

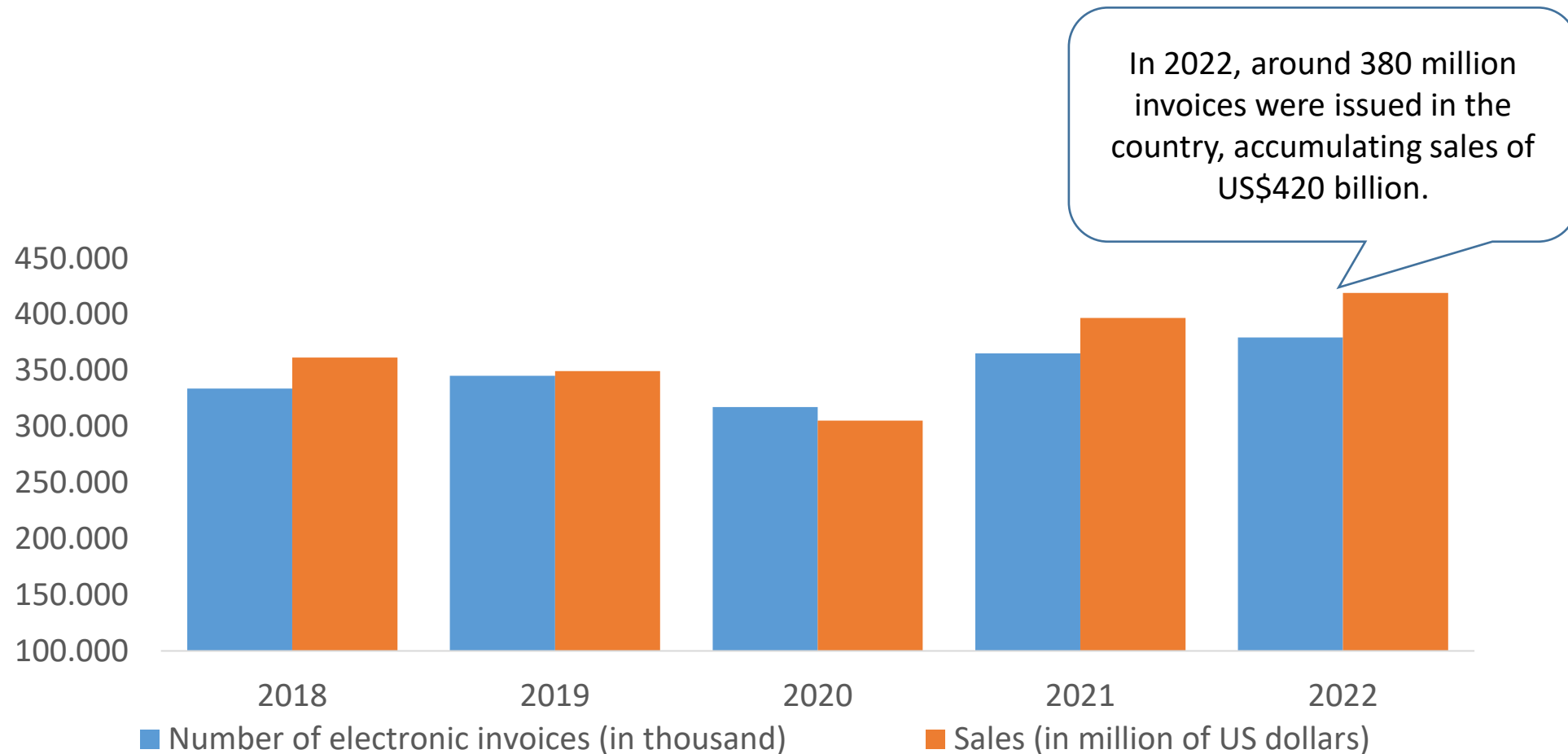


Regional Sales and Purchase Indicators: An example of granular data analysis

Pablo García Silva

Deputy Governor of the Central Bank of Chile, Chair of
the Irving Fisher Committee on Central Bank Statistics

