### Productive Integration between Latin America and Asia Pacific:

How to integrate into value chains. The role of SMEs

José Durán Lima Chief of the Regional Integration Unit, Division of International Trade and Integration, ECLAC, United Nations

Republic of Korea, 18 September 2019

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## Motivation



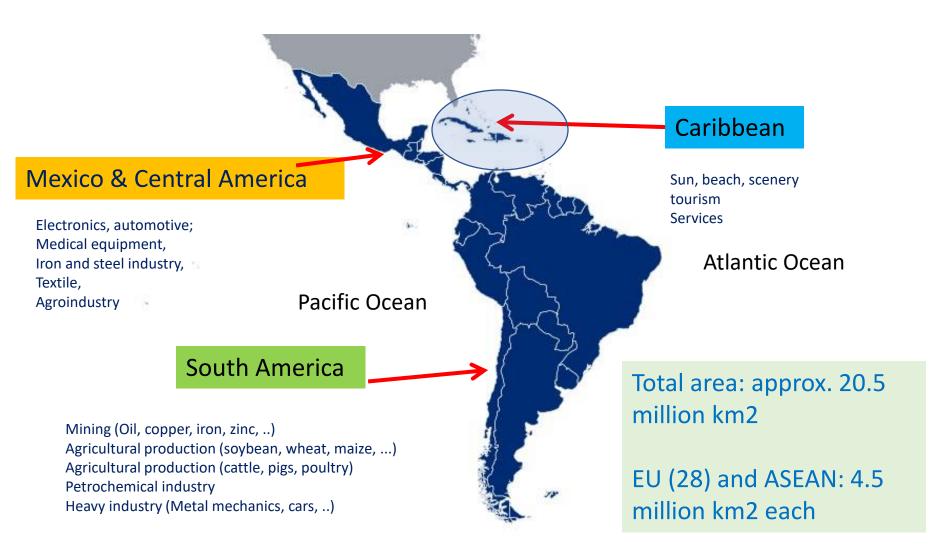
#### Show the development of value chains in Latin America and the Caribbean.

- <u>Value Chains</u>: The measurements that link trade and production are increasingly necessary. Multiple approaches have been used (trade analysis, trade and production link in Input Output approach; business surveys custom microdata analysis)
- Questions to answer
  - 1. Does LACs countries participate in GVC? Are there intra-regional value chains? In what sectors? What 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?
  - 4. How SMEs participate in value chains, and what space have SMEs in the bi-regional trade and production linkages?

# LACs characterization

## Latin America and the Caribbean are 3 sub regions in one, and with different insertion patterns

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### Latin American and the Caribbean: tariff and non tariff protection in intra-regional trade, 2015<sup>a</sup>

(In percentages)

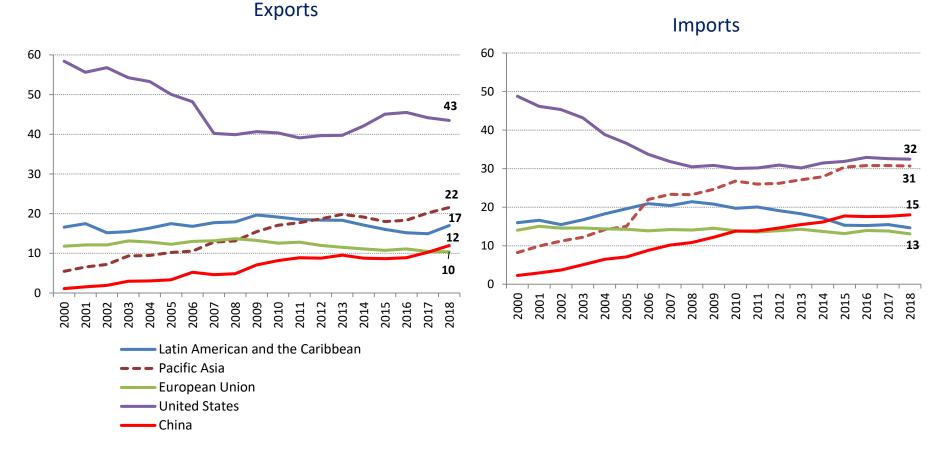
	Applied tariff (1)	Equivalent ad valorem due to NTBs (2)	Tariff and non tariff protection (3)=(1+2)	Share of non tariff in total protection (4)=(2/3)*100	Administrative Barriers (EAV) (5)
Andean Community	1.3	2.1	3.4	61.7	12.7
South American Common Market	1.4	5.1	6.5	78.4	13.4
Central America	2.5	2.3	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	3.9	5.8	64.8	15.4

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

# 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)

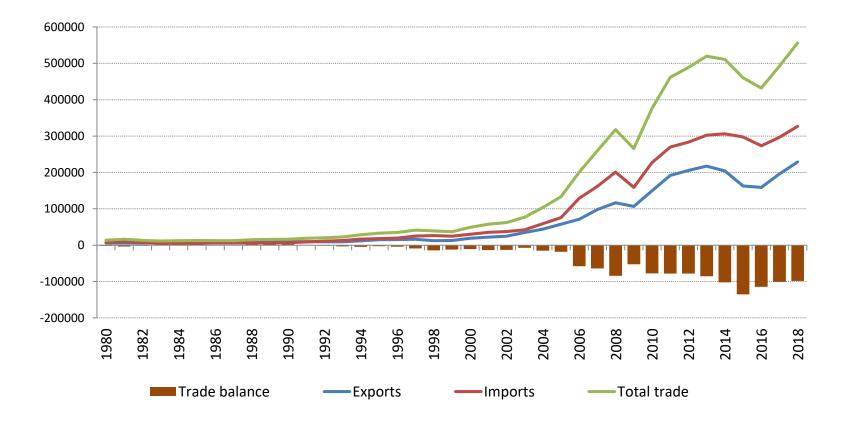


Source: ECLAC based on official national data

# LAC trade with Asia-Pacific boomed in the last years after a 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. Notwithstan ding the levels reached, it is still a far reach from the Europe an Union or Asia Factory.

