State involvement in development: the global value chain approach

Manuel Trevignani, a Carolina Lauxmann a and Marcos Valentinuza

^a Universidad Nacional del Litoral, Argentina.

Email addresses: mtrevignani@hotmail.com; clauxmann@hotmail.com and marcosvalentinuz@gmail.com, respectively.

Date received: June 14, 2021. Date accepted: November 21, 2021.

Abstract

The global value chain approach is currently the preeminent development paradigm. Although much of the literature on this approach tends to marginalize the role of the state in development strategies, recent years have seen greater interest in reviving the state's role in development. The debate around the state and its role in value chains has also been invigorated by attempts to reassess state-centric perspectives on development in contemporary capitalist economies. This article examines the implications of reconsidering the state's role in the value chain approach and the potential impact this may have on efforts to achieve structural change in peripheral countries.

Keywords: state; global value chains; development; industrial policy; periphery.

INTRODUCTION

Since the 1990s, various analytical frameworks have emerged to account for changes in the organization of production and trade at the global level. Among the most prominent of these are the global commodity chain, global value chain, and global production network approaches. Although each of these approaches has its respective particularities, one common characteristic between them is that they all privilege fragmentation of production at the global level in multiple and dispersed geographic spaces controlled by large companies that have become, in this scenario, transnational (Bair, 2009; Fernández and Trevignani, 2015; Scholvin, 2020).

Although research continues to be conducted within each of these perspectives, the GVC¹ approach is increasingly emerging as the preeminent paradigm in academia and the research agendas of various international organizations working in trade and international economics (Dalle *et al.*, 2013). In light of this, and given the proliferation of studies on governance and upgrading in production chains, the GVC approach began to be considered not only as a theoretical-analytical framework for studying the transformations of contemporary capitalism, but also as a tool for designing development strategies.

The GVC approach has privileged the role of corporations — particularly large transnational corporations (TNCs) — in reorganizing capitalism at the global level. Furthermore, this framework increasingly understands that development strategies in peripheral countries are primarily determined by the private sector. Therefore, various academics and policymakers working within this approach support the insertion of local companies into global production chains as a means of promoting development. They also argue that this insertion occurs via the articulation of local companies with TNCs, in a kind of interaction of private actors that relegates the state to a subsidiary role in the relationship. To adopt Horner's (2017) terminology, the state operates as a "facilitator" of the free movement of goods and capital, to stimulate a good "business climate" (Neilson et al., 2014).

Despite its claim to be the "new heterodoxy," the GVC approach presents a liberal-leaning development strategy that differs little from the Washington Consensus orthodoxy (Werner et al., 2014). However, in an attempt to respond to certain criticisms of the approach, new formulations began to emerge during the 2010s regarding the role of the state in configuring global production chains and the development strategies associated with insertion into them. This review of the role of the state in the GVC approach was driven by some of the most prominent scholars within the GVC tradition (Gereffi and Sturgeon, 2013; Milberg et al., 2014; Gereffi, 2014). Likewise, parallel to this revision of the mainstream school, authors also incorporated elements of other theoretical traditions on the role of the state in development processes as they relate to productive fragmentation. Consequently, a series of contributions emerged (see, for example, Andreoni, 2019; Hauge, 2020; Horner, 2017; Lauridsen, 2018) that brought into dialogue business-focused chain approaches and state-centric studies of development. These studies sought to shed light on the diverse actors and dimensions of analysis that must be grasped when seeking to understand how countries can move away from the periphery in the contemporary capitalist economy.

This article examines the revised role of the state in the GVC approach, and analyzes if this reconfigured state role aids assists the formulation of an alternative development strategy to the one promoted in the original GVC approach, one which attributes greater importance to state intervention in development. In addition to this introduction, the text is organized as follows: the first section offers a summary of the GVC approach as it relates to the productive reconfiguration of capitalism from the late 20th century and the early 21st century. The second section then goes on to analyze how the most significant contributions to the GVC approach have treated the issue of development, and how this has evolved over time. The third section, meanwhile, illustrates recent attempts to bring the GVC approach into dialogue with more state-centric approaches to development, informed by an understanding that statehood has a significant impact on the configuration and maintenance of global production chains and the associated opportunities for development. The final section analyzes the (in)capacity of peripheral countries to advance away from heterogeneity and productive specialization and

thus reduce productivity and income gaps with central countries. Finally, the article concludes by offering some brief final considerations which reflect on the potential limitations and advantages of the reformulated development strategies proposed by the modified GVC approach at the beginning of the second decade of the 21st century.

2. THE GVC APPROACH AND THE PRODUCTIVE RECONFIGURATION OF CAPITALISM SINCE THE END OF THE 20th CENTURY

During the late 1980s, in the context of the intensification of the neoliberal structural adjustment that had begun in the previous decade, a new approach for analyzing the processes of productive reconfiguration of capitalism on a global scale emerged, initiated by pioneering studies from Gary Gereffi.² Gereffi's work sought to displace the then predominant state-centric approaches in development studies which privileged the national space as the locus of analysis and intervention (Horner, 2017). Gereffi proposed an alternative, business-centered, analytical approach to development, examining business' articulation for the production of different goods and/or services on a global scale and in real-time. This perspective complemented the theories of regional/local — sub-national³ — development, which had also proliferated in this context of capitalist reconfiguration, thus opening a space for the analysis of local-global networks — glocalization processes (Swyngedouw, 2004) — and their potential for development.