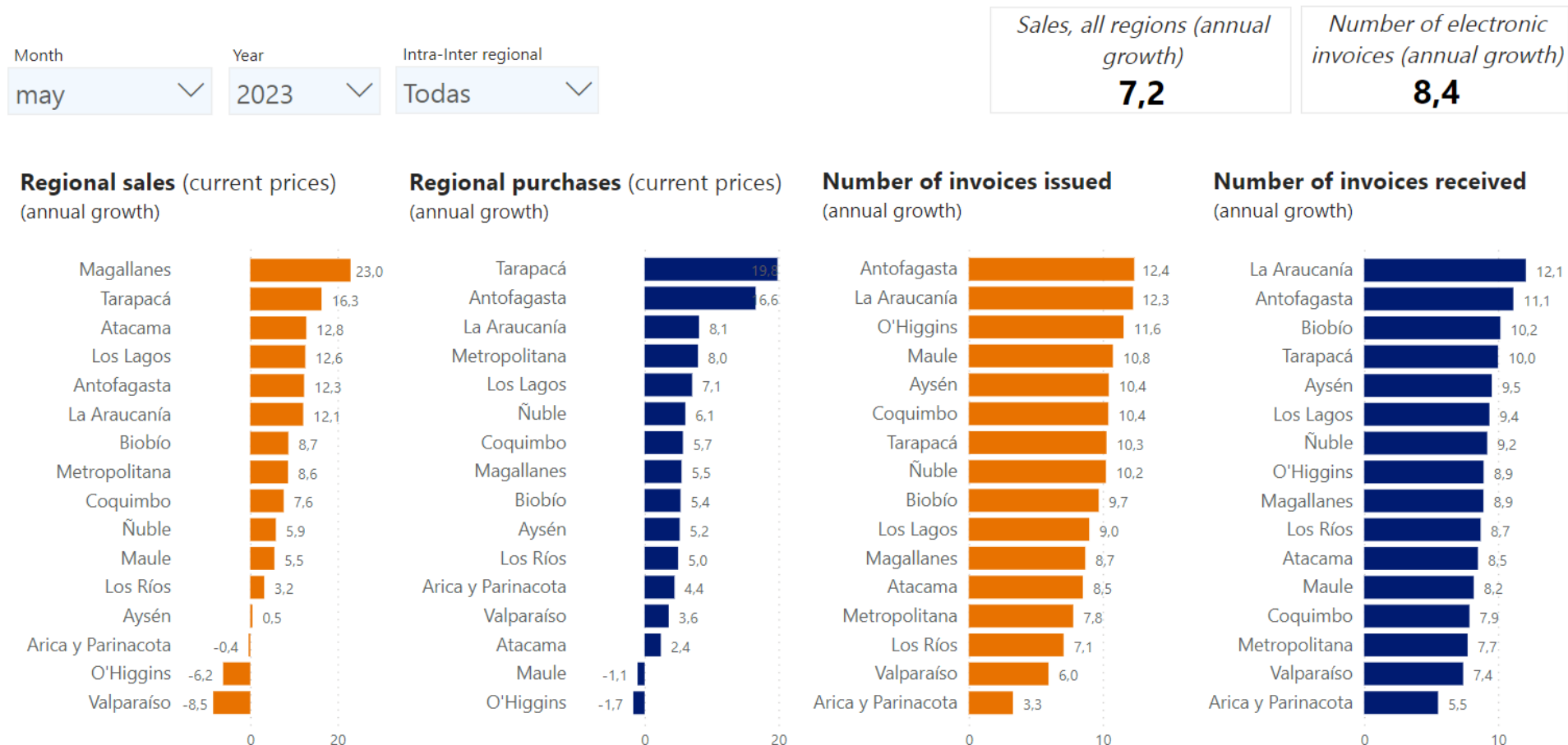
The electronic invoice becomes mandatory for firms of all sizes since 2018. This granular data has provided an enormous analytical potential to the Central Bank of Chile.



