The role of Central American Trade in developing El Salvador's high-value exports

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Abstract

This paper describes the development and evolution of El Salvador's industrial exports. This paper found that El Salvador's exports to other Central American countries enhance business opportunities observed in an increase in the number of new products exported to this region and this products are more complex compared to the regular exports outside region. However, this paper also finds that the products that are exported first to Central America and then to the rest of the world are not the most sophisticated. El Salvador may benefit from trade diversion that prevents it from exporting high quality products to the world except Central America.

Keywords: El Salvador exports, manufacturing industry complexity, trade diversion, Central American trade.

Importance of the Industrial Sector for El Salvador

Currently in El Salvador the indutrial sector employs fewer people than the commercial and agricultural sector. However, the industrial sector represents 95% of El Salvador's exports (Banco Central de Reserva de El Salvador, 2019). According to the Dirección Nacional de Estadísticas y Censos (2019), the industrial sector absorbs 15% of the workforce, that is, more than 420 thousand jobs, it also represents 17.4% of the GDP.

The industrial sector has historically employed a large part of the labor market and the GDP per worker has not stagnated compared to other sectors. Figure 2 shows that the productivity of this sector is twice larger than the commerce, restaurants and hotels sector and four times larger than the agricultural sector. This is because its growth is not constrained by the size of the Salvadoran market. In addition, labor productivity determines the salary and quality of life of workers. A country with the geographic and population size of El Salvador should be growing mainly thanks to the export sector, the industrial sector therefore represents an opportunity that the country must strengthen.

Fig 1. Workers by sector, 2018

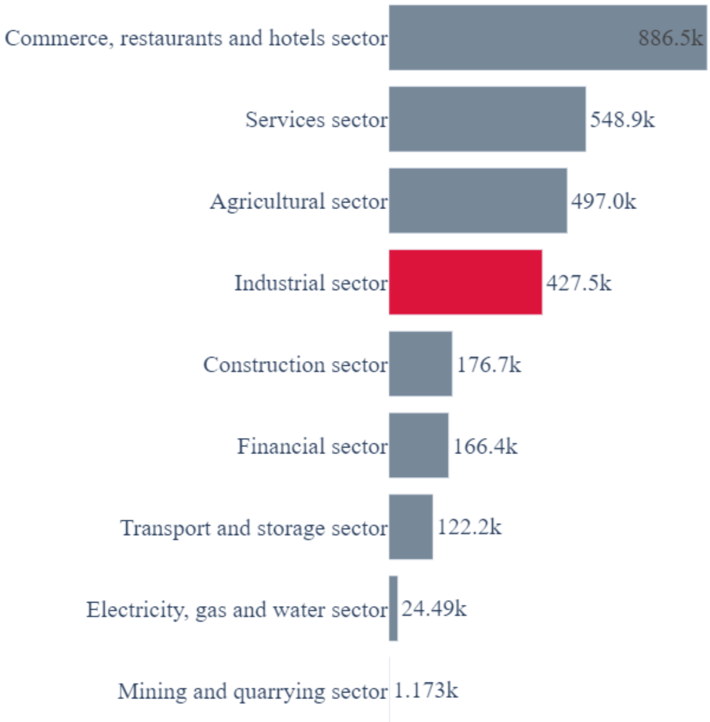
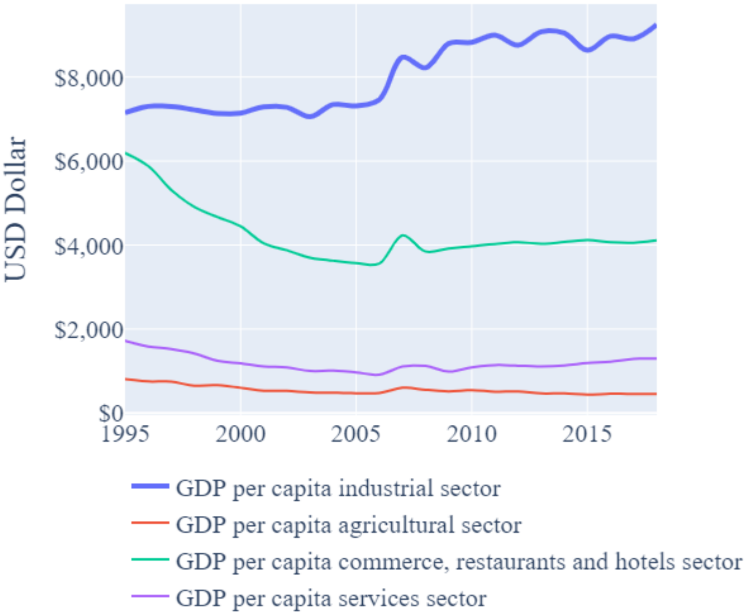


Fig 2. Labor productivity: GDP per worker of the most important sectors at 2014 constant prices



Evolution of the sector over time

The sector has grown significantly over time. In 1994, the industrial sector represented 76.6% of exports and agricultural sector 23.1% (Banco Central de Reserva de El Salvador, 2019). In the 2000s, the sector grew larger. The industrial sector achieved 95% of exports and grew about 5 times during 1995 and 2015.

