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# The Internal Geography of Services Value-Added in Exports: A Latin America Perspective

*"The New International Scenario and Brazil's Foreign Policy"  
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# Introduction

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UNCTAD Project:

Haddad, E. A. (2019), **Measurement of the Services Value-Added in Brazilian Exports**. UNCTAD. *Unpublished report*

Focus:

***MoS 5 / Latin America / Geography***

- Services bundled in goods
- Brazil, Chile, Colombia, Mexico
- Regional inequality within countries (“new look”)

# Context

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Increasing international fragmentation of production chains and the emergence of global value chains (GVC)

Gross export statistics may be inaccurate to measure a country's participation in international trade:

- Looking directly at gross exports of goods and services may affect how a country chooses priority partners in trade agreement negotiations, and may also bias the impact analysis of international demand shocks, for instance

This inaccuracy is basically led to underestimating (particularly) the contribution of services to exports and employment. This further leads to a general lack of understanding in the true contribution of services to development and policy emphasis on services sectors by policymakers of developing countries.

## Context (cont.)

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A more appropriate measurement should consider the value added by each country in the production of goods and services that are consumed worldwide

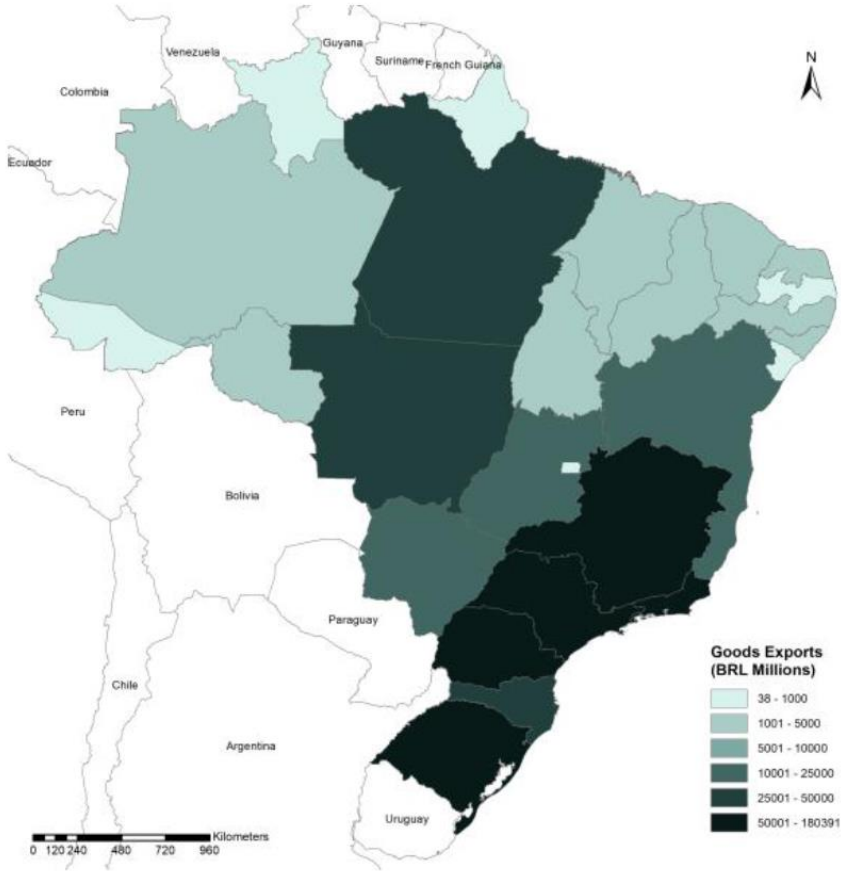
Moreover, if one is interested in sectoral-specific trade policies, it would be important to map the contribution of value added to trade flows by sector or group of sectors (e.g. services) in different countries

Recent initiatives have successfully addressed the data challenge, generating global input-output databases that have been widely used for measuring different dimensions of GVCs

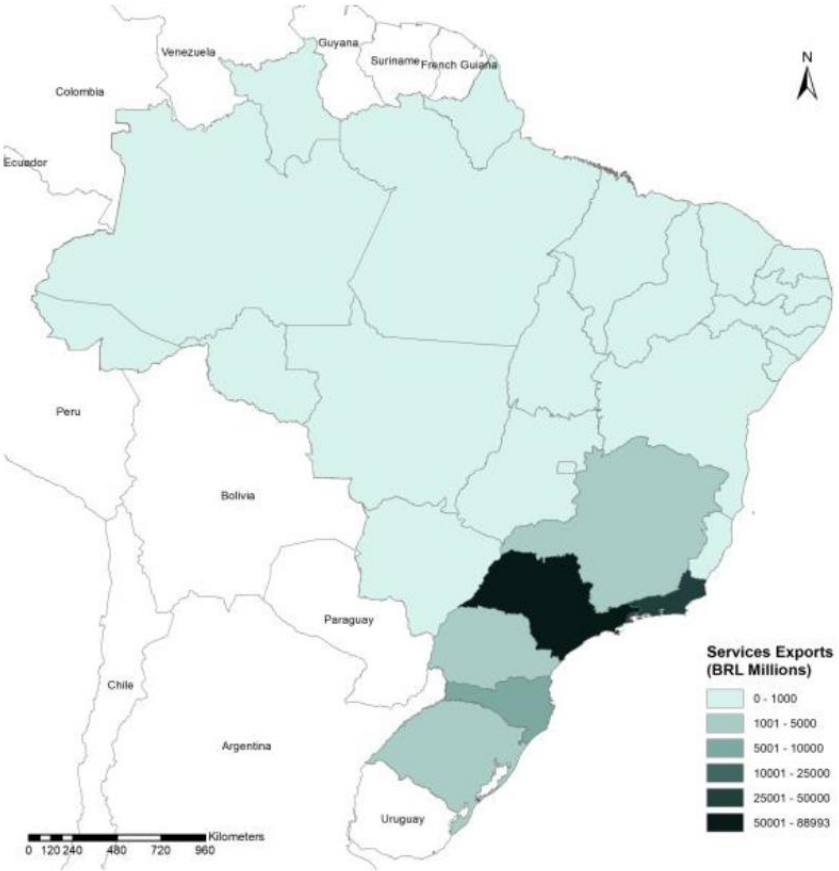
In spite of their enormous contributions, these databases still suffer from lack of detailed information both in terms of country coverage and products and sectoral disaggregation