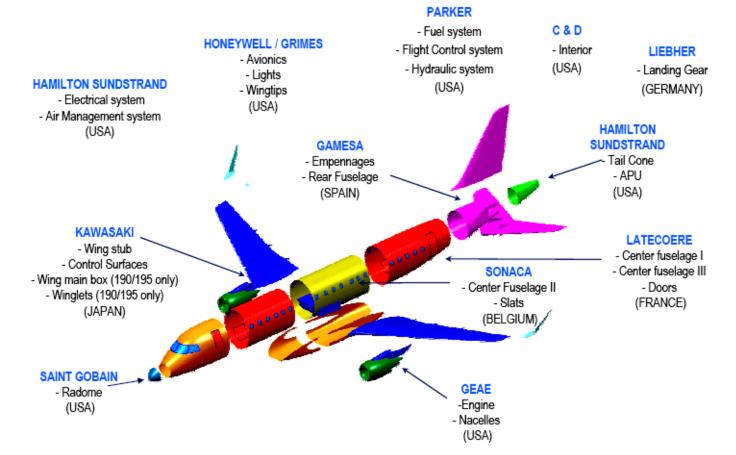


- A value chain describes the wide range of production activities that a company and its workers undertake to develop a product from raw material to final product.
- The stages and processes of chaining are varied:
  - **Backward:** The ability of a sector to incorporate other sectors linked to it by its demand for intermediate goods imported required 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 countri es trough export. (Value Added embodied in the exports of partners countries)
- Linkages can be national, regional, inter-reginal 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.

#### Summary of LAC-Asian Trade Agreements

		ΓΓΛΙΛΟ												
	Australia	Brunei Dar ussalam	China	Republic of Korea	Hong Kong, China	India	Japan	Malaysia	New Zealan d	Singapore	Thailand	Taiwan Pro vince of Chi na	Viet Nam	
Argentina				In neg't		PSA (2004)								
Brazil				In neg't		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)	FTA (2018)						TLC (2013)				
El Salvador				FTA (2018)								FTA (2008)		
Guatemala				Cooperation Agreement (2019)								FTA (2006)		
Honduras				FTA (2018)								FTA (2008)		
Mexico	TPP	TPP					AA (2005)	TPP	ТРР	TPP			TPP	
Nicaragua				FTA (2018)								FTA (2008)		
Panama				FTA (2018)						FTA (2006)		FTA (2004)		
Paraguay				In neg't		PSA (2004)								
Peru	ТРР	TPP	FTA (2010)	FTA (2011)			AA (2012)	TPP	ТРР	FTA (2009)	FTA (2011)		TPP	
Uruguay				In neg't		PSA (2004)								

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#### Pacific Alliance members: FTA network with Asia Pacific

#### (as of September 2019)

	China	Japan	Republic of Korea	Others (in force)	TPP-11 a
Chile	Yes	Yes	Yes	Australia, Hong Kong ( SAR China), India, Mal aysia, P4 <sup>a</sup> Thailand, Vie tnam	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.

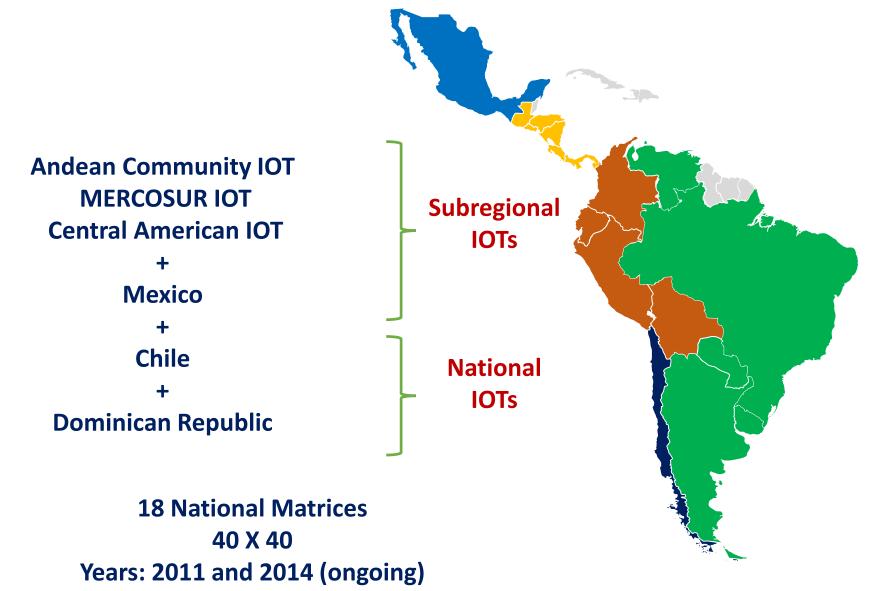
<sup>a</sup> Trans-Pacific Strategic Economic Partnership Agreement. Its original members were Brunei Darussalam, Chile, New Zealand and Singapore. An expanded to 11 members (Australia, Malaysia, Singapore, Vietnam, Canada, Mexico and Peru) Methodology: IO Table, a tool for FEALAC value chain analysis



- 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 product input matrix 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) and other recent literature
  - ✓ Calculation of Grubel-Lloyd Index (intraindusty trade);

### The First Latin American (18) Input-Output Table





18 LAC Intermediate Use					Final Use								Exports																	
CO	untries	(1	8	LA	Сc	ou	ntr	ies	)		(18	LA	C co	oun	tri	ies		(/	Asi	ia I	Pa	cifi	сa	nd	Ro	of V	Vor	ld)		
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55	partners	Argentina	Brazil	Costa Rica	Dom. Rep.	Mexico	:	Uruguay	Venezuela	Argentina	Brazil	Costa	Dominic Republic	Mexico	:	Uruguay	Venezuela	United State:	Canada	EU	India	Australia	Brunei	Cambodia	Japan	China	Thailand	:	R of World	Gross Value
	Argentina	40x40								40x 2								40x1												40x1
	Brazil	40x40																												
ts	Costa Rica																													
boi	Dominican Repub																													
LAC Imports	lic									-																				
ų	Mexico																													
P																														
	Uruguay																													
	Venezuela																													
	United States	40x40									-		-	-				-				L	-	-			-		J	
rts	Canada																													Q
bol	European Union																													
<u></u>	(EU)																													
N	India												16	CC/		۸ <b>۲</b>	<b>0</b> V	tra r	.00	io		n	. rt.	aar	<b>.</b> .					
RC	Australia																	tra r	-			-				- - -				
pu	Brunei																	nei,												
n a	Cambodia	_																aysia			_								ao	s,
Asian and ROW Imports	Japan												My	anı	ma	ar, I	Mo	ngo	lia	, Ir	ndo	one	esia	, P	hili	ppi	nes	,		
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	R of World																													
	Тах	1x40																												
	Insurance and fr eight																													
	Value added																													

