

ECLAC IOTs Framework: databases: years, countries and industries

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NACIONES UNIDAS

C E P A L



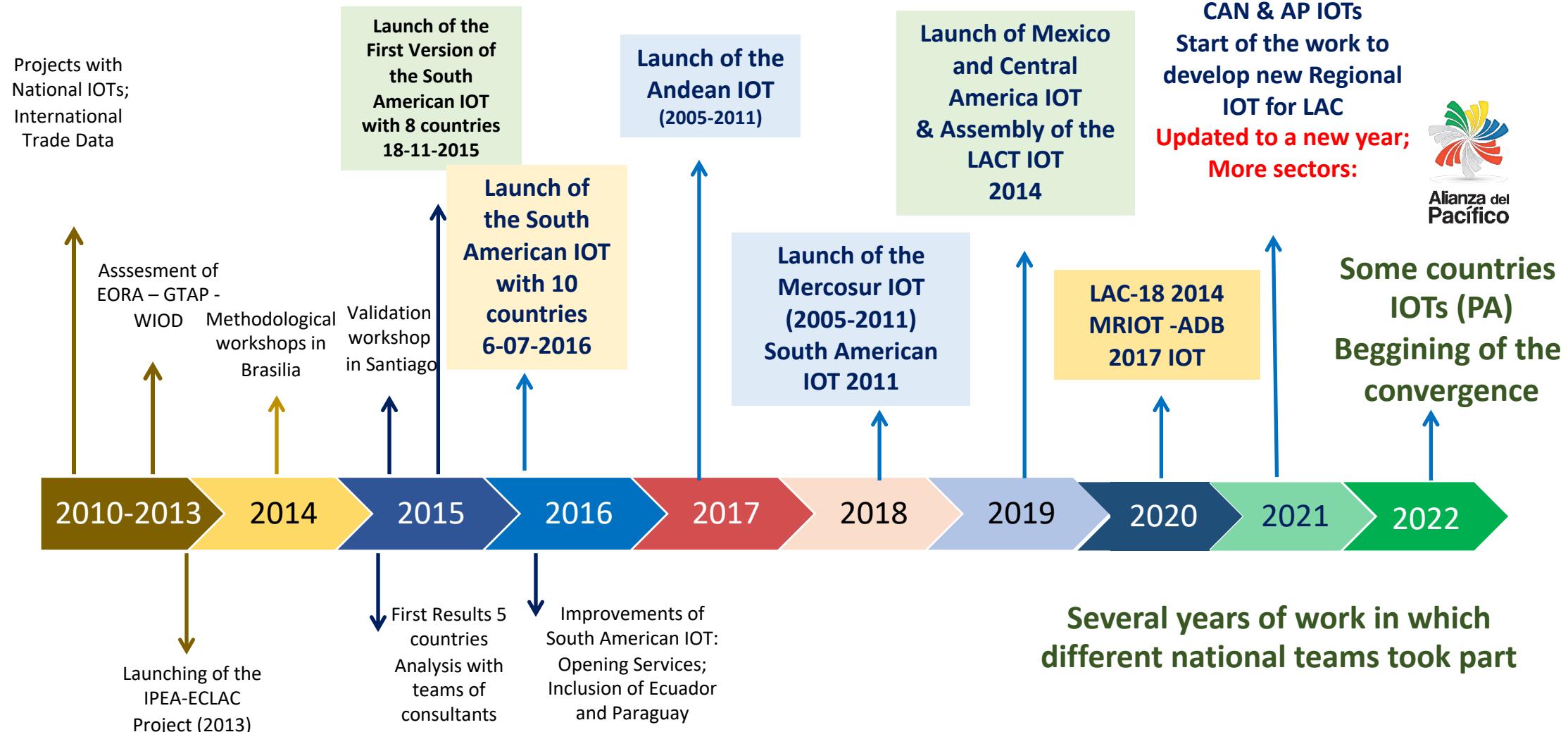
Sevilla, March 30, 2023



Summary

1. History: From South America IOT to LAC IOT
2. Industries
 1. 40X40 IOT
 2. 60X60 IOT
3. Different databases: 2005, 2011, 2014, 2017 and 2018
4. Efforts to achieve convergence
 1. ECLAC – ADB;
 2. ECLAC – ADB – OCDE
 3. ECLAC – ADB – OCDE - FIGARO

Milestones in the process of Latin America's value-added trade project: From South America (10) to Latin America (18)



Source: ECLAC, based on: Durán & Banacloche (2021). "Economic analysis based on input-output tables: Definitions, indicators and applications for Latin America".

Major achievements of the ECLAC input- output table project

- First achievement: Assembling an IOT for South America
- (2016; 2019; 2020)

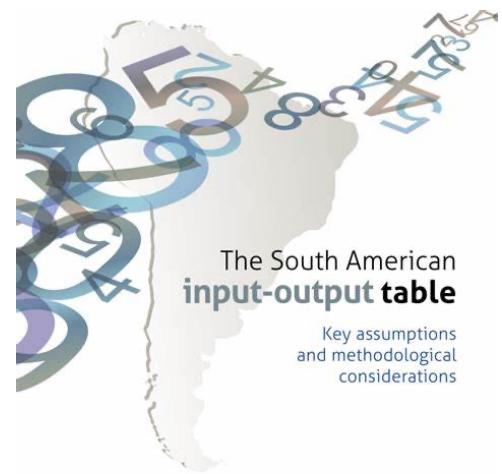
- 10 countries: Argentina, Bolivia. P. S., Brazil, Chile, Colombia, Ecuador, Peru, Paraguay, Uruguay and Venezuela. B. R.;
- A single base year: **2005 (with IPEA). 2011. 2014;**
- A single valuation: current dollars and basic prices



Assembling the IOT
can be understood as
puzzle regarding the
harmonization of
methodology



Assembled IOT includes
40 sectors



SUITs, the heart of our work

**ECLAC Statistic Division has a very detailed list of availability of Supply
Use Tables of Latin American countries**

- **Different years**
- **Different sectors**
- **Different currencies**

| Country | SUT | ISIC Rev | Classifier of Economic Activities of the Country | CPCversion | Reference Year | Disaggregation Activities | Type | Current valuation | Constant valuation |
|--------------------|-------------|----------|--|---------------|----------------|-------------------------------|------|-------------------|--------------------|
| Argentina | 2004 | 3 | v | 1.1 | 2004 | 143 x 162 | PxI | v | ... |
| | 2018 | | | | | 223 x 107 | | | |
| Bolivia (P.S.) | 1988 - 2014 | 2 & 3 | v | 1.0 | 1990 | 35 x 35 | PxI | v | v |
| | 1990 - 1994 | | | | | 1980 | | | |
| Brazil | 1995 - 1999 | 4 | v | 2010 BESPL | 1980 | 12 x 12 | PxI | v | v |
| | 2000 - 2009 | | | | 1980 | 80 x 42 | | | |
| | 2010 - 2019 | | | | 2000 | 12 x 12: 107 x 51 | | | |
| | | | | | 2010 | 107 x 51: 128 x 68 | | | |
| Chile | 1996 | 3 & 4 | v | 2.0 | 1996 | 12 x 12; 73 x 73 | PxI | v | v |
| | 2003 | | | | 2003 | 13 x 12; 73 x 73 | | | |
| | 2013 | | | | 2013 | 12 X 12; 111 X 181 | | | |
| | 2018 | | | | 2018 | 12 X 12; 111 X 181 | | | |
| Colombia | 2006 - 2019 | 4 | v | 2.0 | 2005 y | 392 x 61 y 66 x 61 | PxI | v | v |
| | 2005 - 2019 | | | | 2015 | 392 x 61 y 66 x 61 | | | |
| Costa Rica | 1997 - 2007 | 4 | v | 2.0 | 1991 | 121 | PxI | v | v |
| | 2012 - 2016 | | | | 2012 | 183 x 141 | | | |
| | 2017 | | | | 2017 | 184 x 96 | | | |
| | 2018 | | | | 2017 | 184 x 151 | | | |
| Ecuador | 2000 - 2006 | 4 | -- | ... | 2000 | 60 x 47 | PxI | v | v |
| | 2007 - 2019 | | | | 2007 | 277x71 | | | |
| El Salvador | 2005 | 4 | v | 2.0 | 1990 | 69 x 69 | PxI | v | ... |
| | 2014-2018 | | | | 2014 | 69 x 69 | | | |
| Guatemala | 2005-2012 | 4 | v | v | 2001 | 65 x 23 | PxI | v | v |
| | 2013-2019 | | | | 2013 | 151 x 104 | | | |
| Haiti | 2012 | 4 | v | 2.0 | 2012 | 20 x 23 | PxI | v | ... |
| Honduras | 2000 - 2018 | 4 | v | 2.0 | 2000 | 55 x 16 | PxI | v | ... |
| Jamaica | 2007 | 3 | v (JIC 2005) | ... | 2007 | 12 x 12 | IxI | v | ... |
| Mexico | 2003 - 2020 | 4 | v | 2.0 | 2013 | 20 x 20; 80 x 80; 262 x 262 | IxI | v | ... |
| Nicaragua | 2001 - 2005 | 4 | v | 2.0 | 1994 | 39 x 39 | PxI | v | v |
| | 2006 - 2018 | | | | 2006 | 39 x 38 | | | |
| Panama | 1996 | 4 | v | ... | 1996 | 158 x 29 | PxI | v | ... |
| | 2015 - 2017 | | | | 2007 | 60 x 60 | | | |
| Paraguay | 1991 - 1997 | 4 | v | 2.1 | 1994 | 46 x 33 | PxI | v | v |
| | 2008 - 2014 | | | | 2014 | 53 x 33 | | | |
| Peru | 2007 - 2019 | 4 | v | 2.0 | 2007 | 365 x 101 | PxI | v | ... |
| Dominican Republic | 1991 - 2005 | 4 | v | 2.0 | 1991 | 67 x 32 | PxI | v | ... |
| | 2007 - 2016 | | | 2.0 | 2007 | 69 x 40 | | | |
| Saint Lucia | 2016 | 4 | v | ... | 2006 | 20 secciones 22 divisiones | IxI | v | ... |
| Suriname | 2015 | 4 | v | 2.0 | 2015 | 71 x 23 | IxI | v | ... |
| | 2005-2008 | | | | 2005 | 45 | | | |
| Uruguay | 2012 | 4 | v | 2.0 | 2005 | 134 x 107 | PxI | v | ... |
| | 2016 | | | | 2016 | 110 x 95 | | | |
| Venezuela (B.R.) | 1997 | 3 | ... | ... | 1997 | 180 x 121 | PxI | v | ... |