# Spatial Pattern of Gross Exports of Goods and Services: Brazil

*Goods*

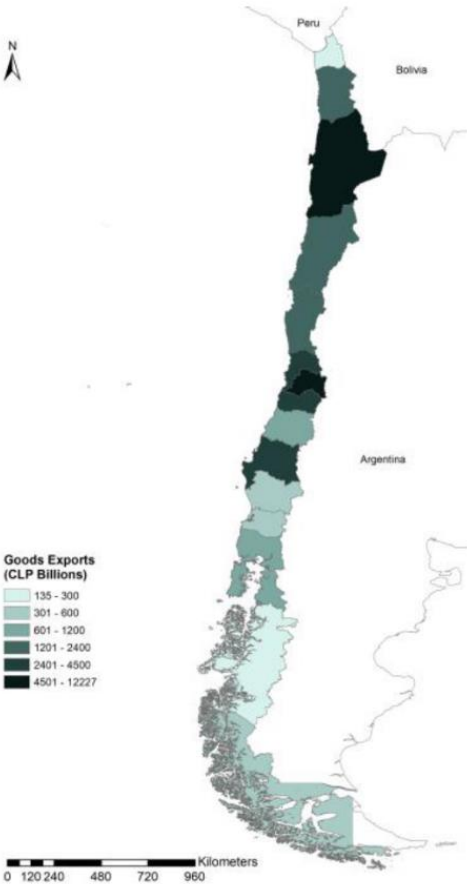


*Services*

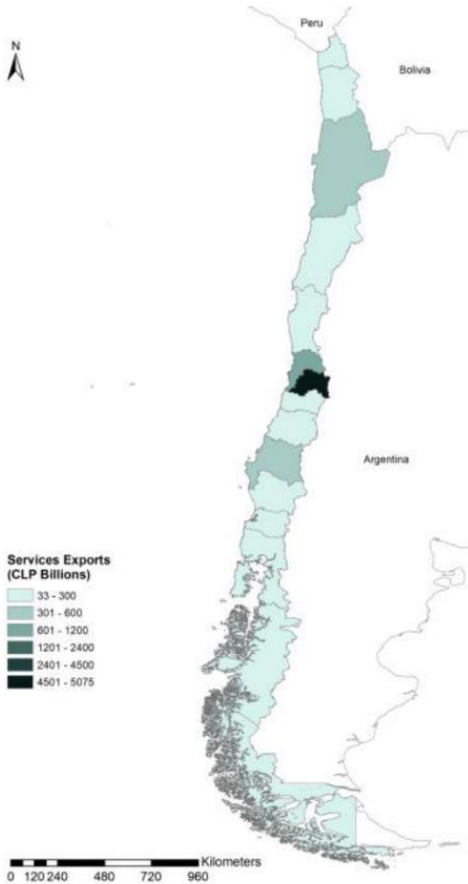


# Spatial Pattern of Gross Exports of Goods and Services: Chile

*Goods*

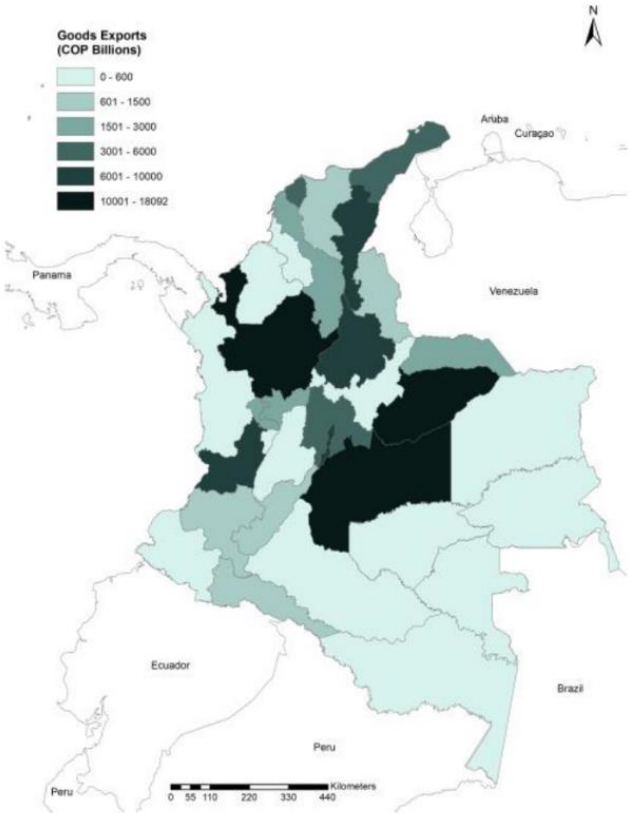


*Services*

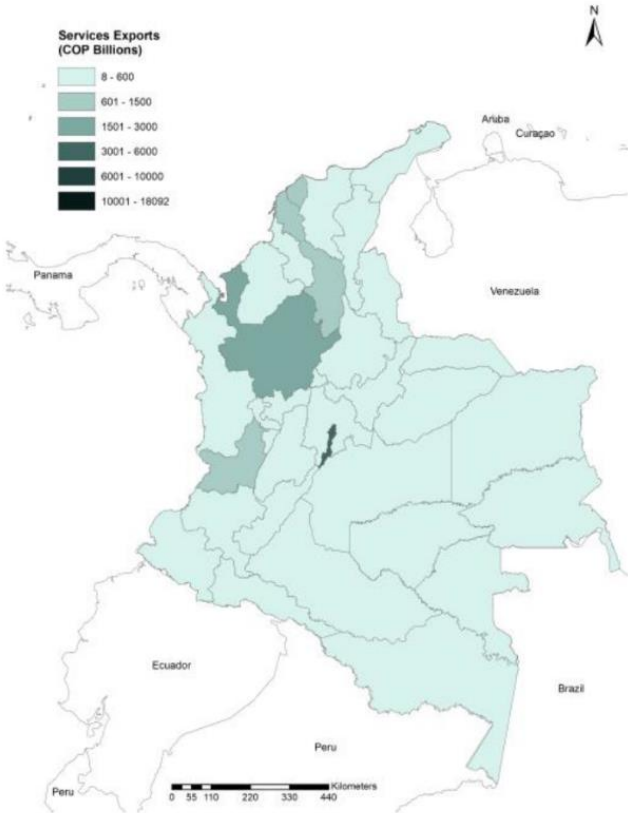