In addition, since 1994 there have been approximately 1,800 new exported products according to the 8-digit HS code, only in this sector. These new products represent more than $1.2 billion dollars in exports, more than 3 times the exports of the agricultural sector in 2015. However, Fig. 3 shows a deceleration of the industry in terms of new products, which shows the challenges Salvadoran businesses face to develop new products.

Central American Commerce

Unlike the rest of the world, the industrial sector plays a more important role in Central America, of the total exports from El Salvador to the region, more than 97% were industrialized goods since 1994. According to the Banco Central de Reserva, if the maquilas are excluded, the main commercial partner of El Salvador is Central America and then the United States.

The products that are exported to Central America and that were not exported in 1994 are around 1,600, which represents almost $550 million dollars in exports (see Fig.4). When compared to Figure 3, it is evident that the discovery of business opportunities occurs mainly when exporting to Central America. Intra-regional trade is vital so that the Salvadoran industrial sector can experiment with new products, it is common for countries to strengthen their commercial relations with the nearest countries before they can diversify their portfolio of destinations.

Fig 3. New products exported to the World

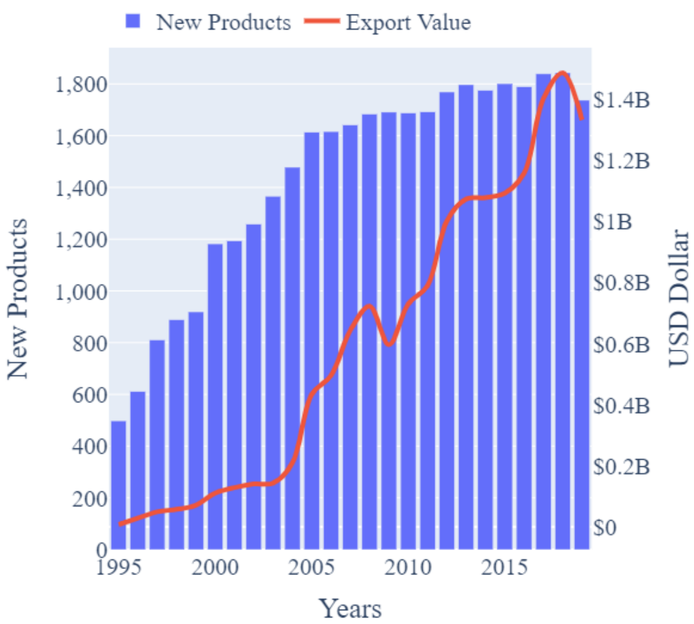
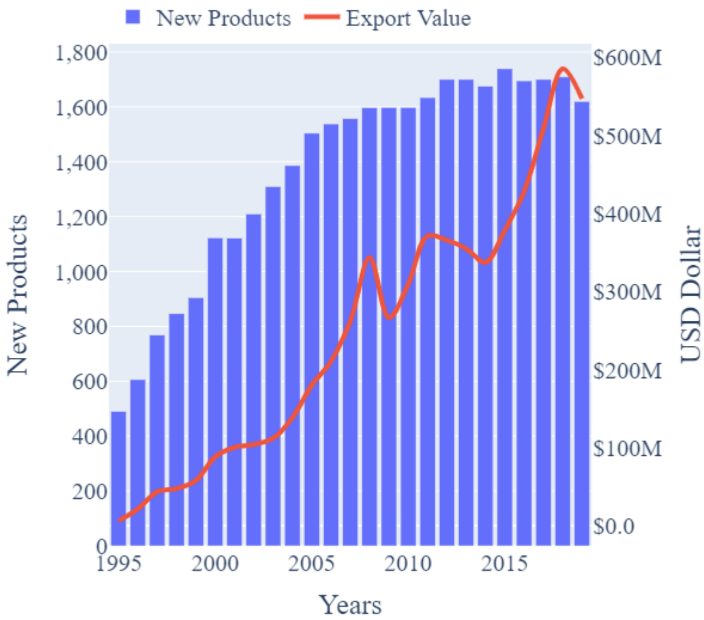