Source: Central Bank of Chile based on Electronic Invoices (Internal Tax Services)

A particular application based on this microdata source are the “**Regional Sales and Purchase Indicators**” which have allowed a timelier monitoring of regional activity.

Territorial activity in Chile



Source: Central Bank of Chile based on Electronic Invoices (Internal Tax Services)

In addition, it also makes it possible to measure the volume of trade between regions, considering the **economic activity of companies** or their size.

Territorial activity in Chile, by macrozone and economic activity

Year

2022

MACROZONE OF SELLER

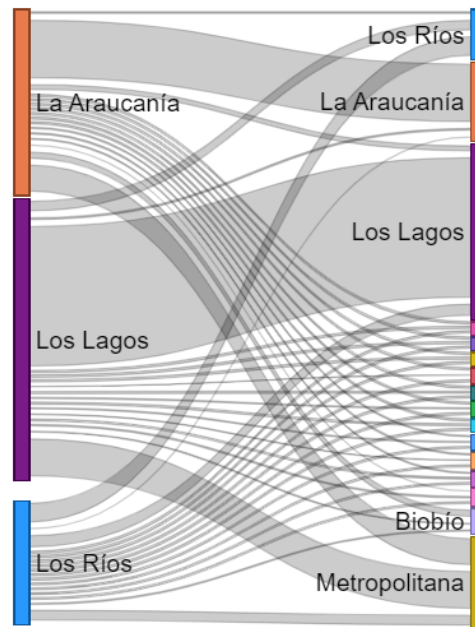
- ☐ North
- ☐ Center
- ☐ Metropolitan
- ☐ Center-South
- ☒ South
- ☐ Austral