# Spatial Pattern of Gross Exports of Goods and Services: Colombia

*Goods*



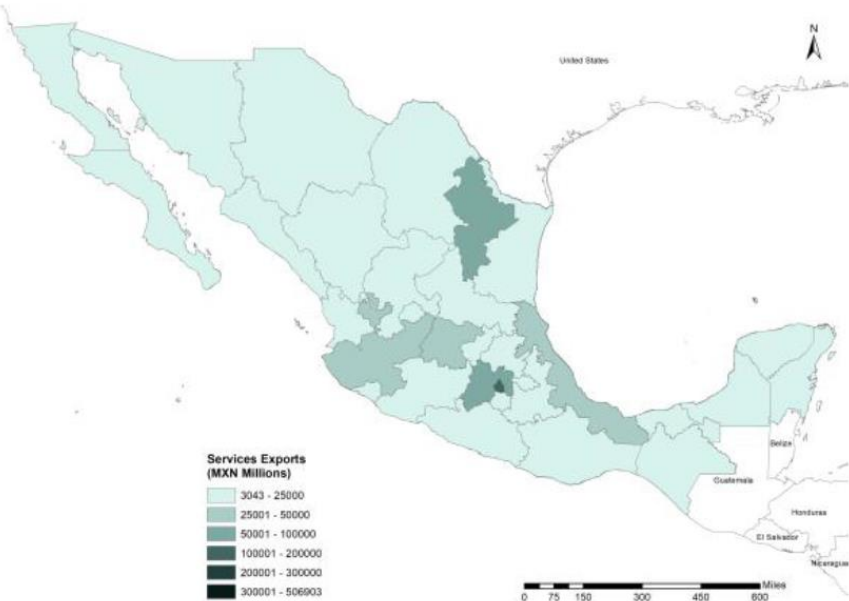
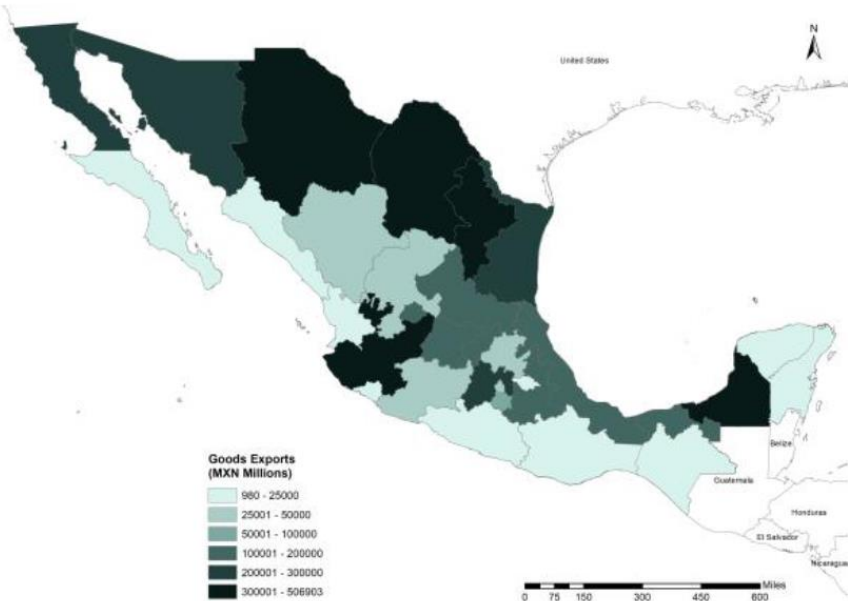
*Services*



# Spatial Pattern of Gross Exports of Goods and Services: Mexico

*Goods*

*Services*





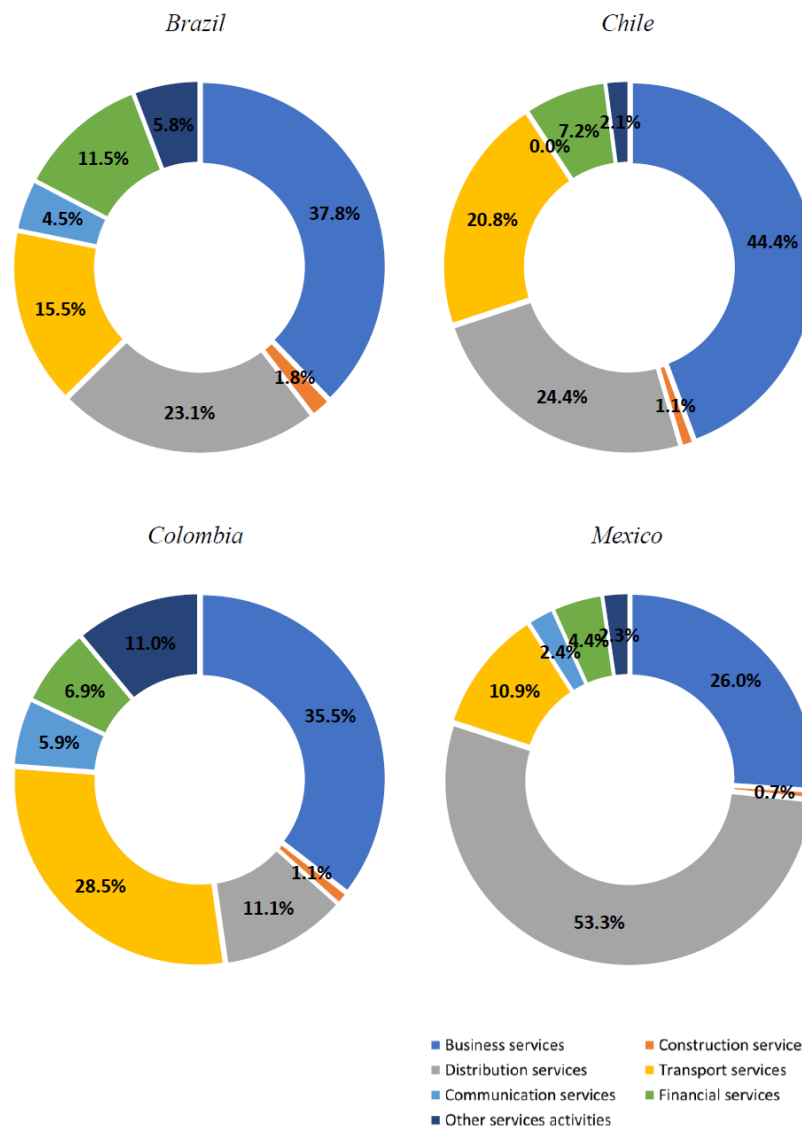
# How much services value-added is in exports and how does it compare to direct services exports?