And also, the IOT

ECLAC Statistic Division also has all the IOTs available in LAC countries

- Different years**
- Different sectors**
- Different currencies**

Documents

[CPCv2.1_English.pdf](#)

[CPCv11-Spanish.pdf](#)

[ISIC_Rev3_Spanish.pdf](#)

[ISIC_Rev4_Spanish.pdf](#)

[ISIC31_Spanish.pdf](#)

Mexico

[MEX_COU_2003_2012.zip](#)

[MEX_COU_2013.zip](#)

[MEX_COU_2014_2020.zip](#)

| Country | IOT | ISIC | Classifier of Economic Activities of the Country | CPC | Reference Year | Disaggregation Activities | Type | Valuation | |
|------------------|-------------------------|------|--|------------|-------------------------|----------------------------|------|----------------------|--|
| Argentina | 1997 | 3 | NCEA | CPC ver1.1 | 1997 | 195 x 124 | PxI | Current | |
| | 1985 | | | | 1980 | 80 x 43 | PxI | Current | |
| | 1990 - 1996 | | | | 1980 | 80 x 43 | PxI | Current | |
| | 2000 | 4 | NCEA | | 2000 | 12 x 12 y 110 x 55 | PxI | Current | |
| | 2005 | | | | 2000 | 12 x 12 y 110 x 55 | PxI | Current | |
| | 2010 | | | | 2010 | 12 x 12, 20 x 20 y 67 x 67 | PxI | Current | |
| | 2015 | | | | 2010 | 12 x 12, 20 x 20 y 67 x 67 | PxI | Current | |
| | 1996 | | | | 1996 | 12 x 12 y 73 x 73 | IxI | Current | |
| | 2003 | | | | 2003 | 12 x 12 y 73 x 73 | IxI | Current | |
| | 2008-2018 | | | | 2013 | 12 x 12 y 111 x 176 | IxI | Current | |
| Brazil | 2018-2019 | | | | ZU18 | 12 x 12 y 111 x 118 | IxI | Current | |
| | 2005, 2010 | | | N-CPC | 2005 | 61 x 61 | IxI | Current | |
| | 2005, 2010 | | | | 2005 | 61 x 61 | PxP | Current | |
| | 2015 | 4 | ISIC rev4 | | 2015 | 68 x 68 | IxI | Current | |
| | 2015 | | | | 2015 | 68 x 68 | PxP | Current | |
| | 2017 | | | | 2015 | 68 x 68 | IxI | Current | |
| | 2017 | | | | 2015 | 68 x 68 | PxP | Current | |
| | 2012 | | | | 2012 | 183 x 183 | PxP | Current | |
| | 2012 | | | | 2012 | 128 x 128 | IxI | Current | |
| | 2017 | | | | 2017 | 184 x 184 | PxP | Current | |
| Chile | 2017 | | | | 2017 | 136 x 136 | IxI | Current | |
| | 2007 | | | CPC ver2.0 | 2007 | 71 x 71 | IxI | Current | |
| | 2009 - 2014 | 4 | ISIC rev4 | | 2007 | 71 x 71 | IxI | Current | |
| | 2019 | | | | 2007 | 71 x 71 | IxI | Current | |
| | 1996 - 2005 | | | | 1990 | 45 x 45 | PxI | Current and Constant | |
| | 2005 - 2014 | 4 | CCP ver2.0 | | 2014 | 53 x 53 | IxI | Current | |
| | 2005 - 2014 | | | | 2014 | 53 x 53 | PxP | Current | |
| | 2013 | 4 | | | 2013 | 105 x 105 | IxI | Current | |
| | 2000, 2011, 2013 | 4 | NCEA | N-CPC | 2000 | 11 x 11 y 95 x 95 | ixP | Current | |
| | 2007 | 3 | | | 2007 | 53 x 53 | PxP | Current | |
| Colombia | 1970, 1975, 1978 y 1980 | | | N/I | 1970, 1970, 1970 y 1980 | 72 x 72 | IxI | Current | |
| | 2003 | | | | 2003 | 20 x 20 | IxI | Current | |
| | 2008 | | | | 2008 | 814 x 814 | IxI | Current | |
| | 2008 | 4 | NAIC | CPC ver2.0 | 2008 | 814 x 814 | PxP | Current | |
| | 2013 | | | | 2013 | 72 x 72 | IxI | Current | |
| | 2013 | | | | 2013 | 822 x 822 | PxP | Current | |
| | 2006 | 4 | NCEA | N-CPC | 2006 | 39 x 39 y 24 x 24 | PxP | Current | |
| | 2006 | | | | 2006 | 39 x 39 y 14 x 14 | IxI | Current | |
| Ecuador | 1979 | | | | 1979 | 103 x 70 | PxI | Current | |
| | 1994 | 4 | ISIC rev4 | CPC ver2.0 | 1994 | 287 x 45 | PxI | Current | |
| | 2007 | | | | 2007 | 101 x 101 | PxI | Current | |
| | 2007 | | | | 2007 | 24 x 24 | PxP | Current | |
| | 2007 | | | | 2007 | 24 x 24 | IxI | Current | |
| | 2007 | | | | 2007 | 24 x 24 | PxP | Current | |
| | 2012 | | | | 2012 | 24 x 24 | IxI | Current | |
| | 2012 | | | | 2012 | 180 x 121 | PxI | Current | |
| | 1997 | 3 | NCEA | N-CPC | 1997 | 121 x 121 | PxP | | |
| | 1997 | | | | 1997 | 121 x 121 | IxI | | |
| Venezuela (B.R.) | 1997 | | | | 1997 | 25 x 25 | PxI | | |
| | | | | | 1997 | 25 x 25 | PxP | | |
| | | | | | 1997 | 25 x 25 | IxI | | |
| | | | | | 1997 | 25 x 25 | PxP | | |
| | | | | | 1997 | 25 x 25 | IxI | | |

Some countries have national classifiers adapted from international ones

| Country | Classifier of Economic Activities of the Country | CPC |
|--------------------|---|--|
| Argentina | National Classification of Economic Activities | CPC ver1.1 |
| Brazil | National Classification of Economic Activities - CNAE 2.0 | Brazilian Economic Sectors Product List |
| Chile | ISIC rev4 | CPC ver2.0 |
| Colombia | National adaptation ISIC 3 and ISIC Rev 4 | CPC ver2.0 |
| Costa Rica | ISIC rev4 | CCP rev2.0 |
| Ecuador | ISIC rev4 | ... |
| El Salvador | Nomenclature of Activities of El Salvador (NAES) | CCP ver2.0 |
| Guatemala | Nomenclature of Economic Activities for Guatemala (NAEG) | Product Nomenclature for Guatemala (NPG) |
| Jamaica | Jamaica Industrial Classification | ... |
| Mexico | North American Industry Classification System 2013 (NAICS 2013) | CPC ver2.0 |
| Nicaragua | Classification of Economic Activities for Nicaragua. | Product Classifier for Nicaragua |
| Dominican Republic | ISIC rev4 | CPC ver2.0 |
| Venezuela (B.R.) | Classification of Products and Economic Activities of Venezuela | Central Product Classifier of Venezuela. |

Major achievements of the ECLAC input-output table project

- **Second achievement: Assembling a Latin American IOT (2019-2020)**

- 8 additional countries: Mexico, Costa Rica, El Salvador, Dominican Republic, Honduras, Guatemala, El Salvador and Panama;
- A single base year: **2011, 2014**;
- A single valuation: current dollars and basic prices