Fig 4. New products exported to Central America



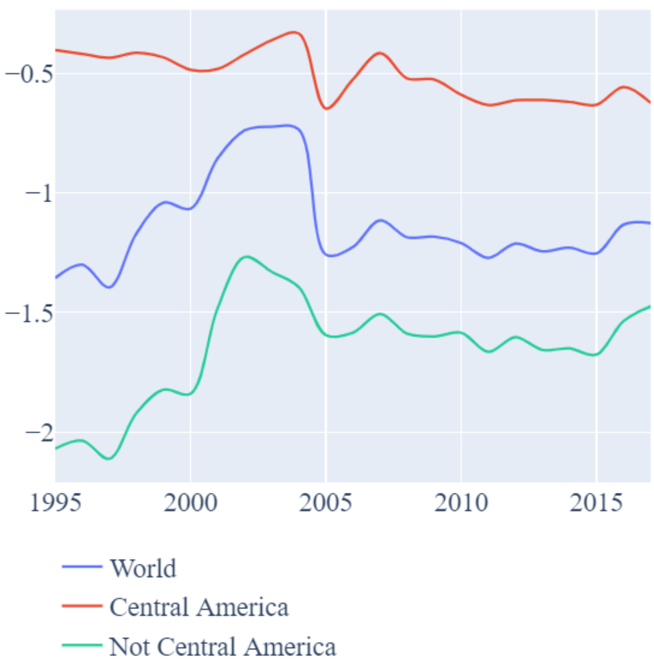
Complexity of the basket of goods exported according to the destination

To demonstrate the level of technological development, I use a weighted average of the Product of Complexity Index (PCI) of the Atlas of Economic Complexity at six digits of the HS exports. PCI ranks the sophistication of the productive know-how required to produce a product. PCI is calculated according how many countries can produce a specifica kind of product (Growth Lab at Harvard University, 2019)[1]. This index classifies products according to their complexity, therefore, the index is higher for products such as chemical and machinery that tend to be very complex, since they require a sophisticated level of productive knowledge and usually arise from large companies with a number of highly qualified employees. The index is low for raw materials or simple agricultural products that only require a basic level of technical knowledge and can be produced by an individual or family-run company.

Despite the new range of products, El Salvador has failed to sophisticate its productive knowledge. The index used in Figure 5 indicates that El Salvador has stagnated in terms of technological intensity. However, it is possible to appreciate two types of goods exported, those sent to Central America and those sent to the rest of the world – a drop is observed in 2005, this is due to a reclassification of the maquilas in the Banco Central de Reserva data.

Products with greater added value are sent to Central America. The importance of the region for El Salvador stems from not only the size of the Central American market, but also to the quality of the exports (see figure 6). Products with more complexity will leave more income for national workers and will benefit local producers.

Fig 5. Weighted average PCI of exports according to destination

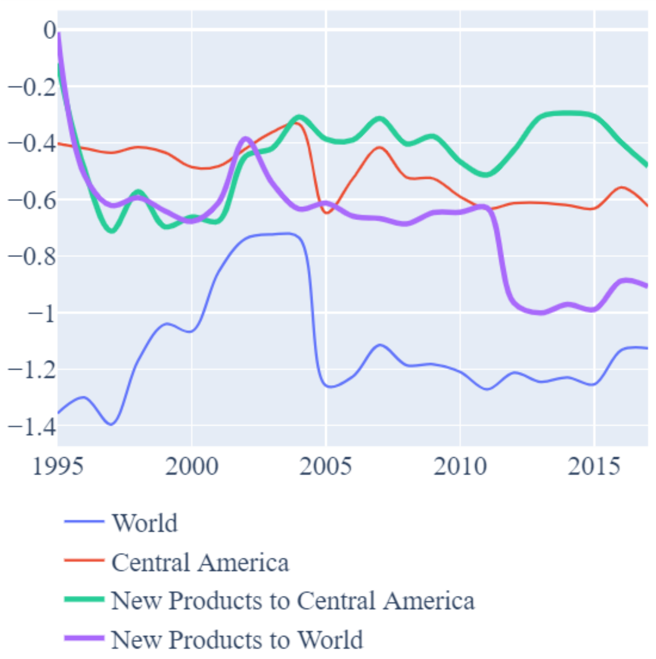


Complexity of exports according to product type

The new products with more acceptance abroad are more sophisticated that the average, although their intensity of complexity has decreased in recent years. If we remember Figure 3, the levels of trade have increased and given that this is a weighted average, we could note that the decrease in the index is due to the fact that the products that have had more acceptance abroad are not the most sophisticated.

On the other hand, the new products are not more sophisticated than the average exported to Central America (purple line in figure 6). The new business opportunities appear to be of less added value than those of the Central American region. It seems a stalemate not only in the discovery of new businesses (see figure 3) but also of more sophisticated products to which the country are already exported.