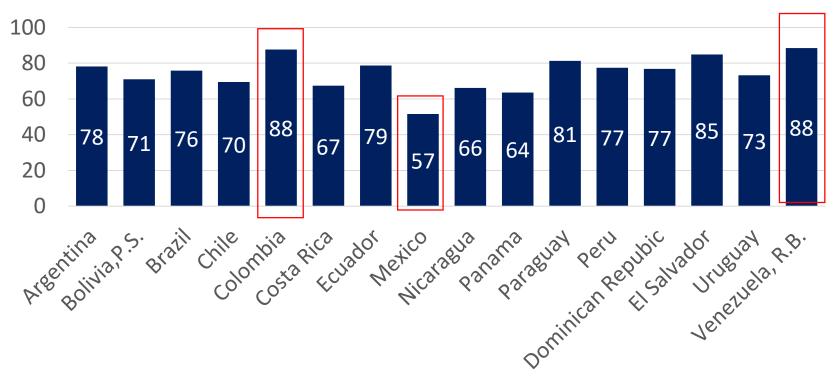


- We have in ECLAC a IO Table with 18 LAC countries
- Covering interregional trade with 16 FEALAC Asia Pacific m embers
- Is free and available for governments, academics, policy makers, students, .....
- We will be a Global IOT Matrix as a result of FEALAC Project . Together with ESCAP and the Asian Development Bank.
- <u>https://www.cepal.org/es/eventos/matrices-insumo-produ</u> <u>cto-como-herramienta-politicas-comerciales-industriales-a</u> <u>merica-latina</u>

**Results of FEALAC Project on bi-regional VC analysis**  The average VA embodied in total LAC export is 73%, with Mexico having the lowest share, and Colombia and Venezuela the highest

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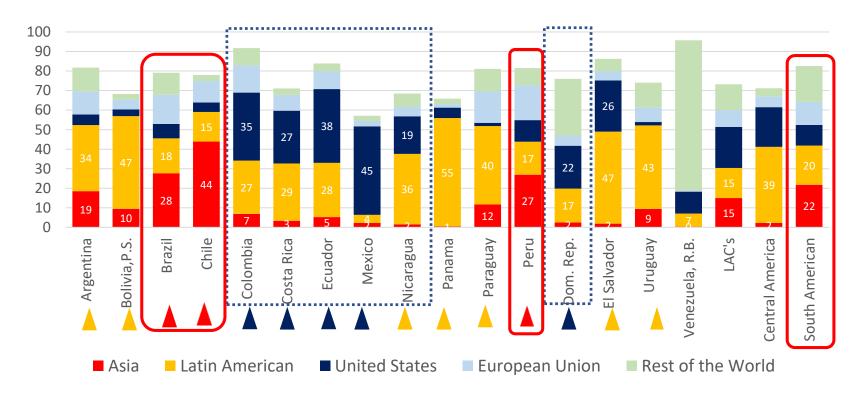
### Latin American (16 countries): Domestic Valued Added content in Total Exports, 2011 (VA/XT)\*100



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

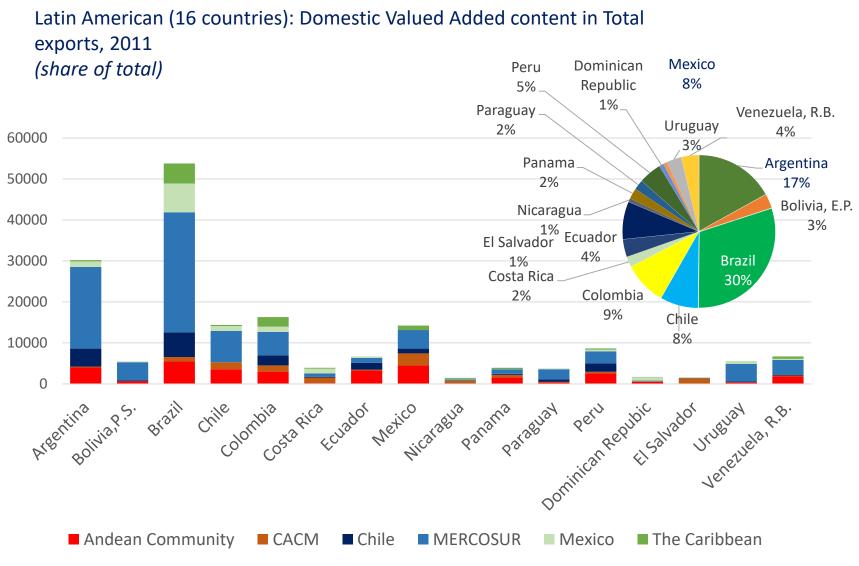


### Latin American (16 countries): Domestic Valued Added content in Total Exports by origin, 2011 (VA/XT)\*100 (in percentages)



