

# Challenges and answers in developing the IOT for Central America, Mexico and the Dominican Republic

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Regional-Global TIVA meeting  
23 October 2020



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Economic Commission for Latin America and the Caribbean  
Subregional Headquarters in Mexico

# Background

- The development of the first regional input-output table for Latin America was a project financed by the United Nations General Secretariat, as part of the Development Account Programme.
- The project aimed to strengthen the statistical and analytical capacities of Latin American countries in the analysis, design and evaluation of industrial and trade policies, through the use of national, subregional and regional input-output tables.
- It was a 24-month process, in close collaboration with national organizations (central banks and statistical institutes) and regional bodies (the Central American Economic Integration System, SIECA).
- ECLAC Mexico was in charge of developing the first IOT for Central America, Mexico and the Dominican Republic.



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# Regional IOT

	Consumo intermedio intrarregional								Consumo final intrarregional								Exportaciones totales extrarregionales	Valor bruto de la producción
	CRI	SLV	GTM	HND	NIC	PAN	MEX	DOM	CRI	SLV	GTM	HND	NIC	PAN	MEX	DOM		
CRI	<b>Z<sup>CC</sup></b>	Z <sup>CS</sup>	Z <sup>CG</sup>	Z <sup>CH</sup>	Z <sup>CN</sup>	Z <sup>CP</sup>	Z <sup>CM</sup>	Z <sup>CD</sup>	<b>F<sup>CC</sup></b>	F <sup>CS</sup>	F <sup>CG</sup>	F <sup>CH</sup>	F <sup>CN</sup>	F <sup>CP</sup>	F <sup>CM</sup>	F <sup>CD</sup>	X <sup>CRdM</sup>	VBP <sup>C</sup>
SLV	Z <sup>SC</sup>	<b>Z<sup>SS</sup></b>	Z <sup>SG</sup>	Z <sup>SH</sup>	Z <sup>SN</sup>	Z <sup>SP</sup>	Z <sup>SM</sup>	Z <sup>SD</sup>	F <sup>SC</sup>	<b>F<sup>SS</sup></b>	F <sup>SG</sup>	F <sup>SH</sup>	F <sup>SN</sup>	F <sup>SP</sup>	F <sup>SM</sup>	F <sup>SD</sup>	X <sup>SRdM</sup>	VBP <sup>S</sup>
GTM	Z <sup>GC</sup>	Z <sup>GS</sup>	<b>Z<sup>GG</sup></b>	Z <sup>GH</sup>	Z <sup>GN</sup>	Z <sup>GP</sup>	Z <sup>GM</sup>	Z <sup>GD</sup>	F <sup>GC</sup>	F <sup>GS</sup>	<b>F<sup>GG</sup></b>	F <sup>GH</sup>	F <sup>GN</sup>	F <sup>GP</sup>	F <sup>GM</sup>	F <sup>GD</sup>	X <sup>GRdM</sup>	VBP <sup>G</sup>