ACTIVITY OF SELLER

- ☒ Goods
- ☒ Services
- ☒ Trade

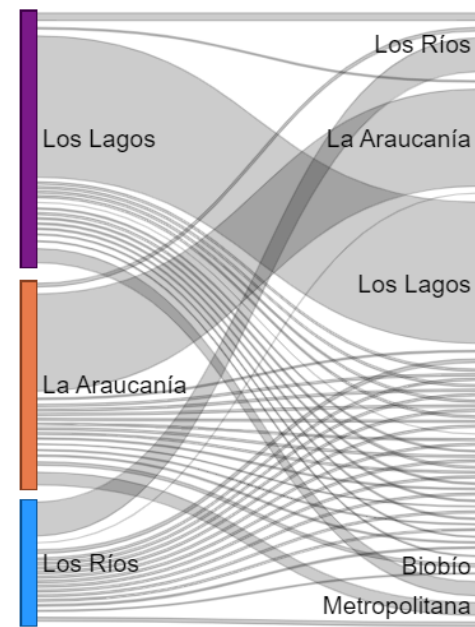
23.537

Sales, in billions of chilean pesos



35.836

Number of electronic invoices, in thousands



MACROZONE OF BUYER

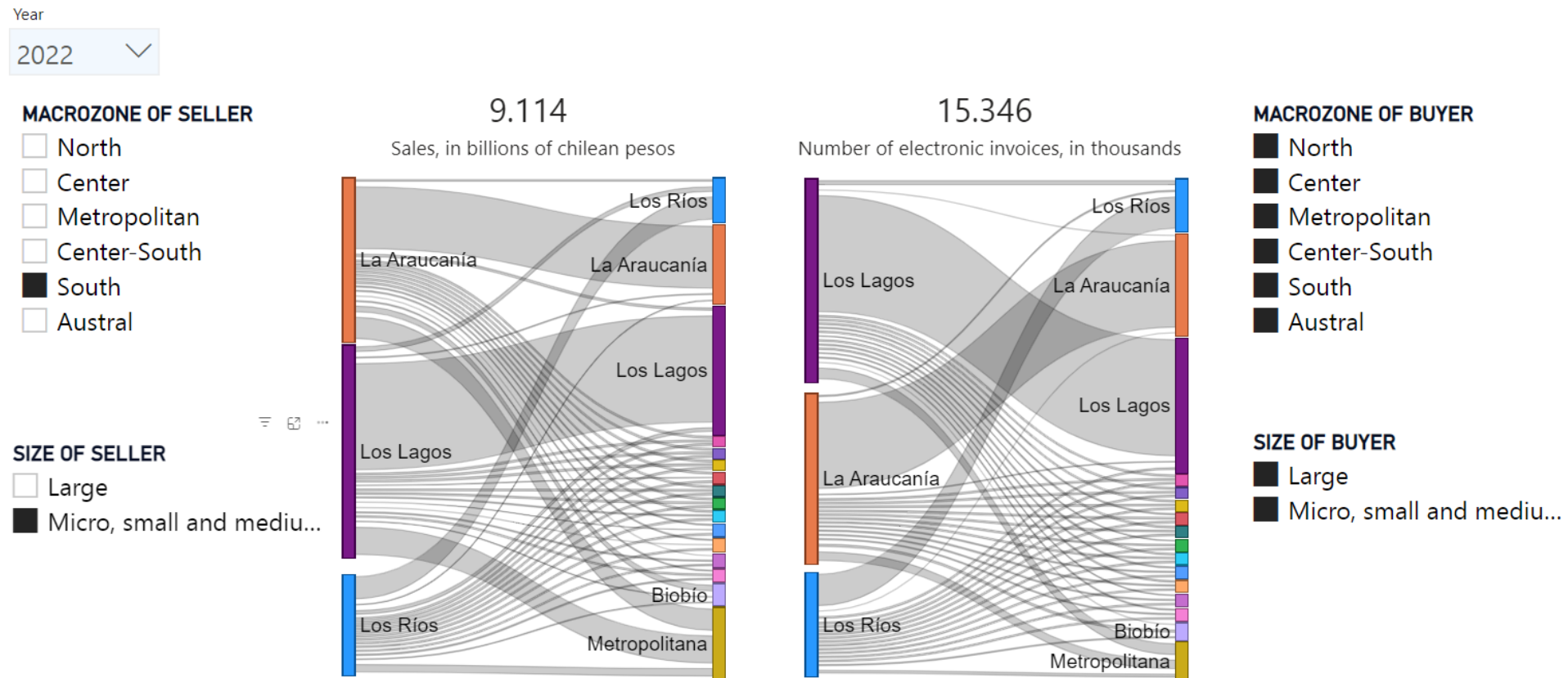
- ☒ North
- ☒ Center
- ☒ Metropolitan
- ☒ Center-South
- ☒ South
- ☒ Austral

ACTIVITY OF BUYER

- ☒ Goods
- ☒ Services
- ☒ Trade

In addition, it also makes it possible to measure the volume of trade between regions, considering the economic activity of companies or their **size**.