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

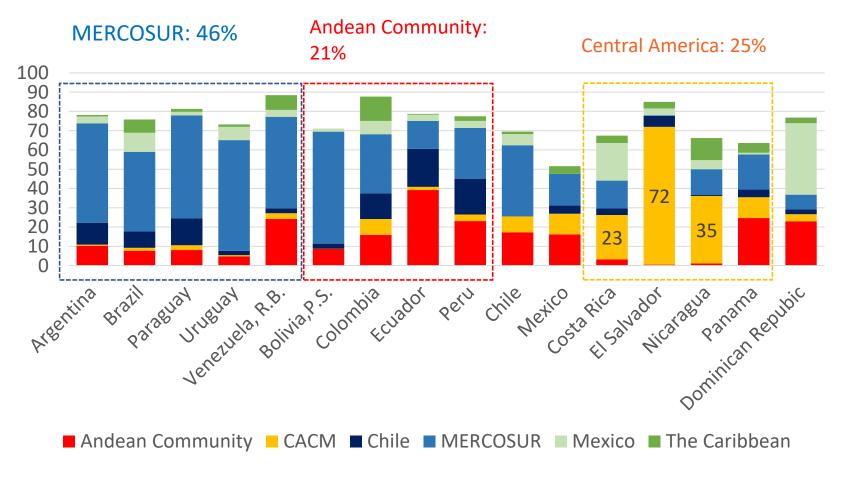




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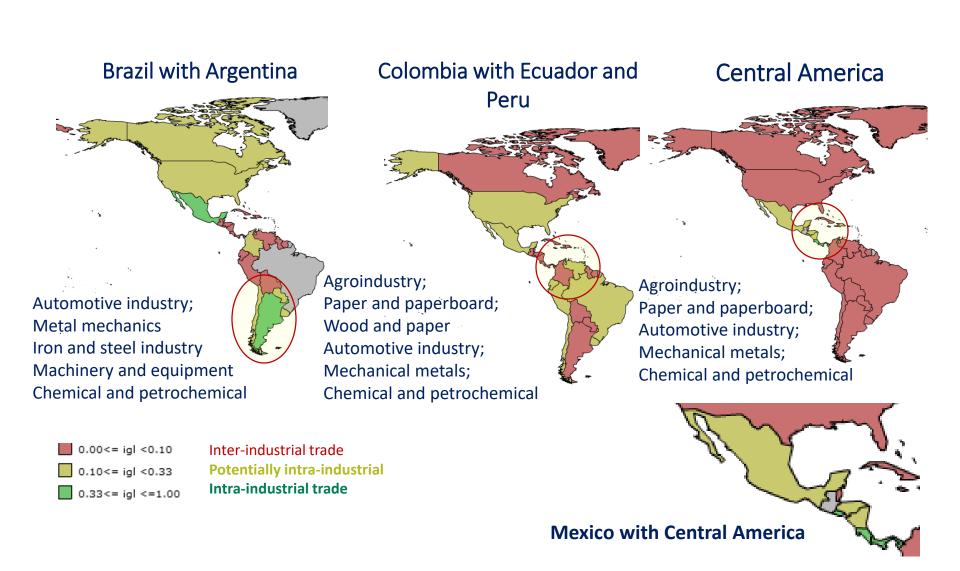


### Latin American (16 countries): Domestic Valued Added content in Total Exports to Latin America, 2011 (VA/XT)\*100



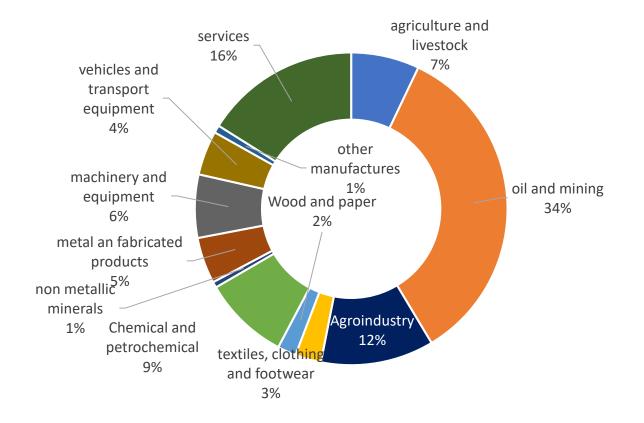
At a regional level, the main productive chains are between countries that are geographically close

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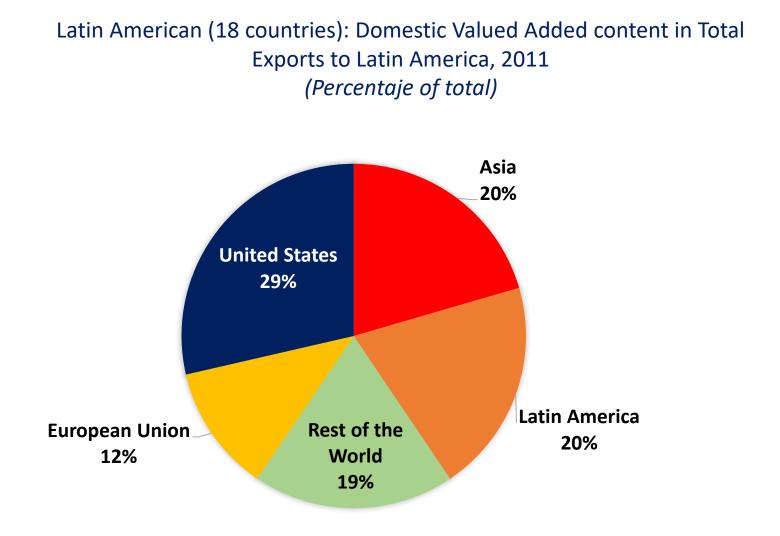


Supply chains at a regional basis are located in agroindustry, paper and carboard, plastic industry, and also in chemical and petrochemical **2019** industries, and also in some services (transport, financing, business services,...)

#### Latin American (18 countries): Domestic Valued Added content in Total Exports to Latin America, 2011



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

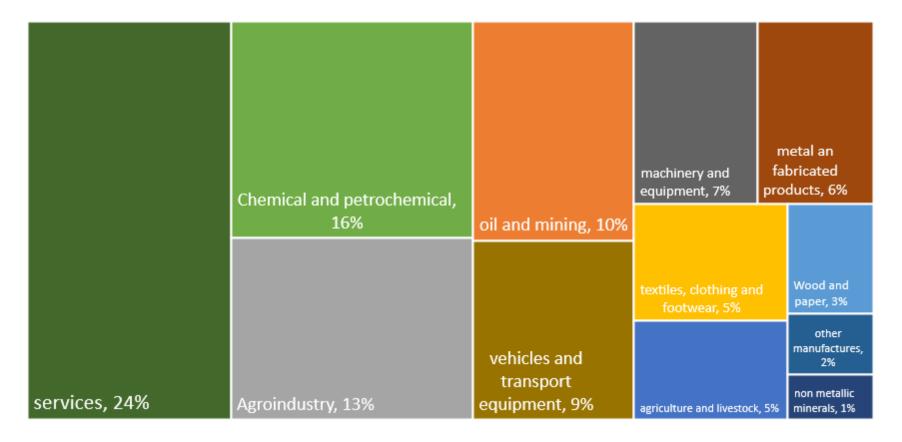


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What are the sectors with more value added in VA embodied in intraregional export? Basically services and manufactures