**Table 1. Trade in Value Added: Brazil, Chile, Colombia and Mexico**

	<i>Brazil</i>	<i>Chile</i>	<i>Colombia</i>	<i>Mexico</i>
<i>Exports of goods</i>				
VA in service sectors	172,076	8,522	19,612	736,351
VA in non-service sectors	295,893	22,976	64,937	1,931,817
<b>Total VA</b>	<b>467,969</b>	<b>31,498</b>	<b>84,550</b>	<b>2,668,168</b>
<i>Exports of services</i>				
VA in service sectors	113,938	6,362	11,817	577,257
VA in non-service sectors	5,907	369	1,280	20,676
<b>Total VA</b>	<b>119,845</b>	<b>6,730</b>	<b>13,097</b>	<b>597,933</b>
<i>Total exports</i>				
VA in service sectors	286,014	14,883	31,429	1,313,607
VA in non-service sectors	301,799	23,345	66,218	1,952,493
<b>Total VA</b>	<b>587,813</b>	<b>38,228</b>	<b>97,647</b>	<b>3,266,100</b>
<i>Gross exports</i>				
Goods	628,020	39,909	103,683	4,274,221
Services	139,012	8,074	15,314	641,657
<b>Total</b>	<b>767,032</b>	<b>47,982</b>	<b>118,997</b>	<b>4,915,878</b>

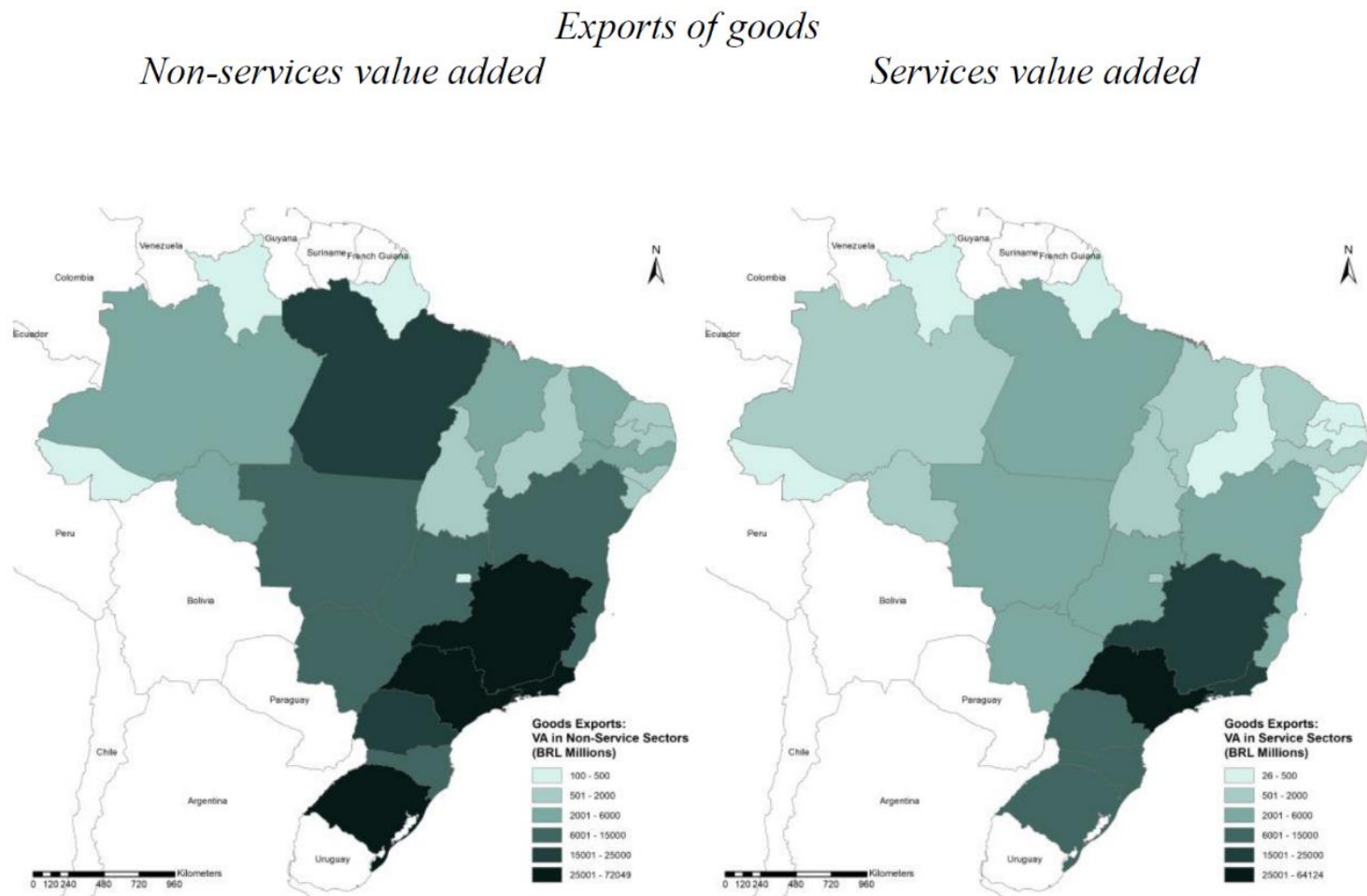
*Obs.* Estimates for Brazil in 2015 BRL millions; Chile in 2014 CLP billions, Colombian in 2015 COP billions, and Mexico in 2013MXN millions