HND	Z <sup>HC</sup>	Z <sup>HS</sup>	Z <sup>HG</sup>	<b>Z<sup>HH</sup></b>	Z <sup>HN</sup>	Z <sup>HP</sup>	Z <sup>HM</sup>	Z <sup>HD</sup>	F <sup>HC</sup>	F <sup>HS</sup>	F <sup>HG</sup>	<b>F<sup>HH</sup></b>	F <sup>HN</sup>	F <sup>HP</sup>	F <sup>HM</sup>	F <sup>HD</sup>	X <sup>HRdM</sup>	VBP <sup>H</sup>
NIC	Z <sup>NC</sup>	Z <sup>NS</sup>	Z <sup>NG</sup>	Z <sup>NH</sup>	<b>Z<sup>NN</sup></b>	Z <sup>NP</sup>	Z <sup>NM</sup>	Z <sup>ND</sup>	F <sup>NC</sup>	F <sup>NS</sup>	F <sup>NG</sup>	F <sup>NH</sup>	<b>F<sup>NN</sup></b>	F <sup>NP</sup>	F <sup>NM</sup>	F <sup>ND</sup>	X <sup>NRdM</sup>	VBP <sup>N</sup>
PAN	Z <sup>PC</sup>	Z <sup>PS</sup>	Z <sup>PG</sup>	Z <sup>PH</sup>	Z <sup>PN</sup>	<b>Z<sup>PP</sup></b>	Z <sup>PM</sup>	Z <sup>PD</sup>	F <sup>PC</sup>	F <sup>PS</sup>	F <sup>PG</sup>	F <sup>PH</sup>	F <sup>PN</sup>	<b>F<sup>PP</sup></b>	F <sup>PM</sup>	F <sup>PD</sup>	X <sup>PRdM</sup>	VBP <sup>P</sup>
MEX	Z <sup>MC</sup>	Z <sup>MS</sup>	Z <sup>MG</sup>	Z <sup>MH</sup>	Z <sup>MN</sup>	Z <sup>MP</sup>	<b>Z<sup>MM</sup></b>	Z <sup>MD</sup>	F <sup>MC</sup>	F <sup>MS</sup>	F <sup>MG</sup>	F <sup>MH</sup>	F <sup>MN</sup>	F <sup>MP</sup>	<b>F<sup>MM</sup></b>	F <sup>MD</sup>	X <sup>MRdM</sup>	VBP <sup>M</sup>
DOM	Z <sup>DC</sup>	Z <sup>DS</sup>	Z <sup>DG</sup>	Z <sup>DH</sup>	Z <sup>DN</sup>	Z <sup>DP</sup>	Z <sup>DM</sup>	<b>Z<sup>DD</sup></b>	F <sup>DC</sup>	F <sup>DS</sup>	F <sup>DG</sup>	F <sup>DH</sup>	F <sup>DN</sup>	F <sup>DP</sup>	F <sup>DM</sup>	<b>F<sup>DD</sup></b>	X <sup>DRdM</sup>	VBP <sup>D</sup>
Importaciones intermedias extrarregionales	M <sup>C</sup>	M <sup>S</sup>	M <sup>G</sup>	M <sup>H</sup>	M <sup>N</sup>	M <sup>P</sup>	M <sup>M</sup>	M <sup>D</sup>										
Impuestos sobre la producción	T <sup>C</sup>	T <sup>S</sup>	T <sup>G</sup>	T <sup>H</sup>	T <sup>N</sup>	T <sup>P</sup>	T <sup>M</sup>	T <sup>D</sup>										
Fletes y seguros	F <sup>SC</sup>	F <sup>SS</sup>	F <sup>SG</sup>	F <sup>SH</sup>	F <sup>SN</sup>	F <sup>SP</sup>	F <sup>SM</sup>	F <sup>SD</sup>										
Valor agregado doméstico	VAD <sup>C</sup>	VAD <sup>S</sup>	VAD <sup>G</sup>	VAD <sup>H</sup>	VAD <sup>N</sup>	VAD <sup>P</sup>	VAD <sup>M</sup>	VAD <sup>D</sup>										
Valor bruto de la producción	VBP <sup>C</sup>	VBP <sup>S</sup>	VBP <sup>G</sup>	VBP <sup>H</sup>	VBP <sup>N</sup>	VBP <sup>P</sup>	VBP <sup>M</sup>	VBP <sup>D</sup>										