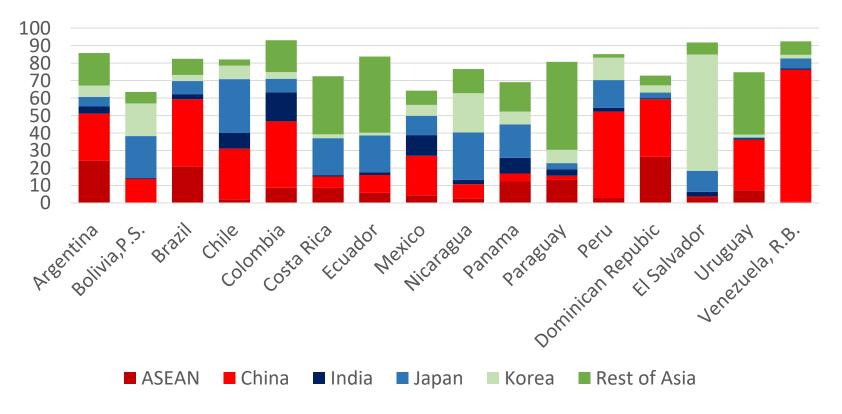
Latin American (18 countries): Domestic Valued Added content in Total Exports to Latin America, distribution by big sectors, 2011 (Share in total)



In the case of the LAC 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 the comparative advantage of LAC in that products

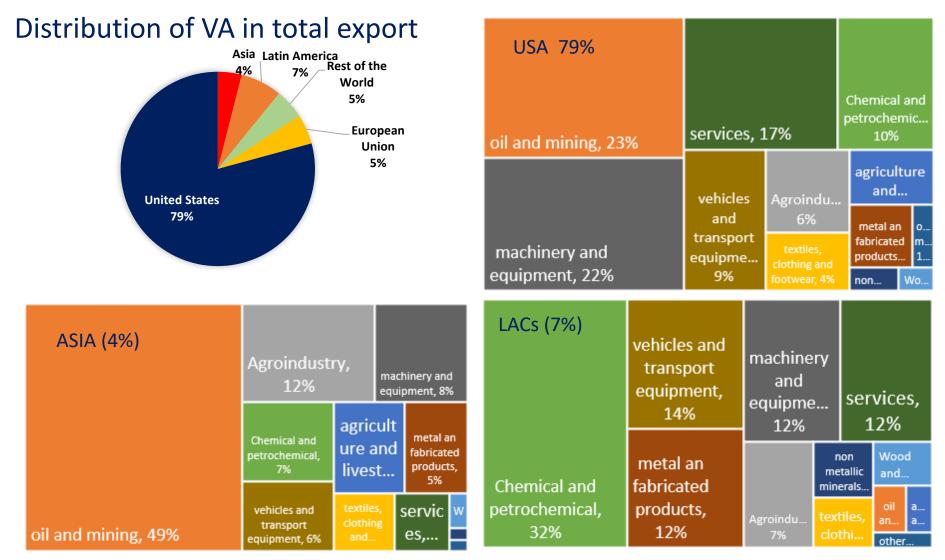


#### Latin American (18 countries): Domestic Valued Added content in Total Exports to Asia, distribution by big sectors, 2011 (Share in total)

Cooper Iron mineral Oil Zinc Bauxita Aliminia	Transports, Financing, Business services, services, 17%		Wine, Meal fish, Fresh fish, Tunas,; Meats, Soya oil, Agroindustry, 12%					
oil and mining, 48%	Soybean Fruits: apple, orange, kiwi, berries, agriculture and livestock, 11%	fabr pro : Ch	tal an icated ducts, 3% emical and roche	Wood and paper, 2% textil es,	vehi cles and tr machi ner			

### Mexico has more diversified VA



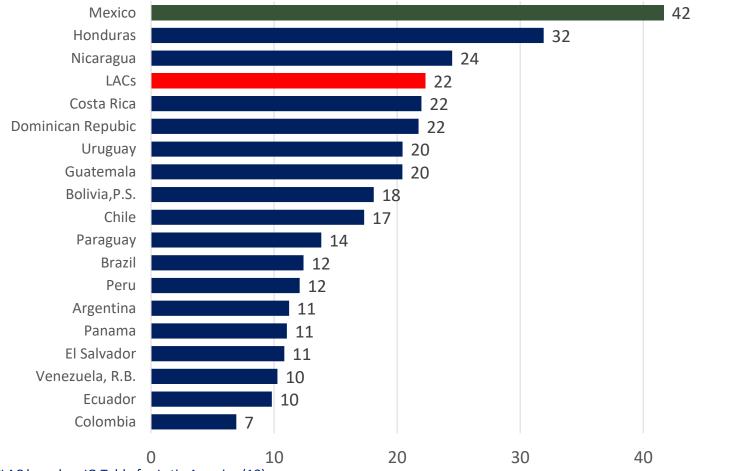


#### Comparatively, Mexico, Honduras, Nicaragua and Costa Rica appear with greater vertical integration



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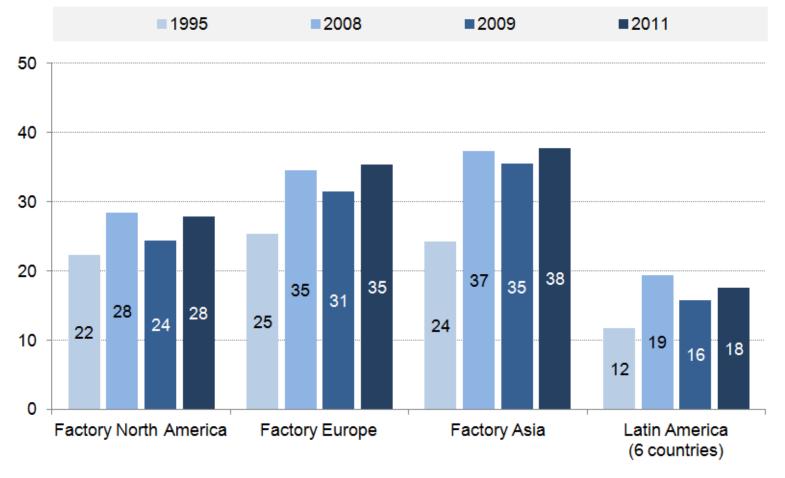
### Latin American (18 countries): Import requirement in total exports, 2011 (II/XT)\*100