Throughout the 1990s, Gereffi continued to develop the path initiated in the 1980s, helping shape the approach that came to be known as Global Commodity Chains (GCC), which has served as the basis for a great number of studies on the new global productive processes. As the approach became more popular, a series of meetings were organized in academic circles to pool criteria related to the scope of the concept and its methodology (Sturgeon, 2008). At these meetings, the word "commodity" — referring to primary products — began to be discussed, and was finally replaced by the broader notion of "value." This shift in terminology enabled the approach to incorporate analysis of other types of products, such as manufactured goods and services, while at the same time maintaining the link between analysis of chains and the concept of value-added (Gibbon and Ponte, 2005). Thus, the term GVC refers to the value generated and retained by the various activities required to produce a good or service, from its conception through to the different stages of production, until it is made available to the final consumer (Gereffi et al., 2001). These conceptual clarifications, combined with the methodological consensus regarding case studies in peripheral countries, sought to explain the reconfiguration of production at the global level and the ensuring opportunities for development. The result was a new paradigm in development studies: GVC.

The relationship between GCC and GVC was outlined in a 2001 report with the intriguing title: "The Value of Value Chains: Spreading the Gains from Globalisation." This report illustrates the concepts of "upgrading" and "governance," which are the central pillars of the GVC approach (Gereffi et al., 2001).

The concept of upgrading seeks to analyze the ability of actors occupying subordinate positions in global production networks to increase their capacity to generate and capture value. In other words, their capacity to improve their position in the chain. Achieving this objective involved evaluating various forms of upgrading or improvement, such as: in the quality and diversity of a company's products (product upgrading); in the efficiency of production (process upgrading); in the control of functions of greater value (functional upgrading); or in the use of the capabilities acquired in a particular function of the chain to move to another sector or production chain (intersectoral upgrading) (Gereffi, 1999; Humphrey and Schmitz, 2002).

There are, however, various obstacles to upgrading processes. One of the main obstacles to subordinate companies improving their position in global value chains lies in the logic of selective control of functions by the companies occupying more powerful positions in value chains. This problem inevitably forces an analysis of the second central component of the approach, governance, a concept which the literature on GVC has highlighted in relation to how power is distributed and exercised between companies in a production chain. In addition to the first distinction in the GCC approach regarding buyer-driven and seller-driven chains (Gereffi, 2001), the classic form of governance emerged within the GVC approach. The latter approach served as a basis for analyzing chain structures and the possibilities for upgrading in them (Gereffi et al., 2005). These are established as follows, in ascending order from least powerful to most powerful: a) based on market relations; b) modular; c) relational; d) captive; and e) hierarchical. The GVC approach, therefore, strives to frame insertion into value chains as a means of development for subordinate actors and spaces, based on a complementarity between governance structures and the possibilities of upgrading in them.

In summary, the GVC approach presents a collective construction based on "win-win games," while studies conducted within the paradigm simultaneously acknowledge the existence of limitations for subordinate actors to climb positions in global production chains. This is because the companies that lead the chains try to reserve for themselves the most profitable activities — such as those related to design, brand development, marketing, and commercialization — and wish to avoid any competition that might come from a subordinate company wishing to enter these activities through functional upgrading processes (Humphrey and Schmitz, 2002; Schmitz, 2004). Intersectoral upgrading, which leads firms to move into the production of higher-value goods that serve more dynamic markets, is also difficult (Trienekens and van Dijk, 2012), as leader firms resist these efforts and seek to maintain their central position. Likewise, although it is possible to achieve certain process or product improvements through insertion into the chain, either through gaining access to inputs, technology, or information that would otherwise be unavailable (Ravenhill, 2014), this process does not necessarily pose a threat to the leader companies. On the contrary, it often reinforces their position of power, as subordinate companies reach international standards and improve the overall positioning of the chain as a whole (Gibbon and Ponte, 2005; Nadvi, 2008).

In light of this, the GVC approach made an important contribution to the study of the economic dynamics of capitalism between the end of the 20th century and the beginning of the 21st century, with an emphasis on its particular productive configuration. This relatively simple concept has made it possible to explain how global production networks are shaped, how value is produced and distributed spatially along them, and how peripheral — centrally subnational — spaces can be incorporated to promote their development. Development is presented, in this approach, as a process closely

associated with the capacity to achieve different types of upgrading, a concept that progressively became the main focus of GVC studies, coming to supersede governance as the principal focus of enquiry.

This growing centrality afforded by the GVC approach to upgrading and its link with development led to this approach being progressively adopted by multilateral development organizations, such as the United Nations, the World Bank and the Inter-American Development Bank, who adopted it as an intervention device (Trevignani and Fernandez, 2020). These organizations took the GVC approach from theory to practice, starting with the formulation of development policies associated with insertion into global production chains. The adoption and dissemination of the GVC approach as the new development paradigm for the 21st century necessitate a critical analysis of its main theoretical postulates, as well as the policy recommendations derived from it, in order to analyze its potential and/or limitations for promoting development in peripheral areas. Working from this understanding, the following section analyzes the evolution of the central concepts of the GVC approach.

3. EVOLUTION OF THE PROBLEMATIC OF DEVELOPMENT IN THE GVC APPROACH

One way to approach the problematization of development within the GVC literature is to survey key words extracted from the analysis of the main works adopting the GVC approach. To this end, this article reviews a total of 1,183 studies conducted between 2000 and 2020, mainly extracted from the Global Value Chains Initiative database. However, given that this database can no longer be considered up to date as of 2014, this data was complemented with other databases that made it possible to cover the entire period of analysis. Here, it should be clarified that, although all the literature on GVC deals with the same issues, Figure 1 illustrates not only the citations of these terms or themes, but also represents those publications where they are specifically addressed.

