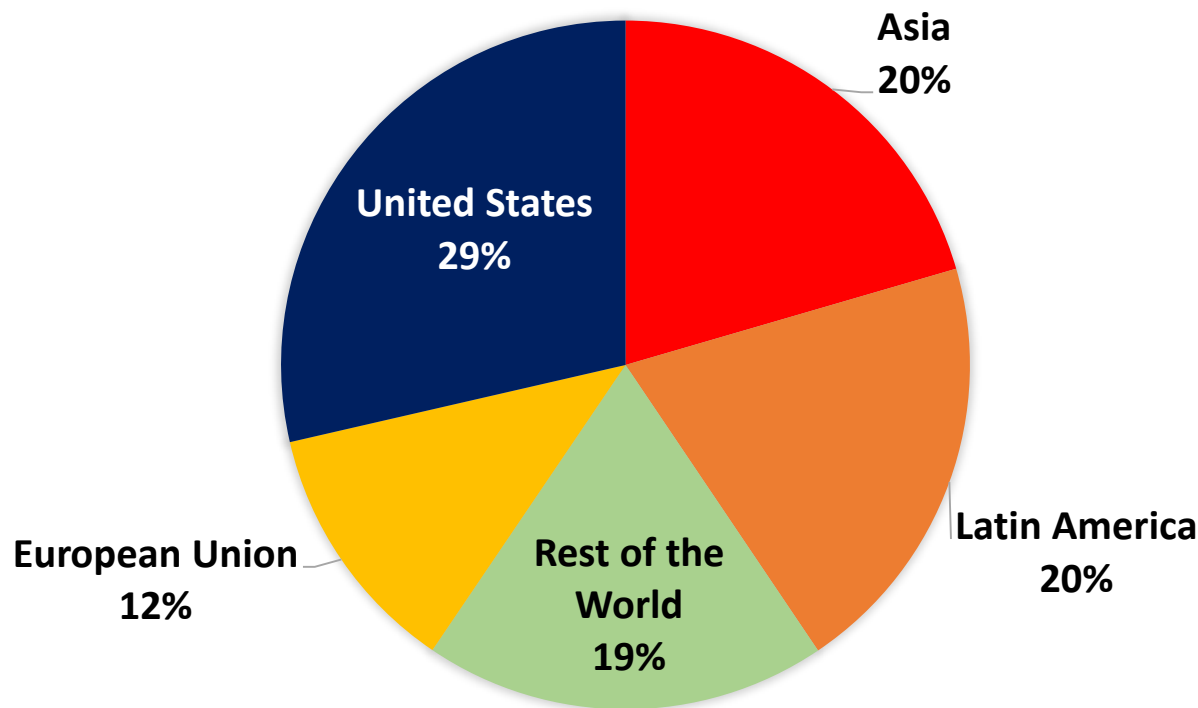
Supply chains at a regional basis are located in agroindustry, paper and carboard, plastic industry, and also in chemical and petrochemical industries, and also in some services (transport, financing, business services,...)

Latin American (16 countries): Domestic Valued Added content in Total Exports to Latin America, 2011



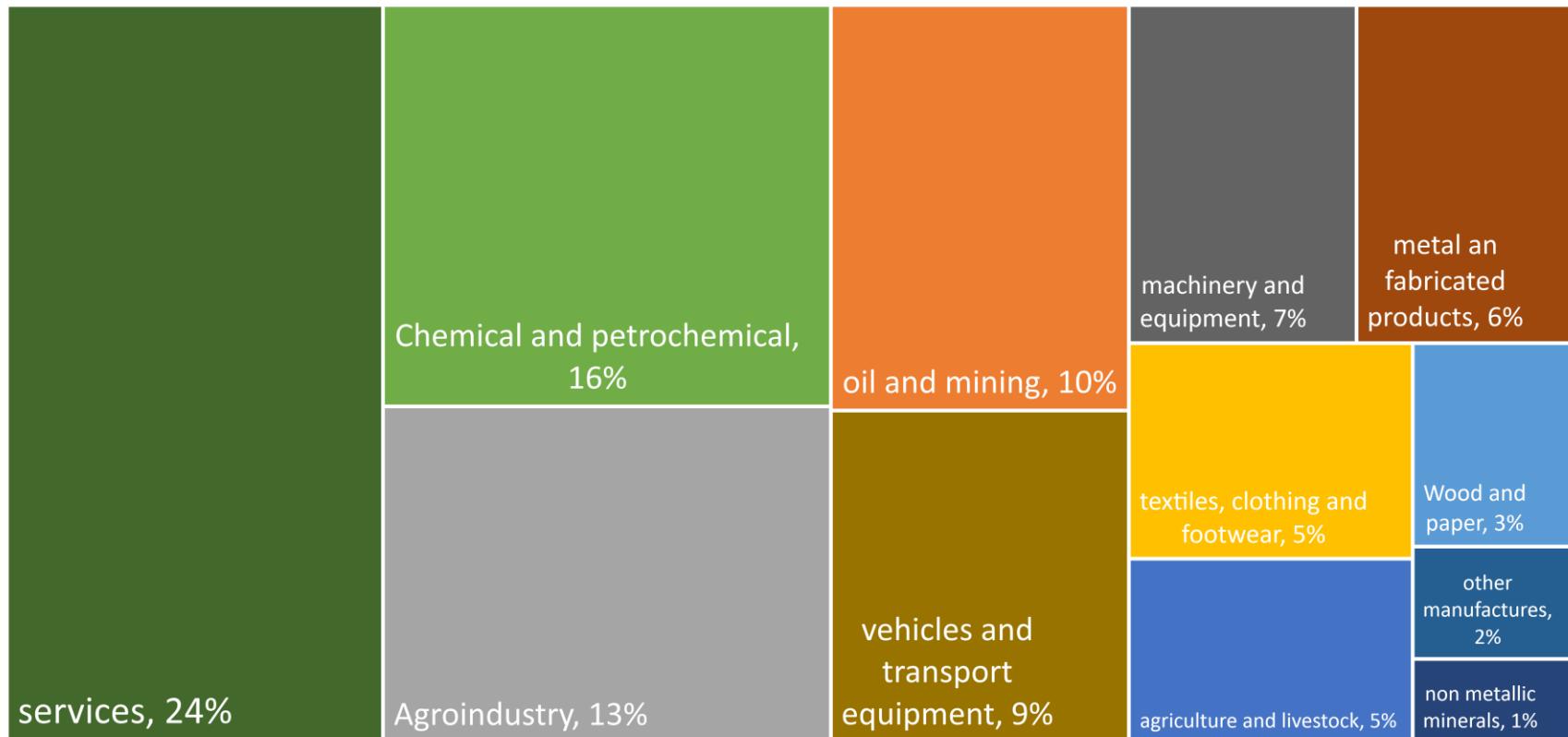
United States, Asia and Latin American are the most important destinies for regional Value Added

Latin American (16 countries): Domestic Valued Added content in Total Exports to Latin America, 2011
(Percentage of the total)



Which are the sectors with more value added embodied in intraregional export? Basically services and manufactures