# North America, European Union and Asia have more value chain than Latin America



### Imported intermediates embodied in gross manufacturing exports, 1995-2011

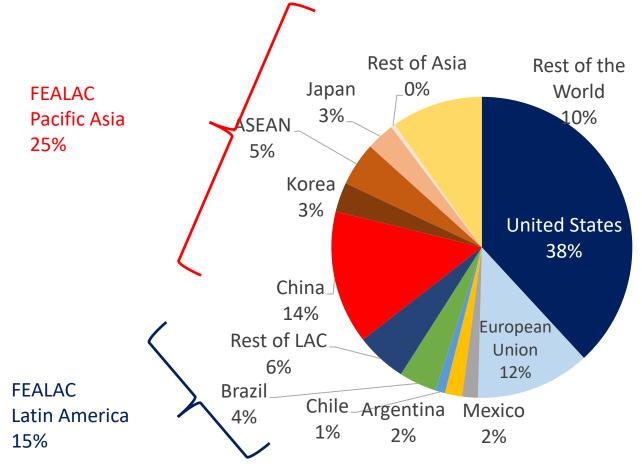


Source: Zaclicever (2017)

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 in total)

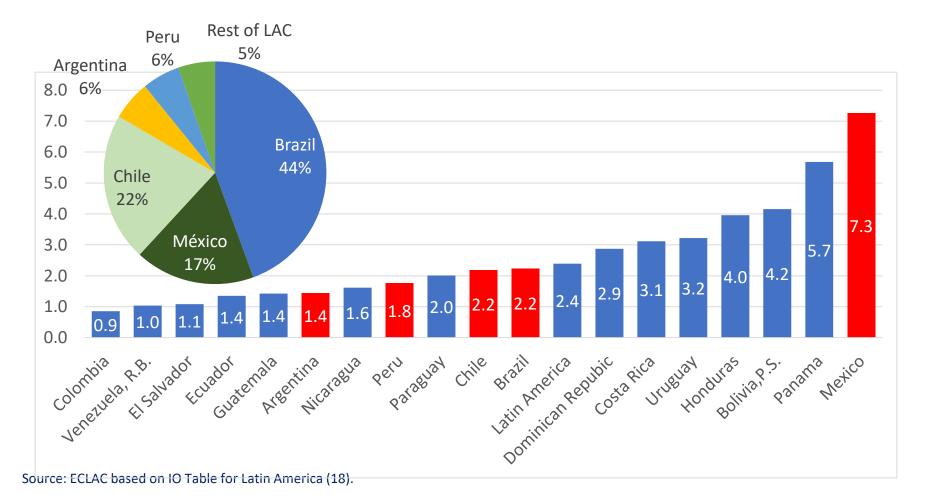


Fuente: CEPAL, sobre la base de datos COMTRADE de Naciones Unidas

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

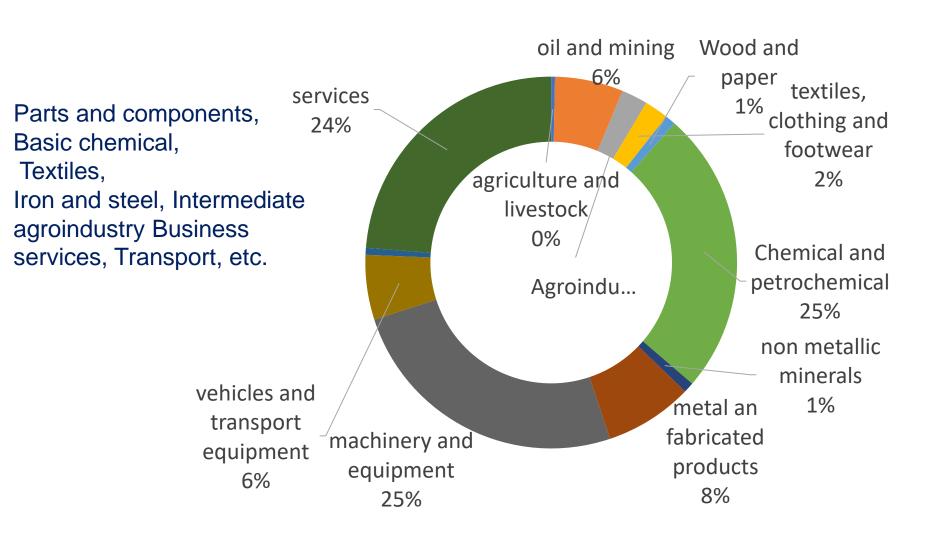
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### Latin American (18 countries): Import requirement from Asia in total exports to Asia, 2011 (II/XT)\*100



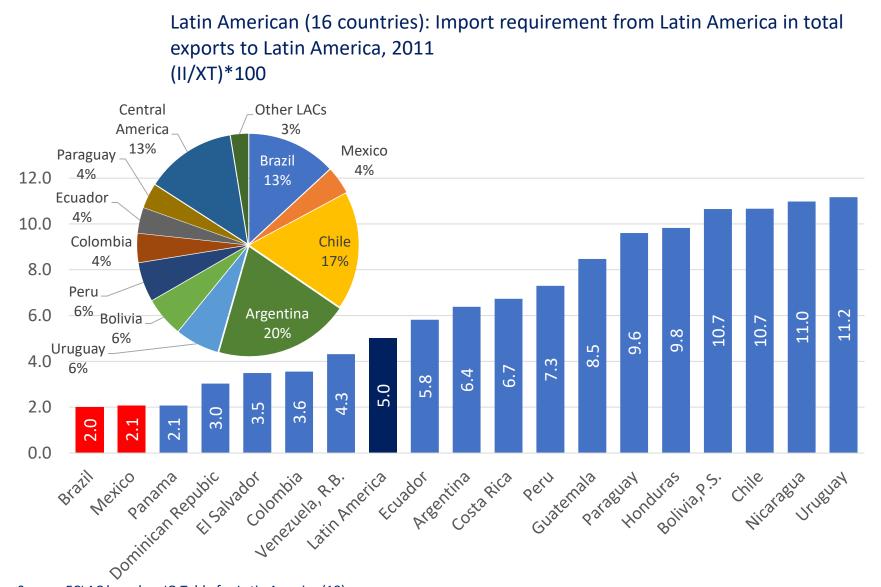
## What kind of intermediate inputs imports Latin America from Asia Pacific?