Selected sectors / Industries for the harmonization of SA IOT – LAC

| Forty sectors selected to join a South American input-output matrix | | | | | | | | | | | | |
|---|---|---|--|--|--|--|--|--|--|--|--|--|
| Sector | Description | ISIC Code (Rev. 3) | | | | | | | | | | |
| s1 | Agriculture and forestry | 0111 0112 0113 0121 0122 0130 0140 0200 | | | | | | | | | | |
| s2 | Hunting and fishing | 0150 0500 | | | | | | | | | | |
| s3 | Mining (energy) | 1010 1020 1030 1110 1120 1200 | | | | | | | | | | |
| s4 | Mining (non-energy) | 1310 1410 1421 1422 1429 | | | | | | | | | | |
| s5 | Meat and meat; dairy milk | 1511 1512 1514 1520 | | | | | | | | | | |
| s6 | Grinding, baking and pasta | 1531 1532 1541 1544 | | | | | | | | | | |
| s7 | Sugar and confectionery products | 1542 1543 | | | | | | | | | | |
| s8 | Other food products | 1513 1549 | | | | | | | | | | |
| s9 | Drinks | 1551 1552 1553 1554 | | | | | | | | | | |
| s10 | Snuff products | 1600 | | | | | | | | | | |
| s11 | Textiles | 1711 1712 1729 1730 | | | | | | | | | | |
| s12 | Garments | 1721 1722 1723 1810 1820 1911 1912 | | | | | | | | | | |
| s13 | Footwear | 1920 | | | | | | | | | | |
| s14 | Wood and products of wood and cork | 2010 2021 2022 2023 2029 | | | | | | | | | | |
| s15 | Pulp, paper, paper, printing and publishing | 2101 2102 2109 2211 2212 2213 2219 2221 2222 2230 | | | | | | | | | | |
| s16 | Coke, refined petroleum and nuclear fuel | 2310 2320 2330 | | | | | | | | | | |
| s17 | Basic chemicals | 2411 2412 2413 | | | | | | | | | | |
| s18 | Other chemicals (excluding pharmaceuticals) | 2421 2422 2424 2429 2430 | | | | | | | | | | |
| s19 | Pharmaceutical | 2423 | | | | | | | | | | |
| s20 | Rubber and plastic | 2511 2519 2520 | | | | | | | | | | |
| s21 | Nonmetallic minerals | 2610 2691 2692 2693 2694 2695 2696 2699 | | | | | | | | | | |
| s22 | Iron and Steel | 2710 2731 | | | | | | | | | | |
| s23 | Non-ferrous metals | 2720 2732 | | | | | | | | | | |
| s24 | Metal fabricated metal products (excluding machinery and transport equipment) | 2811 2812 2813 2891 2892 2893 2899 | | | | | | | | | | |
| s25 | Machinery and equipment (excluding electrical equipment) | 2911 2912 2913 2914 2915 2919 2921 2922 2923 2924 | | | | | | | | | | |
| s26 | Office equipment (including computer equipment) | 3000 | | | | | | | | | | |
| s27 | Machinery and electrical appliances | 3110 3120 3130 3140 3150 3190 3210 | | | | | | | | | | |
| s28 | Radio, television and telecommunications equipment | 3220 3230 | | | | | | | | | | |
| s29 | Optical medical equipment and precision instruments | 3311 3312 3313 3320 3330 | | | | | | | | | | |
| s30 | Motor vehicles, trailers and semi-trailers | 3410 3420 3430 | | | | | | | | | | |
| s31 | Aircraft | 3530 | | | | | | | | | | |
| s32 | Other transport equipment | 3511 3512 3520 3591 3592 3599 | | | | | | | | | | |
| s33 | Other articles: recycling, furniture and other | 3610 3691 3692 3693 3694 3699 3710 3720 | | | | | | | | | | |
| s34 | Electricity, gas and water | 4010 4020 4030 | | | | | | | | | | |
| s35 | Construction | 4510 4520 4530 4540 4550 | | | | | | | | | | |
| s36 | Transport | 6010 6021 6022 6023 6030 6110 6120 6210 6220 6301 | | | | | | | | | | |
| s37 | Post and telecommunications | 6411 6412 6420 | | | | | | | | | | |
| s38 | Finance and insurance | 6511 6519 6591 6592 6599 6601 6602 6603 6711 6712 | | | | | | | | | | |
| s39 | Services to businesses of all kinds | 6719 6720 | | | | | | | | | | |
| s40 | Other services | 7010 7020 7111 7112 7113 7121 7122 7123 7129 7130 | | | | | | | | | | |
| | | 7210 7220 7230 7240 7250 7290 7310 7320 7412 7413 | | | | | | | | | | |
| | | 7414 7421 7422 7430 7491 7492 7493 7495 7499 | | | | | | | | | | |
| | | 5141 5142 5143 5149 5150 5190 5211 5219 5220 5231 | | | | | | | | | | |
| | | 5232 5233 5234 5239 5240 5251 5252 5259 | | | | | | | | | | |
| | | 5260 5510 5520 7411 7494 7511 7512 7513 7514 7521 | | | | | | | | | | |
| | | 7522 7523 7530 8010 8021 8030 8090 8511 8512 8519 | | | | | | | | | | |
| | | 8520 8531 8532 9000 9111 9112 9120 9191 | | | | | | | | | | |
| | | 9192 9199 9211 9212 9213 9214 9219 9220 9231 9232 | | | | | | | | | | |
| | | 9241 9249 9301 9302 9303 9309 9500 9900 | | | | | | | | | | |

Source: ECLAC on the basis of IOM and / or national SUT, considering on the work of the respective national teams.

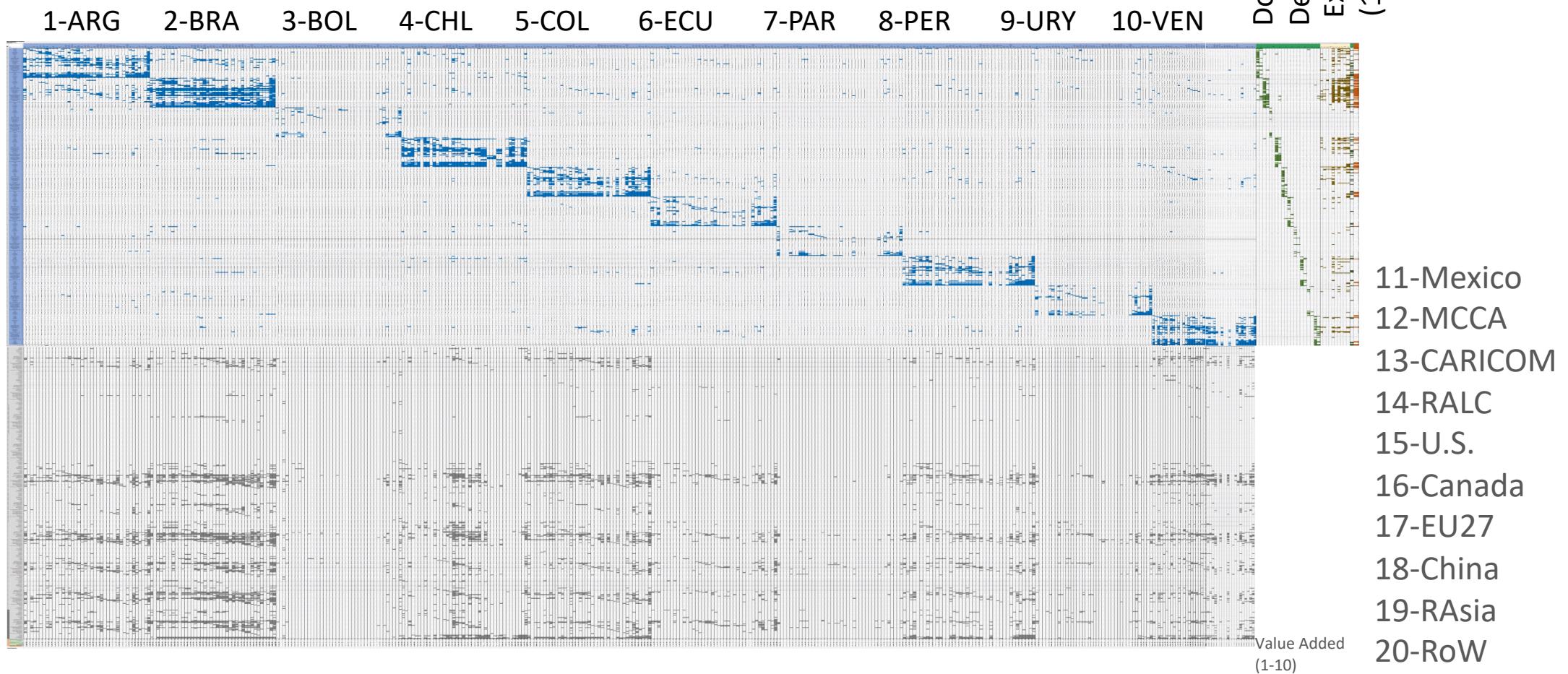
Each National IOTs was reclassified to 40 Sectors

Primary
(4)