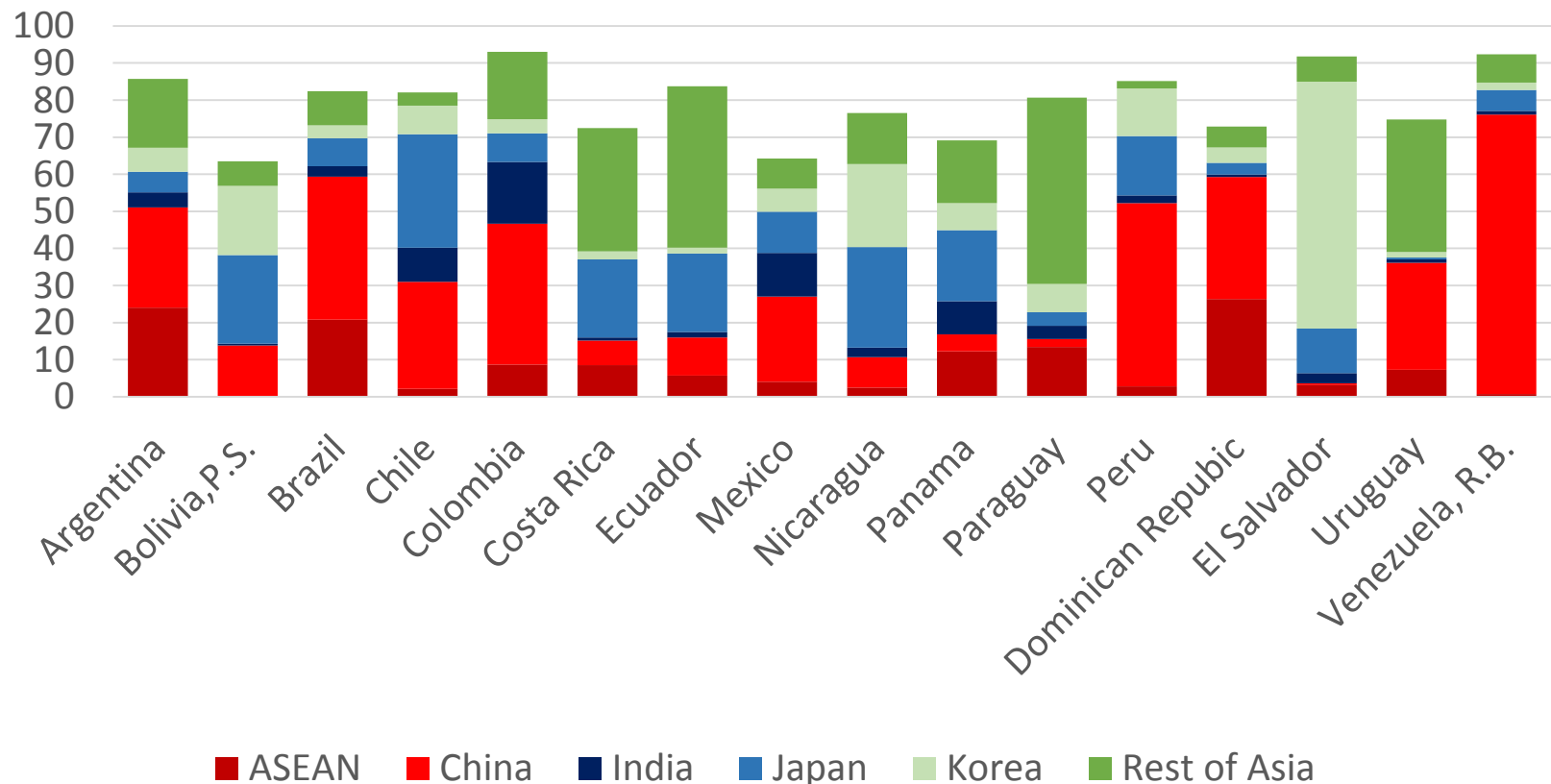
Latin American (18 countries): Domestic Valued Added content in Total Exports to Latin America, distribution by big sectors, 2011
(Share of the total)



Source: ECLAC based on IO Table for Latin America (18).

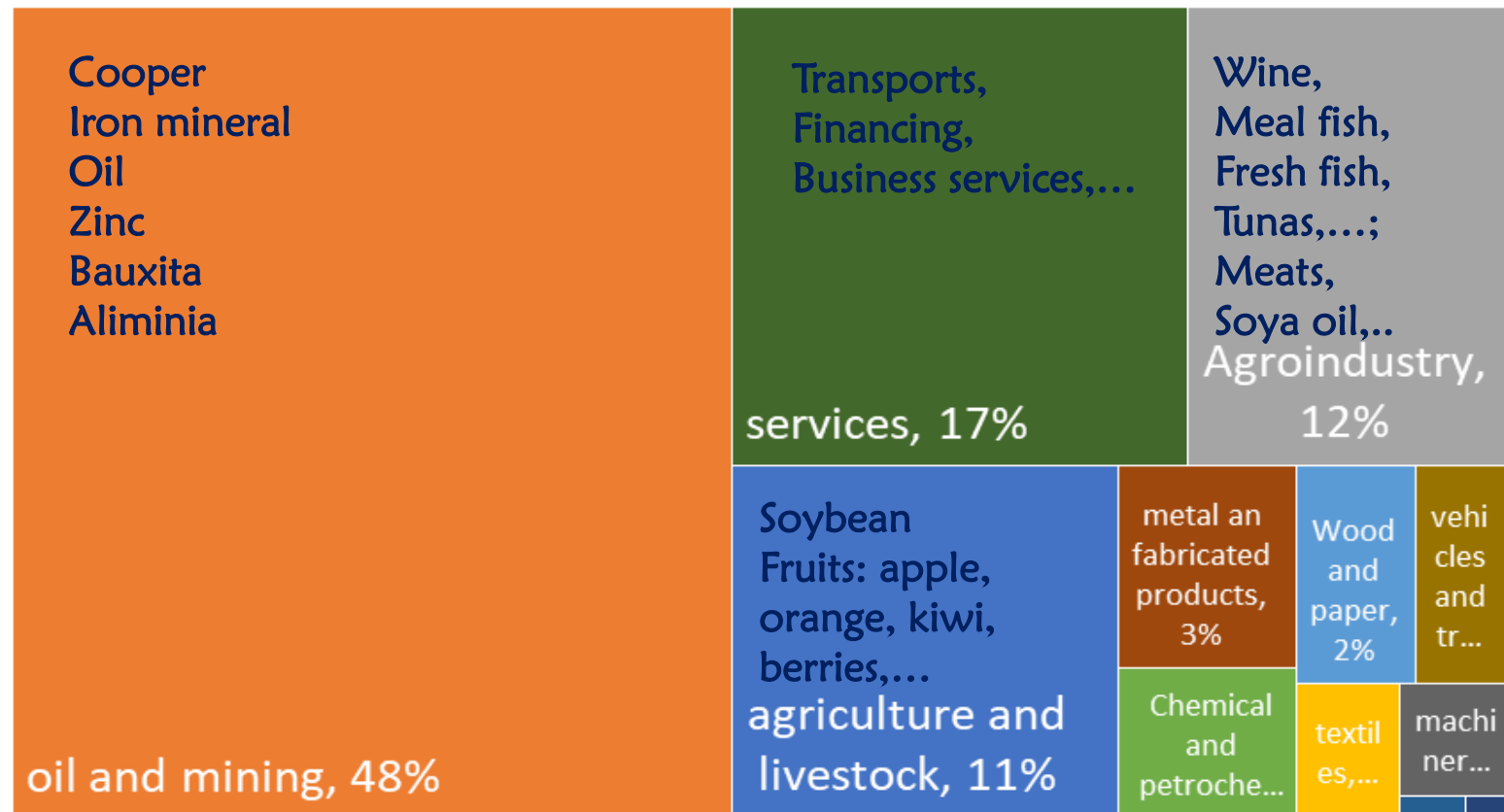
With respect to the Value Added, the main destination in Asia is China, with some important participation of Japan, ASEAN countries and Korea