Figure 1 highlights the two main concepts that, as mentioned in the previous point, constitute the fundamental pillars of the GVC theoretical scaffolding: upgrading and governance, to which the issue of development is added as another central concern.

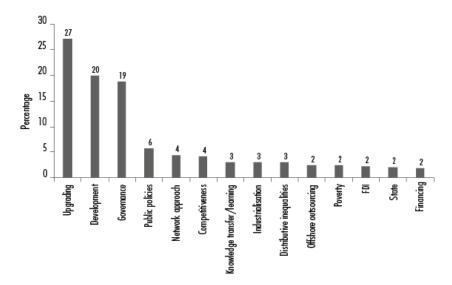
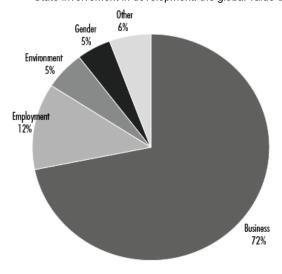


Figure 1. Main topics addressed in the GVC literature, 2000-2020

Source: Compiled by the authors based on the Global Value Chains Initiative; Global Value Chain Center; and Responsible Global Value Chains databases.

As previously mentioned, development studies no longer center on the state and the national space, but rather on linking local companies — many of which are agglomerated in sub-national spaces — with global productive networks. Figure 2 illustrates this focus on business and development strategies driven by the private sector in the GVC approach, highlighting the primary objects of analysis and intervention in the empirical work of the GVC approach. Of the documents surveyed, 72% focus their attention on businesses, clearly making businesses the privileged object of study and intervention, while the remaining topics represent a combined total of 28%.

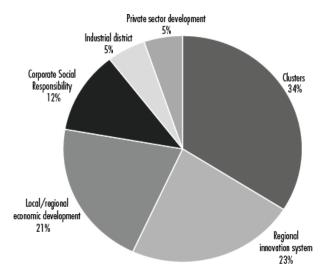
Figure 2. Object of analysis and intervention of the GVC literature, 2000-2020



Source: Compiled by the authors based on the Global Value Chains Initiative; Global Value Chain Center; and Responsible Global Value Chains databases.

Figure 3, meanwhile, shows the complementarity between GVC studies and regional/local development approaches, mentioned earlier in this article, highlighting the main theoretical frameworks associated with GVC studies. Particularly noteworthy are the concepts of clusters, industrial districts, and regional innovation systems, which focus on the innovative dynamism of regional and local spaces, positioning them as the privileged sphere for stimulating the insertion of local companies into global production chains.

Figure 3. Main concepts and theoretical frameworks associated with the GVC literature, 2000-2020

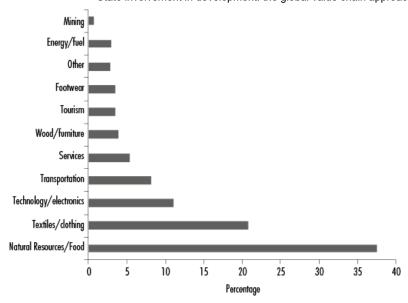


Source: Compiled by the authors based on the Global Value Chains Initiative; Global Value Chain Center; and Responsible Global Value Chains databases.

The data presented so far corroborates the initial propositions regarding the displacement of the GVC literature from the national scale and, within the literature, the role of the state in development processes in peripheral areas.

An additional aspect to consider here is the analysis of the sectors in which the main empirical studies of the GVC literature are conducted. As can be seen in Figure 4, the predominant sectors are linked to the extraction and processing of natural resources and food, followed by the textile industry. In other words, the proposal for development via integration to global production chains privileges "easy" industrialization (Baldwin, 2011) linked to the "spurious" comparative advantages (Fanjzybler, 1983) of natural resources and/or cheap labor existing in various peripheral countries.

Figure 4. The various sectors that GVC case studies have focused on, 2000-2020



Source: Compiled by the authors based on the Global Value Chains Initiative; Global Value Chain Center; and Responsible Global Value Chains databases.

It can therefore be seen how the GVC approach focuses on development strategies associated with developing corporate actors from the industrial sectors, sectors in which peripheral countries have spurious comparative advantages. Case studies within the approach analyze how companies involved in productive activities already existing in those countries insert themselves into a given production chain, and how they can eventually achieve upgrading processes. This kind of development merely reissues aggiornadamente — like old wine in new bottles — the Ricardian theory of the international division of labor — this time linked to intermediate goods rather than final products — and exacerbates specialization and productive heterogeneity of the peripheral areas, thereby obstructing structural transformation process that may promote development.

In light of this, it is not surprising that Hauge (2020) states that from the 1990s onwards no peripheral country has been able to achieve upward mobility in the global wealth hierarchy. A brief historical review shows that the last countries to emerge from the periphery did so during the 1970s and 1980s (Arrighi and Drangel, 1986) and, although their development was associated with links to global production chains, it was not determined exclusively by the actions of private companies. Rather, in these processes, the national government played an important role in determining how local companies participated in global production chains.

Against this backdrop, various critiques of the GVC theoretical framework began to emerge at the beginning of the 21st century, often highlighting the excessive emphasis on business and the insufficient attention afforded to the institutional environments in which they exist (Gibbon and Ponte, 2005; Lane, 2008; Neilson and Pritchard, 2009). A further aspect of the GVC approach which came under attack was its linear, additive, and positive view of the upgrading processes of individual companies, which seem to coagulate, unmediated, in the development of peripheral countries (Fernández and Trevignani, 2015; Neilson *et al.*, 2014; Pipkin, 2011; Werner *et al.*, 2014).