Manufacturing (29)

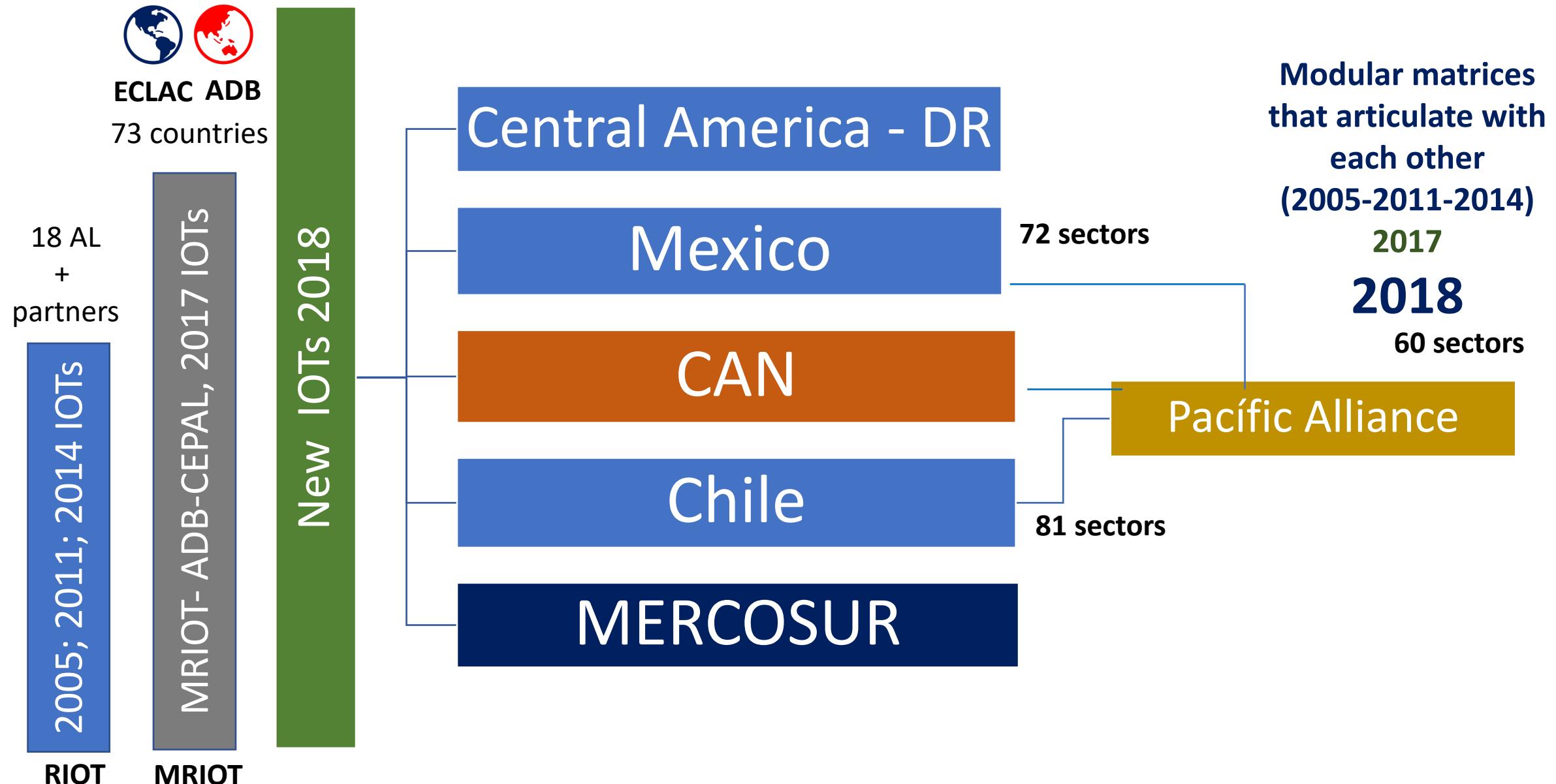
Services (7)

Structure of the IOT

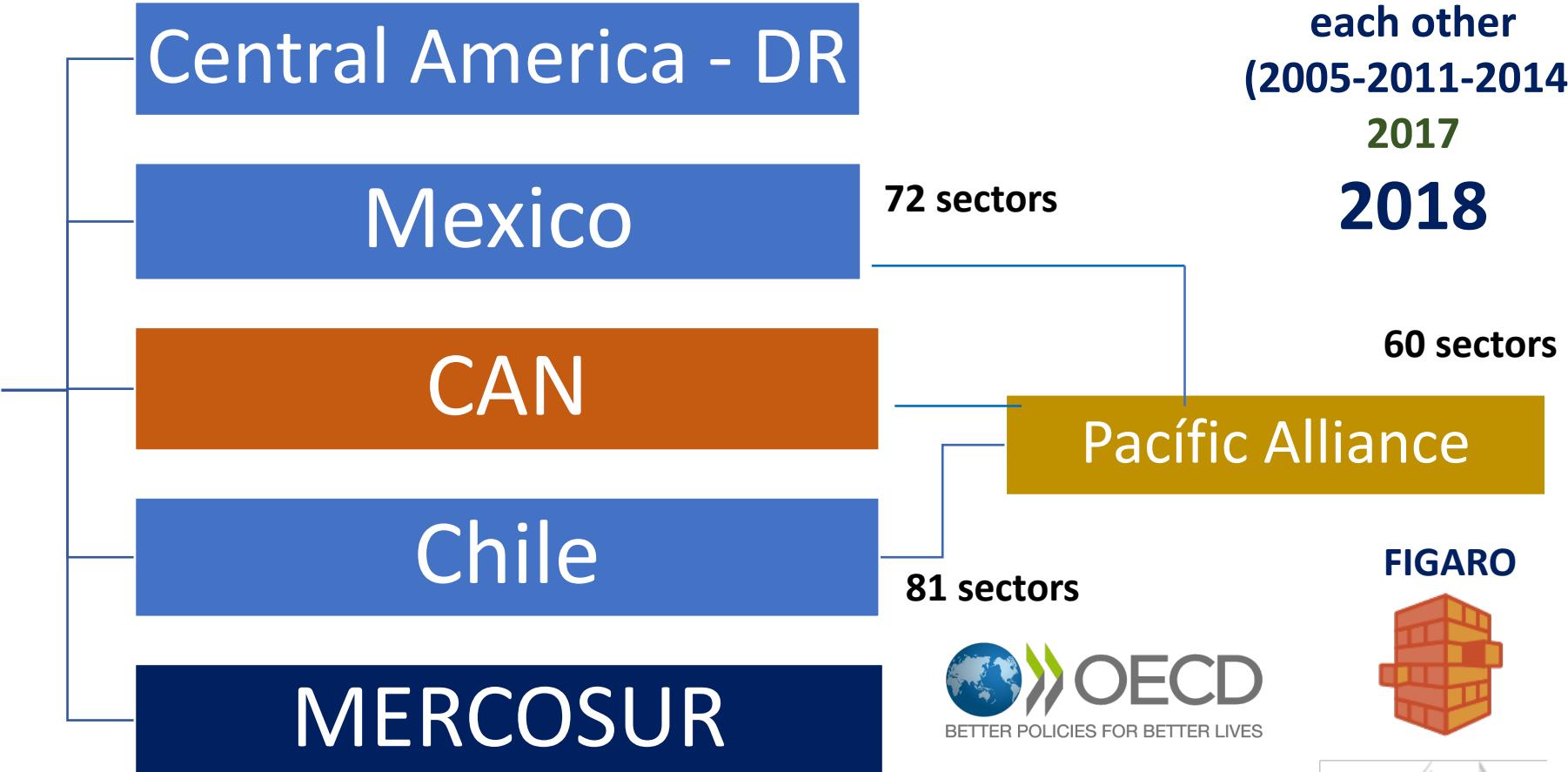


The heat map of the South American IOT shows the biggest transactions on the region.

Stock of IOTs (As off March 2023)



How they will in the future?