# What services sectors contribute more to overall domestic services value-added embodied in total exports?



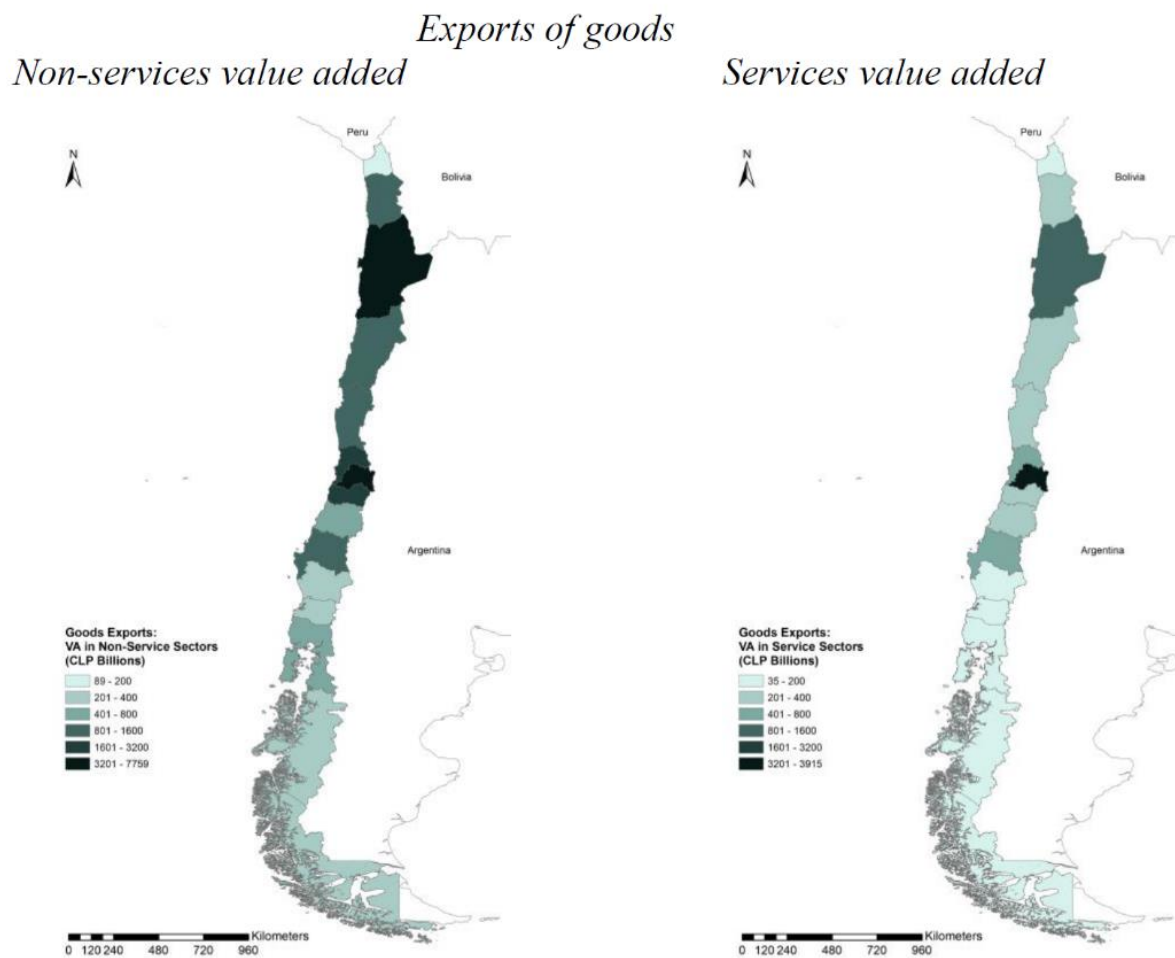
# What are the main regions contributing to domestic value-added in the (goods and services) exports local value chains?

**Figure 3. Spatial Patterns of Non-Services and Services Value-Added Embodied in Exports of Goods and Services: Brazil (in 2015 BRL millions)**



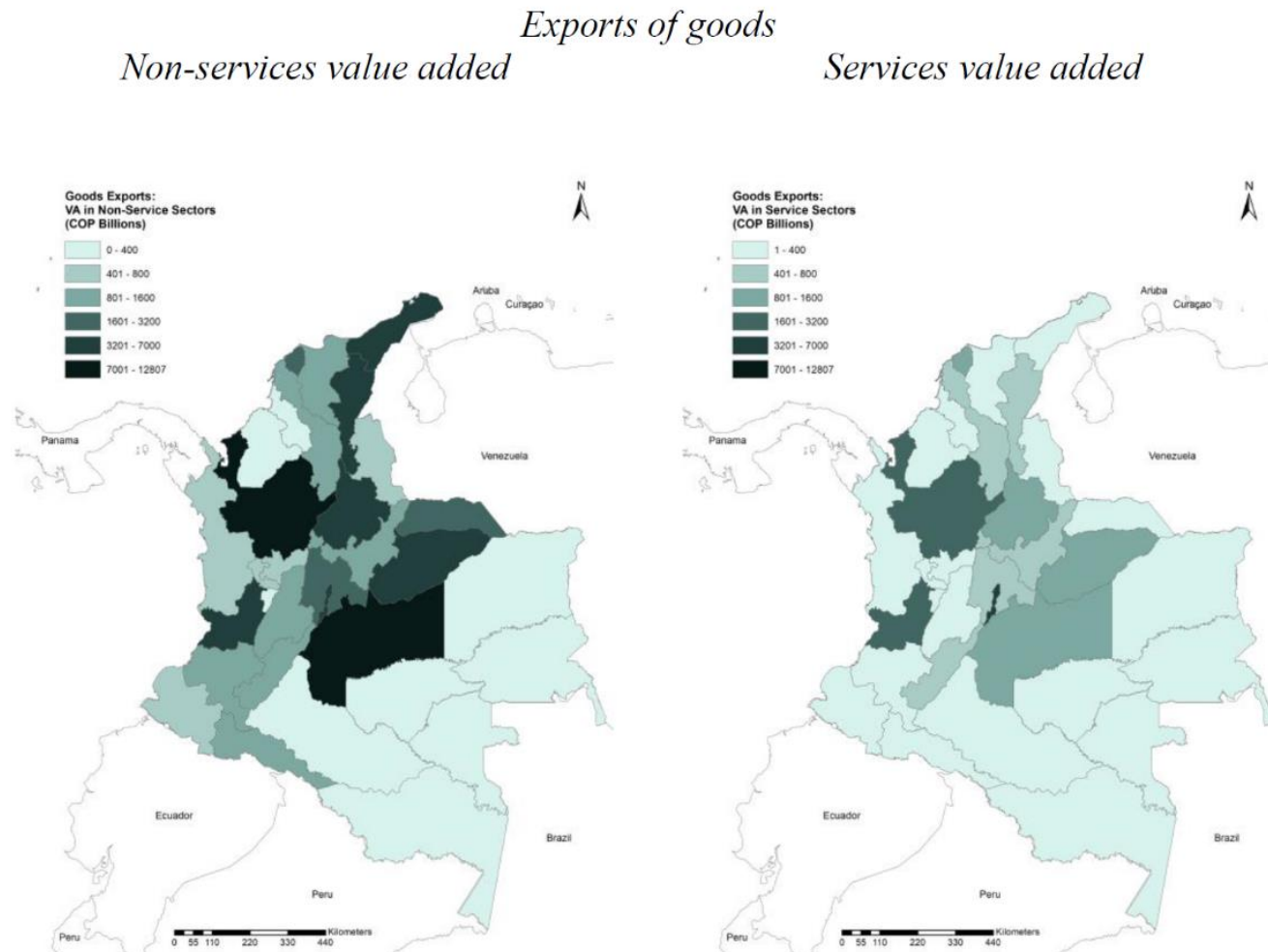
# What are the main regions contributing to domestic value-added in the (goods and services) exports local value chains?

