Reshaping the boundaries of the firm: global value chains and lead-firm strategies

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Abstract

In the contest of globalization the global value chains approach (GVC) is emerging as a new tool in analysing economic transactions between global and local/regional players. Recently GVC scholars have proposed a revised governance schema to explain inter-firm coordination dynamics in the global context.

Although designed to account for the rise of new inter-firm networks configured and controlled by international lead firms, the proposed GVC governance schema essentially lacks a real international content. Indeed, location specificity is not explicitly considered and so this new theory of inter-firms linkages cannot be defined as truly "global", explaining out-sourcing rather than off-shoring. Furthermore this revised governance schema, in contrast with previous versions developed by GVC scholars, seems to depart from considering the characteristics, strategies and behaviors of major global firms.

In this paper, after presenting the GVC approach, I argue that by refocusing the attention on the international strategies of lead firms it is possible to introduce location specificity issues and contribute to develop a strategy-contingent inter-firm governance theory.

Keywords: global value chains, lead firms, global strategies, inter-firm governance

Introduction

Although in the past multinational activities and foreign direct investments have been often used as synonymous, today this assimilation appears increasingly inaccurate. Global companies are more and more engaging in cross-border value adding activities through non-equity arrangements and the increasingly porous firm boundaries are emphasizing the strategic value of inter-firm interdependencies and their active coordination. This is forcing researchers to rethink the nature and organization of multinationals, acknowledging the tendency to separate *de facto* control of operations from *de jure* ownership of assets (Narula and Dunning, 2009).

In this changing scenario, the global value chains approach (GVC) represents an emerging framework for the study of international inter-firm transactions. Despite the interest of GVC scholars has been mostly focused on the potential of insertion in global value chains to support economic and social development, their stress on systemic value chain competitiveness and their research attention on non-equity international governance forms are becoming a focal point for firm strategy and international business scholars too. As argued in this paper, cross-fertilization between international business research and global value chains analysis, enriching its international strategy content, seems able to favour further intellectual progress.

In the first section I present the global value chains approach and its recently updated inter-firm coordination schema, while in the second section I discuss the international nature of the proposed GVC governance, highlighting the lack of an explicit reference to location specificity issues. Then I review the progressive blurring in GVC research of the role of lead firms and their different strategies, suggesting that this is preventing to acknowledge the fundamental distinction between horizontal vs. vertical international activities of multinational firms. The incorporation of the generic global strategies (AAA triangle) proposed by Pankaj Ghemawat into the analysis of global value chains represents a promising path to bring back location specificities and lead firms at the center of the analysis. Finally, in the last part of the paper I propose an alternative governance schema, especially designed for cross-border horizontal operations (mainly neglected by GVC scholars), that considers both lead firms (*intensity of use*) and suppliers' strategic characteristics (*capabilities*), in order to explain the establishment of the appropriate boundaries of the firm in relations to the strategic global objectives of the organizations.

The Global Value Chains approach

In the contest of globalization the global value chains approach (GVC) is standing out as a key tool for the analysis of economic transactions between global players and local/regional economic systems.

The initial version of the framework emerged in the mid-nineties, when Gereffi and others (see Gereffi and Korzekniewicz, 1994), grounding on Wallerstein's World System theory (Wallerstein, 1979), developed a framework called "global commodity chains" (GCC). In analyzing global production systems the approach followed by Gereffi (1994) departs from Wallerstein's legacy (1979), tending to stress the importance of the strategies and actions of transnational firms rather than the regulating and shaping power of the nation states. Linking the notion of value-added chain of production activities (Kogut, 1985) with the governance of global industries, Gereffi (1994) pointed out the networked nature of today's global economy and its impacts on the development prospects for firms and regions. A fundamental concept in the development of this framework has also been the notion of international fragmentation of production processes, as elaborated by those trade economists that stressed the connection between the increasing integration of trade with the geographical disintegration of production processes (Feenstra, 1998).

The analysis of global commodity chains (GCC) is concerned with how global production and distribution systems are organized. Gereffi and his collaborators initially defined global commodity chains as: "sets of interorganizational networks clustered around one commodity or product, linking households, enterprises, and states to one another within the world-economy" (Gereffi *et al*.,1994: 2). In this framework, particular attention is given to the role of powerful *lead* firms that, using the words of Gereffi (1999, p.41), undertake "the functional integration and coordination of internationally dispersed activities". Lead firms and global buyers are the players that define the *governance* structure of the chain, considered as "authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain" (Gereffi, 1994: p. 97). The framework suggests that the relation with international buyers and firms is crucial for the *upgrading* of the supply-base capabilities, especially in developing countries.

In the collection book edited by Gereffi *et al*. in 1994, Gereffi identifies three dimensions of GCCs: the input-output structure, the territory covered, and the governance structures (Gereffi 1994: p. 97). One year later the author added a fourth dimension, i.e. the institutional framework, to analyze how national and international conditions and policies affect the globalization process at each stage in the chain (Gereffi, 1995). The input-output structure and the geographical coverage of GCCs have been used to describe the specific configuration of selected chains, but the dimension that so far has received most attention is the governance structure of the chains (Raikes et al., 2000). The study of the governance dimension underlines the power of key agents and their capacity to incorporate less powerful actors to perform lower value-added activities or, alternatively, to exclude them. In the GCC framework, the analysis of power relations and the implications that these have on upgrading outcomes are crucial. In this context, two main governance structures are identified that characterize two different types of commodity chains:

- *producer-driven chains → in these type of chains (e.g. automobile and aircraft industries) due to large-scale, high-technology production facilities, involving heavy investment and scale economies, important barriers to entry are found and manufacturers are the key agents, that directly control the production process, out-sourcing low-profit activities upstream or downstream to networks of suppliers and retailers;*
- *buyer-driven chains → these type of chains (e.g. apparel and footwear industries), differ from producer-driven chains in that they have low barriers to entry in production and producers are subordinated to powerful buyers (kind of "producers without factories"); these provide access to rich markets thanks to the ownership of international brand names and control over retailing structures. In this case, the key agents (the buyers) focus on high-profit activities with high entry barriers, like design and marketing, out-sourcing production to a competitive decentralized system of sub-contractors, often located in developing countries with cheap labor costs (Gereffi, 1994).*

In the last years, the global commodity chains framework has been updated and generalized (Gereffi and Kaplinsky, 2001; Sturgeon, 2008), in order to account for new developments of the global economy where governance forms are rapidly changing and previous producer-driven industries and transnational giants are becoming less vertically integrated and more network-oriented. The generalized framework, that responds to the need of conceptualizing more complex and diversified inter-firm governance models, has been named "global value chains" (see Gereffi and Kaplinsky, 2001). The word commodity was replaced because of the ambiguity of the term that could generate misleading interpretations,

erroneously suggesting for example a particular focus on undifferentiated products. The Global Value Chains (GVC) approach then nuances a broader understanding of the evolution of global industries, studying the distribution of value-generating activities not only in "commodities" like agricultural and standardised clothing products, but in more complex production processes too, both for goods and services.

Internationalization of production may be managed through both foreign direct investments or market and contractual relationships (Caves, 2007). GVC researchers are particularly interested in understanding value chains that are divided among multiple firms (separation of ownership) and spread across different places (geographical dispersion).

In 2005 Gary Gereffi, John Humphrey, and Timothy Sturgeon published a theoretical paper in which they propose a more complete typology of value-chain governance. To construct a more general theory of value chain and network coordination, Gereffi et al. (2005) rely on three fundamental variables:

- **the complexity of inter-firm transactions** (i.e. the complexity of product and process specifications);
- **the ability to codify transactions** (i.e. the degree to which this complexity can be mitigated through codification)
- **the capabilities in the supply-base** (i.e. the extent to which suppliers have the necessary capabilities to meet the buyers requirements).

Allowing these variables to assume just two values, high or low, one obtains eight possible combinations, five of which are actually found, providing a new comparative governance schema for inter-firm relationships. The five categories of inter-firm governance identified are:

- **market**: easily codified transactions, relatively simple product specifications, and presence of suppliers with the capabilities to make the products required with little input from clients;
- **modular value chains**: they differ basically from markets because regard complex productions, coupled with the ability to codify specifications;
- **relational value chains**: operations require complex transactions, supplier capabilities are high, but product specifications cannot be codified,

- **captive value chains**: product complexity is high, codifiability, i.e. the ability to provide detailed instructions, is also high, but capabilities in the supply-base are low;
- **hierarchy**: products are complex, specifications are hardly codified, and highly competent suppliers cannot be found.

Table 1 shows the five relevant combinations of the variable values that determine the 5 categories of transaction governance. As shown in the last column of the figure, explicit coordination and power asymmetry between buyers and suppliers are expected to increase continually from market to hierarchy.

Table 1: Global value chains governance

Governance Type	complexity of transactions	ability to codify transactions	capabilities in the supply-base	degree of explicit coordination and power asymmetry
Market	Low	High	High	Low
Modular	High	High	High	↕
Relational	High	Low	High	
Captive	High	High	Low	
Hierarchy	High	Low	Low	High

Source: Gereffi, Humphrey and Sturgeon (2005)

The schema presented here resumes the fundamental three modes of industrial organization of the organizational tradition: market, hierarchy and network (or hybrid form). However, the network mode (close to the buyer-driven case) is expanded into three different types: modular, relational and captive. In modular networks, suppliers take full responsibilities for the productive process and use generic machinery that limits transaction-specific investments. In relational networks, complex interaction and mutual dependence is managed by trust, reputation and other non legal sanctions. Finally, in captive networks, low

supplier competence in the face of complex product and process specifications obliges the lead firms to intervene and control heavily the outsourced activities, building up a transactional dependence that tends to lock-in the supply-base. The captive governance type arises typically when big buyers of developed countries set up outsourcing networks in developing countries.

With respect to the buyer-driven and producer-driven chain distinction of GCC analysis, the global value chains (GVC) framework proposes a more elaborate set of governance forms: furthermore it explicitly tries to explain changes in governance patterns over time. As an evolution of GCC analysis, the new framework is consistent with the previous one: trying to integrate them, we may say that buyer-driven chains tend to be coordinated via market, modular, or relational governance, while producer-driven chains tend to be coordinated via captive or hierarchical governance.

Sturgeon (2008) proposes to revise the original Gereffi's (1994) fourfold framework of input-output, geography, governance, and institutions. While the first two elements appear mainly descriptive, he argues instead that governance and institutions represent causal dimensions of analysis, containing explanations for the observed organizational and spatial features of global production networks. Summing up recent progress in the GVC approach, he suggests to split the *governance* dimension into two distinct areas of inquiry: on one hand analyzing how *power* is distributed and exerted among firms in the chain, and on the other focusing on the *character of linkages* between stages in the chain of value added activities. In this way the global value chain approach appears to be centered around 5 dimensions. Of these, input-output structure and geography are essentially descriptive, while power, determinants of firm-level coordination and institutions constitute the fundamentals three "pillars" of a framework that attempts to provide robust explanations of the evolution of inter-firm relationships and industry geographic patterns.

Where is the "global" content in global value chains governance?

Despite the declared intention to "explain organizational structures that span international borders and particularly in those that have a global reach" (Gereffi, Humphrey, Sturgeon, 2005: p. 98), the proposed GVC governance schema somehow lacks a real international content. Indeed, location specificity is not considered and so this new theory of

inter-firms linkages can hardly be defined as truly "global", explaining out-sourcing rather than off-shoring.