## Intraregional linkages are more stronger's in Latin America, especially in medium and small countries.

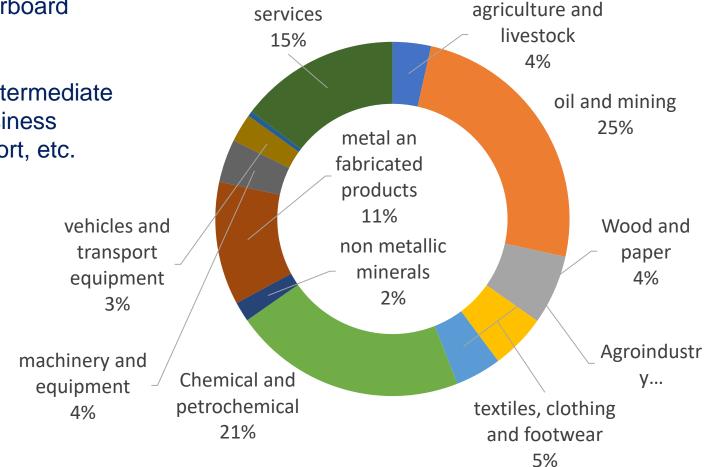
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Source: ECLAC based on IO Table for Latin America (18).

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

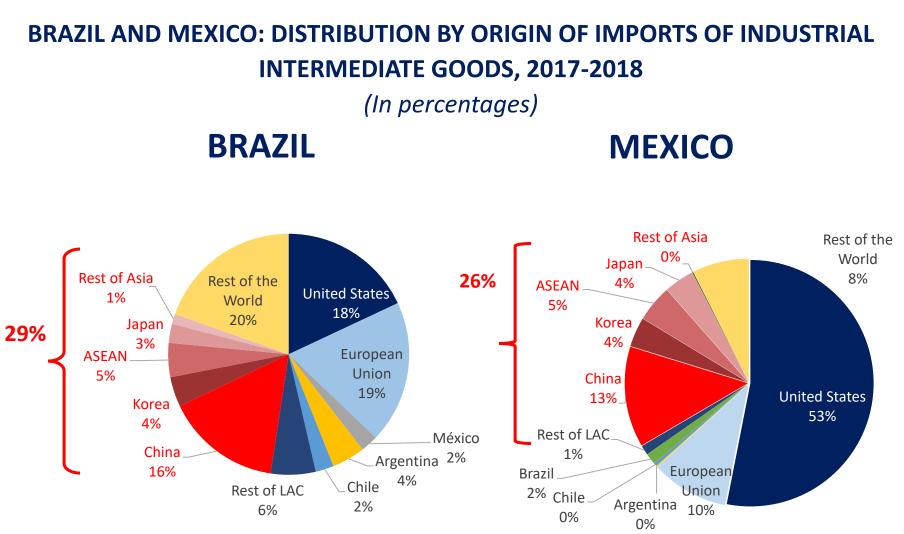
Oil and mining Rubber an plastic Carton and paperboard Basic chemical, Textiles, Iron and steel, Intermediate agroindustry Business services, Transport, etc.



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

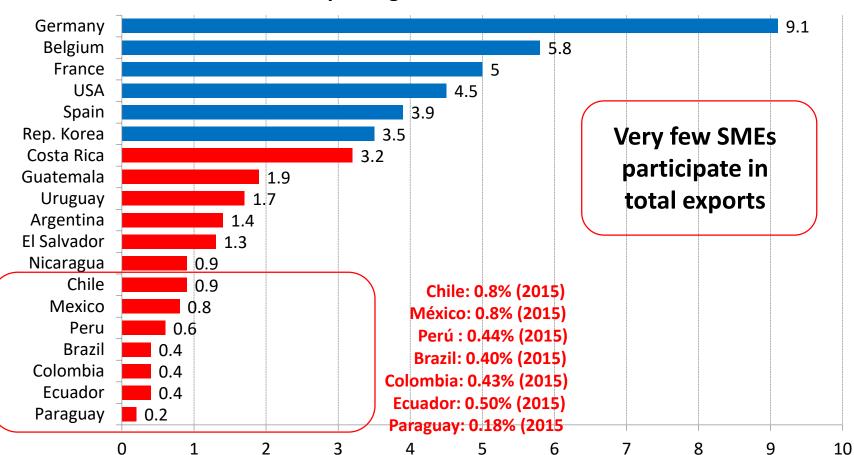
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Source: ECLAC based on data from UN Comtrade.

# **SMEs linkage with biregional VC analysis**

# How LACs SMEs participate in value chains?, and what space have SMEs in the bi-regional trade

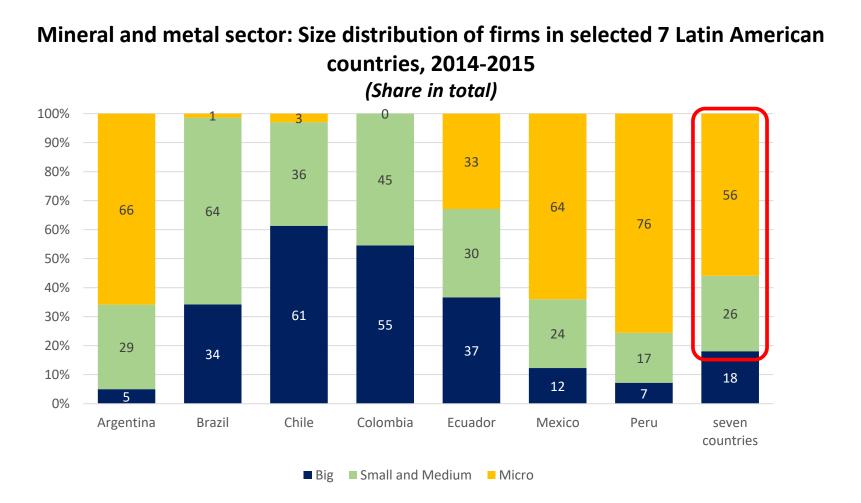


#### Selected countries: exporting firms as a share of all firms, circa 2013

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Source: Roberto Urmeneta, "Dinámica de las empresas exportadoras en América Latina. El aporte de las pymes", CEPAL, 2016, sobre la base de datos de aduana, censos económicos y registros tributarios o de seguridad social de cada país.