Modular matrices
that articulate with
each other
(2005-2011-2014)

2017

2018

60 sectors

List of countries included in the FEALAC IOT: and ROW (18 LAC and 26 Asian countries)

| | | | | | |
|----------------------------|-----|----------------------------------|-----|-------------------|-----|
| Australia | AUS | Luxembourg | LUX | Brunei Darussalam | BRU |
| Austria | AUT | Latvia | LVA | Bhutan | BHU |
| Belgium | BEL | Mexico | MEX | Kyrgyz Republic | KGZ |
| Bulgaria | BGR | Malta | MLT | Cambodia | CAM |
| Brazil | BRA | Netherlands | NET | Maldives | MLD |
| Canada | CAN | Norway | NOR | Nepal | NEP |
| Switzerland | SWI | Poland | POL | Singapore | SIN |
| People's Republic of China | PRC | Portugal | POR | Hong Kong. China | HKG |
| Cyprus | CYP | Romania | ROM | Argentina | ARG |
| Czech Republic | CZE | Russia | RUS | Bolivia, P.S. | BOL |
| Germany | GER | Slovak Republic | SVK | Chile | CHL |
| Denmark | DEN | Slovenia | SVN | Colombia | COL |
| Spain | SPA | Sweden | SWE | Ecuador | ECU |
| Estonia | EST | Turkey | TUR | Paraguay | PAR |
| Finland | FIN | Taipei, China | TAP | Peru | PER |
| France | FRA | United States | USA | Uruguay | URY |
| United Kingdom | UKG | Bangladesh | BAN | Venezuela. B.R. | VEN |
| Greece | GRC | Malaysia | MAL | Costa Rica | CRI |
| Croatia | HRV | Philippines | PHI | El Salvador | SLV |
| Hungary | HUN | Thailand | THA | Guatemala | GTM |
| Indonesia | INO | Viet Nam | VIE | Honduras | HND |
| India | IND | Kazakhstan | KAZ | Nicaragua | NIC |
| Ireland | IRE | Mongolia | MON | Panama | PAN |
| Italy | ITA | Sri Lanka | SRI | Dom. Republic | RDO |
| Japan | JPN | Pakistan | PAK | Rest of the World | RoW |
| Republic of Korea | KOR | Fiji | FIJ | | |
| Lithuania | LTU | Lao People's Democratic Republic | LAO | | |



Source: Working Group ECLAC-ESCAP-ADB

National matrices already updated as of 2018 (As of November 2022)



Alianza del
Pacífico

Colombia (66X66)

Chile (80X80)

Mexico (72X72)

Peru (66X66)

Argentina

Brazil

Paraguay

Uruguay

Ecuador

Central America

Bolivia (EP)

Venezuela (RB)



Exchange Rate
Used (year average)

| | | |
|----------|---|-------------|
| CHILE | : | 641.22 CLP |
| COLOMBIA | : | 2796 COLP |
| PERU | : | 3.287 SOLES |
| MEXICO | : | 19.2372 MXP |

- Same currency (US\$)
- Homogeneous Sector (60x60)
- Compatible with other IOTs:
TIVA OCDE, FIGARO, ADB.

Broad Economic Sectors (Maximum openness of the LAC IOT)

PRIMARY
From 4 to 19



Agriculture, hunting and forestry (s1, s2)
Oil and mining (s3, s4)

From 2 to 12
From 2 to 7

MANUFACTURES
From 29 to 33



Food, beverages and tobacco (s5 to s10)
Textiles, clothing and footwear (s11 to s13)
Wood, paper and paperboard (s14 to s15)
Chemicals and pharmaceuticals (s16 to s19)
Rubber and plastics (s20); Non-metallic minerals (s21)
Metals and metal products (s22, s23, s24)
Machinery and equipment (s25 to s29)
Motor vehicles and auto parts (s30, s31 and s32)
Other manufactures (s33)

From 6 to 8
3 (Idem)
From 2 to 3
4 (Idem)
2 (Idem)
3 (Idem)
5 (Idem)
From 3 to 4
1

SERVICES
From 7 to 29



Electricity, gas and water (s34); Construction (35);
Transport (s36); Post and telecommunications (s37);
Finance and insurance (s38); Business services (s39)
Other services (s40)

Electricity, water and other utilities (1 to 3)

Transports (1 to 4: Land, water, air storage)

Hotel and restaurants
IT Administration
Education
Public Administration

81 ECONOMIC SECTORS

New convergence sectors (overlaps with other TIVA initiatives)

32 manufacturing sectors

**Primary
Products
(8)**

**Agroindustry
(3)**

**Textiles, clothing
& footwear (3)**

**Wood & Paper
(3)**

| Sector | Description Major Economic Sectors of the 2018 PA IOT |
|--------|--|
| 1 | Crop and animal production, hunting and related service activities |
| 2 | Forestry and logging |
| 3 | Fishing and aquaculture |
| 4 | Coal and lignite mining |
| 5 | Extraction of crude petroleum and natural gas |
| 6 | Mining of metal ores |
| 7 | Other mining and quarrying |
| 8 | Mining support service activities |
| 9 | Manufacture of food products |
| 10 | Manufacture of beverages |
| 11 | Manufacture of tobacco products |
| 12 | Manufacture of textiles |
| 13 | Manufacture of clothing |
| 14 | Manufacture of leather and allied products |
| 15 | Manufacture of wood and products of wood and cork,... |
| 16 | Manufacture of paper and paper products |
| 17 | Printing and reproduction of recorded media |

Convergence Sectors (Overlaps with other TIVA initiatives)

(32 manufacturing sectors)

| | |
|---|--|
| Chemical & pharmaceutical (3) | |
| Rubber & plastic (1) | |
| Non- metallic minerals (1) | |
| Metal mechanics (3) | |
| Electrical equipment and electronics (2) | |
| Non-electrical Mach. & equipment (1) | |
| Vehicles (3) | |
| Other Manufactures (1) | |

| Sector | Description Major Economic Sectors of the 2018 PA IOT |
|--------|---|
| 18 | Manufacture of coke and refined petroleum products |
| 19 | Manufacture of chemicals and chemical products |
| 20 | Manufacture of basic pharmaceutical products and pharmaceutical preparations |
| 21 | Manufacture of rubber and plastic products |
| 22 | Manufacture of other non-metallic mineral products |
| 23 | Manufacture of basic iron and steel |
| 24 | Non-ferrous metals |
| 25 | Fabricated metal products |
| 26 | Computer, electronic and optical equipment |
| 27 | Electrical equipment |
| 28 | Machinery and equipment, n.e.c. |
| 29 | Motor vehicles, trailers and semi-trailers |
| 30 | Ships and boats |
| 31 | Other transport equipment |
| 32 | Other Manufactures. |

Convergence Sectors (Overlaps with other TIVA initiatives)

(28 service sectors)

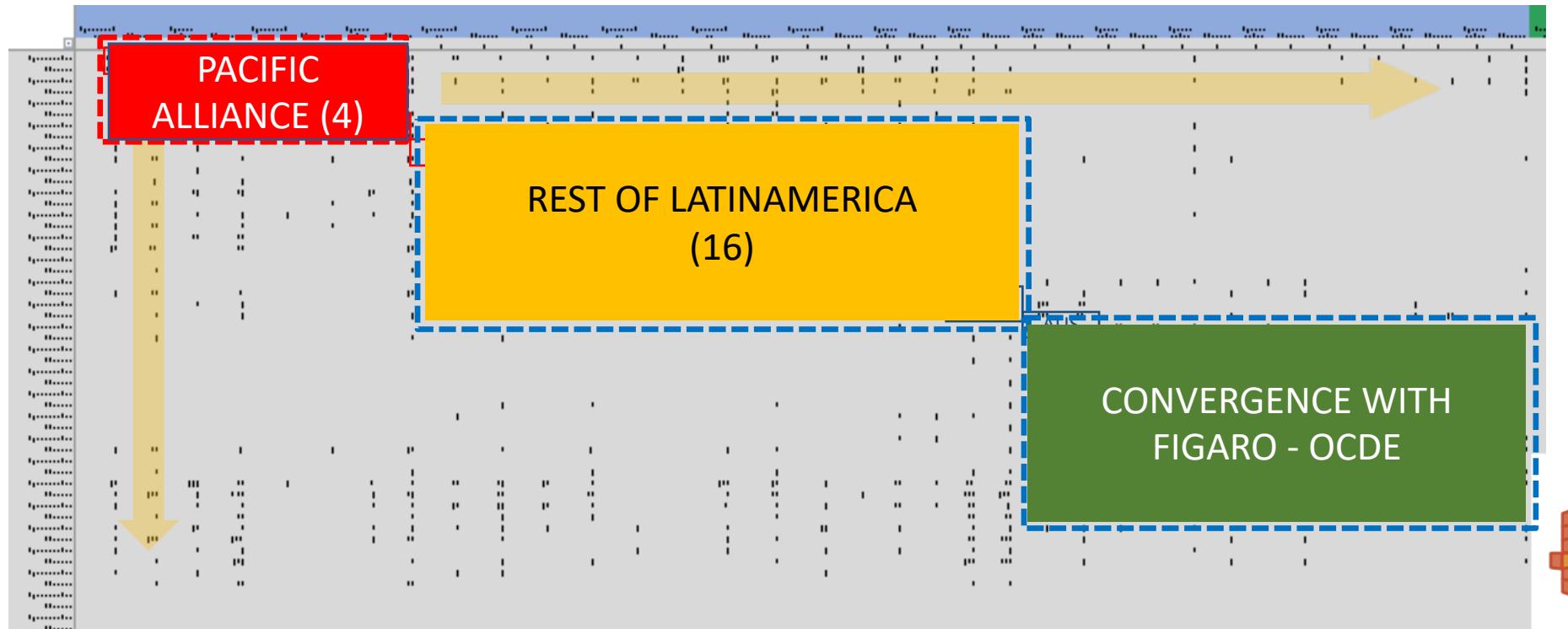
| Sector | Description Major Economic Sectors of the 2018 PA IOT | Sector | Description Major Economic Sectors of the 2018 PA IOT |
|--------|--|--------|---|
| 33 | Repair and installation of machinery and equipment | 48 | Publishing activities |
| 34 | Electricity, gas, steam and air conditioning supply | 49 | Audiovisual and broadcasting activities |
| 35 | Water collection, treatment and supply | 50 | Telecommunications |
| 36 | Sewerage, waste management and remediation activity | 51 | Information technology and other information service activities |
| 37 | Construction | | Financial service activities, except insurance and pension funding activities |
| 38 | Wholesale and retail trade and repair of motor vehicles and mopeds | 52 | Insurance, reinsurance, and pension funding, except compulsory social security |
| 39 | Wholesale trade, except of motor vehicles and mopeds | 53 | Activities auxiliary to financial services and insurance activities |
| 40 | Retail trade, except of motor vehicles and mopeds | 54 | Business services of all kinds |
| 41 | Land transport and transport through pipelines | | Travel agency, tour operator, reservation service and related activities |
| 42 | Water transport | 56 | |
| 43 | Air transport | 57 | Public administration and defence; compulsory social security |
| 44 | Warehousing and support activities for transport | 58 | Education |
| 45 | Postal and courier activities | 59 | Other service activities |
| 46 | Accommodation | | Real estate activities of own or leased, fee or contract real estate activities |
| 47 | Food and beverage service activities | 60 | |