Somehow Sturgeon indirectly admits the absence of a specific international character of the proposed GVC governance schema, when he says that "GVC governance theory operates equally well at any and all of these spatial scales" (Sturgeon, 2008: p. 123). The fact that the GVC governance theory can equally be applied at any spatial scale, is more proper to a general theory of inter-firm linkages rather than to a specific theory on international operations. Stating that geography represents a descriptive rather than causal dimension in GVC analysis (Sturgeon, 2008), it somehow contradicts its explicit focus on globalization and its spatial features.

This lack of internationality should not surprise if we consider the interdisciplinary theoretical underpinnings of the most recent GVC governance framework in more detail. These include industrial organization, transaction cost economics, economic sociology and in part strategic management. As immediately clear from this list, the intellectual lineage doesn't touch on any specific international discipline, like international economics, international business management, theories of the multinational firms or international business strategy.

The general theory of global value chains governance, proposed by Gereffi et al. in 2005, draws in part on Williamson's work (1975, 1981) on transaction cost economics (TCE), but then goes beyond it enriching TCE classifications of inter-firm hybrid (network) forms between market and hierarchy. In doing that, GVC scholars acknowledge the contributions of cluster and network theorists, who used relational arguments to justify complex and tightly coordinated production systems structured by independent firms (Piore and Sabel 1984; Lorenz, 1988; Brusco, 1990; Powell, 1990; Adler, 2001). Strategic management considerations too influenced Gereffi et al. (2005), and in particular the resource-based view of the firm and the core competences approach, providing further explanations (based on firms resources) for externalization decisions instead of organizational integration (Penrose, 1959; Barney, 1991; Prahalad and Hamel, 1990).

The variable *capabilities in the supply-base* represents an innovation with respect to other theories dealing with the boundaries of the firm: it is not explicitly considered in TCE nor in the relational contracting perspective (Carson et al., 2006). Using a strategic resource-based approach, we can explain this concept considering that if the suppliers of a firm don't have the necessary capabilities to meet the buyer requirements, clearly for that firm the strategy of focusing on its "core competencies" and relying on the complementary

competencies of external suppliers is not feasible. In the GVC perspective, peculiarly, the choice of hierarchy depends crucially on the capabilities of suppliers. In contrast to TCE, in which it is an increase in asset specificity or uncertainty that justifies vertical integration, the main dimension that differentiates relational value chains from vertically integrated firms is the possibility to find competent suppliers for complex transactions.

From what said above, it emerges that the comparative governance schema proposed by GVC scholars provides many organizational insights about complex firm-to-firm relationships, suggesting a range of solutions to the problem of asset specificity (Sturgeon, 2008). On one hand it introduces new critical dimensions in analyzing inter-firm transactions, while on the other (through the "relational" value chain typology) it internalizes the arguments of economic sociologists and heterodox economists (Granovetter, 1985; Powell, 1990) about the social embeddedness of economic behavior, the value of future relations, and the importance of non-legal social sanctions for opportunism. However, despite all its merits, the proposed framework somehow departs from the GVC original objective, i.e. analyzing the international production networks structured by lead firms that insert new countries and actors in the global economy.

At this point, one could question what means indeed having a distinctive international/global content. According to Ricart et al. (2004) discussing about business across borders concerns "the colocation of different places with different types of firms" (p. 175). Then, in the interplay between firms and places, locations with all their features and peculiarities represent the key distinctive element of analysis. If we consider the variables of the GVC governance theory, we find that *complexity* and *codificability* represent characteristics of the transactions, while *capabilities* is a variable that attains to suppliers. Geography remains at best a descriptive dimension: nothing is said about location specificities and the interaction of firms and geographies. However, it is at that interaction that should explicitly point any theory that aspires to be called "global".

International business scholars (Enright, 2002; Ricart et al., 2004) have suggested that like firms, also locations can be defined and described as bundles of activities, resources, and knowledge bases that impact on location-based competitiveness. The fundamental question to address here is about why do countries differ: an explicit focus on the variation in location specificity should be at the heart of every theory of globalization or, as Ghemawat would argue, semi-globalization (Ghemawat, 2003a). As highlighted by Ghemawat (2001, 2003a),

there are several dimensions along that countries normally differ, such as cultural, administrative, geographic and economic difference.

The above discussion provides the outlines of a new promising "international" research agenda for GVC researchers, in order to reach a better understanding of the world as an "ecology of firms and places" (Ricart et al., 2004).

Where have lead firms disappeared?

Moving beyond the original Gereffi's (1994) producer-driven versus buyer-driven distinction - that had however the merit of grasping the importance of external networks in coordinating global production processes - the argued loss of internationality in the analysis was not the only important change. In fact a second important shift was a strong focus on transaction characteristics and *de facto* a devaluation of the strategic role of leading international firms in the global organizing process (Gibbon et al., 2008). In order to create a general, but parsimonious, framework able to differentiate between different network forms and account for dynamic processes of technological change, Gereffi et al. (2005) ended up leaving behind one of the fundamental and more characteristic interest of "traditional" GVC and GCC scholars, i.e. a strong focus on "the strategies and behavior of major firms and their suppliers" (Sturgeon, 2008, p.127).

In the original exposition of the framework (Gereffi, 1994) the idea that governance was fundamentally *driven* by lead firms – i.e. governance as *driving* (Gibbon et al., 2008) – remarked the fundamental insight that the phenomena of disintegration of production and its re-integration were not occurring spontaneously nor systematically, but were the result of intentional strategies of international firms controlling access to final markets. The attributes, strategies and decisions of so called *lead firms* were then at the heart of the analysis on governance. Different governance models were associated to different lead firm types: producer-driven chains were typically set up by large scale manufacturers, while buyer-driven chains were organized primarily by retailers and/or marketers. The theme of lead-firm "driving" had a considerable success, especially among development scholars (Dolan & Humphrey, 2000; Schmitz & Knorringa, 2000), stimulating a great number of empirical studies on specific global industries. It is not surprising then that the new governance theory

proposed in 2005 by Gereffi et al. caused a wide-ranging debate among GCC and GVC analysts.