Latin American (16 countries): Domestic Valued Added content in Total Exports to Asia Pacific, 2011 $(VA/XT)*100$



And the sector with more VA exported to Asia are primary products according to the comparative advantage of LAC in that products

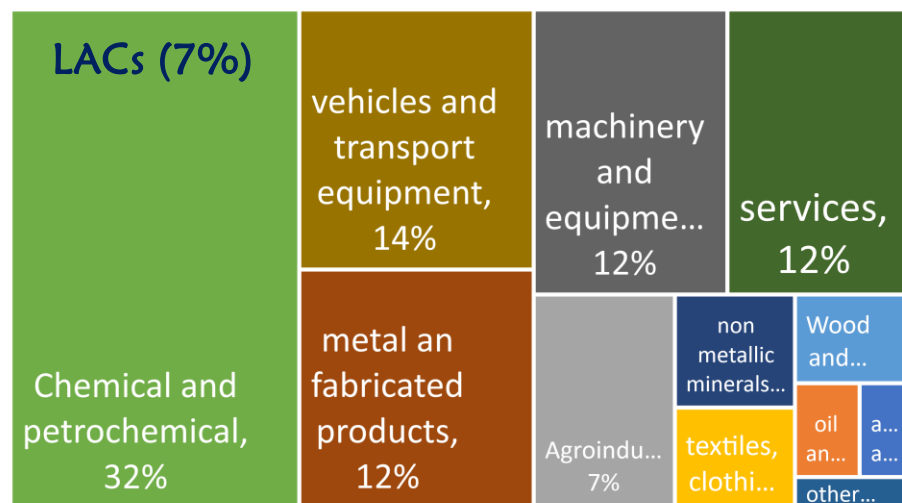
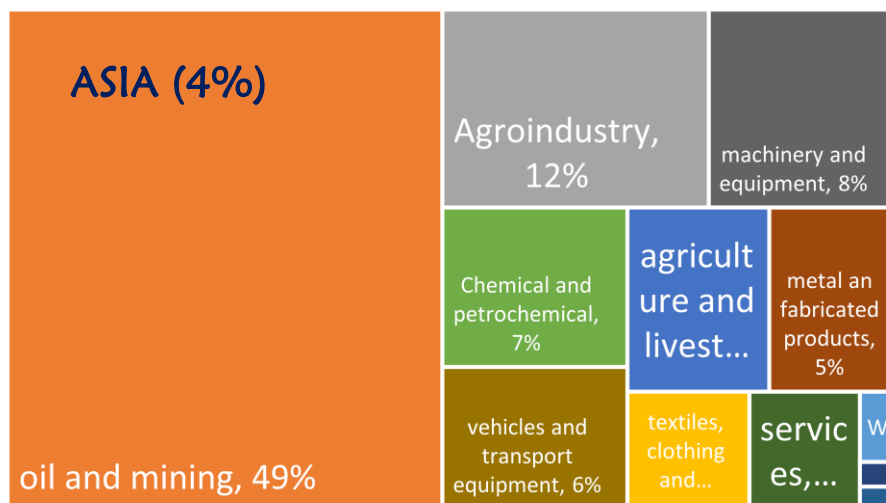
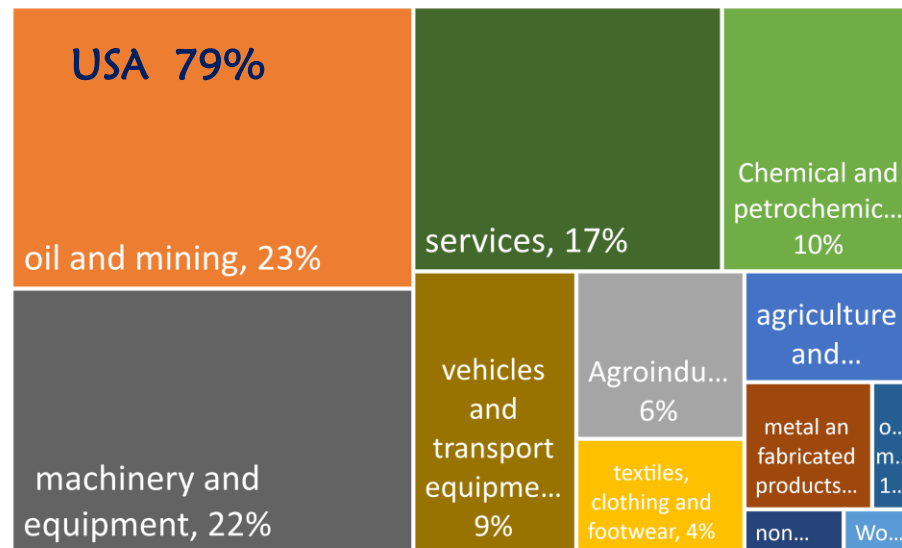
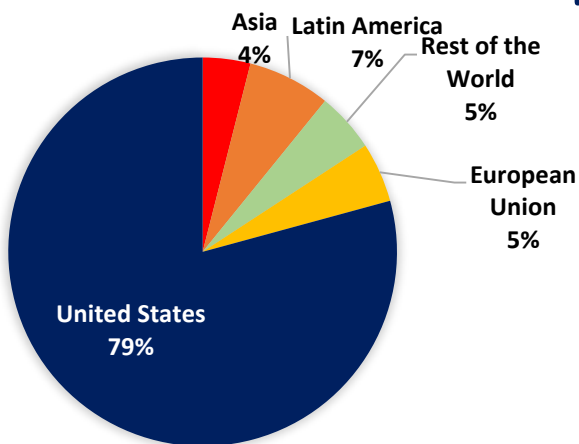
Latin American (18 countries): Domestic Valued Added content in Total Exports to Asia, distribution by big sectors, 2011
(Share of the total)



Source: ECLAC based on IO Table for Latin America (18).