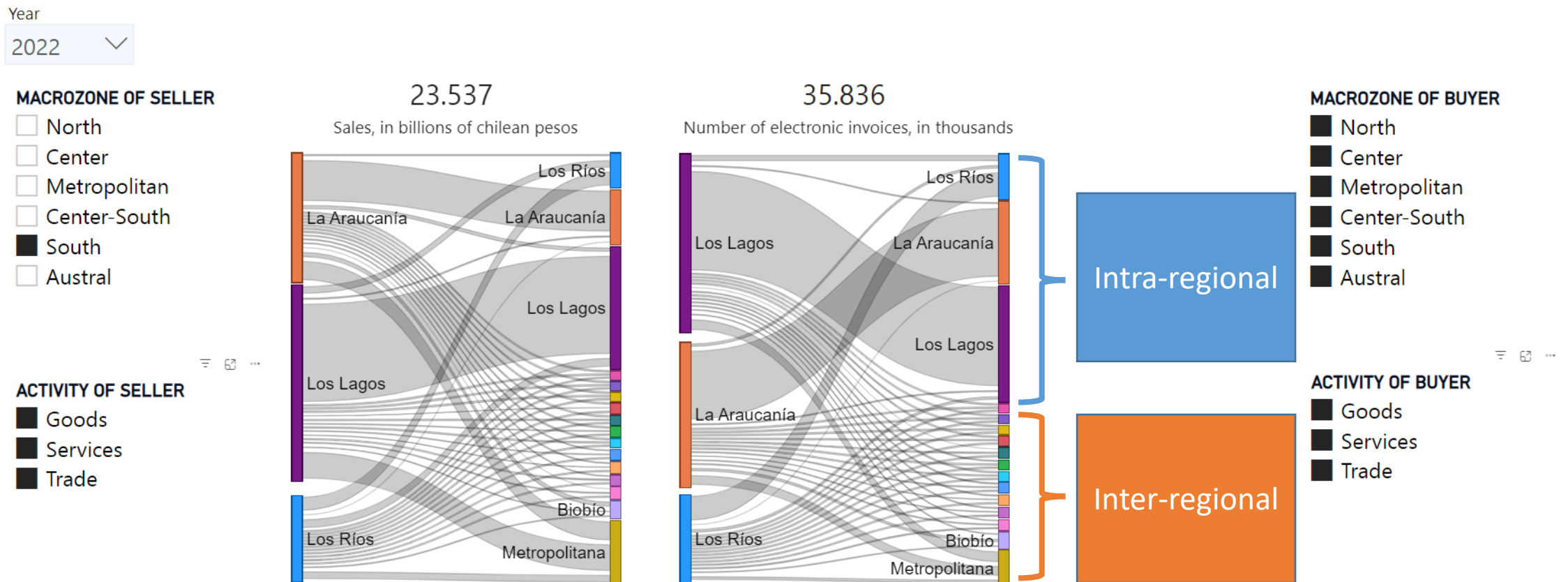
Territorial activity in Chile, by macrozone and firm size



Source: Central Bank of Chile based on Electronic Invoices (Internal Tax Services)

Intra-regional trade tends to be more important than inter-regional trade. On the other hand, inter-regional trade tends to be concentrated in the metropolitan region, which is home to its capital, Santiago, as well as in neighboring regions.

Territorial activity in Chile, by macrozone and economic activity



Intra-regional trade tends to be more important than inter-regional trade. On the other hand, inter-regional trade tends to be concentrated in the metropolitan region, which is home to its capital, Santiago, as well as in neighboring regions.

Territorial activity in Chile, by macrozone and economic activity

Year

2022

MACROZONE OF SELLER

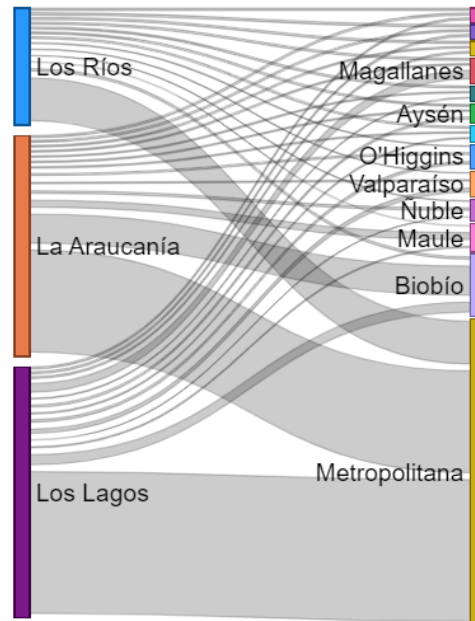
- ☐ North
- ☐ Center
- ☐ Metropolitan
- ☐ Center-South
- ☒ South
- ☐ Austral