In search of parsimony and greater analytical rigor to specify the determinants of a broader range of inter-firm governance types in global industries, the revised fivefold governance typology of the GVC theory no longer refers explicitly to lead firms strategies in driving global chains, but rather emphasizes the characteristics of transactions (Gibbon et al., 2008). The framework shifts (in line with transaction cost economics) toward the search of efficient organizational solutions to the structural challenges of inter-firm transactions. However, not all the variables introduces in the new governance typology of the GVC theory refer to the characteristics of transactions: "capabilities in the supply-base" recalls the lessons of Penrose (1959) about the importance of internal resources and firm-level learning processes. But, very peculiarly, this focus on capabilities and learning only attains to suppliers, as if lead firms did not learn and develop new capabilities over time. This neglect about lead firms changes and learning processes is particularly significant in the context of the global economy, where also well-established companies going global face new challenges (cultural, administrative, etc) that impose to develop new kinds of capabilities and resources.

In sum, in the revised GVC governance framework neither the structural characteristics of lead firms, nor their particular motives to go global are considered as crucial explanatory variables. To understand globalization and the global reshaping of the firms boundaries, strategies cannot be set aside in the analysis: the acknowledgement of the different strategic options available to firms that want to go global appears a kind of prerequisite for convincing statements about the international organization of economic activity (Chandler, 1962; Ghemawat, 2008).

International strategies are not a trivial matter

Gereffi et al. (2005) argued that they "resist the overly simplistic notion that global value chains are evolving along a single trajectory" (Gereffi et al., 2005: p.97). Still they appear to offer a rather simplified view about lead firms international strategies. Indeed, defining hierarchy as an extreme and residual governance typology, they seem to consider vertical disintegration, through outsourcing (and off-shoring), as the underlying (only)

principal and preferred strategy of internationalization: “lead firm strategies to simultaneously increase outsourcing and consolidate their supply-chains have created a set of highly capable suppliers that, in turn, make outsourcing more attractive for lead firms that have yet to take the outsourcing plunge” (Gereffi et al., 2005: p.101).

It is clear that GVC scholars are mainly focusing on the phenomenon of delocalization of production from developed to developing countries, in this way implicitly limiting their analysis to production offshoring (through outsourcing), driven by the desire of benefiting from wage, administrative or regulatory international differences. However international strategic management is much more variegated than that.

The undervaluation of international strategies highlighted in GVC governance theory it not something new (Ghemawat, 2008), and even among international management and organization scholars we often find the idea that strategy is easy while international organization is not: “disappointments and failures were not due primarily to inappropriate strategic analysis, but to organizational deficiencies” (Bartlett and Ghoshal, 2002: 4). But international strategies are not a trivial matter and reflecting about *what* functions to perform across-border it normally changes the perspective and provides valuable insights about *how* to organize them.

Discussing about economic globalization, Pankay Ghemawat (2003a, 2007) suggests to focus on the strategies implemented by multinational firms to deal with the differences that arise at national borders. His generic cross-border strategies (the AAA strategy triangle) for coping with and even capitalizing on what he calls “semiglobalization”, i.e. the actual partially integrated world where differences still matter, constitute a very useful framework for the study of lead firms international strategic behavior. Integrating his conceptualization of international strategies in global value chains analysis could help to retrieve attention on location specificity and lead firms behaviors, contributing to bring back a distinctive international content to the GVC approach.

Ghemawat (2007) asserts that there are basically three generic global strategies for dealing with a semiglobalized world, where the absolute level of cross-border integration of markets and societies remains seriously incomplete. He classifies them considering generally how firms make money from cross-border operations and how they deal with similarities and differences across countries. Indeed recognizing that exist significant differences, a company can implement strategies for adjusting to these, overcoming them, or exploiting them; so a company – using Ghemawat’s words - can implement respectively strategies of *adaptation*,

aggregation, or *arbitrage* (Ghemawat, 2007). The first two strategies (adaptation and aggregation) correspond to the tradeoff, widely discussed by international business scholars, between national responsiveness versus global integration: the key strategic issue here regards the decision about how much of the globalizing business model to keep standard (to maximize economies of scale and scope), and how much to reluctantly adjust to local tastes (to achieve local responsiveness). Exploiting differences instead of similarities is the essence of the third generic strategy (arbitrage), that focus on the advantages of national variations as opposed to the constraints they entail. Arbitrage, the "original" cross-border strategy (Ghemawat, 2003b), is explained by the search of absolute economies of international specialization.

Despite its historical importance for international trade and investment, according to Ghemawat (2003b) arbitrage appears to be "the forgotten strategy". Indeed, even though Bruce Kogut had clearly pointed out its relevance more than 20 years ago (Kogut, 1985), arbitrage has been forgotten in recent discussions of globalization and strategy, that tended to be concentrated on the debate about local customization versus global standardization. However, due to the still significant cultural, administrative, economic, and geographic differences that remain among countries, the scope for international arbitrage is much more than just leveraging on cheap capital, cheap labor or innovative local knowledge and concerns all kind of location specificities.