**Figure 4. Spatial Patterns of Non-Services and Services Value-Added Embodied in Exports of Goods and Services: Chile (in 2014 CLP billions)**



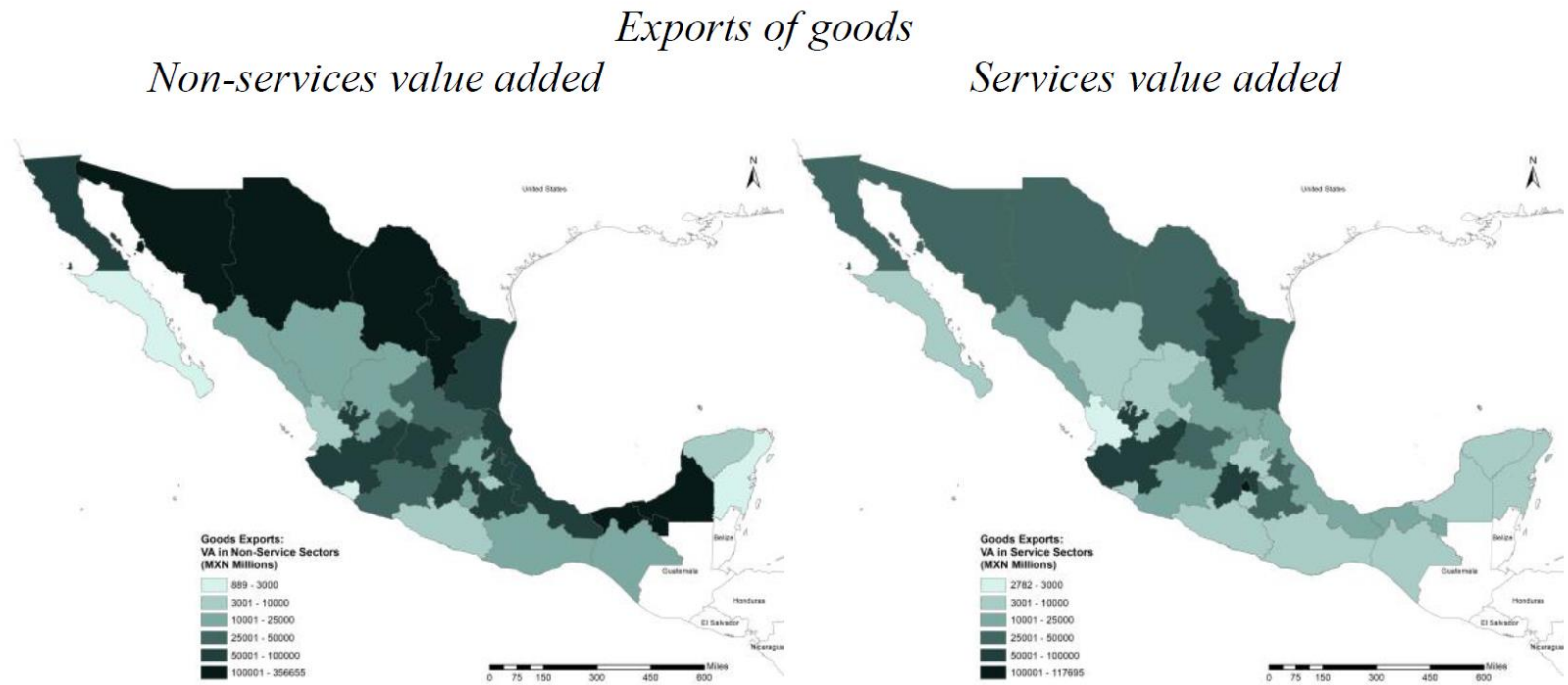
# What are the main regions contributing to domestic value-added in the (goods and services) exports local value chains?

**Figure 5. Spatial Patterns of Non-Services and Services Value-Added Embodied in Exports of Goods and Services: Colombia (in 2015 COP billions)**



*What are the main regions contributing to domestic value-added in the (goods and services) exports local value chains?*

**Figure 6. Spatial Patterns of Non-Services and Services Value-Added Embodied in Exports of Goods and Services: Mexico (in 2013 MXN millions)**



# Where is services value-added of exports more concentrated?

**Table 2. Regional Concentration of Value-Added in Exports: Brazil, Chile, Colombia and Mexico**

<b>Brazil</b>			
<i>Exports of goods</i>		<i>Export of services</i>	
<i>VA in non-service sectors</i>	<i>VA in service sectors</i>	<i>VA in non-service sectors</i>	<i>VA in service sectors</i>
São Paulo	24.3%	São Paulo	37.3%
Minas Gerais	12.6%	Minas Gerais	11.2%
Rio de Janeiro	10.3%	Rio de Janeiro	10.6%
Rio Grande do Sul	10.1%	Paraná	7.9%
Paraná	8.3%	Rio Grande do Sul	7.3%
TOTAL	65.7%		74.2%
		São Paulo	35.2%
		Rio de Janeiro	16.7%
		Santa Catarina	8.0%
		Paraná	7.7%
		Minas Gerais	6.5%
		Rio Grande do Sul	3.4%
		TOTAL	74.0%
			94.2%

<b>Chile</b>			
<i>Exports of goods</i>		<i>Export of services</i>	
<i>VA in non-service sectors</i>	<i>VA in service sectors</i>	<i>VA in non-service sectors</i>	<i>VA in service sectors</i>
De Antofagasta	33.8%	Región Metropolitana de Santiago	45.9%
Región Metropolitana de Santiago	16.0%	De Antofagasta	18.2%
De Valparaíso	8.8%	De Valparaíso	7.1%
Del Libertador General Bernardo O'Higgins	8.8%	Del Biobío	6.3%
De Coquimbo	5.9%	De Atacama	4.3%
TOTAL	73.2%		81.9%
		Región Metropolitana de Santiago	32.3%
		De Valparaíso	13.3%
		Del Biobío	12.3%
		Del Libertador General Bernardo O'Higgins	9.1%
		De Antofagasta	7.1%
		Del Libertador General Bernardo O'Higgins	2.7%
		TOTAL	74.1%
			86.1%

<b>Colombia</b>			
<i>Exports of goods</i>		<i>Export of services</i>	
<i>VA in non-service sectors</i>	<i>VA in service sectors</i>	<i>VA in non-service sectors</i>	<i>VA in service sectors</i>
Meta	19.7%	Bogotá D.C.	22.3%
Antioquia	12.2%	Antioquia	15.8%
Casanare	9.4%	Valle del Cauca	10.2%
Cesar	7.7%	Meta	6.8%
Santander	6.1%	Atlántico	6.8%
TOTAL	55.1%		61.8%
		Antioquia	13.6%
		Valle del Cauca	11.1%
		Bogotá D.C.	11.0%
		Cundinamarca	9.8%
		Atlántico	5.5%
		Meta	8.2%
		Cundinamarca	4.4%
		TOTAL	53.6%
			67.6%