ACTIVITY OF SELLER

- ☒ Goods
- ☒ Services
- ☒ Trade

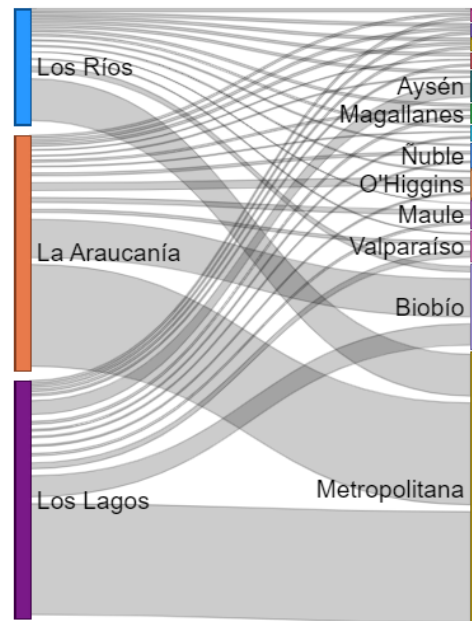
6.988

Sales, in billions of Chilean pesos



6.145

Number of electronic invoices, in thousands



MACROZONE OF BUYER

- ☒ North
- ☒ Center
- ☒ Metropolitan
- ☒ Center-South
- ☐ South
- ☐ Austral

ACTIVITY OF BUYER

- ☒ Goods
- ☒ Services
- ☒ Trade

Intra-regional trade tends to be more important than inter-regional trade. On the other hand, inter-regional trade tends to be concentrated in the metropolitan region, which is home to its capital, Santiago, as well as in neighboring regions.

Territorial activity in Chile, by macrozone and economic activity

Year

2022

MACROZONE OF SELLER

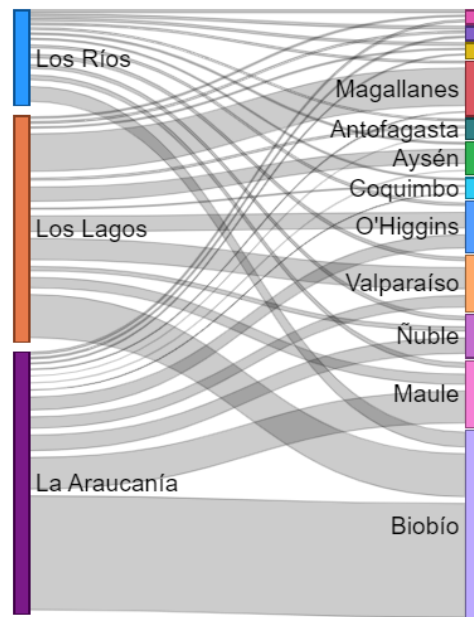
- ☐ North
- ☐ Center
- ☐ Metropolitan
- ☐ Center-South
- ☒ South
- ☐ Austral