What it is interesting to remark here is the fact that the GVC analysis stands like an exception with respect to the recent discussions on globalization and strategy. In fact, neglecting the international customization versus standardization tradeoff, it has been almost exclusively centered (although implicitly) on the arbitrage strategy. This is not surprising considering the strong interest of GVC scholars on the international fragmentation of production and the offshoring of low value-added functions. Furthermore the contribution of Kogut (1985) constituted a fundamental underpinning in the development of the GVC approach (Gereffi et al. 2005). This fact clearly suggests the great potential of combining an international strategy perspective with the GVC analysis, ascertained that both approaches tended to stress different aspects of the increasing integration of world economies (Table 2).

Table 2: Stressing different aspects of the increasing integration of world economies

	International Strategy perspective	Global Value Chains approach
Discussions about globalization centered on	**Markets (growing overseas)**	**Production (offshoring and global sourcing)**
Globalization strategies	**Local customization versus global standardization**	**Arbitrage, exploiting international differences**
Main players	**Multinationals investing globally**	**Lead-firms, controlling complex inter-firm networks**
Governance and transfers of knowledge	**Headquarter – subsidiary relations**	**Lead firms – suppliers relations**

Horizontal versus vertical global value chains.

Moving away from explicitly considering the differences that characterizes the firms that control and shape global value chains operations, GVC scholars not only leave out of the analysis the different potential development effects associated with different types of multinationals (and their subsidiaries), but ignore the fact that these differences have important impacts on their organizational decisions and value chain governance. Actually the initial buyer-driven versus producer-driven distinction was centered on lead firms structural differences, concerning the characteristics of the industry of operation (capital- versus labour-intensive, investment-based versus trade-based operations), but then as we said the revised GVC governance theory turned to consider governance as transaction-specific rather than leadfirm-specific. Neither the former buyer-driven vs. producer-driven distinction nor the latter GVC governance theory considered differences in lead firms *motives* to go global or their underline *strategies* as fundamental variables to understand cross-border organization; nonetheless "motives remains important, because motivations are indicative of the potential consequences of their activities" (Narula and Dunning, 2009: p.25) and "international

organization must be strategy-contingent" (Ghemawat, 2008: p.204). Indeed looking at the different underlying strategies of lead firms it is possible to get important insights about their organizational decisions.

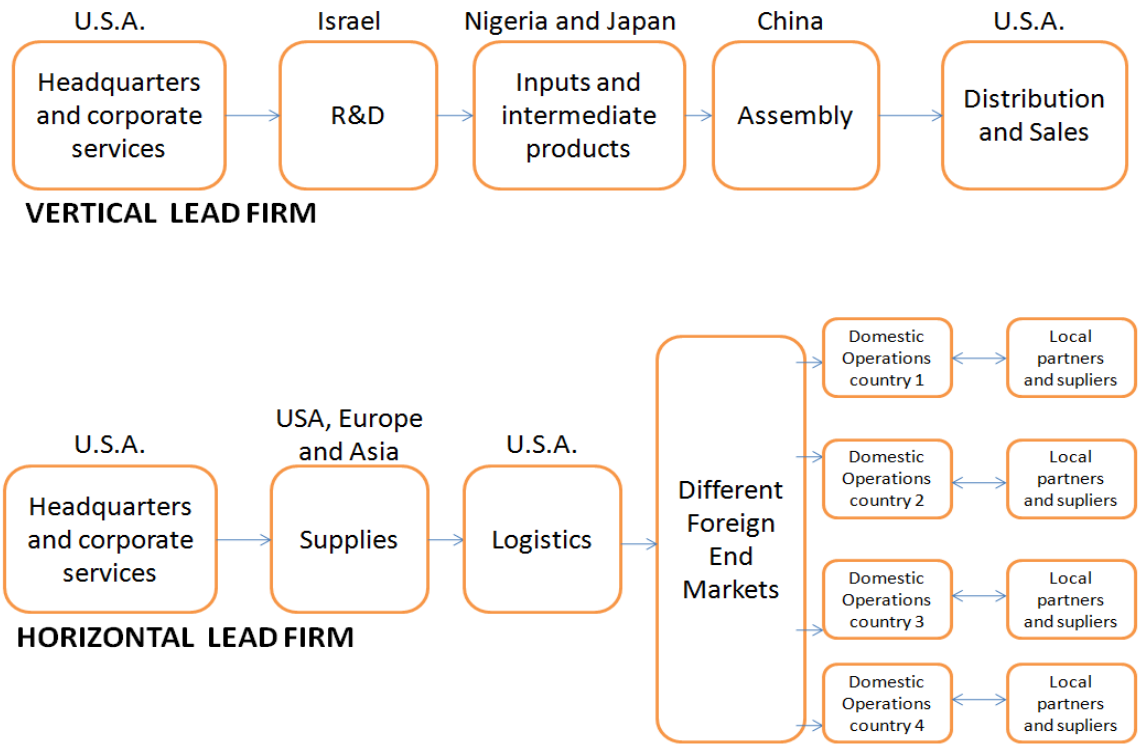
Multinational firms motives to global and strategies are clearly interrelated. Narula and Dunning (2009) distinguish four main motives: resource seeking (e.g natural resources), market seeking (e.g. growing overseas markets), efficiency seeking (mainly production cost related, e.g. cheap labour) and strategic asset seeking (e.g. knowledge-related assets). Tying the previous motives with Ghemawat generic global strategies we can say that resource seeking, efficiency seeking and strategic asset seeking motivations represent different type of arbitrage strategies that seek to exploit international differences ("arbitrage seeking"), i.e. respectively geographic arbitrage, economic arbitrage and knowledge arbitrage (Ghemawat, 2003b). Indeed, as Ghemawat often remarks, "the scope for arbitrage is as wide as the differences that remain among countries, which continue to be broad and deep" (Ghemawat, 2003b: p.78). On the contrary, market seeking motivations appear strictly interrelated with adaptation and aggregation strategies, i.e. with decisions about national responsiveness versus global integration and so about the extent to which similarities among countries can be exploited.