Fig 6. Weighted average PCI of exports according to destination and new products



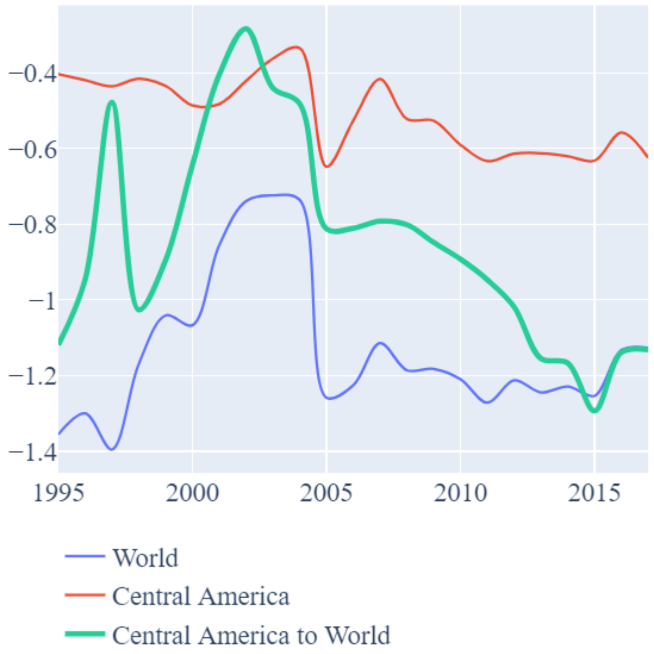
Products exported to Central America and then to the rest of the world on average are no more complex than those exported to Central America (green line in figure 7). The products that benefit from economies of scale within the region and then want to compete with the rest of the world are low value-added products with respect to the intra-region.

Products first exported to Central America and then to the rest of the world were more complex to average exports, however they converged over time to the global average. It seems to indicate that recently, intra-regional trade is not improving the quality of exports outside the region.

This seems to indicate that El Salvador benefits from trade diversion in the region. Trade agreements allow El Salvador to compete in goods with high added value, however, these goods are not competitive outside the region. Recently, the quality of exports is more similar to the global average than to the average for Central America.

[1] More detail of the index see: http://atlas.cid.harvard.edu/glossary

Fig 7. Weighted average PCI of exports according to destination



Conclusions

• The industrial sector has grown considerably in recent years, especially thanks to intra-regional trade. The sector has diversified its export products especially for Central America. However, the stage of self-discovery has slowed as the country is having trouble discovering new opportunities and products.

• Sophistication of exported products has stagnated. However, Central American exports are relatively more complex than exports to the rest of the world.

• Contrary to expectations, new exported products do not have a higher degree of sophistication than the Central American average. This exacerbates the problem of finding profitable business opportunities that allow the use of skilled labor in the country. The least complex products are those that grow in exports and those that find stable markets.

• Central American products are not obtaining the economies of scale necessary to compete outside the region. Once a high value-added product is sent outside the region, it is not accepted by the foreign market. While less sophisticated products appear to be more sustainable and constant.

• There seems to be a trade diversion from which the Salvadoran industrial sector is benefiting. This would explain why El Salvador is unable to send sophisticated products to outside of Central America and because historically it has maintained a gap between the complexity of products that it sends to Central America and the rest of the world. If this were not the case, one would expect the country to once reach sufficient economies of scale explore new destinations outside the region and therefore exports to the rest of the world should converge in terms of sophistication with Central American exports. The problem of trade diversion is that it is not sustainable over time, as the Central American region increases its trade agreements.

Recommendations

• The country must strengthen commercial ties with its most important destinations. The customs union between Honduras and Guatemala can be a growth opportunity for the industry since these two are the main export destinations. Improving the conditions of intra-regional trade will improve the technological development of the country, reaching the economies of scale necessary to compete globally, by reducing costs.

• El Salvador must continue with the self-discovery of new products and new destinations. Strengthen business incubators and provide any kind of help to industrial products. Train exporters who want to explore new destinations, positioning Salvadoran products abroad. Support the products with the highest added value and which have guaranteed to be profitable within the region. These measures could help reduce the complexity gap between Central American destinations and the rest of the world.

• The problem must be studied to find some reason why trade diversion happens or debate because there is no convergence in the complexity of intra-regional exports and the rest of the world. The main suspects of the low competitiveness of the industry outside of Central America could be high transportation costs outside of Central America or it could be associated with a particularity to the value chains to which Salvadoran products are integrated in Central America as less licensing requirements or positioning of Salvadoran brand.

References

Banco Central de Reserva de El Salvador, 2019.

DYGESTIC, 2012. *Encuesta de Hogares de Propósitos Múltiples*, Ciudad Delgado: s.n.

Growth Lab at Harvard University, 2019. *Atlas of economic complexity*.
Available at: http://atlas.cid.harvard.edu/glossary