- It comprises eight countries: Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama.
- With data for 2011.
- And 40 sectors.
- It is expressed in millions of dollars (US\$) and basic prices.

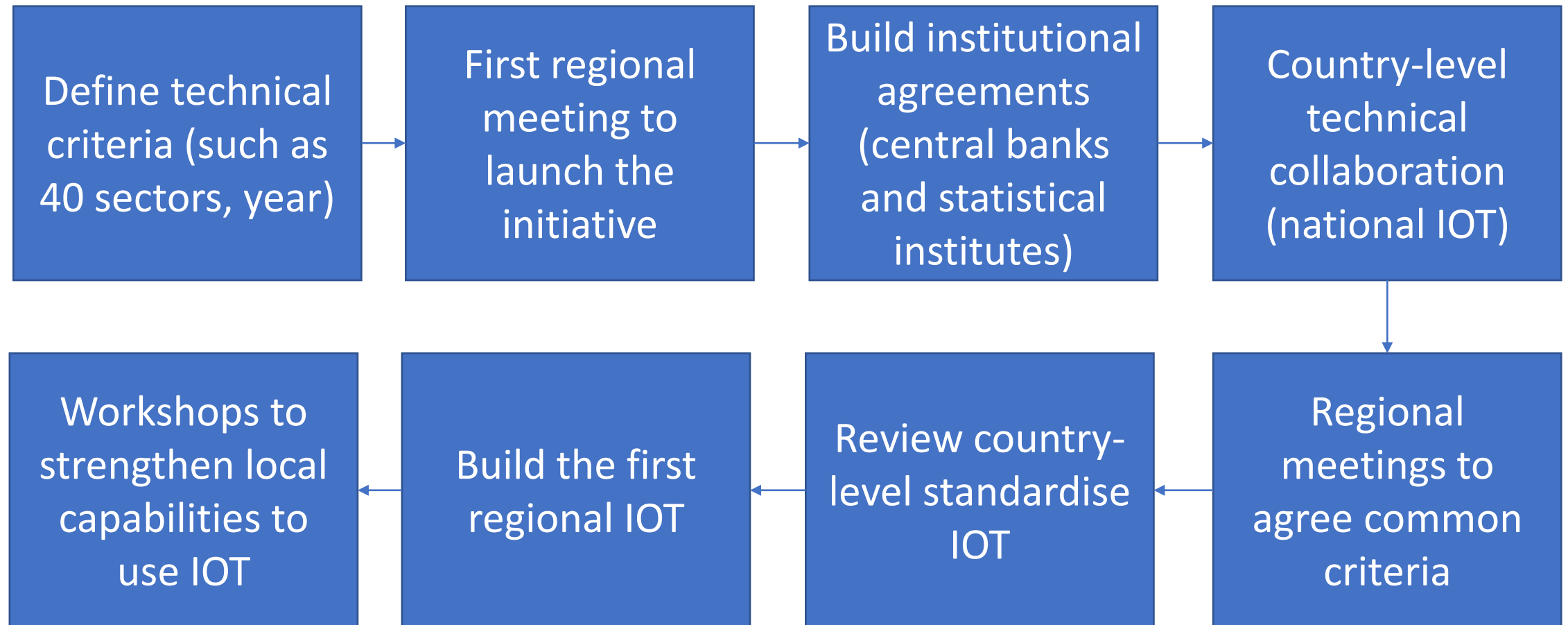


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# The process



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# Main challenges

## Political:

- » Public information dissemination policies without compromising its confidentiality (for instance, monopolies in some sectors).

## Technical Standardisation:

- » Agree homogeneous criteria for the registration of goods trade accounts (re-exports, re-imports).
- » Identify the amount paid for freight and insurance associated with imports (FOB prices).
- » Agree a common registration system for trade in services.



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## **First report:** Productive integration through intraregional trade of intermediate inputs in Central America, Mexico and the Dominican Republic: An analysis based on vertical specialization indicators

It aims is to analyze how deep, varied and connected are the production and trade processes among Central America, Mexico and the Dominican Republic.



[https://repositorio.cepal.org/bitstream/handle/11362/45941/1/S2000562\\_es.pdf](https://repositorio.cepal.org/bitstream/handle/11362/45941/1/S2000562_es.pdf)



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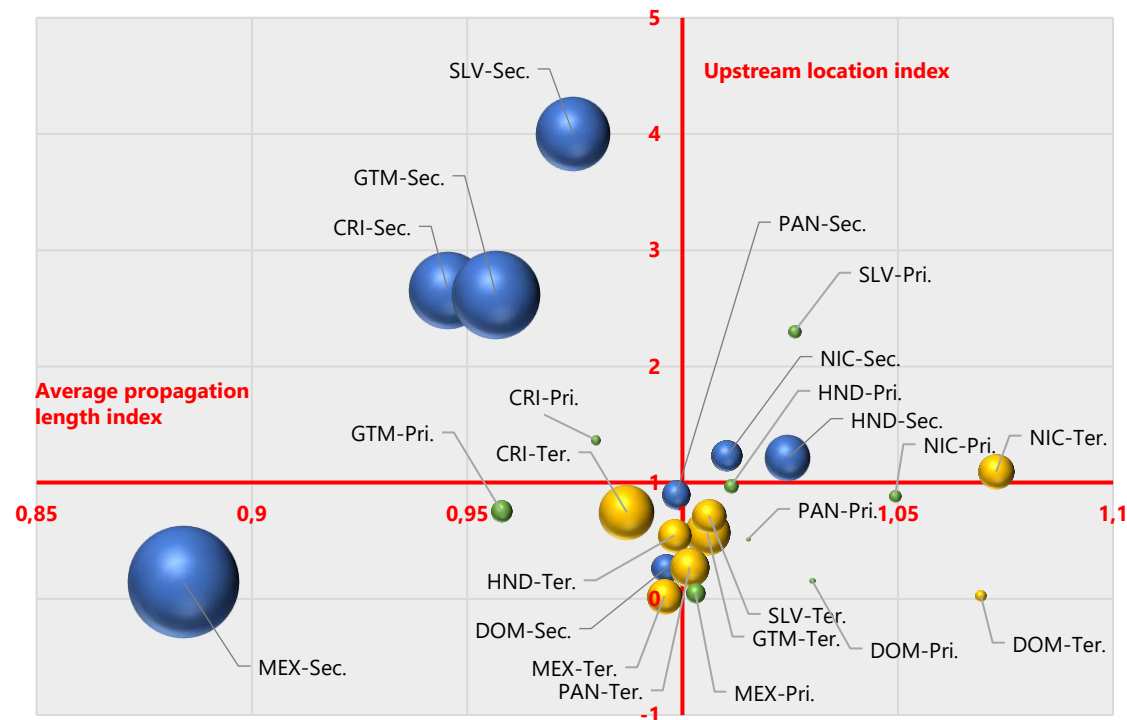
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The reduced value of the average length of the propagation index shows that value chains among the analysed countries are short and shallow. Although it is the most commercially integrated Latin American subregion (according to gross trade data), imports of intermediate goods that come from outside the same subregion are very important.