What the previous discussion highlights is that exists a qualitative differences between companies that try to exploit differences (resource/efficiency/asset-seeking) and companies that pursue to exploit similarities (market-seeking). So, also from an organizational point of view, we may expect to see significant variations. Indeed, a large body of economic research on the multinational enterprises (Caves, 2007) has shown also empirically the value of distinguishing between horizontal versus vertical multinational enterprises, i.e. between companies that tend to perform (many of) the same activities in different countries leveraging on market similarities and companies that instead mainly seek to arbitrage differences across countries functionally and geographically slicing up their value chain.

The horizontal vs. vertical distinction (or market vs. production) appears particularly powerful in explaining variations in the coordination of cross-border activities, because the imperatives of pursuing scale economies trough market expansion differ greatly from those of playing the spreads through arbitrage. In fact there are fundamental tensions between pursuing an horizontal focus rather than a vertical one. Deep and conflicting differences regard (Ghemawat, 2003b and 2007): the competitive advantages pursued through overseas operations (scale and scope economies vs. absolute economies of specialization), the coordination of international operations (by business vs. by function), the localization of overseas operations (countries similar to the home base vs. more diverse set of countries), the

public issues raised (cultural domination vs. labor exploitation). Of course, most multinationals follow both logics, horizontal and vertical, in their international operations, for example emphasizing vertical coordination arrangements upstream of their value chain and horizontal coordination arrangements downstream. However, according to different industries and business models it is still possible to characterize a firm as following mainly an horizontal rather than vertical logic, and this characterization implies important organizational variations (e.g. country-centered vs. function-centered).

Fig. 1: Horizontal versus vertical multinationals and their global value chains



Source: author's elaboration

In GVC literature the distinction between horizontal and vertical multinational and value chains is not acknowledged. Even the former distinction between buyer-driven vs. producer-driven chains was blurred by the detected shift in the organization of even

traditional integrated multinationals toward external networks. So the underlying idea became that deverticalization represents a general strategic trend for everyone, and only not desirable external constraints can bring to residually choose hierarchy. Even though the increasing importance of alliance capitalism is widely recognized (Narula 2003; Dunning and Lundan, 2008), this view appears quite extreme. Saying that hierarchical control and full internalisation is no longer always a first-best option to MNEs (Narula and Dunning, 2009), is very different from (although implicitly) pointing at vertical disintegration as the always (if possible) preferred best option (Gereffi, et al. 2005). The GVC scholars position, as we already pointed out, represents a sort of downgrading of the strategic options of the multinational firm and on the contrary a strict focalization on its organizational deficiencies.

From our point of view, because of their attention to the international fragmentation of production, the offshoring of low value-added functions and their developmental implications, GVC scholars tended to focus predominantly on vertical global operations motivated by arbitrage strategies of exploiting differencies, neglecting on the other hand horizontal operations driven by logics of adaptation and aggregation.

At this point, one could question the fact that country-centered international horizontal networks are not the functional integrated, but vertically disintegrated and geographical dispersed value chains that constitute the specific content of GVC analysis. However these horizontal networks often share common upstream suppliers and different kind of general corporate services, so that their value chains could be represented like a river that downstream is divided into many quite similar branches (Fig. 1). The increasing importance of developing countries as consumer markets and the increasing relevance of service organizations (organized mainly horizontally) in the global economy suggest that GVC analysts cannot neglect to study horizontal networks and so they should then adapt their conceptual tools to account for them. In particular it appears worth to better understand the relationships that horizontal lead firms establishes in every target country with local partners and institutions (Fig.1), acknowledging that the organization of these value chains at the local level can significantly differ from one place to the other.

Beyond transaction costs: a different governance model

In this section I propose a different governance framework to explain the inter-firm organization of global industries, with special reference to the coordination and organization of horizontal international operations for market seeking-purposes. Arbitrage strategies based on absolute economies of specialization seem in tune with a preference toward outsourcing and fragmentation, when feasible, in order to exploit differences and avoid the risks and the complexities of internalize very different activities. But for market seeking operations that look after international similarities to rather exploit economies of scope and scale, more integrated value chains appear appealing. (This characterization as many of the insights that follow have been importantly informed by interviews with the CEOs and other executives of leading international firms, contacted during a three year research period on the global cruise industry). Especially in service industries, but not only, the need to control the operations that "touch" the final clients calls for more integrated organizational arrangements. As stated by Procter & Gamble CEO A.G. Lafley, "if it touches the customer, we don't outsource it" (Ghemawat, 2007: 61).

Considering that the economic developments and international regulations associated with globalization have improved the enforceability of contracts, the codifiability of information and have implied a progressive decline of transaction and monitoring costs (Narula 2003), I intentionally set aside traditional transaction costs and features to rather center the discussion on production costs and firms characteristics (both lead firms and suppliers). In the context of transaction cost economics (TCE), markets are presumed to enjoy certain advantages with regard to production cost economies, while internal organizations enjoy governance cost economies (Williamson, 1981). However, increasing the scale of their operations companies can substantially reduce this spread regarding production cost advantages. Indeed, TCE scholars recognize the importance of production costs and economies of scale when they state that, even in the presence of asset specificity, activities will tend to remain outsourced when internal consumption (*frequenc*y of transactions) remains too low to justify internalization (Richardson, 1972). Furthermore, technological change, proprietary assets development and firm- and industry-level learning concern not only suppliers (see the variable *capabilities in the supply-base* in GVC theory), but clearly also lead firms. The traditional focus on headquarter to subsidiaries (or suppliers) transfers of knowledge (Bartlett and Ghoshal, 1989) should not obscure the fact that important transfers of

knowledge occur also from subsidiaries to headquarters (Doz et al., 2001) and from suppliers to value chain lead firms. These considerations suggest that barriers to internalization constituted by learning economies (Ghemawat, 1985) can decrease over time as lead firms become more experienced about their business, the operations of their suppliers, the inputs acquired and the countries where they operate.