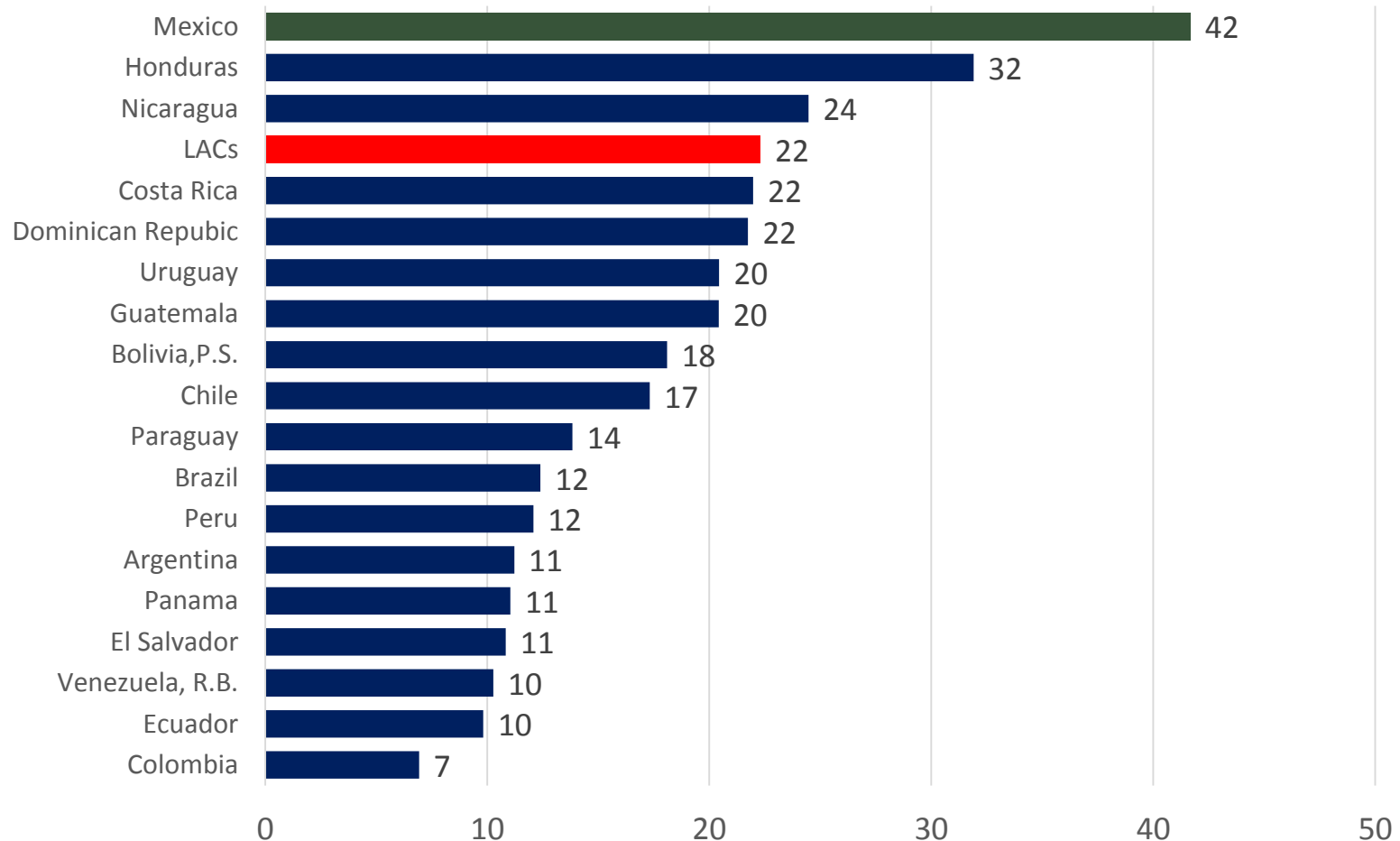
Mexico has more diversified VA

Distribution of VA in total export



Comparatively, Mexico, Honduras, Nicaragua and Costa Rica have greater vertical integration

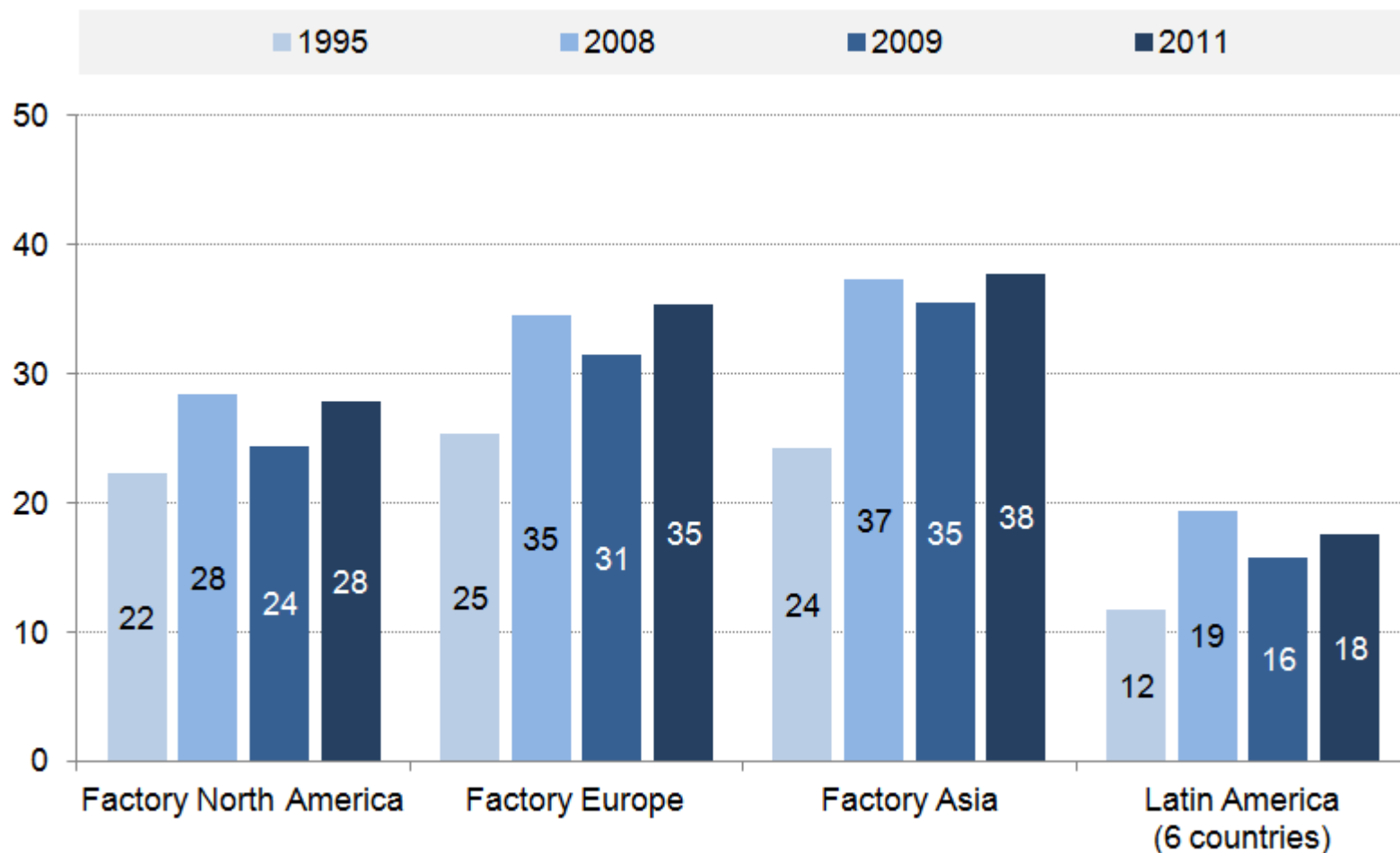
Latin American (16 countries): Import requirement in total exports, 2011
(II/XT)*100



Source: ECLAC based on IO Table for Latin America (18).