<b>Mexico</b>			
<i>Exports of goods</i>		<i>Export of services</i>	
<i>VA in non-service sectors</i>	<i>VA in service sectors</i>	<i>VA in non-service sectors</i>	<i>VA in service sectors</i>
Campeche	18.5%	Ciudad de México	16.0%
Tabasco	9.3%	Nuevo Leon	11.3%
Coahuila de Zaragoza	8.6%	Jalisco	7.4%
Nuevo Leon	7.6%	Mexico	7.0%
Chihuahua	5.7%	Veracruz de Ignacio de la Llave	7.5%
		Ciudad de México	6.5%
TOTAL	49.6%		47.9%
		Campeche	20.3%
		Tabasco	14.5%
		Mexico	8.7%
		Nuevo Leon	8.3%
		Jalisco	7.1%
		Veracruz de Ignacio de la Llave	4.5%
		TOTAL	57.5%
			51.7%

*What types of services are associated with more concentrated patterns of value-added embodied in exports?*

**Table 3. Share of Primate Regions in Services Value-Added of Exports of Good and Services: Brazil, Chile, Colombia and Mexico**

	<i>Brazil</i>		<i>Chile*</i>		<i>Colombia</i>		<i>Mexico</i>	
	<i>Goods</i>	<i>Services</i>	<i>Goods</i>	<i>Services</i>	<i>Goods</i>	<i>Services</i>	<i>Goods</i>	<i>Services</i>
Business services	35.3%	64.0%	43.0%	69.8%	23.4%	33.3%	25.9%	37.5%
Construction Services	26.5%	33.6%	27.6%	40.5%	13.7%	22.6%	3.8%	9.7%
Distribution services	35.1%	60.2%	60.9%	71.1%	29.9%	37.7%	5.6%	17.8%
Transport services	31.2%	58.4%	38.4%	54.6%	11.2%	40.4%	7.1%	21.2%
Communication services	50.7%	70.7%	-	-	34.1%	42.0%	50.6%	60.1%
Financial services	57.7%	80.2%	60.2%	76.8%	42.5%	51.7%	32.8%	44.1%
Other services activities	29.3%	60.8%	32.5%	53.1%	18.9%	20.1%	8.4%	18.7%

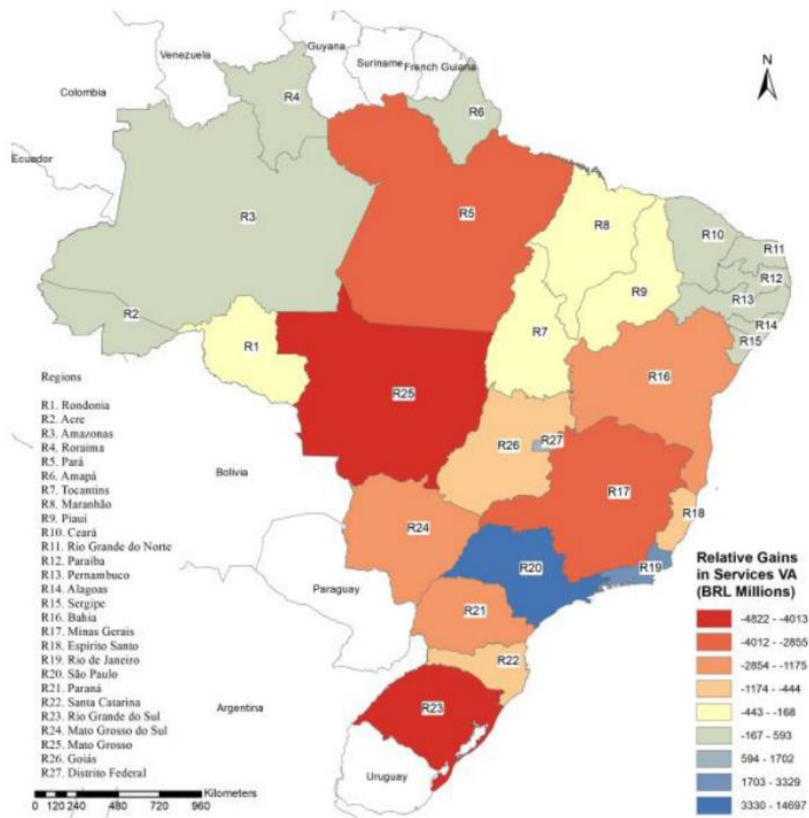
\* Transport services include communication services

Obs.: Primate regions in each country are: São Paulo (Brazil), Santiago (Chile), Bogotá (Colombia), and Mexico City (Mexico)

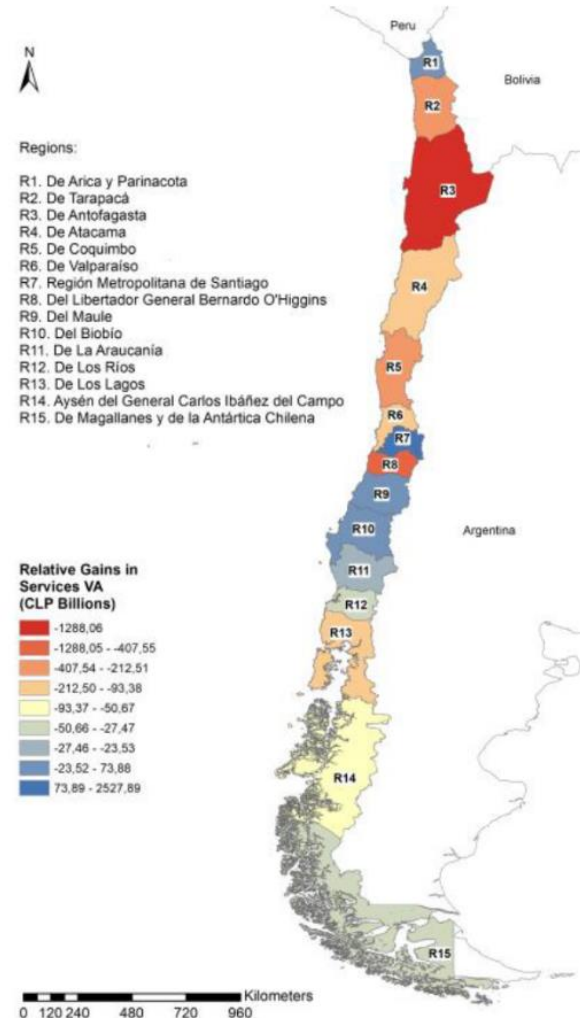


# What regions would have lost (gained) most, had the spatial distribution of exports of goods prevailed in the local generation of services value-added?