To build a variable able to group together the cost efficiency effects of scale and experience, I call *intensity of use* a variable that increases with the scale of production and the years of activity in which a lead firm has been acquiring a product or a service from a supplier. The more the lead firm *uses* the products/services of a supplier, because of an increased scale and cumulated time of activity, the greater will be the incentives to internalize the provision of that product/service because of scale economies and the experience and knowledge acquired. However, as highlighted by Penrose (1959) the *competencies of suppliers* (or their developed proprietary assets) can be too difficult to replicate, so when the capabilities and resources in the supply-base represent a strategic value for the lead firm that it would be very difficult to re-create effectively in-house, the need of having access to those expertise and competencies represents a strong incentive for forging and maintaining external relationships.

The other fundamental variable that I'm going to use, *capabilities in the supply-base*, is present also in the GVC governance framework, but I want to highlight the strategic content of this variable: in this context capabilities are not only low or high in abstract, or "in relation to the requirements of the transaction" (Gereffi er al., 2005: 85), but are high or low according to the lead-firm valuation about the strategic value they provide as crucial assets for the profitability of its operations. So the framework that I propose aspires to be strategy-contingent and to escape from any mechanistic view of organizational change, clearly establishing the strategies of the lead-firm as the primary voluntary source of organizational change (Chandler, 1962). In this view, inexperience, lack of adequate scale and lack of the strategic competences and knowledge enjoyed by suppliers, are the constraints to integration that explain the forging and maintaining of external relationships (Table 3). Indeed the *ability to codify transactions*, one of the fundamental basic variables of the GVC framework, here instead of favoring outsourcing, it is rather a driver of integration because it is much easier to internalize codified knowledge than tacit one.

In the following theoretical proposal, I acknowledge the 5 basic types of value chain governance identified by Gereffi at al. (2005), but, downgrading the role of information

codifiability, I merge the categories of modular and relational value chains into just one that I name "network" and that represents a collaborative type of inter-firm collaboration characterized by low power asymmetry. Thus, my typology now identifies 4 basic governance types: market, network, captive (or supported) value chains, and hierarchy. To understand when to expect market, network, captive, or vertically integrated global value chain governance to arise, I rely on the two key determinants of outsourcing vs. internalizing decisions previously identified and discussed: *capability of suppliers* and *intensity of use*.

Table 3: A new comparative governance schema for inter-firm relationships

	Intensity of use Low	Intensity of use High
Suppliers' Capabilities Low	**Captive**	**Hierarchy**
Suppliers' Capabilities High	**Market**	**Network**

Source: author's elaboration

Table 3 graphically depicts the governance schema that I'm suggesting about inter-firm relationships, with special reference to the coordination and organization of horizontal international operations. When the intensity of use associated with a certain stage of the value chain is low and suppliers have the capability to provide the products/services in question, market governance represents a natural solution because in this situation scale economies cannot be reached through internal consumption. As the intensity of use increases, the incentives to internalize that stage of the value chain increase too because of the augmented scale of operations and the increased experience and knowledge of the lead firm: if the specific capabilities of suppliers are not considered as strategic assets too difficult to replace, hierarchy governance provides the advantages of greater control/coordination and avert the risk of disintermediation/bypass. On the other hand, even in presence of a high intensity of

use, if the specific capabilities of suppliers are considered as strategic assets not easily replaceable and crucial for the overall profitability of operations, network governance provides the advantages of assuring (though specific contracts) that the intensity of use and so the extended demand of the lead-firm will be satisfied by competent suppliers that formally commit themselves to support lead-firm operations. Finally, if the intensity of use is too low to justify internalization, but the market doesn't provide competent suppliers, lead firms can engage in captive governance schemes, providing selected captive (or *supported*) suppliers with the technical assistance needed to fulfill the buyer's requirements.

Although the variables internal to the model presented, *capability of suppliers* and *intensity of use*, certainly influence the decisions about how to shape the boundaries of the firm, in the context of global operations others specific features intervene. Administrative forms of governance opposed to market coordination via the price mechanism, for example, are normally enhanced and favored by the fact that markets often do not work well across borders (Ghemawat, 2008). Another element in favor of network forms of coordination in the international context, as opposed to hierarchy, is the fact that when operating across borders demand uncertainty tend to be higher and so maintaining independent suppliers provides greater flexibility and avoids obsolescence, as long as competent suppliers can be found (Jones et al., 1997).

Table 3 can interestingly be re-interpreted in light of the generic global strategies – adaptation, aggregation and arbitrage - proposed by Ghemawat (2007). Arbitrage strategies are often implemented through outsourcing, also because the restriction of vertical scope tend to simplify the projected involvement in international operations. However adaptation strategies too provide additional rationales for outsourcing, because firms can decide to rely on local partners for activities that require a deep knowledge of the targeted foreign market. Therefore in pursuing an adaptation strategy, the knowledge of the local market and the greater ability to obtain local responsiveness are valuable strategic capabilities that may incentive lead firms to consider maintaining external suppliers also in a context of increasing intensity of use (network form in table 3). On the other hand, some year after entering a foreign market, the increased experience/knowledge acquired it may downgrade the strategic importance of relying on local partners for products/services intensely used, and so push toward a more integrated governance model inspired by aggregation strategies. Even not modeling explicitly location specificity, the governance schema proposed in table 3 appears a useful support for global strategy formulation (especially in market-seeking operations),

because it provides an initial base for linking the Ghemawat's framework of the AAA Triangle for global strategies with the decisions about the boundaries of the firm.

Conclusions

The literature on global value chains analysis - increasingly employed especially by development researchers and practitioners in analysing economic transactions between global and local/regional players - deserves more attention by international business scholars for many reasons.