North America, European Union and Asia have more integrated value chains than Latin America

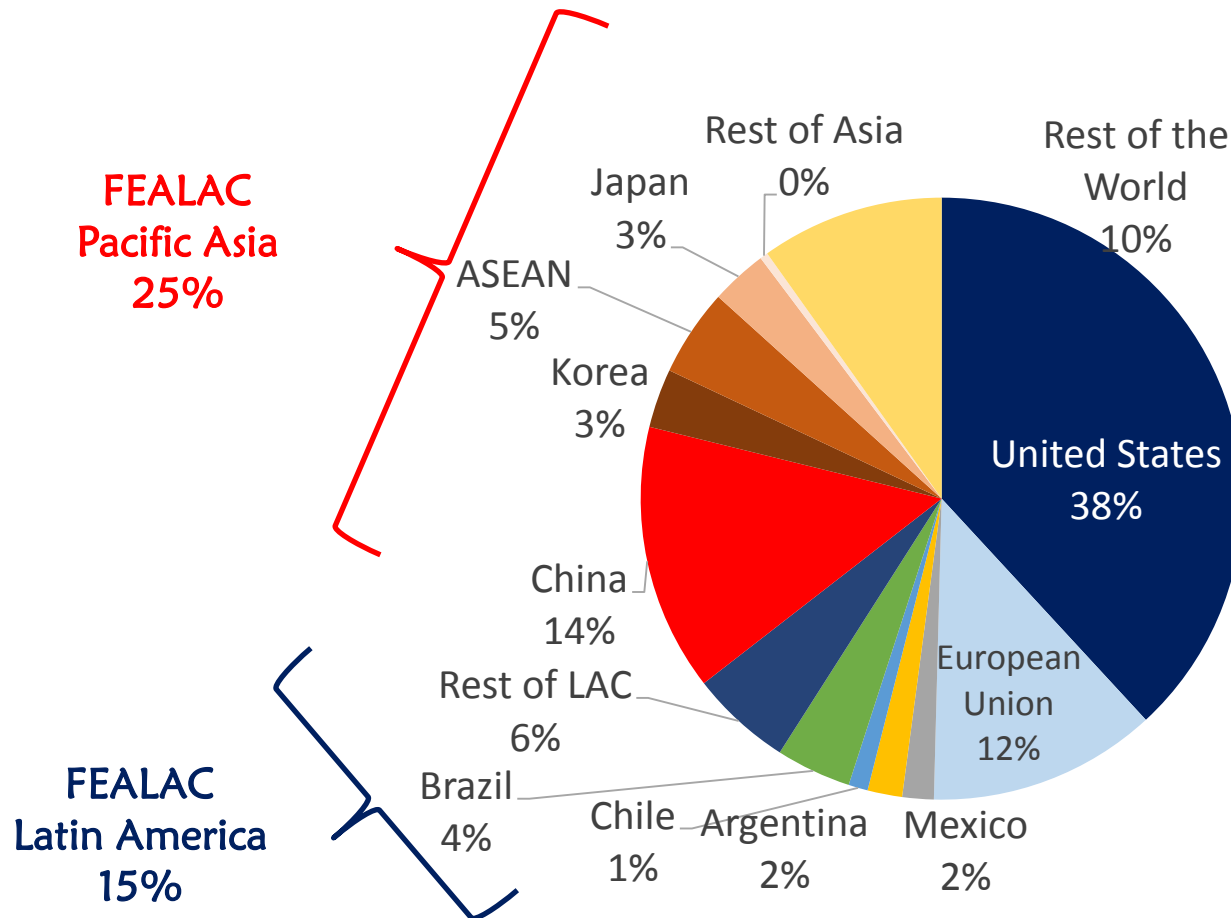
Imported intermediates embodied in gross manufacturing exports, 1995-2011



Source: Zaclicever (2017)

The main intermediate goods that the region imports from the world come from the United States (38%) and Asia (25%). 15% of the region itself.

Latin American and the Caribbean: Main origin of intermediate imports, 2017-2018
(Shares of the total)