ACTIVITY OF SELLER

- ☒ Goods
- ☒ Services
- ☒ Trade

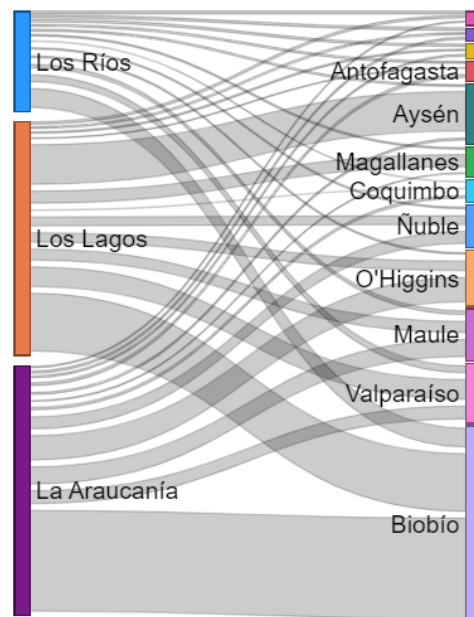
2.027

Sales, in billions of Chilean pesos



2.524

Number of electronic invoices, in thousands



MACROZONE OF BUYER

- ☒ North
- ☒ Center
- ☐ Metropolitan
- ☒ Center-South
- ☐ South
- ☒ Austral

ACTIVITY OF BUYER

- ☒ Goods
- ☒ Services
- ☒ Trade

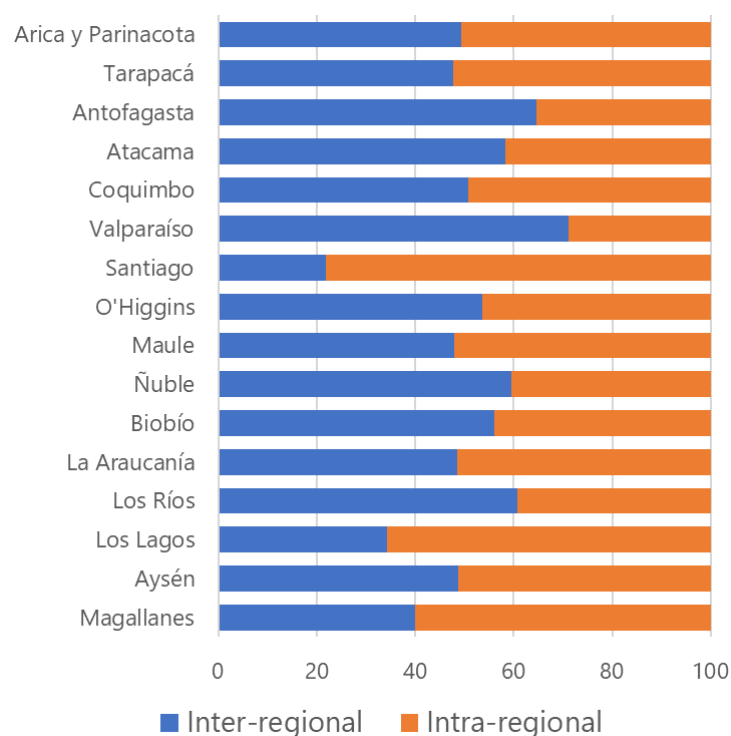
Annex: Alternative way to display the information



The share of intra- and inter-regional sales is not homogeneous between regions, nor is its evolution over the last 5 years. However, Intra-regional trade tends to be more important than inter-regional trade.

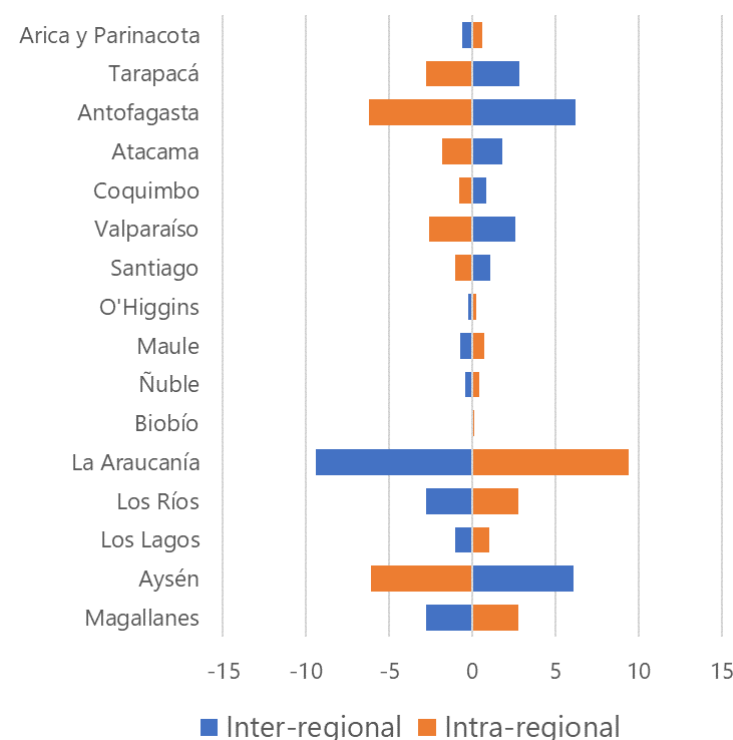
Regional sales composition

Year 2022; %



Change in the regional sales composition

Years 2018 v/s 2022; %



Source: Central Bank of Chile based on Electronic Invoices (Internal Tax Services)

On the other hand, inter-regional trade tends to be concentrated in the metropolitan region, which is home to its capital, Santiago, as well as in neighboring regions.