## Brazil

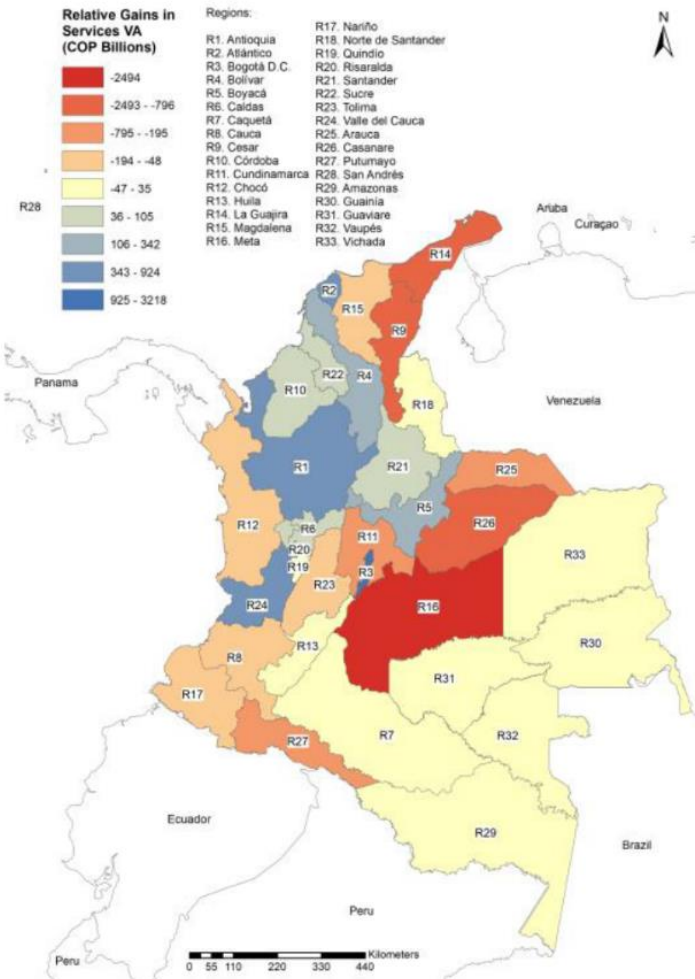


## Chile

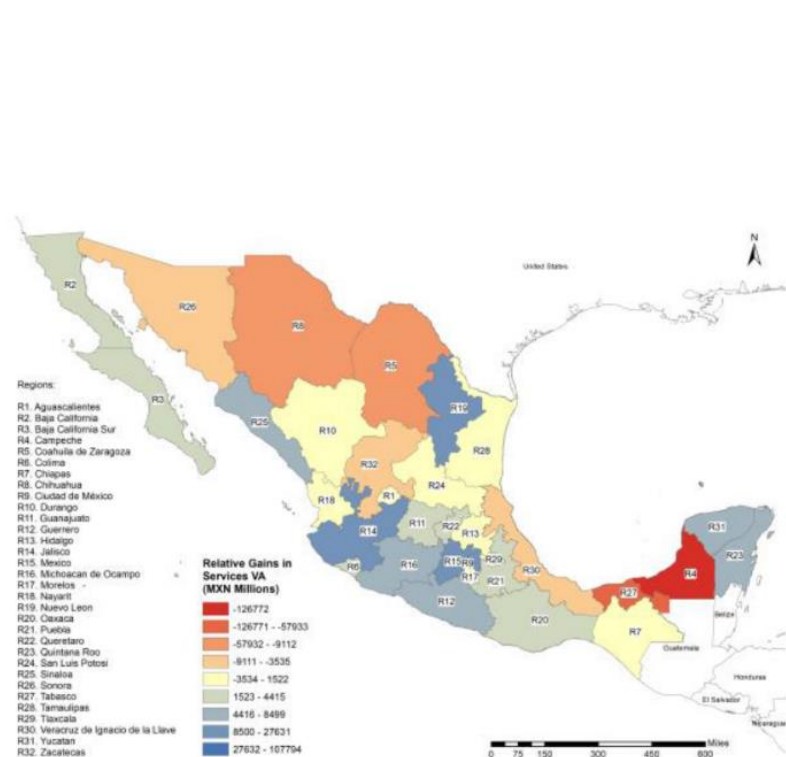


# What regions would have lost (gained) most, had the spatial distribution of exports of goods prevailed in the local generation of services value-added?

Colombia



Mexico



# Relevance for policy

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“Servicification” has potential asymmetric locational impacts, benefiting developed economies, at a global scale, and primate cities, at the national level

- **Global:** more sophisticated services sectors exports are largely and increasingly dominated by developed economies
- **Local:** tend to benefit larger urban agglomerations in the more developed regions, reinforcing regional inequality

Importance of MoS 3 (FDI-driven services)

- Bulk of the tasks are undertaken in offices located in big cities

MoS 5 also raises concerns for regional inequality in natural resource-rich Latin American countries

# Relevance for policy

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LA still requires policies, capabilities and infrastructure to promote intermediate services

Despite its relevance, MoS 5 is not subject to the existing international trade regime under the GATS

- Policies linked to services' content shares and services' trade facilitation, may lead to the removal of important trade frictions, helping increasing competitiveness, productivity and well-being, at least in the short-term

Asymmetric effects of business cycles

- Opportunities to minimize production and income leakages

# Relevance for policy: climate change

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Exports of goods:

- Fossil fuel (changes in the world energy matrix)
- Agriculture (productivity and geographical shifts)

Services value-added:

- Valuation of environmental services (less concentrated)
- Promote a “green economy”
- Circular economy
- (...)

# Three spatial regimes: identification

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## **“Primary exporters”**

- Services infrastructure is sparse and the connections are easily associated with specific and scattered export activities

## **“Intermediate space”**

- Assumes a role of transition in the context of the interface of the country's interregional system with the world economy, and is more articulated with the domestic markets

## **“Global traders”**

- Denser economic spaces, more integrated with the world economy, where efficiency in services activities plays a crucial role in affecting the countries' overall competitiveness

# Three spatial regimes: consequences

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In summary, the internal geography of services value-added in exports *vis-à-vis* the location patterns of natural resources in Latin American countries may add another source of tension for the contemporary trade negotiations in the region

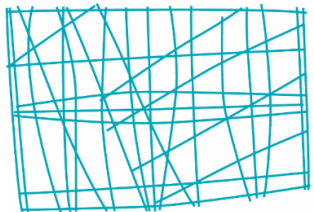
To the extent that there will be mismatches between the sequencing, cadence and intensity of policies promoting a greater insertion of LA countries into RVC and GVC, it may lead to **a novel form of geography of discontents** in the region

Thank you!

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