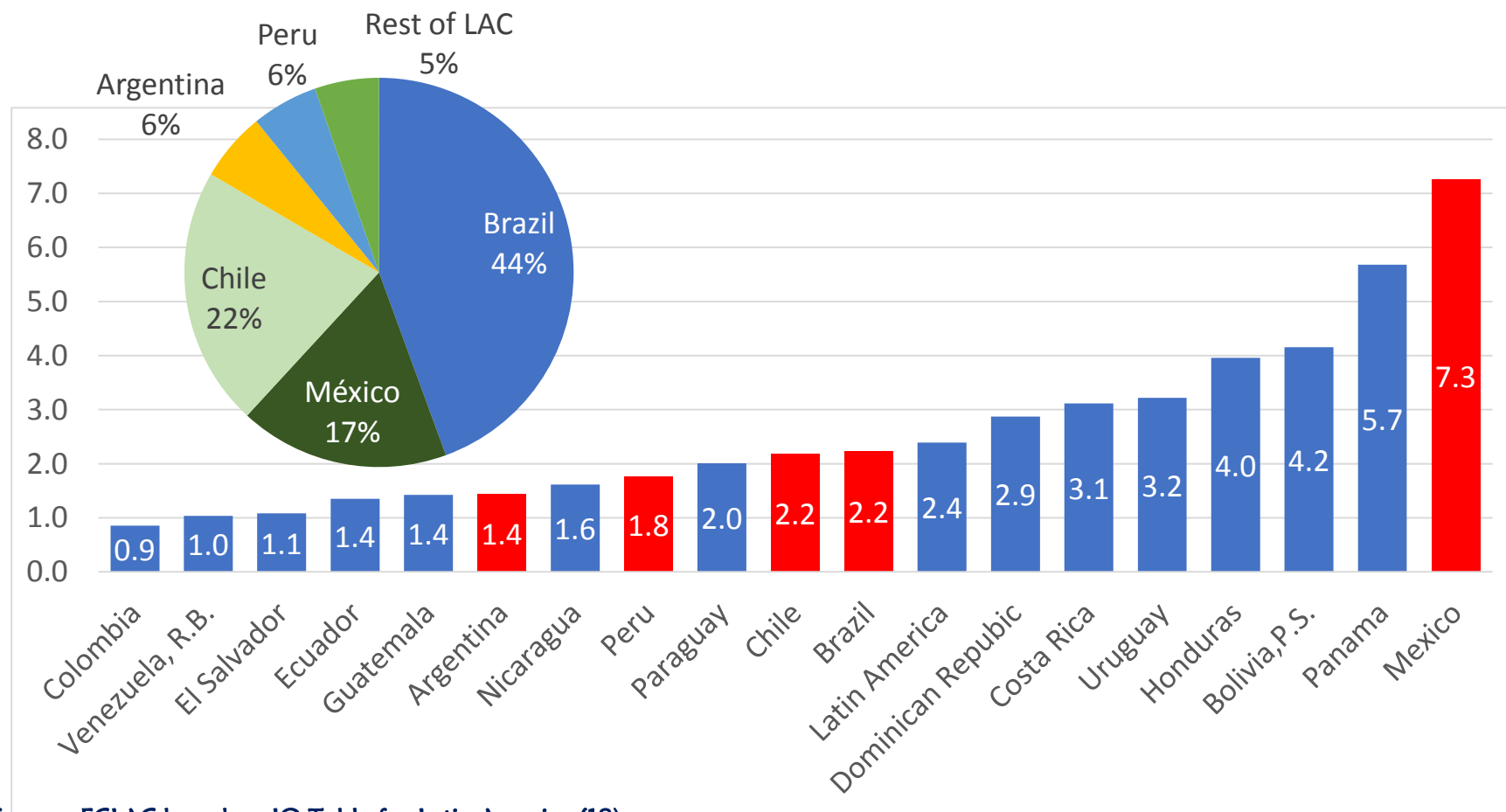


Fuente: CEPAL, sobre la base de datos COMTRADE de Naciones Unidas

Source: ECLAC based on data from UN Comtrade

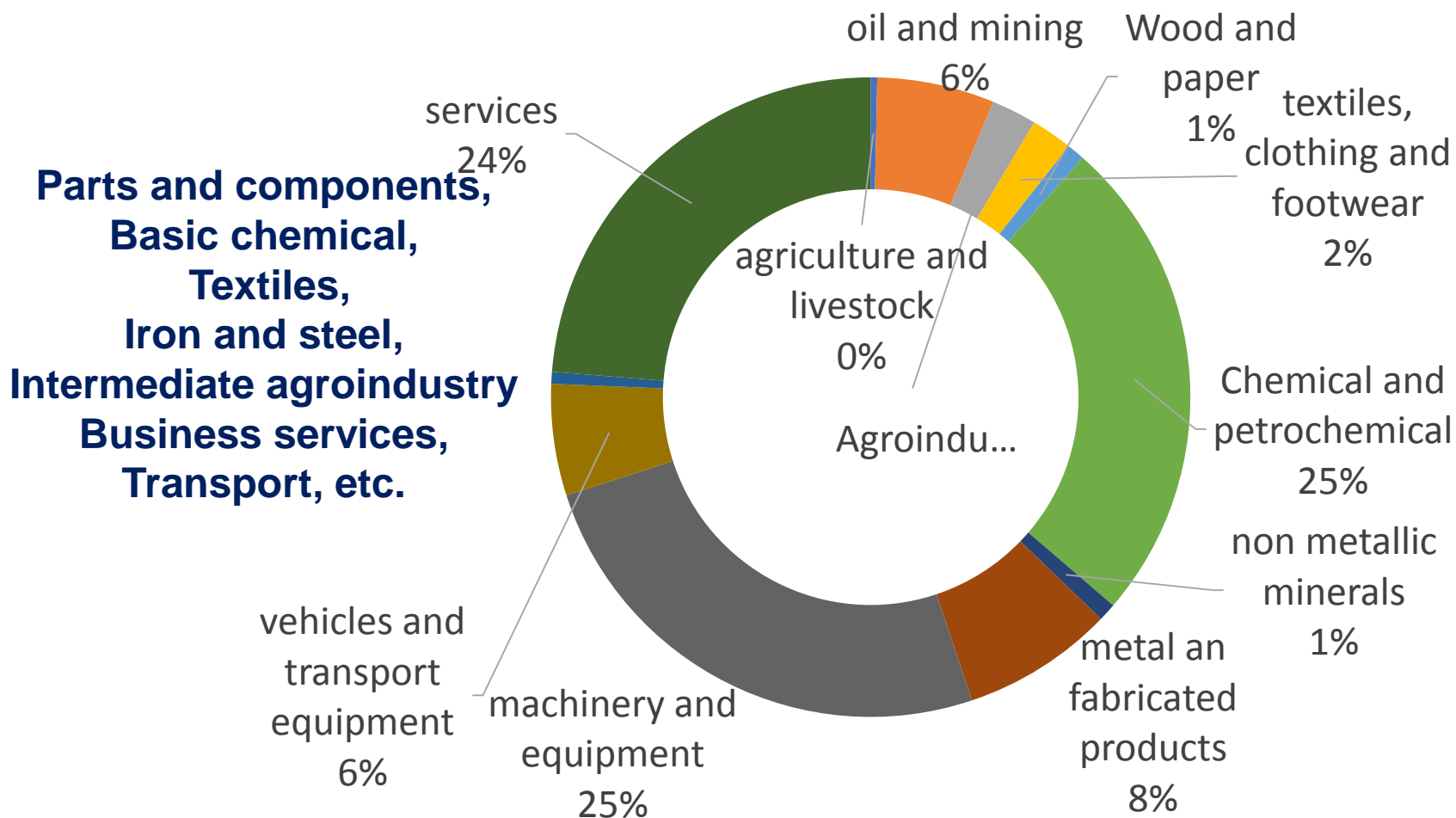
The amount of imported intermediate goods from Asia, embodied in total exports to Asia are concentrated in 5 countries (95% of total intraregional imports)

Latin American (16 countries): Import requirement from Asia in total exports to Asia, 2011
 $(II/XT)*100$



Source: ECLAC based on IO Table for Latin America (18).

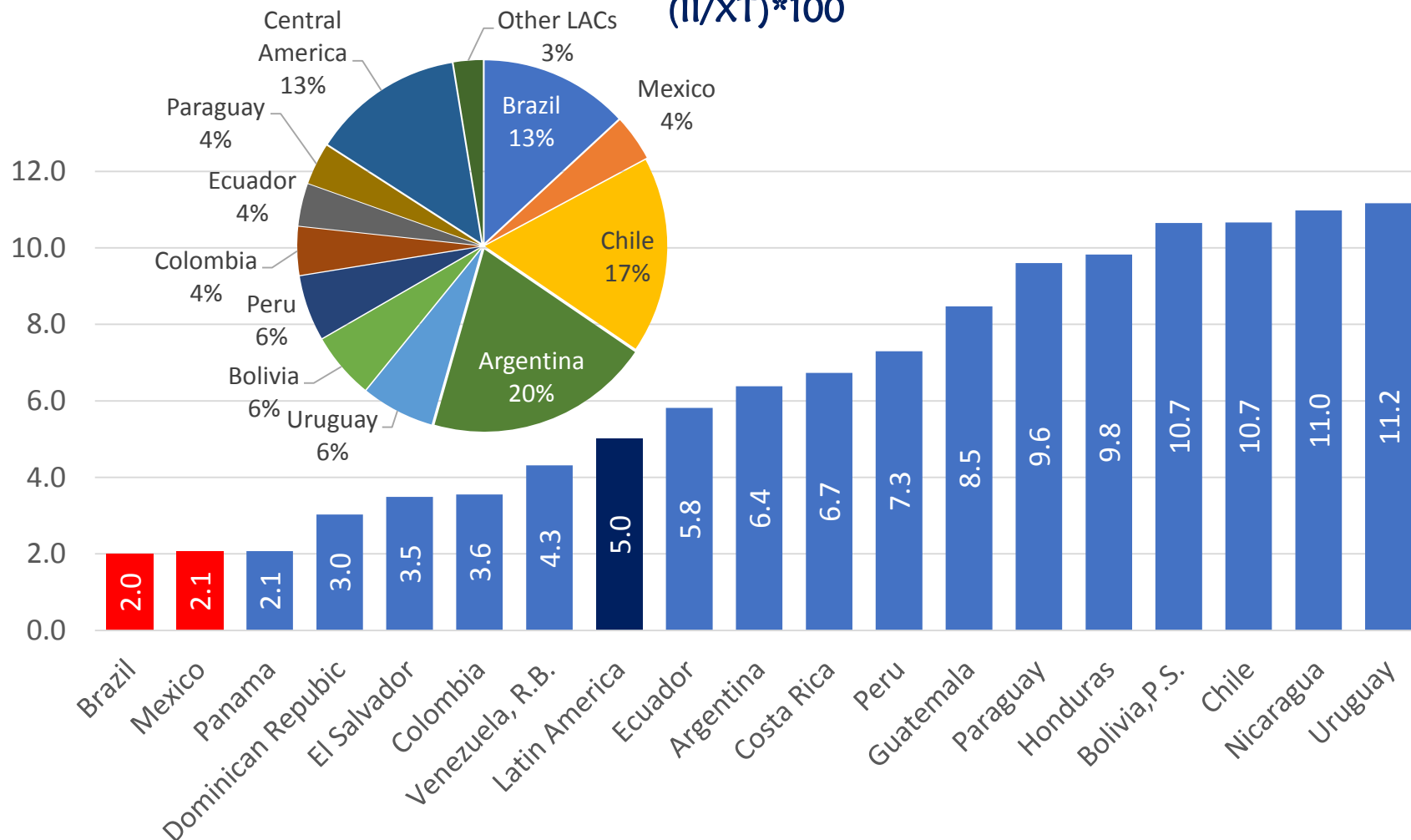
What kind of intermediate inputs imports Latin America from Asia Pacific?



