# **IDE Research Bulletin**

Research project summary based on papers for academic journals with the aim of contributing to the academic community

## The Role of Suppliers in Global Value Chains

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#### **Background and Aim of the Project**

The global value chain (GVC) research developed in the context of the emergence of new drivers of globalization, and in particular retailers and brand-name companies – which (Gereffi 1999: 46) referred to as "manufacturers without factories". These lead firms created new global supply bases, emerging as powerful actors shaping the value chains by performing tasks such as defining product characteristics, distributing tasks along the chain, influencing the distribution of risks and rewards along the chain, and choosing suppliers and monitoring their performance (Dolan, Humphrey, and Harris-Pascal 1999: 18-21; Ponte and Gibbon 2005: 3). Given that the focus of the GVC research has primarily been on the exercise of power by lead firms over other actors and its consequences, relatively limited attention has been directed to suppliers. Suppliers were regarded largely as passive and subordinate actors that act within the constraints determined by the lead firms and accumulate capabilities in accordance with the requirements and assistance by the lead firms. This is reflected in the theory of GVC governance provided in the seminal paper by Gereffi, Humphrey, and Sturgeon (2005).

However, recent literature suggests the emergence of suppliers who are much more active and powerful players than the conventional GVC research assumed. First, suppliers may exercise agency through their choice of markets and customers (which, where, and how many) and through taking strategic decisions to acquire capabilities and reposition themselves within value chains – albeit within the constraints imposed by lead firms and other actors in GVCs and institutional settings (Kawakami 2011; T. J. Sturgeon and Linden 2011; Sako and Zylberberg 2019). Second, supplier agency and reconfiguration of global industries has led to accumulation of supplier capabilities (Sturgeon, Humphrey, and Gereffi 2011). This, combined with the rise of emerging country lead firms across numerous sectors (Sako and Zylberberg 2019), has resulted in situations where even developing country suppliers possess capabilities equal to or greater than those of their customers (see, for example, (Hsieh 2015; Fujita 2013). Third, the more recent literature on the role of platforms and platform leadership (Gawer and

Cusumano 2002; Hagiu and Wright 2015) emphasizes the key role played by "suppliers" (companies not selling directly to final consumers) in shaping markets and providing leadership.

The literature discussed above is crucial in showing that suppliers may, within constraints imposed by lead firms, other actors or institutional settings, exercise agency in reconfiguring value chains. However, the literature suffers a number of shortcomings. First, the discussion has been based primarily on a limited number of very large transnational suppliers. These suppliers, typically found in electronics, automobile and apparel industries, originate in either developed countries or the Tiger economies in East Asia. By supporting the manufacturing needs of developed country lead firms in Asia and around the world, these large suppliers not only maintain close relationships with their clients but are also in a position to negotiate better terms of transactions with them (Sturgeon and Lester 2003; Appelbaum 2008; Sturgeon, Humphrey, and Gereffi 2011). However, these transnational suppliers are best seen as exceptional cases. In the meantime, the question of whether and how smaller firms, which in fact are the majority, might exercise agency in global value chains remains under-explored.

Second, there have been limited systematic analyses as to what the available strategic options are for suppliers and how they work in practice. To start with, previous discussion has focused overwhelmingly on a particular type of suppliers' strategy, i.e., functional upgrading or acquiring new functions in the chain to increase the overall skill content of activities (Schmitz, 2004: 8). Because moving into higher-margin and difficult-to-replicate activities is vital for developing enduring and solid competitiveness, this type of upgrading has been regarded as particularly crucial for suppliers (Navas-Alemán, 2011; Giuliani, Pietrobelli, & Rabellotti, 2005). However, functional upgrading is not the only route for suppliers to exercise agency in value chains. Sturgeon & Lester (2003), for instance, identify a variety of routes for suppliers to enhance value creation and to protect their share of the market against competitors, which include specialization in process-specific technologies that enable the firm to provide high-quality, low-priced manufacturing and manufacturing-related services. More recently, Sako and Zylberberg (2019), drawing on management theories, developed a framework that articulates ways in which supplier strategy enables them to redefine the nature of their relationships with buyers. The framework highlights the importance of three types of suppliers' strategies: diversifying buyer portfolios,

upgrading in the context of strong regimes of appropriability, and upgrading while in control of critical and appreciating specialized complementary assets.

