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Global value chains, learning, innovation and policies. CGV case of aviation in the state of San Luis Potosi

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Abstract

The structure of international trade has changed in the last five decades, it has grown from a single component, goods, structure or current composition, with three components, goods, services and intermediate goods. One factor in this change, which has broad and deep implications are global value chains. A study and implications is dedicated this article, with particular reference to the Global Value Chain aeronautical present in the state of San Luis Potosi, and learning and innovation options for scaling the participating companies.

Global value chains, scaling, learning and innovation

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Introduction

The economic growth and development is one of the priorities of governments for its wide repercussions. An interesting option that has been developed for Asians to join global value chains countries. This has allowed them to advance productive and socially, an element that lacks the experience of the last decades in Mexico and Latin America. To explore this option is dedicated this work, particularly the CGV aeronautics, present in the state of San Luis Potosi.

Background

Changes in the structure of international trade

International trade has evolved over the last sixty years. At the end of the Second World War, the weight of international trade on global GDP was lower than those recorded in previous years to World War I levels; is from early 50s to their weight starts increasing, goods were the central part of the trade, supported by services (transport, insurance and some sightseeing). In the 60s the services become more important in GDP in advanced countries, in the 70s this trend is reflected in international trade in services 80s join the multilateral negotiations, joining the WTO Agreements 1994.

At present, services account for 20% of all internationally traded, and growing. In the 80s when it begins to gain strength trade in intermediate goods and parts internationally, partly driven by the global value chains, CGV, as they were relatively new issues, the negotiating mandate for the WTO Doha Round, launched in 2001, they not included, currently trading being done in regional or bilateral negotiations outside of the multilateral negotiations, which is where greater overall effect would[6], trade in goods or parts currently accounts for one third of international trade.

The facts stated in the preceding paragraphs show that the structure of international trade has changed from that which existed until the 60s years of the last century has grown from a component goods in the first seven decades of the twentieth century, the current three components: goods, services and parts or components (intermediate goods).

Trade in intermediate goods has continued to grow, its rise cannot be understood without understanding the Global Value Chains, CGV, is one of the novel aspects of the last three decades is relatively new, so their analysis yet It is being developed as well as methods to measure it.[7]. It is an important phenomenon not only in terms of production and investment (including FDI) but also infrastructure, logistics and among others, ie it is complex. There are other proposals for naming designation "global value chain" CVM "relocation of production", "Fragmentation of production".

6 Bianchi, E. and C. Szpak (2013), global production chains: Implications and governance, FLACSO, Buenos Aires.

7 Blyde, Y. (Coordinator) (2014), Mill synchronized. Latin America and the Caribbean in the era of global value chains, IDB Special Report on Integration and Trade.

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GVCs

Among the causes of GVCs we are: economic, technological, services, FDI, multilateral and regional negotiations, which have been changing over time, its origins can be traced beyond the last three decades[8], the internationalization of production is not a new process [9].

GVCs are not static, rather they are dynamic, changing. For example, Japan has relocated first part of its production in Korea, Taiwan, Hong Kong, about the term "flying geese" which refers to the fact that an advanced country, helps and encourages the development of its neighbors was coined.

Then delocalized part of their production to China, Thailand. Or if we consider the case of China[10], GVCs incorporated from the 80s, a time production was done internally, now a part is made in (less developed) countries nearby. This figure is not in Latin America, perhaps because of the lack of a country with great productive development (referring to Mexico and Brazil, which in theory should lead becomes), the distances between countries, higher than among Asian, limitations interconnectivity and infrastructure, among others[11].

The adoption of an export model and market economy by Japan, after the end of World War II, and the subsequent adoption of the model by South Korea, Taiwan and Hong Kong, allowed production succeeded in joining companies in developed countries, is another cause of the development of GVCs. Also the success of these countries, meant that the area of high-income countries should be expanded, to be formed by the US, Western Europe and Australia, went on to have an Asian component, Japan, South Korea, Hong Kong and Taiwan, which were incorporating their neighbors.
GVCs are being developed in the primary and tertiary secondary sector (manufacturing), and producing various goods and services such as televisions, cell phones, cars, food, financial services, healthcare, software, business process outsourcing (BPO by his acronym), others.