Seeking to respond to these criticisms, some analyses began to emerge within the GVC approach during the 2010s that offered several modifications, including attributing greater importance to the state in the study of global production chains (Horner, 2017). However, despite this effort from leading GVC scholars to incorporate into their theoretical framework new considerations regarding the role of the state in the configuration of the chains and in the development strategies for linking them, little seems to have actually changed.

The appeal to the state occurred primarily via public policy, especially industrial policy. In this sense, works such as Gereffi and Sturgeon (2013), Gereffi (2014) and Milberg *et al.* (2014) stressed the importance of pursuing an industrial policy based on development strategies focused on incorporation into global production chains. These contributions differentiate three types of industrial policies: i) "horizontal" ones, which affect the national economy as a whole; ii) "selective" or "vertical" ones, which focus on particular industries or sectors; and iii) "value-chain oriented" ones, which aim to take advantage of international supply chain linkages or dynamics to improve a country's position in a given production chain (Gereffi, 2014). According to these contributions to the GVC approach, the only industrial policies relevant in the current scenario are the "chain-oriented" ones, which drive an increasing degree of vertical specialization (Milberg *et al.*, 2014). As Gereffi puts it: "Today, GVC-oriented industrial policy focuses to a greater extent than previously on the intersection of global and local actors, and factors in the interests, power, and scope of leader firms and global suppliers, accepting international business networks as the appropriate playing field" (Gereffi, 2014, p. 446).

This is how the leading academics in this approach argue that we are currently witnessing a paradigm shift in industrial policy. The policy in place before the takeoff of global production chains seems to have been rendered obsolete (Milberg *et al.*, 2014). In this regard, Gereffi (2014) argues that policy interventions should be conceived beyond horizontal or vertical policies aimed at favoring import substitution industrialization strategies (ISI) and exportoriented industrialization (IOE), and should rather advance in vertical specialization strategies based on existing comparative advantages.

Thus, despite this revised role attributed to the state via industrial policy in the GVC approach, the state is clearly far from being framed as a central actor in a process of structural transformation that would allow peripheral countries to leave behind heterogeneity and productive specialization to promote their development. Rather, the development strategy promoted by the "reformulated" GVC approach seems to reinforce the state's role as "facilitator." This does little to position the approach as a heterodox proposal for overcoming the liberal-orthodox recommendations of the Washington Consensus. Understood in this way, state intervention seems to be reduced to fostering the insertion of local productive actors into global chains, promoting and guaranteeing processes of openness and liberalization of goods and capital, and facilitating the operation of these chains — for example, by improving logistics and other physical and social infrastructures — which, far from modifying center/periphery dynamics, consolidates the position of the peripheral areas on the world stage based on existing spurious comparative advantages.

The following section analyzes several studies that have examined these issues in-depth and which provide tools for proceeding along alternative lines of research to those proposed by the GVC approach of development strategies based on insertion into global production chains.

4. CONTRIBUTIONS FROM STATE-CENTRIC APPROACHES TO DEVELOPMENT

The reconsideration of the role of the state within the GVC approach has certain limitations, in that this revised understanding of the state's role does little to dynamize structural transformation processes of various national economies.

During the last five years, various contributions have emerged from outside the GVC theoretical framework yet seeking to engage constructively with it, placing greater emphasis on these issues. Several works — Andreoni (2019), Behuria (2019), Hauge (2020), Horner (2017), and Lauridsen (2018) — established a dialogue between business-centered chain approaches and state-centered studies on development. These authors highlight that, even in the contemporary capitalist economy, where it seems that accumulation occurs in a world without borders through global production networks, nation-states continue to be relevant for promoting processes that enable advancement from peripheral positions.

As mentioned in previous sections, insertion into global production chains can enable a country to increase its industrial production quickly and easily (Baldwin, 2011); encourage upgrading via the incorporation of companies which improve production efficiency and/or product quality; and even enable them to produce more sophisticated products within the chain. However, this factor can seldom enable upgrading processes at the functional level (Gereffi, 2019; Lee and Gereffi, 2015) and/or intersectoral level (Trienekens and van Dijk, 2012; Zakić *et al.*, 2018) that allow the development and articulation of different sectors of its production structure to leave behind the characteristics of heterogeneity and specialization.

Thus, although the GVC approach offers an exit strategy from the periphery via association with an industrialization driven by insertion into chains, it is only the gateway to a development process that, to be dynamic and sustainable over time, requires carrying out different types of upgrading, which are not always easy to achieve.

Peripheral countries that join global production chains generally do so because the TNCs which lead these chains are attracted by these nations' endowment of cheap labor and/or natural resources (Humphrey, 2004). As can be seen in Figure 4, the main sectors which GVC case studies focus on are production chains that exploit natural resources, without making substantial progress in their processing at the local level, and/or that carry out labor-intensive manufacturing activities that do not require higher levels of labor qualification or significant technological complexity for their execution. Thus, the insertion of peripheral countries' companies into global production chains is associated with an industrialization with limited capacity to enable a process of structural transformation which would promote development. Participation in global production networks does not seem to promote the development of a complex and dynamic industrial sector which, via innovation, would contribute to generating intra- and inter-sectoral linkages that would enable a transition towards homogenization and diversification of the production structure and, on this basis, enable upgrading processes that would promote development. On the contrary, taking advantage of the spurious competitive advantages available in peripheral spaces encourages the development of industrial activity sectors that often function as enclaves which do not present major articulations with the rest of the economy (Heidrich and Williams, 2011). Moreover, insertion into global production networks sometimes also contributes to the dismantling of previously existing production structures in national spaces, and/or undermining the conditions for reproduction of the labor force, thus damaging the socio-economic dynamics of peripheral countries (Dalle et al., 2013; Kosacoff and López, 2008; Santarcángelo et al., 2017; Selwyn, 2019; Werner, 2016). This gives rise to what Kaplinsky (2000) has termed "impoverishing growth."