Despite the recent progress, research on how suppliers exercise agency in value chains is still at inception. The range of strategic options for suppliers, such as those discussed above, has been extracted primarily from the experience of large transnational suppliers that are exceptionally successful. Some strategies are mutually exclusive, e.g., integrating high-value-adding functions versus staying process specialists. Apparently, a strategy would work well for specific types of suppliers and under specific sets of circumstances but necessarily for other types of suppliers or in other contexts. Further research is needed to comprehensively identify the range of strategic options available to different types of suppliers in different contexts, and systematically analyze how each of them works in practice.

Third, previous discussion has focused mainly on the suppliers' relationships with their main customers, leaving the question of whether and how other types of transactional or non-transactional relationships might influence the scope for suppliers to exercise agency in value chains largely under-explored. However, as emphasized by Sako and Zylberberg (2019), diversification of customer portfolio beyond the main customer is vital for suppliers seeking to increase returns and reposition themselves in value chains. Suppliers may also benefit from linkages with actors that they do not have direct transactions with (Hsieh 2015). Recent literature on platforms also highlighted how actors without direct transactional relationships might influence options available to other actors (Humphrey 2018). More comprehensive examination of suppliers' relationships, including those with customers other than main existing customers or those that do not involve direct business transactions is needed.

This project is an attempt to further develop both empirical and theoretical work on the role of suppliers in value chains. On the empirical front, the aim is to understand the variety of approaches and strategies adopted by suppliers to improve their performance, reposition themselves in value chains, and/or even influence value chain governance. The analyses in particular focus on small- and medium-scale suppliers in machinery-related industries from developed, emerging and developing countries in East and Southeast Asia, which earlier studies have largely recognized as passive and subordinate actors in chains governed by powerful lead firms. On the theoretical front,

the project explores how the GVC theory might be extended to take better account of the roles, strategies, and/or agency of suppliers in GVCs. The project in particular considers the variety of ways in which suppliers acquire and exploit capabilities that help them strengthen their positions and their theoretical implications.

#### **Summary of the Papers**

This project produced a collection of four papers. The first three are empirical papers that examine the approaches and strategies adopted by suppliers in machinery-related sectors in Taiwan, China and Vietnam. The last paper is a theoretical paper that reconsiders the analysis of suppliers in GVC theory.

The first paper by Michelle Fei-Yu Hsieh, titled "Innovating by collaborating: Modular suppliers in GVCs reconsidered", highlights unique features of innovation capability building achieved by suppliers in the Taiwanese bicycle industry. This industry is a classic case of modular governance, which is characterized by reduced coordination and autonomous manufacturing. Both of these characteristics, according to the GVC literature, are conducive to geographical and transnational expansion of production networks. Nevertheless, the development and transformation of the Taiwanese bicycle industry were achieved by collaborations among local assemblers and suppliers and various horizontal linkages within local clusters that helped them develop innovative bicycles and bicycle components for the global market. By connecting the pragmatic collaboration approach with GVC governance, this paper conducts longitudinal qualitative analysis of two sets of transitions in the Taiwanese bicycle industry. The analysis shows that suppliers collaborate not only with lead firms but with other suppliers beyond the industry boundary to create value-added and innovation in modular production. The paper seeks to shift the unit of analysis from firm-based strategies in a dyadic relationship to inter-firm relationships in a system so as to provide prospects and conditions for the future of broad-based development, and calls for reconsideration of modular governance.

The second paper by Ding Ke, titled "Service, Relational Governance and the Role of Suppliers in Global Value Chains: A Case Study of Japanese Small Suppliers in the Chinese Market", brings to light the role of capable foreign suppliers that assist incapable customers in emerging and developing countries. This pattern of transactional

relationships has become increasingly prevalent in the context of the rise of large emerging markets. However, up till now, such transactional relationships have been largely neglected in the GVC literature. Earlier studies suggested that, by adopting a turnkey solution strategy, the governance pattern under this relationship is usually "modular" or "market" and that information and knowledge flows are highly restrained. In contrast to literature, this paper discovered that a group of Japanese small suppliers in the Chinese market formulate various service strategies (problem solving, technological advice, joint product development, etc.) to attract the Chinese market customers. These Japanese suppliers have formed a typical "relational" governance with local customers and have provided ample learning opportunities. This paper makes it clear that characteristics of industry and market, and supplier capabilities accumulated in a home-market are important to establishing this type of relational governance. With limited managerial resources, active marketing activities and localization have helped small suppliers to apply their strong capabilities to the Chinese market.