Novelties: Tourism (accommodation, restaurants, travel agencies); Transport (4 subgroups); environmental services (water treatment and waste management); technology services (ICTs).

Domestic and Imported Intermediate Use of the Pacific Alliance IOT, New IOT 2018. Each box has 60 sectors.

Pacific Alliance IOT 2018

(4 Pacific Alliance + 16 LAC countries + Rest of the World), Intermediate Utilisation



The Regional Matrix will have 19 countries. Pacific Alliance countries will be the first to have an assembled IOT for 2018

Preliminary convergence sector (ECLAC – OECD) 40 sectors

| No. | ISIC-4 | Industries / Sectors |
|------|--------|--|
| s-01 | D01T02 | Agriculture, hunting, forestry |
| s-02 | D03 | Fishing and aquaculture |
| s-03 | D05T06 | Mining and quarrying, energy |
| s-04 | D07T08 | Mining and quarrying, non-energy |
| s-05 | D09 | Mining support service activities |
| s-06 | D10T12 | Food products, beverages and tobacco |
| s-07 | D13T15 | Textiles, textile products, and footwear |
| s-08 | D16 | Wood and products of wood and cork |
| s-09 | D17T18 | Paper products and printing |
| s-10 | D19 | Coke and refined petroleum products |
| s-11 | D20 | Chemical and chemical products |
| s-12 | D21 | Pharmaceuticals, medicinal chemical |
| s-13 | D22 | Rubber and plastics products |
| s-14 | D23 | Other non-metallic mineral products |
| s-15 | D24 | Basic metals |
| s-16 | D25 | Fabricated metal products |
| s-17 | D26 | Computer, electronic & Optical equipment |
| s-18 | D27 | Electrical equipment |
| s-19 | D28 | Machinery and equipment, nec |
| s-20 | D29 | Motor vehicles, trailers and semi-trailers |

| No. | ISIC -4 | Industries / Sectors |
|------|-------------------|---|
| s-21 | D30 | Other transport equipment |
| s-22 | D31T33 | Other manufacturing |
| s-23 | D35 | Electricity and gas |
| s-24 | D36T39 | Water supply; sewerage, and other |
| s-25 | D41T43 | Construction |
| s-26 | D45T47 | Wholesale and retail trade |
| s-27 | D49 | Land transport |
| s-28 | D50 | Water transport |
| s-29 | D51 | Air transport |
| s-30 | D52 | Warehousing and support activities |
| s-31 | D53 | Postal and courier activities |
| s-32 | D55T56 | Hotel and restaurants |
| s-33 | D58T60 | Publishing, and broadcasting |
| s-34 | D61 | Telecommunications |
| s-35 | D62T63 | IT and other information services |
| s-36 | D64T66 | Financial and insurance activities |
| s-37 | D69T75 | Professional, scientific and technical act. |
| s-38 | D84 | Public administration |
| s-39 | D85 | Education |
| s-40 | D68-77- 82;D86-98 | Other service activities * |

* Include: Administrative support; Health; Recreation and Private houseful

Convergence among all the initiatives: 14 Nomenclature of Economic Activities (NAC) sectors (FIGARO, ADB, ECLAC and OECD minimum common denominator sectors)

| Code Sectors | Main Aggregate sectors (All inititives) |
|--------------|---|
| A | Agriculture, forestry and fishing |
| B | Mining and quarrying |
| C | Manufacturing |
| D & E | Electricity, gas and wather / Water supply; sewerage; waste managment |
| F | Construction |
| G | Wholesale and retail trade; repair of motor vehicles and motorcycles |
| H | Transporting and storage |
| I | Accommodation and food service activities |
| J | Information and communication |
| K | Financial and insurance activities |
| L | Real estate activities |
| O | Public administration and defence; compulsory social security |
| P | Education |
| S | Other services activities |

Source: FIGARO 21 sector industry IOT.

- Include: Professional, scientific and technical activities, administrative and support activities, human health, arts, activities of households and activities of extraterritorial organisations. (M, N, Q, R, T, U)

Comparing large aggregates between TIVA initiatives : GDP, intermediate inputs (DVA), exports and intermediate imports between the TIVA initiatives



Colombia
Chile
México
Perú
60 sectors

Colombia
Chile
México
Perú
45 sectors

Argentina
Brasil
México

Brasil
México
35 sectors

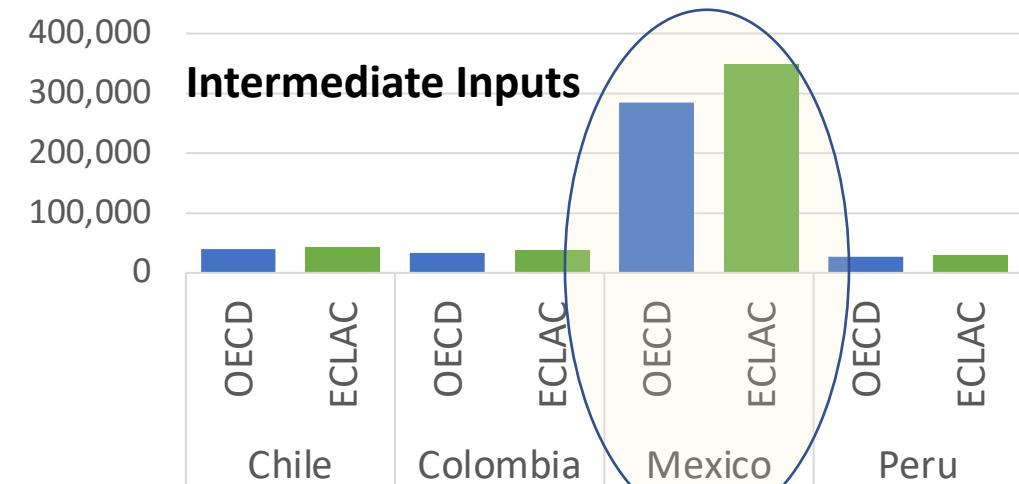
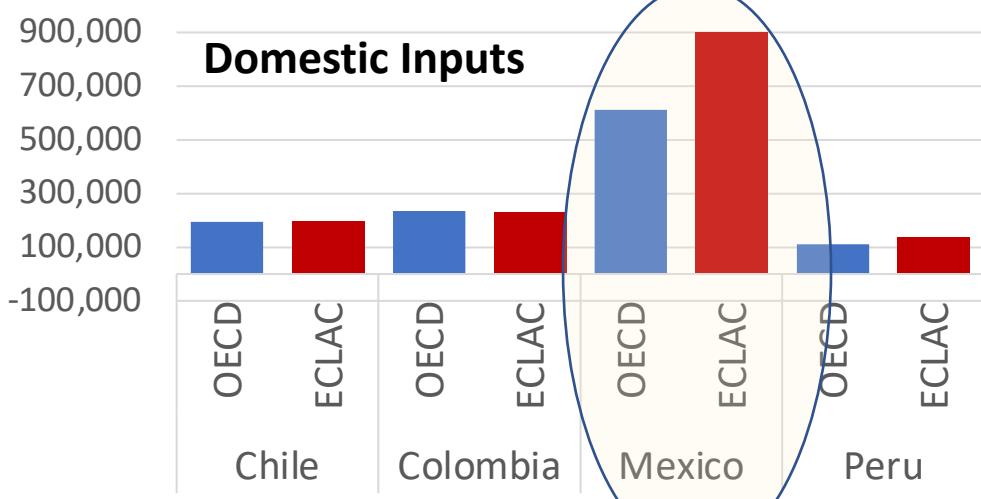
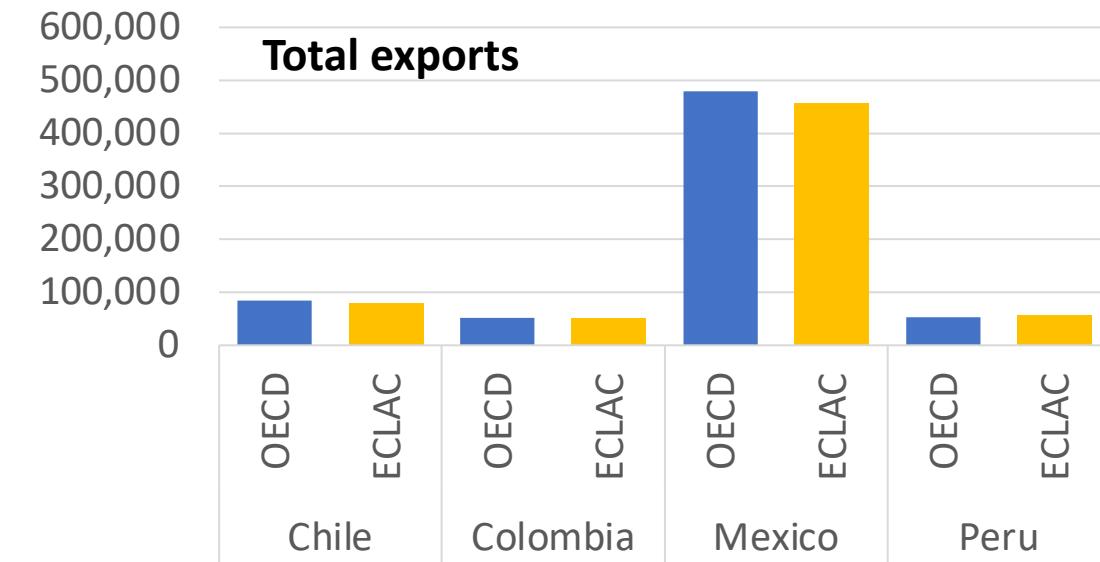
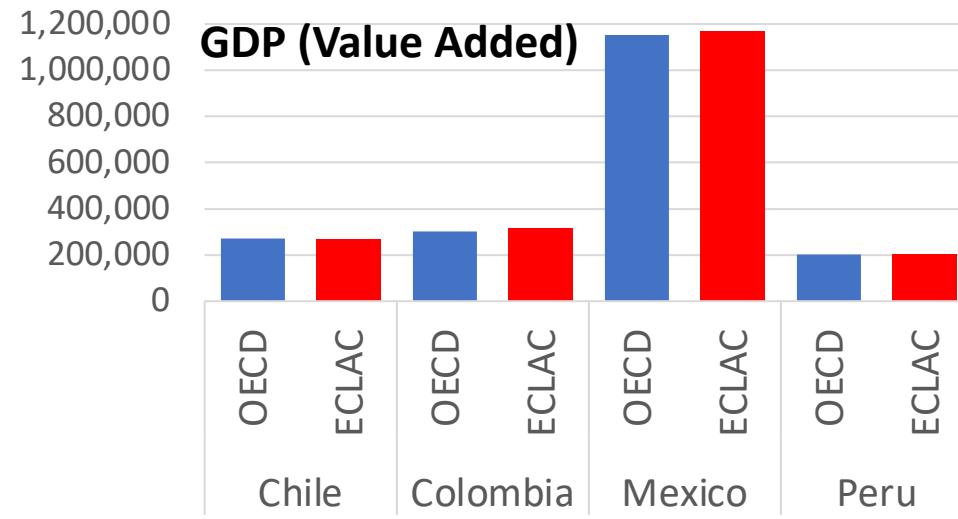