Despite these considerations, it is crucial to acknowledge that there are cases of peripheral countries successfully moving up the global wealth hierarchy via insertion into global value chains. However, it should be noted that the state intervened strategically in these cases (Hauge, 2020). In other words, it is not association with chains alone that guarantees development.

The experiences of certain East Asian countries stand out as cases of successful development in an economy that is increasingly structured through global production chains. These countries —particularly South Korea and Taiwan — began their structural transformation via a process of industrialization associated with participation in regional and global production chains as early as the 1960s. They were part of the regional expansion of the multi-layered subcontracting system of Japanese companies — a process known as "flying geese" (Akamatsu, 1962) —, but also of the global expansion of North American companies — Nike, for example — (Arrighi, 1999; Milberg *et al.*, 2014) which, in an attempt to lower production costs and maintain their profit rate, delocalized and outsourced different parts of their labor-intensive production activities to Asia. These areas offered a disciplined and cheap labor force in international terms, making it possible to conduct various stages of manufacturing production profitably. The first industrial activities in which these Asian countries became involved were not technologically sophisticated and did not require highly-qualified

personnel. However, by the 1980s these Asian countries were developing activities that demanded higher levels of knowledge, skills, and technology (Gereffi, 1996 and 1999).

The industrial policies implemented by the developmentalist states of these countries played a vital role in this process of upgrading within regional and global production chains. State intervention, far from merely enabling trade and capital flow liberalization processes, sought to advance structural transformation processes via designing and implementing protectionist measures aimed at stimulating the development of a complex and dynamic industrial sector (Fernández, 2017). Such measures progressively allowed these countries to achieve substantial upgrading processes within global production chains. Some of the most important policy measures include allocating credit to industrial activity via public banks and/or through the use of private commercial banks; conditioning the entry of foreign direct investment by TNCs which, in addition to restricting TNCs' access to certain economic sectors, stimulated association links with local capital — public and/or private — to enable the transfer of technology to national companies; controlling the participation of local components in exports; restricting imports, both through tariff and non-tariff barriers, to advance domestically in the production of the different components of exportable industrial goods; and export subsidies (Amsden, 2001; Chang, 2004; Evans, 1995; Wade, 1990).

We can see, then, that the state has played a larger role than that of mere facilitator in the successful cases of development through association with global production chains. Not only has the state enabled the free movement of goods and capital and stimulated a good "business climate," but it has also intervened by directing the private development of manufacturing activity associated with increasingly globalized production, taking on the roles of regulator, producer, and even buyer (Horner, 2017). Via these various roles and policies states have played a crucial role in these countries' upgrading processes, thus enabling them to advance in the global wealth hierarchy.

Although currently the states of various peripheral countries are fulfilling some — if not all — of the different roles suggested by Horner (2017) in various global production chains, these interventions — with the exception of the Chinese case — do not seem to be framed within a strategy of structural transformation that enables advancement from peripheral positions. On the contrary, state interventions could be considered limited to promoting the industrial policies proposed by the GVC literature, which insist on vertical specialization based on existing comparative advantages, favoring a few relatively advanced companies linked to the chains but practically disconnected from the rest of the companies operating in the national economy. This kind of state involvement contributes little to the diversification and homogenization of domestic production structures and, therefore, to qualification of the conditions for social reproduction of the population.

Looking briefly at the Chinese case, its initial dynamism can be analyzed in the context of the continuity of the regional "flying geese" process (Kasahara, 2013; Kwan, 2002). China, since the early 1980s, began to dismantle the state planning system and to configure itself as a market economy, enabling export-oriented local private capital ventures and opening the doors to the entry of foreign capital into its territory. Both the local Chinese export-oriented enterprises and the local export-oriented Chinese companies, as well as foreign TNCs — many of them from the region — that co-managed global production chains, exploited the comparative advantage of the Chinese economy: abundant and relatively qualified labor force in line with international standards. In this scenario, labor-intensive manufacturing activities such as textiles, shoes, toys, and simple household appliances, which were part of global production chains, experienced strong growth (Defrainge, 2014; Yue and Evenett, 2010).

The entry of foreign capital into China, similar to what happened previously in its regional neighbors, was not unrestricted or unconditional (Kwan, 2002). Certain industries considered strategic in economic and political terms — such as telecommunications, energy, transportation, and banking — were protected from foreign capital, while the development of national champions — many of them state-owned companies — was encouraged. The objective was to make these companies leader companies in global chains, within the framework of China's "Go Global" strategy (Ministry for Foreign Trade and Economic Cooperation, 2000). On the other hand, policies established joint ventures between local and foreign companies so as to acquire technological and management know-how. Additionally, guidelines were established regarding the entry of foreign capital that directly involves the transfer of technology or the progressive substitution of imports for local production. These are just some of the most relevant measures for conditioning foreign investment, measures which also aim to improve the competitiveness of local companies (Defrainge, 2014; Gabusi, 2016).