**Central America, Mexico and the Dominican Republic: average length of propagation and upstream location indices, by country and sector, 2011**

*(The size of the circles represents intra-regional intermediate exports)*



Source: ECLAC.

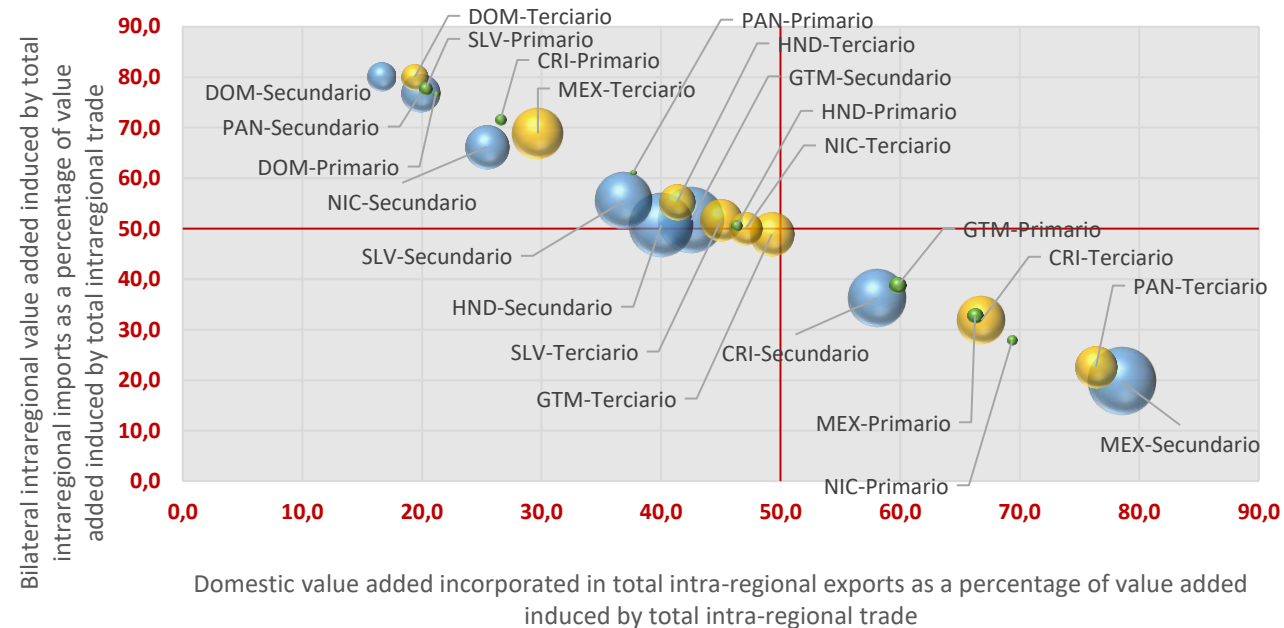


# Second report: Trade in value added in and within Central America, Mexico and the Dominican Republic

This report aims to examine intraregional trade flows in terms of added value, in order to identify the role played as suppliers (exporters) or demanders (importers) of different sectors in intraregional trade.

**Centroamérica, México y República Dominicana: índices de longitud promedio de propagación y de ubicación aguas arriba, según país y gran sector de actividad económica, 2011**

*(El tamaño de las circunferencias representa las exportaciones intermedias intrarregionales)*



Source: ECLAC.