40 sectors (4 countries)



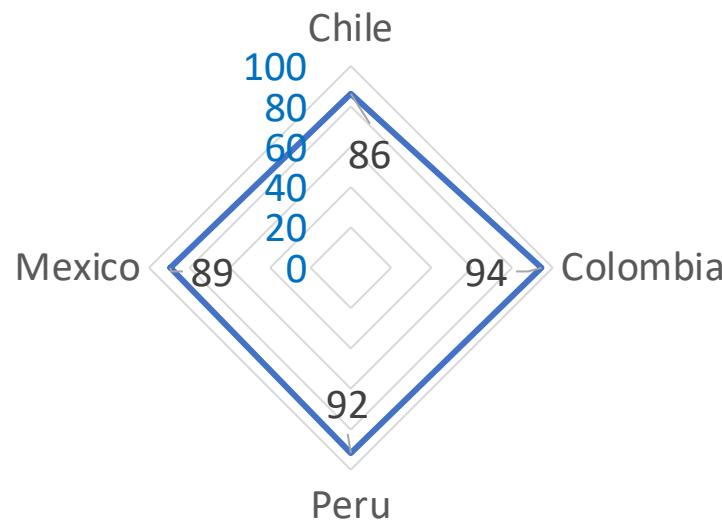
14 sectors
64 sectors

Comparison main IOT indicators (ECLAC – OECD) PA countries, 2018

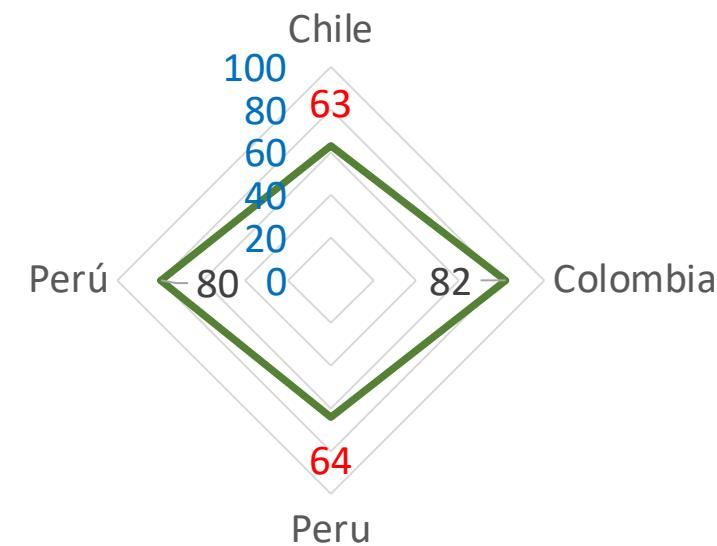


Similarity index (ECLAC – OECD) PA countries, 2018

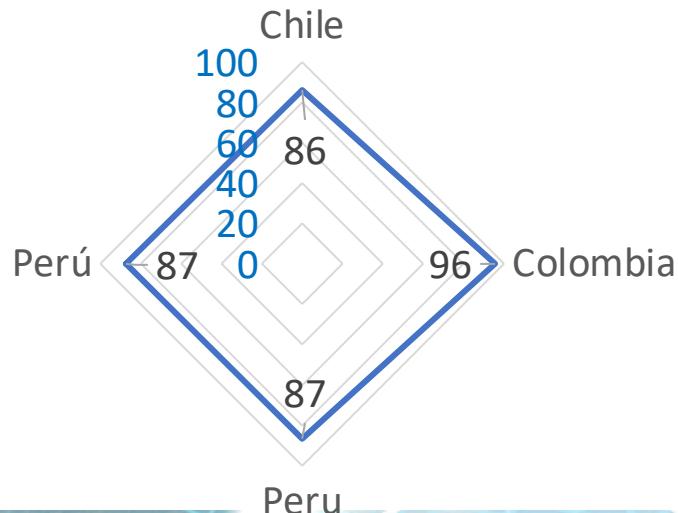
GDP (Value Added)