To an extent, therefore, the success of the Chinese State's industrial policy seems to be the result of the growing participation of Chinese companies in linkages associated with capital- and technology-intensive industries — for example, the chemical industry, iron and steel, electronics, and communication equipment manufacturing — (Yue and Evenett, 2010). An additional factor is the progressive substitution of imported intermediate goods by domestic production (Duan et al., 2018), as well as the measures adopted by various local companies to articulate themselves from a qualified position in production chains (Yeung, 2014).

Although there is still some way to go before China can be considered a developed country, its current strategy and those implemented by East Asian countries that have managed to emerge from peripheral positions demand that the development agenda attribute greater importance to state intervention via industrial policy within the framework of global production chains. This would serve as a strategic tool to advance manufacturing development which enabled the structural transformation of peripheral countries in a scenario of regional and/or global production chains.

5. CONCLUSIONS

This article highlights the relevance of the GVC approach to account for the productive reconfiguration of capitalism since the late 20th century and its positioning as a theoretical frame of reference for rethinking development strategies since its adoption by various international organizations over the last 20 years.

The analysis of the evolution of development issues within the GVC theoretical framework reveals a tendency to overlook the strategic importance of state intervention, instead limiting the state to the role of facilitator in the upgrading processes that would lead to exit from the periphery. Upgrading, in its various forms, is fundamentally centered on the capacity of local companies to form links with leader companies and initiate, from there, a set of mutually qualifying interrelationships that tend to promote the development of peripheral areas. However, these upgrading processes are not inevitable, nor are they simple; indeed, even the very logic of articulation between the leader company in the chain and the rest tends, on occasion, to hinder improvements.

Therefore, it can be observed that companies in peripheral areas that succeed in inserting themselves into global production chains become involved in sectors that have some spurious comparative advantage — usually associated with natural resources and/or cheap labor — and, although they can achieve upgrading in terms of process or product, it is difficult for them to move towards the development of more important tasks within the chain or to enter global chains linked to higher value-added goods and technological sophistication. Therefore, if global integration is left to a facilitating state that relies on existing comparative advantages, linkage to the chain tends to exacerbate the characteristics of heterogeneity and productive specialization of peripheral countries, instead of moving towards a structural transformation that would allow for more homogeneous and diversified productive configurations that promote development.

Although the GVC approach seeks to advance qualification by reconsidering the role of the state, particularly via industrial policy, the scope of this revision has only led to "cosmetic" changes in this perspective. More recent contributions attempt to attribute a more central role to the state and industrial policy within the GVC framework, but they are still far from framing the state as an actor with the capacity to promote a way out of the periphery. Furthermore, the GVC literature pays little or no attention to the need to develop a manufacturing sector that enables structural transformation processes that promote development.

In light of this, the proposal of development through association with global production chains requires a deeper examination than the leading scholars of the GVC approach have conducted thus far. Understood in this way, attempts to establish a dialogue between state-centric studies of development and the GVC approach constitute an important contribution to developing this new line of inquiry and establishing a useful research agenda on the state, industrial policy, manufacturing, and development in the current context of global production chains.

BIBLIOGRAPHY

- Akamatsu, K. (1962). A historical pattern of economic growth in developing countries. *The Developing Economies*, 1(s1). https://doi.org/10.1111/j.1746-1049.1962.tb01020.x
- Amsden, A. (2001). The rise of "the rest": Challenges to the west from late-industrializing economies. Oxford University Press.
- Andreoni, A. (2019). A generalized linkage approach to local production systems development in the era of global value chains, with special reference to Africa. In R. Kanbur, A. Noman and J. E. Stiglitz (eds.). *The Quality of Growth in Africa* (pp. 264-294). Columbia University Press.
- Arrighi, G. (1999). El largo siglo XX. Akal.
- Arrighi, G. and Drangel, J. (1986). The stratification of the world-economy: An exploration of the semiperipheral zone. *Review (Fernand Braudel Center), 10(1).* https://bit.ly/3KFzMyr
- Bair, J. (2009). Global commodity chains. Genealogy and Review. In J. Bair (ed.). Frontiers of Commodity Chain Research (pp. 1-34). Stanford University Press.
- Baldwin, R. (2011). Trade and industrialization after globalisation's 2nd unbundling: How building and joining supply chains are different and why it matters. (NBER Working Paper, w17716). National Bureau of Economic Research. https://bit.ly/3v07R30
- Behuria, P. (2019). The domestic political economy of upgrading in global value chains: how politics shapes pathways for upgrading in Rwanda's coffee sector. Review of International Political Economy, 27(2). https://doi.org/10 .1080/09692290.2019.1625803
- Chang, H. J. (2004). Regulation of foreign investment in historical perspective. *European Journal of Development Research*, 16(3). https://doi.org/10.1080/0957881042000266660
- Dalle, D., Fossati, V. and Lavopa, F. (2013). Política industrial: ¿el eslabón perdido en el debate de las Cadenas Globales de Valor? Revista Argentina de Economía Internacional, 2. https://bit.ly/3s83iob
- Defrainge, J. C. (2014). China's industrial policy. Europe China Research and Advice Network (ECRAN). https://bit.ly/34U5hRy
- Duan, Y., Dietzenbacher, E., Jiang, X., Chen, X. and Yang, C. (2018). Why has China's vertical specialization declined? *Economic Systems Research*, 30(2). https://doi.org/10.1080/09535314.2018.1431610
- Evans, P. (1995). Embedded autonomy: States and industrial transformation. Princeton University Press.
- Fanjzybler, F. (1983). La industrialización trunca de América Latina. Nueva Imagen.
- Fernández, V. R. (2017). La trilogía del erizo-zorro. Redes globales, trayectorias nacionales y dinámicas regionales desde la periferia. Anthropos-Universidad Nacional del Litoral.