● Sectores secundarios   ● Sectores terciarios   ● Sectores primarios



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Distribución funcional del ingreso inducido por el comercio entre los países de Centroamérica, México y la República Dominicana

Luis Daniel Torres González  
Krista Zafra García



Different patterns of commercial regional integration and value -added generation are observed among selected countries:

- Mexico is as a net supplier of primary and secondary goods, and a net demander of services.
- Costa Rica is a net supplier of secondary goods and services, and it demands primary goods.
- Guatemala and Nicaragua supply primary goods, and demand secondary goods and services.
- Panama is a net supplier of services, and demands primary and secondary goods.
- El Salvador, Honduras and the Dominican Republic are net buyers of primary and secondary goods, and services

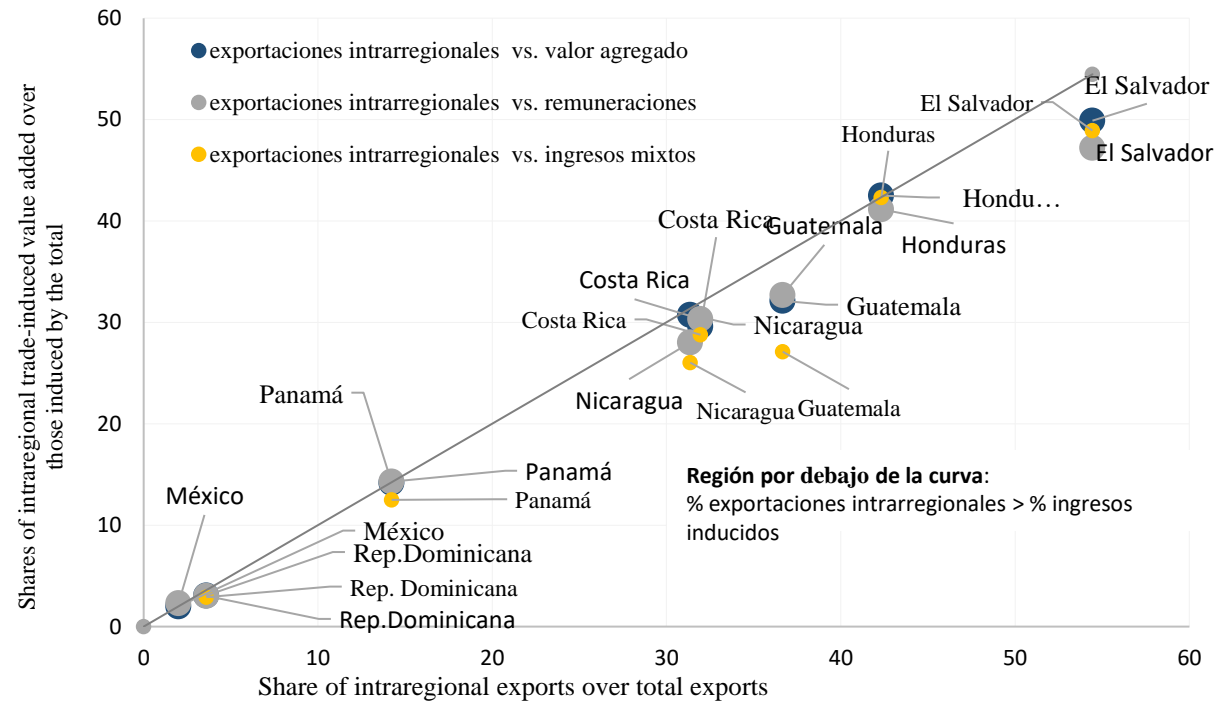
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# Third report: Functional distribution of trade-induced value added among the Central American countries, Mexico, and the Dominican Republic

This report aims to study the relationship between trade performance and the distribution of the resulting value added between salaries, mixed income and gross operating surplus.

Central America, Mexico and the Dominican Republic: Intra-regional exports and their induced added value (In percentages)



Source: ECLAC.



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# Some of the main findings

- Non-exporting sectors observe a more favorable value-added distribution for salaries and mixed income than the exporting sectors.
- The opposite is observed for gross operating surplus: for most countries in the region, the share of gross operating surplus induced by exports (intra or extra-regional) is greater than the share observed for the economy as a whole.
- The share of wages induced by intra-regional exports is, in general, lower than or similar to the share of wages induced by extra-regional exports.
- These are dismal results in countries that have followed an export-growth model in recent decades (in terms of inclusive economic growth).



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# Next steps

- Updating the regional input-output tables (2016 or 2017).
- Disseminating the tables and reports.
- Application of regional IOT for economic policy (for instance, economic reactivation after COVID-19).

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