Sales in the **Maule Region**. Composition by buying region.

Región recepción	Bienes	Comercio	Servicios	Total
Maule	24,72%	17,22%	10,20%	52,14%
Santiago	11,22%	14,43%	5,55%	31,19%
O'Higgins	2,07%	2,20%	0,69%	4,95%
Biobío	2,21%	0,84%	0,54%	3,59%
Ñuble	0,73%	0,85%	0,32%	1,90%
Valparaíso	0,56%	0,75%	0,33%	1,64%
Los Lagos	0,38%	0,65%	0,11%	1,14%
La Araucanía	0,38%	0,64%	0,12%	1,13%
Los Ríos	0,35%	0,11%	0,06%	0,52%
Coquimbo	0,15%	0,24%	0,08%	0,47%
Magallanes	0,06%	0,25%	0,03%	0,34%
Antofagasta	0,07%	0,18%	0,06%	0,31%
Atacama	0,06%	0,18%	0,04%	0,28%
Tarapacá	0,05%	0,07%	0,03%	0,16%
Arica y Parinacota	0,06%	0,06%	0,02%	0,14%
Aysén	0,02%	0,04%	0,04%	0,10%
Total	43,08%	38,71%	18,21%	100,00%

Sales in the **Araucanía Region**. Composition by buying region.

Región recepción	Bienes	Comercio	Servicios	Total
La Araucanía	22,59%	15,15%	13,83%	51,57%
Santiago	8,33%	8,56%	7,68%	24,58%
Biobío	4,62%	1,50%	1,26%	7,37%
Los Lagos	3,67%	1,47%	1,16%	6,29%
Los Ríos	1,51%	1,32%	0,80%	3,63%
Maule	1,57%	0,44%	0,18%	2,19%
Ñuble	0,53%	0,29%	0,35%	1,17%
O'Higgins	0,44%	0,43%	0,16%	1,02%
Valparaíso	0,40%	0,30%	0,21%	0,91%
Antofagasta	0,05%	0,17%	0,10%	0,32%
Coquimbo	0,08%	0,12%	0,07%	0,28%
Aysén	0,05%	0,12%	0,04%	0,20%
Magallanes	0,04%	0,05%	0,06%	0,14%
Arica y Parinacota	0,05%	0,05%	0,02%	0,12%
Tarapacá	0,02%	0,05%	0,04%	0,11%
Atacama	0,02%	0,04%	0,02%	0,08%
Total	43,96%	30,06%	25,98%	100,00%

Sales in the **Coquimbo Region**. Composition by buying region.

Región recepción	Bienes	Comercio	Servicios	Total
Coquimbo	19,86%	16,71%	12,58%	49,14%
Santiago	14,52%	11,36%	9,22%	35,10%
Atacama	2,12%	1,19%	1,34%	4,65%
Valparaíso	1,56%	0,99%	1,67%	4,21%
Antofagasta	0,86%	0,52%	0,59%	1,97%
Biobío	1,28%	0,11%	0,26%	1,65%
O'Higgins	0,38%	0,28%	0,17%	0,82%
Tarapacá	0,39%	0,16%	0,20%	0,75%
Maule	0,23%	0,24%	0,07%	0,54%
Los Lagos	0,11%	0,11%	0,07%	0,29%
Arica y Parinacota	0,12%	0,09%	0,04%	0,25%
La Araucanía	0,07%	0,07%	0,05%	0,19%
Los Ríos	0,07%	0,09%	0,02%	0,18%
Ñuble	0,04%	0,03%	0,03%	0,10%
Magallanes	0,02%	0,05%	0,01%	0,08%
Aysén	0,04%	0,01%	0,01%	0,07%
Total	41,69%	32,00%	26,31%	100,00%

Source: Central Bank of Chile based on Electronic Invoices (Internal Tax Services)