- Fernández, V. R. and Trevignani, M. (2015). Cadenas globales de valor y desarrollo: perspectivas críticas desde el Sur Global. DADOS, 58(2). https://doi.org/10.1590/00115258201551
- Gabusi, G. (2016). The reports of my death have been greatly exaggerated: China and the developmental state 25 years after Governing the Market. *The Pacific Review, 30*(2). https://doi.org/10.1080/09512748.2016.1217 254
- Gereffi, G. (1983). The pharmaceutical industry and dependency in the third world. Princeton University Press.
- _____(1989). Development strategies and the global factory. The ANNALS of the American Academy of Political and Social Science, 505(1). https://doi.org/10.1177/0002716289505001008
- _____ (1990). International economics and domestic policies. Current Sociology, 38(2). https://doi.org/10.1177/001139290038002011
- _____(1996). Global commodity chains: new forms of coordination and control among nations and firms in international industries. *Competition and Change*, 1(4). https://doi.org/10.1177/102452949600100406
- _____(1999). International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics*, 48(1). https://doi.org/10.1016/S0022-1996(98)00075-0
- (2001). Las cadenas productivas como marco analítico para la globalización. *Problemas del Desarrollo. Revista Latinoamericana de Economía*, 32(125). http://dx.doi.org/10.22201/iiec.20078951e.2001.125.7389
- (2014). A global value chain perspective on industrial policy and development in emerging markets. *Duke Journal of Comparative and International Law*, 24(3). https://bit.ly/3476ebY
- _____(2019). Economic upgrading in global value chains. In S. Ponte, G. Gere and G. Raj-Reichert (eds.). Handbook on Global Value Chains (pp. 240-254). Edward Elgard Publishing.
- Gereffi, G., Humphrey, J., Kaplinsky, R. and Sturgeon, T. (2001). Introduction: Globalisation, value chains and development. *IDS Bulletin*, 32(3). https://doi.org/10.1111/j.1759-5436.2001.mp32003001.x
- Humphrey, J. and Sturgeon, T. (2005). The governance of global value chains. Review of International Political Economy, 12(1). https://doi.org/10.1080/09692290500049805
- and Sturgeon, T. (2013). Global value chain-oriented industrial policy: The role of emerging economies. In D. K. Elms and P. Low (eds.). Global Value Chains in a Changing World (pp. 329-360). World Trade Organization, Fung Global Institute and Temasek Foundation Centre for Trade and Negotiations.
- Gibbon, P. and Ponte, S. (2005). Trading down: Africa, value chains and the global economy. Temple University Press Policy.
- Hauge, J. (2020). Industrial policy in the era of global value chains: Towards a developmentalist framework drawing on the industrialisation experiences of South Korea and Taiwan. *The World Economy*, 43(8). https://doi.org/10.1111/twec.12922
- Heidrich, P. and Williams, Z. (2011). Global production chains in Latin America: challenges for inclusive and sustainable growth. Trade and Inclusive Growth Series, (Brief N°72). Red LATN. https://bit.ly/3inA94L
- Horner, R. (2017). Beyond facilitator? State roles in global value chains and global production networks. *Geography Compass*, 11(2). https://doi.org/10.1111/gec3.12307
- Humphrey, J. (2004). Upgrading in global value chains. (Working Paper No 28), Policy Integration Department, International Labour Office. https://bit.ly/34USNck
- Humphrey, J. and Schmitz, H. (2002). How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies*, 36(9). https://doi.org/10.1080/0034340022000022198
- Kaplinsky, R. (2000). Globalisation and unequalisation: what can be learned from value chain analysis? *e Journal of Development Studies*, *37(2)*. https://doi.org/10.1080/713600071
- Kasahara, S. (2013). The Asian developmental State and the ying geese paradigm. (UNCTAD Discussion Papers, 213). United Nations Conference on Trade and Development. https://bit.ly/3wYKIVC
- Kosacoff, B. and López, A. (2008). América Latina y las cadenas globales de valor: debilidades y potencialidades. *Globalización, Competitividad y Gobernabilidad, 2(1)*. https://doi.org/10.3232/GCG.2008.V2.N1.01
- Kwan, C. (2002). The rise of China and Asia's flying-geese pattern of economic development: an empirical analysis based on US import statistics. (Discussion Paper Series 02-E-009). Research Institute of Economy, Trade and Industry. https://bit.ly/3igUqZY
- Lane, C. (2008). National capitalisms and global production networks: An analysis of their interaction in two global industries. Socio-Economic Re- view, 6(2). https://doi.org/10.1093/ser/mwm010
- Lauridsen, L. S. (2018). New economic globalization, new industrial policy and late development in the 21st century: A critical analytical review. *Development Policy Review*, 33(3). https://doi.org/10.1111/dpr.12299
- Lee, J. and Gere, G. (2015). Global value chains, rising power arms and economic and social upgrading. *Critical Perspectives on International Business*. 11(3/4). https://doi.org/10.1108/cpoib-03-2014-0018