First of all, GVC analysis from the very beginning centered its attention on issues that are more and more permeating IB scholars research agendas. GVC scholars questioned the traditional definition of multinational enterprise centered on equity control and foreign direct investmnets and consciously focused on the emerging new organizational global governance forms, such as offshoring/outsourcing structures and inter-firm networks. Acknowledging the growing importance of "alliance capitalism" (Dunning and Lundan, 2008), GVC scholars in the effort to reconceptualize the role and scope of lead firms in driving global production networks, provide important insights about *de facto* vs. *de jure* control and coordinated value adding activities through non-equity means. The GVC peculiar interest in offshoring by outsourcing phenomena and (implicitly) in arbitrage strategies somehow compensate the predominantly focus of international business scholars on the national responsiveness versus global integration tradeoff (Ghemawat, 2003b). Moreover, GVC scholars anticipated the actual increasing attention in IB to the role of local and global institutions, the modes of multinationals' interaction with their local environment and the developmental and environmental consequences of their actions (Dunning and Narula, 2009). Finally, the holistic focus on industry value chains and all the different actors that contribute to bring a product from its conception to its end use (Kaplinsky and Morris, 2001) points out a fundamental level of analysis to understand firms competitiveness. This "meso" level of analysis between industries and macro-economies (Ricart et al., 2004), very much in tune on the other hand with recent work on regional clusters (Audretsch, 2000; Dunning, 2000), stresses the importance and influence of the linkages between suppliers and buyers, the spillovers from related industries and public policies on innovation, performance and industrial upgrading. The extended value chain or value system in Porter's words (1985) - that is the primary object

of investigation of both regional cluster analysts and GVC researchers (especially when it has a global extent) - should be indeed a valid level of analysis also for international business researchers (Ricart et al., 2004).

On the other hand, as I suggest in this paper, IB developments can also inform GVC analysis, pointing out new directions in GVC theorizations. As Ricart et al. highlighted (2004), to understand cross-border economic activity researchers have to focus on the ecology of firms and places: so if the GVC framework aspires to be effectively an *international* theory, it should consider ways of incorporating location specificity into the analysis on global governance. Another point that I made is that the new governance theory of global value chains proposed by Gereffi et al. (2005) doesn't consider explicitly variations in lead firms structural characteristics and strategies. However, the choice of privileging transactions' structural constraints rather than the intentional strategic actions of firms entails important consequences.

First of all, reducing implicitly the strategic options of global firms to substantially one, i.e. going global though outsourcing to exploit international differences, it fails to catch the variety of multinational motives, strictly linked with the international variations in location specificities. If in the past discussions about globalization were mainly centered on markets, GVC scholars predominantly centered on production, but neither extreme appears able to explain what is going on in the field. Indeed variations in strategies and motives have profound impacts on the organization of global firms. At very least, it seems useful to acknowledge the distinction between horizontal (market-centered) operations and vertical (efficiency seeking and production centered operations).

Secondly, suppliers' capabilities are valued very differently according to the strategies pursued: setting aside strategies weakens the understanding of which kind of capabilities are requested to participate in global value chains. Indeed lead firms can decide to outsource for many different reasons: to decrease costs by exploiting international spreads, or to differentiate their products by leveraging on partner's specific strength, or to achieve greater local responsiveness by relying on local partners with valuable knowledge of local tastes.

Finally neglecting the variations in the underlying motives of global firms and treating them in the same way jeopardizes the possibility to offer valuable recommendations for development-oriented policies. It has to be reminded that GVC analysis had a development-oriented origin and so the provision of insights about the potential of global value chains in supporting economic and social development it has always been a crucial

issue for GVC scholars. However the theory of inter-firm governance developed by Gereffi et al. (2005) can hardly be used to inform local authorities about which policies should be implemented. In fact, if captive and hierarchical value chains are better to be avoided, the variable to focus on in the proposed governance schema are the capabilities of suppliers. But if in order to increase the capabilities of suppliers (industrial upgrading) one has to leverage on the capabilities of suppliers, clearly the whole process appears quite tautological. Instead, for policy-makers it would be interesting to know which kind of multinationals and value chains are more conductive to local development and which kind of competencies should be enhanced. To deepen its understanding of the drivers of industrial upgrading, GVC theory should then differentiate among lead firms and consider the different motives that push them to go global. I suggest that the Ghemawat's generic cross-border strategies (the AAA strategy triangle) for coping with and even capitalizing on international differences constitute an instructive framework, that could help GVC scholars in future attempts to bring back location specificities and lead firms at the center of the analysis.

The trend towards vertical disintegration is not all-comprehensive. Clearly not all global industries and firms are vertically disintegrating. Many companies, especially in service industries, are actually pursuing strategies of vertical integration. This fact is hardly explained by the GVC governance theory that sees hierarchy as the undesired residual organizational form. In the last part of the paper, by proposing an alternative governance schema, especially applicable to those market-seeking cross-border operations mainly neglected by GVC theory, I suggest to focus on production costs, rather than transactions, and to explicitly consider the strategic evaluations and judgments that lead firms carry out about their internal resources compared to suppliers'. The proposed schema considers both lead firms (*intensity of use*) and suppliers characteristics (*strategic capabilities*) and aspires to support the establishment of the appropriate boundaries of the firm in relations to the strategic global objectives of the organizations.

In conclusion, both international business and global value chains analysis could greatly benefit from a reasoned cross-fertilization. In particular, the GVC approach has to decide if it wants to evolve mainly as a theory of inter-firm transactions or on the other hand strive to become a powerful tool to help regions and firms to find their place in the global economy. If the latter is the aim, location specificities and variations in lead firms strategies should return at the heart of GVC theory building.

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