In 7 LACs, MSMEs are 82% of total firms, considering mineral and metal. One of the more sector oriented to Asia Pacific.



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Source: ECLAC, based on oficial databases of each country: Central Bank of Argentina, SECEX, DIRECON, DANE, Aduana del Ecuador, INEGI, and SUNAT

Mineral and metal sector: export distribution of firms in selected 7 Latin American countries, 2014-2015 (Share in total) 100% 4 7 95% 90% 85% 80% 75% 100 99 99 98 97 96 93 92 70% 65% 60% 55% 50% Argentina Brazil Chile Colombia Ecuador Mexico Peru seven countries

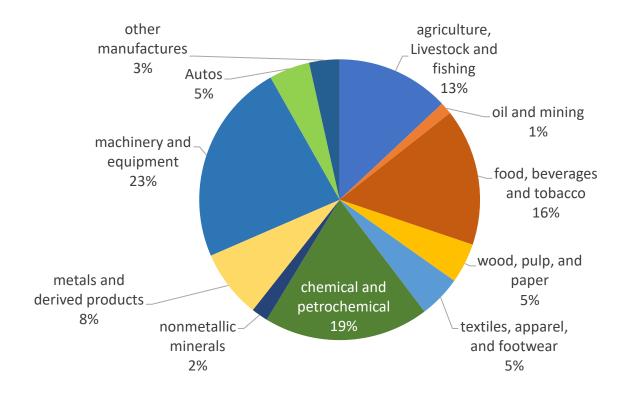
2019

■ Big ■ Small and Medium ■ Micro

Source: ECLAC, based on oficial databases of each country: Central Bank of Argentina, SECEX, DIRECON, DANE, Aduana del Ecuador, INEGI, and SUNAT



2019



### And also by partners. This is the case for Argentine firms that exports to FELAC Asian member countries



Argentina: number of firms exporters to FEALAC Asia, 2017			
FEALAC Asian countries	Total firms	SMEs	Share in total (%)
China	693	345	49.8
Singapur	470	299	63.6
Hong Kong, SAR Japan	349	201	57.6
Japan	287	145	50.5
Malaysia	255	150	58.8
Republic of Korea	228	129	56.6
India	217	125	57.6
Australia	217	115	53.0
Thailand	211	112	53.1
Vietnam	203	115	56.7
Indonesia	126	66	52.4
Phillipines	98	62	63.3
New Zealand	98	51	52.0
Myanmar	22	19	86.4
cambodia	11	6	54.5
Mongolia	7	6	85.7
Brunei	5	2	40.0
Laos	4	3	75.0
FEALAC Asian countries (mean)	195	108	55.7
FEALAC Asian countries (median)	207	114	56.6

Source: ECLAC, based on oficial database

## An Argentine firms that exports to FELAC LAC member countries: four times more SMEs than Asia Pacific

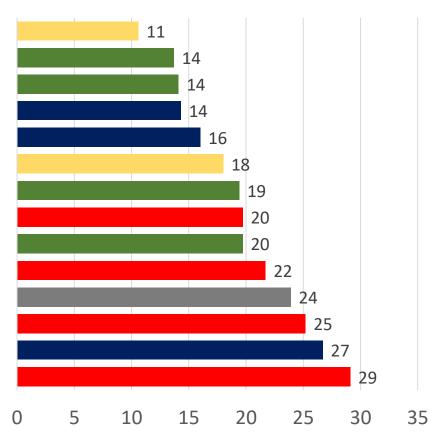


#### FEALAC LAC countries Total firms SMEs Share in total 4228 Uruguay 1216 28.8 Chile 3848 37.8 1454 Brazil 3445 1543 44.8 Paraguay 2560 828 32.3 Bolivia 1910 713 37.3 Colombia 1207 598 49.5 1172 39.5 Perú 463 Mexico 1008 480 47.6 Ecuador 573 261 45.5 49.9 Panama 515 257 328 52.4 Costa Rica 172 **Dominican Republic** 287 151 52.6 Guatemala 264 138 52.3 51.0 Venezuela 198 101 Nicaragua 132 55 41.7 Honduras 123 65 52.8 El Salvador 104 60 57.7 19 35.8 Argentina 53 FEALAC LAC countries (mean) 1220 476 39.1 FEALAC LAC countries (median) 544 259 46.6

#### Argentina, number of firms exporters to FEALAC LAC countries, 2017

Source: ECLAC, based on oficial database

# Bottlenecks and equivalent tariff for exporter firms in Andean countries. SMEs are more affected



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#### **Equivalent Ad Valorem**

Merchandise Inspections Difficulties in customs clearance at destination Delays in land transport Lack of technical capacity to export Sanitary and Phytosanitary Barriers **Import Licenses** High transport costs between business and customs High international transport prices Logistical difficulties in local customs High insurance prices Insufficient export promotion Increase of price inputs incorporated in exports Quality certifications difficult to meet Difficulties of access to credit

Adverse market conditions
Logistic insufficiency
Bureaucracy
Sanitarity and technical requirement
Lack of export promotion

Source: Durán, Cracau and Saeteros (2018), Integración productiva en la Comunidad Andina: cadenas de valor entre Colombia y el Ecuador. Documento de Proyecto. En línea en: <u>https://www.cepal.org/fr/node/45914</u>

# Some reflexions to conclude

## 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 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



- 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 type of companies: SMEs 47% of total firms, but only 3% of total exports. Big exporters capture 97% of total.
- Asian exports are much more diversified:
  - Telecommunication, vehicles, computers, steel, electronics, trans port equipment, footwear, toys, kitchenware, tires, etc.

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



- Promote public-private dialogue (such as this forum)
- Plurinational 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 progress in trade facilitation
  - Single window, digitalization of documents
- Incorporate SMEs in the effort
- Support from the regional development banks





- At the 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 chain s
- The large countries of Latin America should imitate the steps taken by Japan to promote productive integration in Asia Pacific

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