[8] Although before the two world wars there were companies with international operations, the process of corporate globalization is accentuated after the Second World War, in parallel to the internationalization of companies in the multinational banking, which follows its customers is brewing in 60s the Euromarket capital develops, unregulated financial space nationally. Important background of globalization.

[9] Agtmael, A. (2007), The Age of emerging markets. How a new class of world-class companies are taking the world Editorial Norma, Bogotá. Baldwin, R. (2013), Global supply chains: Why They Emerged, Why They Matter, and Where They are going in Elms, D. and P. Low (Eds.) (2013), Global Value Chains in a changing world , WTO, Fung Global Institute and Nanyang Technological University, Switzerland. Spence, M. (2012), The inevitable convergence. The future of economic growth in a world at various speeds, Taurus, Mexico.

[10] GVCs incorporated in the 80s, which combined with the adoption of market model, opening up, gradualism and flexibility in economic management, he has been a great economic development. In fact some consider it a return, as to the Middle Ages, had equal or better growth than Europe.

[11] Kamiya, M. (2012), Latin America's Prospects for Upgrading in Global Value Chains, Mimeo, Colegio de Mexico.

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The development of GVCs is heterogeneous, while manufacturing output decays, agriculture tends to be vertically integrated.

Trade based on intermediate goods is different from goods that was located in one country at the beginning of the industrial era (more than two centuries ago), and then based on plants of the same company or with few suppliers, few countries, most of the last century. Currently, a product can be produced by produced by different companies, in several countries, Baldwin (2013), apparently is a trade that is not based on the theories of absolute advantage Adam Smith or comparative advantage parties or on D. Ricardo, in which the countries specialized in the production of a good, all the good produced in one country, because they could produce at lower comparative cost. Although if you look good, or a company looking to produce good based on a lower price, whether it occurs wholly or parties produce other companies, in different countries, if in this way is able to produce at lower cost relative . It is still the basis of comparative advantage, but viewed in the context of globalization, with higher technology, lower production costs and transport, improving and cheaper communication and decrease (partial) trade barriers. Appreciate that at the base of the CGV is the comparative advantage is more complex now.

With GCS, now countries need not necessarily specialize in the production of a good; can specialize in part or parts thereof. It is an interesting option for companies in developing countries, because they no longer create the entire production process to compete internationally, they can join the globalization, participating in one or more stages of production of a good in a CGV; accessing highest levels, knowledge and contacts.

GVCs are key to the organization of the current global production, although located in different countries, geographical location really is not wide, has a strong regional character, and have appeared what is called "Factory North America", " Factory Europe "and" Factory Asia ". In each area or "factory", there is a center, a country of more productive and technological development, and a periphery, in which the production of lower technological content and value added is done, but with lower costs for the operations they perform. US, Germany and Japan, are often categorized as centers, China advances to be downtown.

The study of GVCs are often organized around four areas: i) The input product structure CVG for a product, ii) The geographic scope of the CGV of a product and the trends in that market, iii) The structure of governaza the CGV and sector analysis, iv) The institutional framework of the GCS, v) Scaling of local businesses and participants in the GCS. It is the approach we will take to the study of aeronautics CGV San Luis Potosi.

Participation of companies in the global aerospace value chain, CGVA in San Luis Potosi and escalation

The aviation industry is already present in Mexico is a key sector for our economy because it shows high growth rates, it is technologically advanced, high quality standards used, generating qualified employment, has important linkages among others. Mexican aviation industry produces goods of low technological content (relatively, it is expected to start), but gradually moving to better jobs and products. Mexico is a good investment receiver to that sector, and it has regional clusters in aerospace, Northwest, Northeast, center (where is located San Luis Potosi, Queretaro, Mexico City, State of Mexico and Puebla).

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If we classify businesses by size (employment) is that 70% are medium and small, 23% are large and 7% micro; recorded a significant participation of foreign companies. 80% of its production is exported; the main markets are the US (74%), Canada (8%), France (3%), Great Britain, South America (catchment area) and others.