Intraregional linkages are stronger in medium and small countries of Latin America.

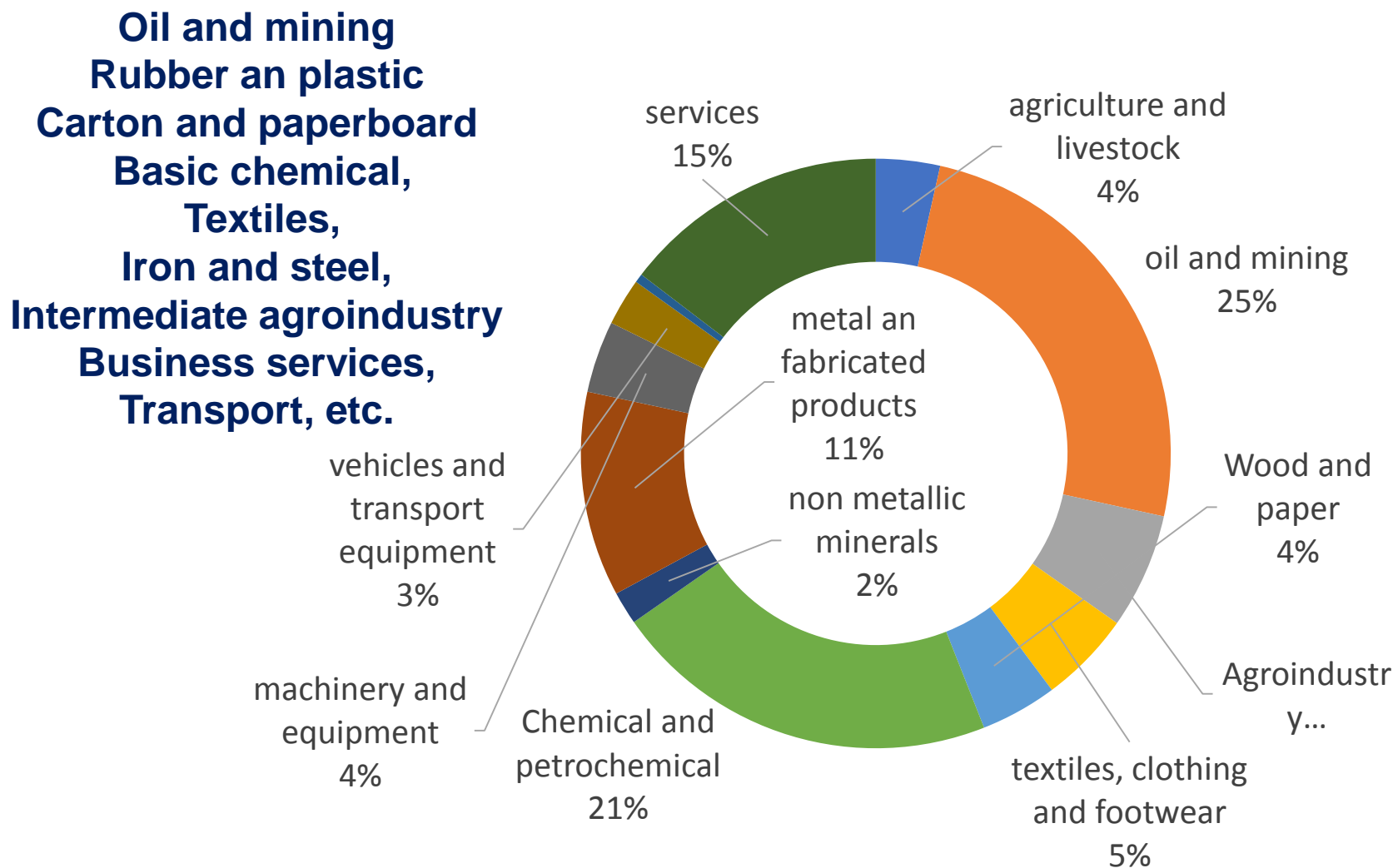
Latin American (16 countries): Import requirement from Latin America in total exports to Latin America, 2011

$(II/XT)*100$



Source: ECLAC based on IO Table for Latin America (18).

What kind of intermediate inputs imports stand out in intraregional trade in Latin America?

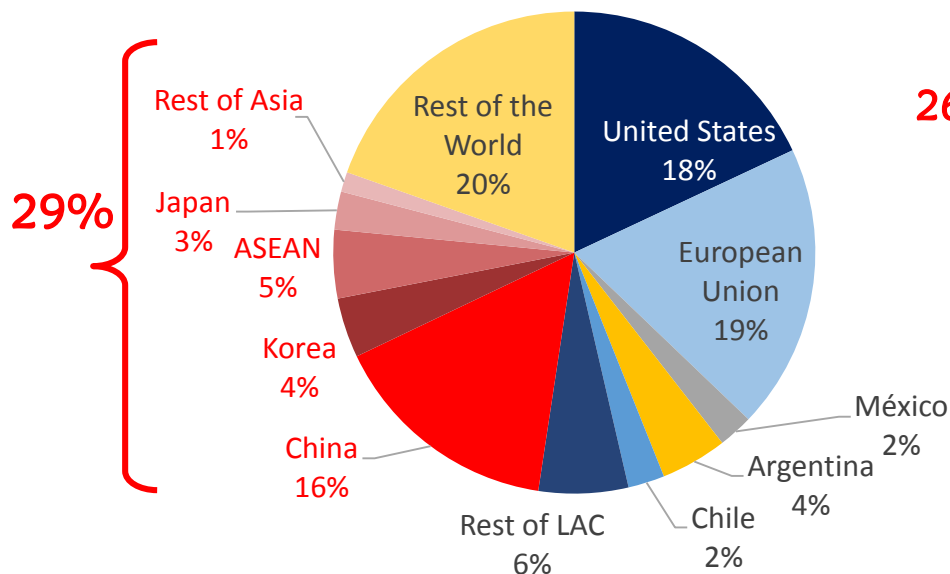


Source: ECLAC based on IO Table for Latin America (18).