The third paper, by Mai Fujita, is titled "How suppliers navigate across industries: Diversification of motorcycle component firms in Vietnam". This paper calls into question the most documented development path for suppliers serving large customers, i.e., upgrading within value chains governed by main customers. The paper asks whether and how this route could be complemented by a less studied route of diversification of customers, particularly into those in different industries. The analysis of original survey data on the Vietnamese motorcycle industry in 2010-2015 finds that inter-industry diversification played a vital role for suppliers in overcoming the challenges of market downturn and intensified competition between suppliers. Suppliers of non-core components that effectively utilized technological assistance provided by motorcycle customers were found to have higher probability of diversifying into the supply of components for customers in other machinery industries. The analysis extends the literature by highlighting a new aspect of supplier side dynamics in GVCs that enables suppliers to bypass lead firm power and control and by demonstrating the importance of industry specificities, especially on the supplier side, which have been underplayed in the GVC literature in exchange for the efforts to develop generic, industry-neutral GVC governance framework.

The last paper by John Humphrey, is titled "Rethinking the analysis of suppliers in global value chain theory". The paper begins with the recognition that the GVC

governance theory employed a parsimonious theory to explain the management of interfirm relationships in the context of offshoring and outsourcing in the latter part of the 20th century. Parsimonious theorizing combined with the power of lead firms that shape the new global supply chains, however, has led to criticisms that the theory is determinist and fails to allow for the agency of the non-lead firms that are often referred to as suppliers. Based on an examination of the parsimonious theory, it is argued that the theory is not deterministic but needs reworking to take into account a much greater heterogeneity in the roles of suppliers in GVCs than that arising from the outsourcing of low-skilled tasks. The paper examines this challenge, and argues that the capability approach, in particular, should be integrated more effectively into GVC theory and extended beyond the issue of supplier capabilities so as to discuss the factors that affect the distribution of capabilities at different points in chains. The paper concludes that, while this would provide a basis for considering supplier capabilities and supplier agency, a discussion of supplier agency should also place it in the context of the constraints posed by industry architectures and the way in which these establish and reinforce lead firm power.

#### **Overall findings**

The following summarises the findings of the project as a whole. First, the project indeed found evidence of "active" exercise of agency by small- and medium-scale suppliers. While the degree of activeness and the strength of agency varied substantially across cases, at least certain sub-groups of suppliers analysed in the three empirical papers deviated from the characterisation in the conventional GVC literature of small- and medium-scale suppliers as passive and subordinate actors in the face of control exercised by powerful lead firms.

Second, the project highlighted a variety of approaches and strategies adopted by such "active" suppliers. In all three empirical papers, diversification of customers constituted a vital component of supplier strategy. In Hsieh's and Fujita's papers, diversification involved serving multiple customers including those in other industries. In Ding's paper, Japanese suppliers, which had traditionally been aligned closely with large customers, actively explored local Chinese customers. The three studies showed how suppliers leveraged diversification so as to avoid dependence on dominant customers, mitigate risks of market fluctuation, acquire new knowledge and technology, or even increase

bargaining power vis-à-vis existing customers. Apart from customer diversification, suppliers examined in the three papers also adopted varieties of other approaches such as collaboration via horizontal linkages beyond transactional relationships and provision of services to incapable customers, depending on the resources and competencies possessed by the suppliers and the industrial and institutional settings. It is worth emphasising that functional upgrading into end product development, branding and marketing, which has received considerable attention in the literature, was not a focal approach pursued by the suppliers analysed in any of the three empirical papers. Although some of the suppliers examined engaged in design of parts and complementary services, production remained the primary realm of activities for majority of the suppliers examined. This suggests that production, which has tended to be underplayed in the extant literature, may offer a range of options for upward mobility of suppliers in machinery-related industries.

Lastly, the project provided theoretical insights. Central to these are the issues of acquisition and exploitation of supplier capabilities, which in the GVC approach have been discussed primarily within dyadic relationships between suppliers and lead firms. The papers suggest ways in which the GVC approach might be extended to take better account of the multiplicity of actors involved in the acquisition and exploitation of supplier capabilities and the mechanisms at work behind capability acquisition and exploitation by suppliers, as well as the industry architecture and lead firm power that function as a constraint to the exercise of agency by suppliers.

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