Total Exports



Domestic Inputs

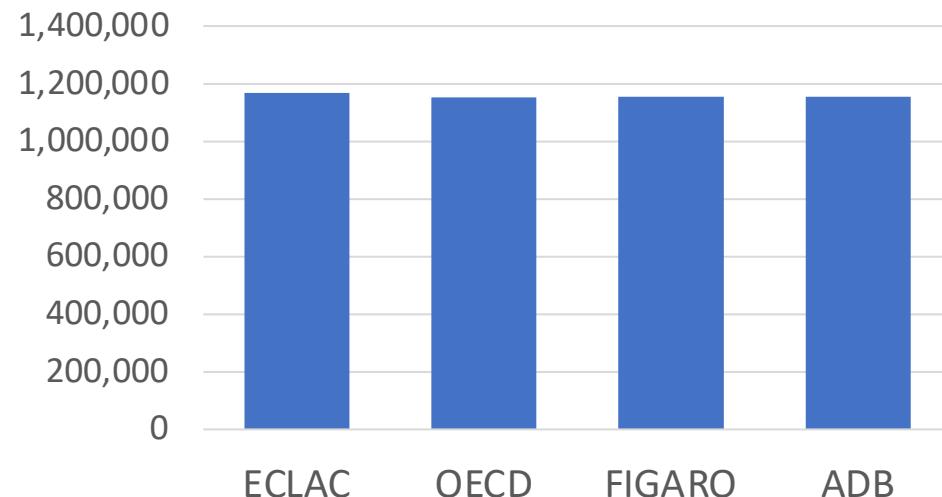


Intermediate imports

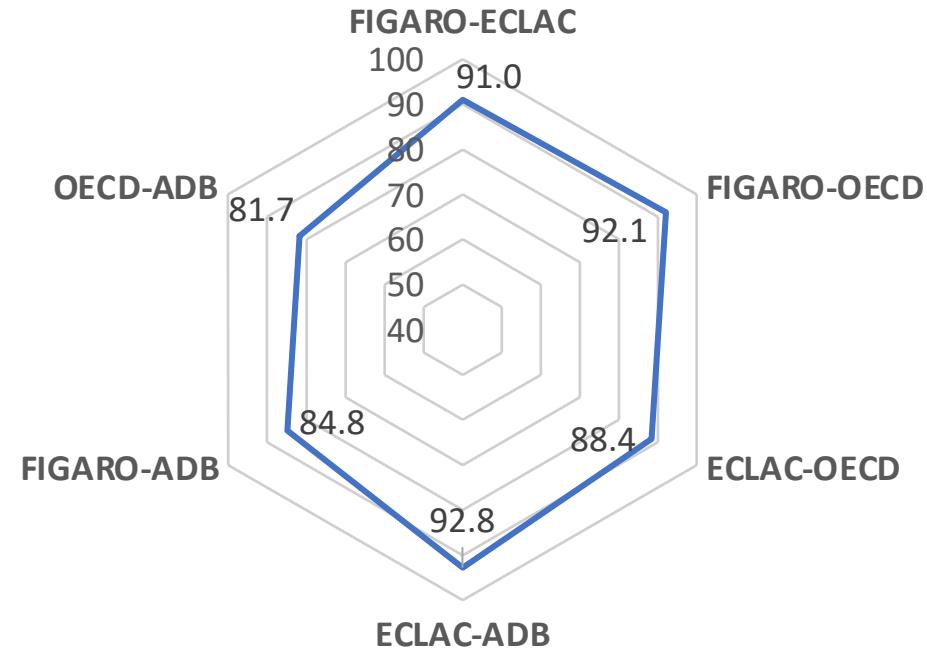


For the Mexican case, broadly GDP values are similar, but there are differences in the industrial structure

GDP (Value Added) USD Millions



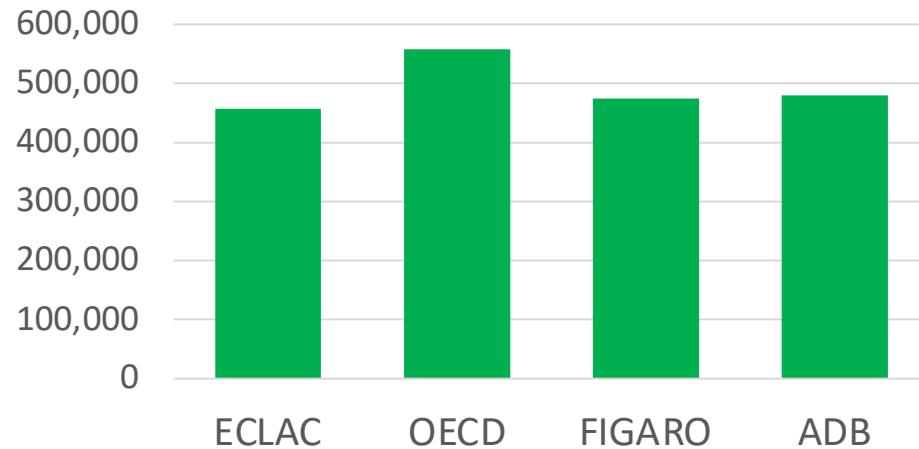
**Similarity Index
Total GDP (Value added)**



Source: Mexico IOT in each initiative (OECD, ADB, EUROSTAT and ECLAC).

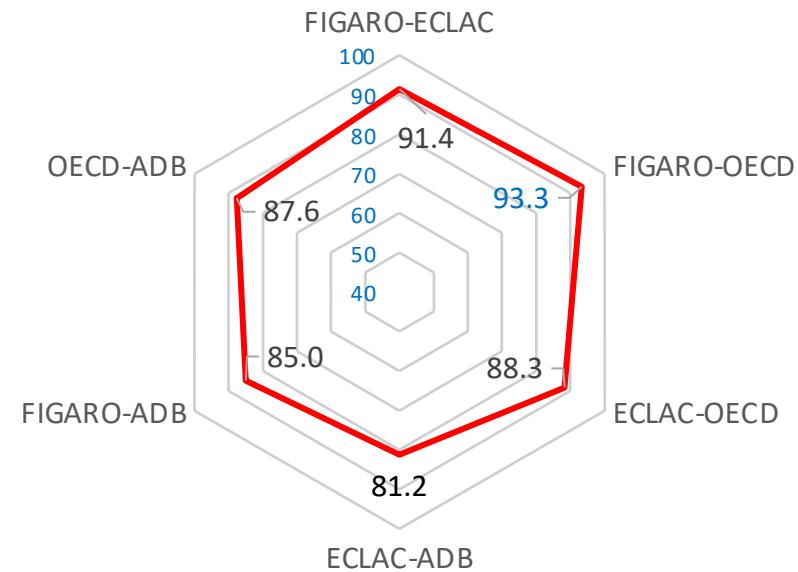
For the Mexican case, in the case of total exports the differences is relative higher than in the GDP case. The similarity index reproduce the differences with more distance among ECLAC, ADB and OECD

Exports (US\$ Million)



Similarity Index

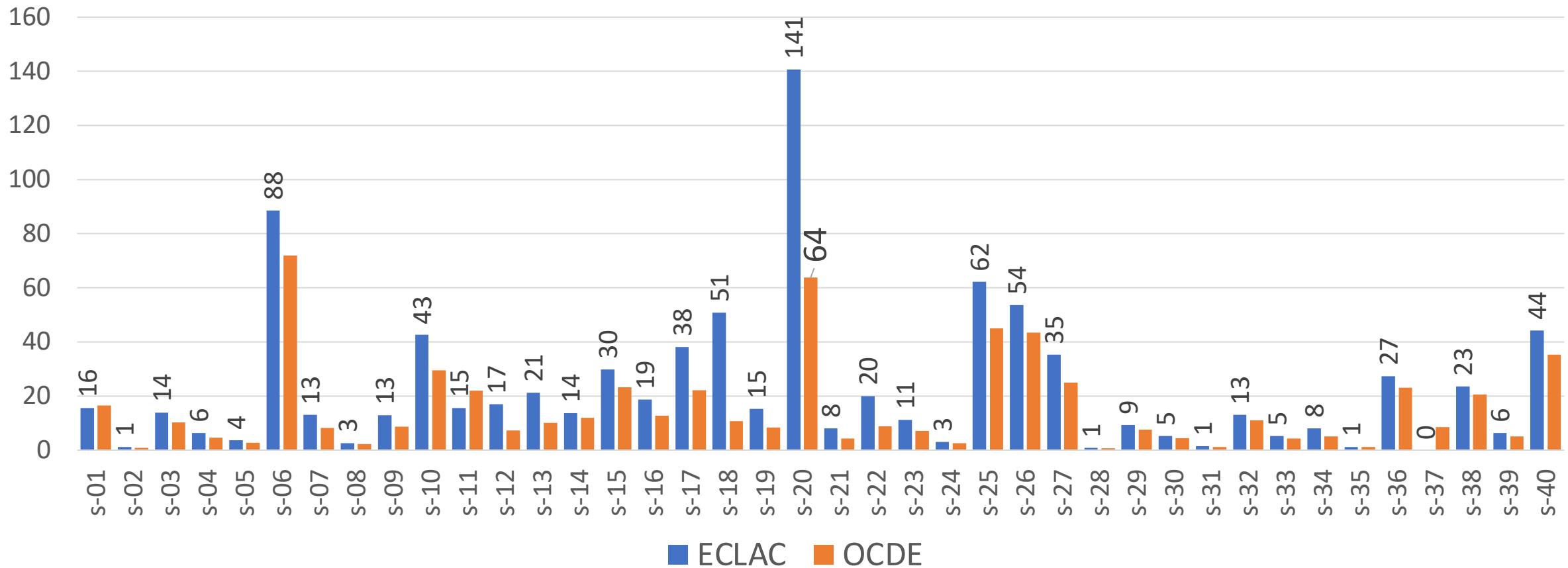
Total Exports



Source: Mexico IOT in each initiative (OECD, ADB, EUROSTAT and ECLAC).

ECLAC figures show higher values than OECD mainly in vehicles (s26) and electronics and electrical equipment (s18)

Mexico: Total domestic value by industry, ICIO TIVA OECD versus ECLAC IOT, 2018
(Millions of dollars)



Conclusions (1)

- IOTs allow for a more informed analysis of the state of Regional Integration (productive structure and complementarities).
- A matrix with a greater number of economic sectors allows for a closer analysis of the productive structure.
- Given messages for Policy makers in Bogotá with some calculated indicators:
 - The Pacific Alliance countries have an underexploited productive integration (less than 2% of the exported value in terms of Value Added).
 - The United States is a major partner of Mexico.
 - Asia Pacific and (China) are gaining more space as relevant partners.



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Thank you!
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NACIONES UNIDAS

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Instrumento regional
de la Unión Europea para
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