The aviation industry in San Luis Potosi starts in 2000, showing dynamism, business size composition (employment) is similar to the national trend, a high proportion of medium and small businesses. A development has greatly helped the automotive, electronics, domestic chemical and state experience, this ability to learn was one of the determinants of the location of the CGVA in the state and Mexico, as suggested about learning as a competitive advantage. Recently, gradually they are installed engineering centers and linked to the export activity and assembly, to country and state level design; statewide use of quality systems and certification companies, innovative experience, the proximity of the US market and connectivity with other countries, the existence of good communications, roads, and rail car tracks (north stands, Midwest and East), airports, customs facilities, technical and university staff, well prepared, among others. The Latin American experience greater escalation in GVCs suggests that depends on several factors, internal to enterprises, and external, and institutional infrastructure, human resources and support.

Potosi aeronautical production of foreign and Mexican companies, generates direct and indirect jobs, exports most of its production to the US, Britain and South America, its influence is diversified; It is a supplier of companies such as Boeing, Anixter, General Electric, others (nationally and internationally).

The CGVA SLP is also located in the manufacture of commodities, where the quality requirements are established by companies that are suppliers, while aeronautical products for further development are more demanding, which are set by government authorities . In turn, the suppliers of the companies CGVA SLP are mostly foreign companies or subsidiaries; here are options for improvement, for example looking to be installed in the country. Companies in the SLP CGVA have plans to produce higher value-added chain scale, and go to the pre and post production.

Policy Implications

Considering that international trade is composed of three components, it has important consequences in various aspects of economic policy, such as industrial, commercial, educational and innovative policy. It is also necessary to have integrated policies, coordinated (at the federal, state and local level, by sector, public-private), decentralized, with adequate resources, accountability and flexibility of organizational design. The industrial, commercial and integration policies are directly related to the GCS.

In Mexico, until recently, industrial policy and integration was focused on promoting the total output of goods nationally, while in Asian countries, a region that has best taken advantage of the opportunities of the relocation of production, industrial policies are more CGV regional focused, with good competitive results. This can be seen in assessments of industrial policies, support for SMEs, in several Latin American countries, integration into global chains is not mentioned, and the focus was still supporting companies that produce all this is changing recently.

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It is also true that Asian countries have been better able to seize opportunities that invested heavily in education and infrastructure, although there are differences between them; their achievements in their international integration, highlight the importance and necessity of these experiences and learn more from other countries, and draw lessons for the Mexican case. Attracting foreign investment should be more proactive and selective companies seek more actively involved in GVCs, prioritize strategic or attractive companies; these investments require adequate human resources to their needs, something to promote, they can learn and innovate.

Justification

The development of GVCs has it enabled several countries to advance economic development, although Mexico participates in them and is the most advanced in this area in Latin America, yet the kind of integration that records is not like of which is recorded in Asian countries, emblematic in many ways. Addressing issues such as learning and innovation in GVCs, particularly in aeronautics CGV SLP, will open horizons insertion best in them, with wide repercussions. At the same time we believe that should be complemented by other actions and policies.

Objectives

- Understand how they learn and innovate the companies involved in the aviation CGV state of San Luis Potosi.

- Understand the main drivers and policy and institutional constraints in strengthening the learning and innovation of the participating companies in the aeronautical CGV SLP.

- Identify the key drivers of business involvement in the CGV SLP.

- Estimate the main trends in the medium and long term CGV aeronautics.

Design of research

Has reviewed the basic literature, it is in Phase conduct interviews to companies, responsible for development of the sector in SLP and other states.

Econometric analysis of time series of monthly production sector and the analysis of production at the enterprise level will be made; for the last 10 years; direct, indirect and induced effects are estimated.

Conclusions

Scale power options are available at CGV, as evidenced by the Asian experience, Mexico has manufacturing tradition, and some experience in the aerospace CGV so should be encouraged in scaling it. The internal effort of companies is a key element associated with the development of suppliers and logistics, to be accompanied by infrastructure resources, human resources and incentives.

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