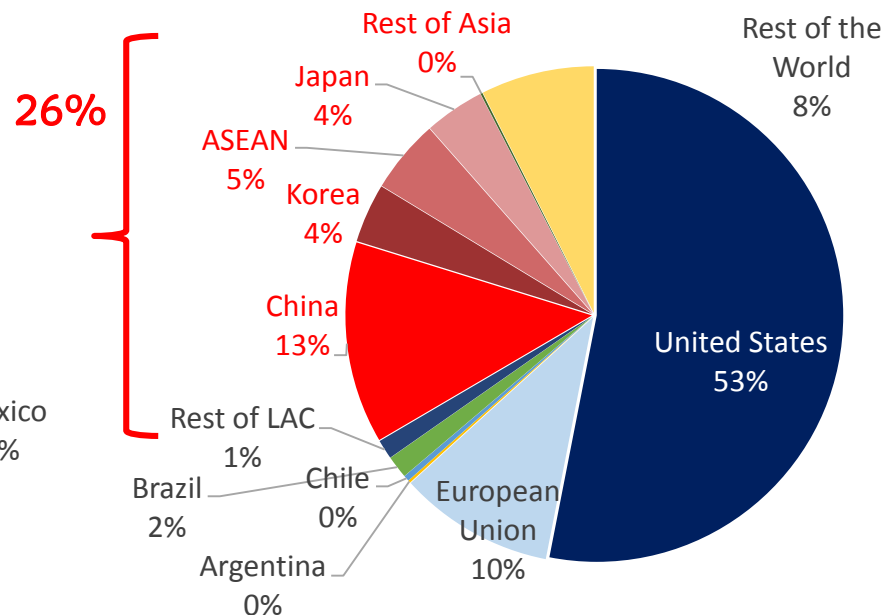
Brazil and Mexico import more industrial intermediate goods from the rest of the world than the rest of LAC

BRAZIL AND MEXICO: DISTRIBUTION BY ORIGIN OF IMPORTS OF INDUSTRIAL INTERMEDIATE GOODS, 2017-2018 (In percentages)

BRAZIL



MEXICO



Source: ECLAC based on data from UN Comtrade.

Evidence of Value Chains in Latin America and the Caribbean

- Mexico and Central America are more integrated in regional value chains that are strongly linked to the North American Factory, centered mostly around the large market of the United States
 - United States is the country that leads
 - The main chains: Automotive and auto parts, electronics, aeronautics, clothing, among others
- In South America, the presence of countries in integrated production chains is more limited and refers to relationships between a few countries: Argentina – Brazil, Colombia – Ecuador – Peru, Brazil – Uruguay
 - The main chains: Automotive and auto parts, electronic, aeronautics, and clothing, among others.
 - Brazil does not play the role in the region that the United States plays in North America.
- In Central America , GVCs are centered around all countries and to a lesser extent on Nicaragua
 - The main chains: chemical and petrochemical, steel and metal industry, pharmaceutical industry
 - A second group of light industries: agro industry, textiles, paper and cardboard

Main features of Asia-LAC trade

- **Inter-industry trade:** Commodities for manufactures
- **LAC** and almost all LAC countries **have a trade deficit** with Asia
- Strongly **concentrated**:
 - **By country:** Argentina, Brazil, Chile, Mexico and Peru account for 80% of LAC exports; China accounts for more than 50% of Asian exports
 - **By product:** soybeans, iron and copper ore and petroleum account for more than half of LAC total exports
 - **By number of companies**
- **Asian exports are much more diversified:**
 - Telecommunication, vehicles, computers, steel, electronics, transport equipment, footwear, toys, kitchenware, tires, etc.

Summary of LAC-Asian Trade Agreements													
	Australia	Brunei Darussalam	China	Republic of Korea	Hong Kong, China	India	Japan	Malaysia	New Zealand	Singapore	Thailand	Taiwan Province of China	Viet Nam
Argentina						PSA (2004)							
Brazil						PSA (2004)							
Chile	FTA (2009)	FTA (2006)	FTA (2006)	FTA (2004)	FTA (2014)	PSA (2007)	AA (2007)	FTA (2012)	FTA (2006)	FTA (2006)	FTA (2013)*		FTA (2014)
Colombia	In neg't		FS	FTA (2014)			TN		In neg't	In neg't			
Costa Rica			FTA (2011)	FS						TLC (2013)			
El Salvador				FS								FTA (2008)	
Guatemala				FS								FTA (2006)	
Honduras				FS								FTA (2008)	
Mexico	TPP	TPP					AA (2005)	TPP	TPP	TPP			TPP
Nicaragua												FTA (2008)	
Panama				FS						FTA (2006)		FTA (2004)	
Paraguay						PSA (2004)							
Peru	TPP	TPP	FTA (2010)	FTA (2011)			AA (2012)	TPP	TPP	FTA (2009)	FTA (2011)		TPP
Uruguay						PSA (2004)							

Pacific Alliance members have been very active in negotiating trade agreements with Asia Pacific

Pacific Alliance members: FTA network with Asia Pacific (as of July 2019)

	China	Japan	Republic of Korea	Others (in force)	TPP-11^a
Chile	Yes	Yes	Yes	Australia, Hong Kong (SAR China), India, Malaysia, P4 ^a Thailand, Vietnam	Yes
Colombia	No	Under negotiation	Yes	No	No
Mexico	No	Yes	No	No	Yes
Peru	Yes	Yes	Yes	Singapore, Thailand	Yes

Source: Organization of American States, Foreign Trade Information System, www.sice.oas.org.

^a Trans-Pacific Strategic Economic Partnership Agreement. Its original members were Brunei Darussalam, Chile, New Zealand and Singapore. An expanded to 11 members (Australia, Malaysia, Singapore, Vietnam, Canada, Mexico and Peru)

How to promote Value Chains and Productive Integration among both regions?

- **Promote public-private dialogue (such as this forum)**
- **Pluri-national Industrial Policies**
 - Clusters in sectors with the most intra-industrial potential
 - Regulatory convergence
 - Joint programs to promote SMEs
 - Training
 - Quality certifications
 - Traceability and carbon footprint
- **Address deficits in infrastructure**
- **Coordinated policies in trade facilitation**
 - Single window, digitalization of documents
- **Incorporate Trans-Latinas in the effort**
- **Support from the regional development banks**

Conclusions

- **At regional level, there is a need for leadership to create production networks**
 - Brazil and Mexico could take the lead
 - Public policies should take into consideration productive chains
- **The large countries of Latin America should imitate the steps taken by Japan to promote productive integration in Asia Pacific**

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