- Milberg, W., Jiang, X. and Gere, G. (2014). Industrial policy in the era of vertically specialized industrialization. In M. Salazar-Xirinachs, I. Nübler, and R. Kozul-Wright (eds.). *Transforming economies: making industrial policy work for growth, jobs and development* (pp. 151-178). International Labour Office.
- Ministry for Foreign Trade and Economic Cooperation (2000, June 16th). China's accession to the WTO and participation in the economic globalization. Speech at the Luncheon of the 21st Century Forum by Minister for Foreign Trade and Economic Cooperation SHI Guangsheng. https://bit.ly/34XuZEE
- Nadvi, K. (2008). Global standards, global governance and the organization of global value chains. *Journal of Economic Geography*, 8(3). https://doi.org/10.1093/jeg/lbn003
- Neilson, J. and Pritchard, B. (2009). Value chain struggles: Institutions and governance in the plantation districts of South India. Wiley-Blackwell.
- _____, Pritchard, B. and Wai-chung Yeung, H. (2014). Global value chains and global production networks in the changing international political economy: An introduction. Review of International Political Economy, 21(1). https://doi.org/10.1080/09692290.2013.873369
- Pipkin, S. (2011). Local means in value chain ends: Dynamics of product and social upgrading in apparel manufacturing in Guatemala and Colombia. *World Development*, 39(12). https://doi.org/10.1016/j.worldd ev.2011.04.016
- Porter, M. (1990). The competitive advantage of nations. The Free Press.
- _____ (1998). Clusters and the new economics of competition. Harvard Business Review, 76(6). https://bit.ly/3rP2rbB
- Ravenhill, J. (2014). Global value chains and development. Review of International Political Economy, 21(1). https://doi.org/10.1080/09692290.2013.858366
- Santarcángelo, J., Schteingart, D. and Porta, F. (2017). Cadenas globales de valor: una mirada crítica a una nueva forma de pensar el desarrollo. *Cuadernos de Economía Crítica*, 4(7). https://bit.ly/3G1GN9g
- Schmitz, H. (2004). Local upgrading in global chains: recent findings. DRUID Summer Conference on Industrial Dynamics, Innovation and Development. https://bit.ly/2TKOcY6
- Scholvin, S. (2020). Global commodity chains, global value chains, and global production networks. In E. Vivares (ed.). *The Routledge Handbook to Global Political Economy. Conversations and Inquiries* (pp. 174-193). Routledge.
- Selwyn, B. (2019). Poverty chains and global capitalism. Competition & Change, 23(1). https://doi.org/10.1177/1024529418809067
- Sturgeon, T. (2008). From global commodity chains to global value chains: Interdisciplinary theory building in an age of globalization. In J. Bair (ed.). *Frontiers of Commodity Chain Research* (pp. 110-135). Stanford University Press.
- Swyngedouw, E. (2004). Globalisation or "glocalisation"? Networks, territories and rescaling. Cambridge Review of International A airs, 17(1). https://doi.org/10.1080/0955757042000203632
- Trevignani, M. and Fernández, V. R. (2020). The institutionalization process of the GVC approach: From the academic field to the international organizations. In S. Faust (ed.). *Understanding value chains* (pp. 1-48). Nova Science Publishers.
- Trienekens, J. and van Dijk, M. P. (2012). Upgrading of value chains in developing countries. In M. P. van Dijk and J. Trienekens (eds.). *Global value chains*. *Linking local producers from developing countries to international markets* (pp. 237-250). Amsterdam University Press.
- Wade, R. (1990). Governing the market: Economic theory and the role of government in East Asian industrialization. Princeton University Press.
- Werner, M. (2016). Global production networks and uneven development: Exploring geographies of devaluation, disinvestment, and exclusion. *Geography Compass*, 10(11). https://doi.org/10.1111/gec3.12295
- Werner, M., Bair, J. and Fernández, V. R. (2014). Linking up to development? Global value chains and the making of a post-Washington Consensus. *Development and Change*, 45(6). https://doi.org/10.1111/dech.12132
- Yeung, H.W-C. (2014). Governing the market in a globalizing era: Developmental states, global production networks and interrm dynamics in East Asia. *Review of International Political Economy*, 21(1). https://doi.org/10.1 080/09692290.2012.756415
- Yue, P. and Evenett, S. J. (2010). Moving up the value chain: Upgrading China's manufacturing sector. International Institute for Sustainable Development (IISD). https://bit.ly/3z8LETS
- Zakić, N., Božilović, S. and Sijakovic, I. (2018). Analysis and upgrading of value chain. Ekonomika, Journal for Economic Theory and Practice and Social Issues, 64(4). https://doi.org/10.5937/ekonomika1804001Z

¹ The acronym Global Value Chains is used to refer to this approach, due to its widespread use in the literature.

² Although Gereffi's early work is clearly influenced by world-system theory (Gereffi, 1983, 1989 and 1990), the author gradually departed from this theoretical tradition.

³ These theories, from which posited new concepts such as clusters, industrial districts, endogenous development, and regional innovation systems, highlight the advantages of agglomeration processes at the regional and local levels to improve productivity and achieve competitiveness (Porter, 1990 and 1998), thus framing subnational spaces as strategically important to development.

⁴ See globalvaluechains.org

- $\frac{5}{2}$ For example, the Global Value Chain Center at Duke University (gvcc.duke.edu), or the network of experts Responsible Global Value Chains (responsibleglobalvaluechains.org).
- $\frac{6}{2}$ This reality makes clear the lack of importance of the industrialization issue in the GVC approach, as shown in Figure 1.