Are Multinationals and Governments from Emerging Economies Configuring Global Value Chains in New Ways?

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Abstract

**Purpose** – The hallmark of today’s global value chains (GVCs), still dominated by multinationals from advanced economies, is a sophisticated international division of labour based on scale economies and prevailing factor endowment differences between countries. However, GVCs led by multinationals from large emerging economies may be configured on the basis of considerations that supplement factor cost efficiencies, namely those of societal objectives as formulated by political actors in the home country. In this context, the purpose of the paper is to examine the implications of political and socio-economic factors on GVC configuration of multinational firms.

**Design/methodology/approach** – In-depth case study of a leading Chinese car manufacturer, Zhejiang Geely Holding Group (ZGH) and its value chain configuration.

**Findings** – We show how ZGH’s configuration of its GVC, including that of acquired Volvo Car Corporation, takes place in symbiosis with political actors. The advantages and disadvantages of this symbiosis are highlighted.

**Research limitations/implications** – The study focuses on GVC configuration of one company, ZGH, in one industry, the automotive industry, in one emerging economy. The external validity of the study may therefore be limited. Furthermore, the focus is on the geographical/locational configuration of GVCs and ignores the ownership aspects.

**Originality/value** – The paper provides novel empirical evidence to better understand GVC configuration of multinational firms from emerging economies.

**Paper type** – Research paper

**Key words** – Global value chains, Emerging market multinationals, Political embeddedness
Introduction

A significant proportion of the world’s manufacturing is the result of an international division of labor coordinated by multinational enterprises (MNEs) (UNCTAD, 2013), which is usually referred to as a global value chain (GVC) (Porter, 1986). In this paper, we examine the factors that determine how GVCs are configured geographically. We do so from an evolutionary perspective (Cantwell et al., 2010) that captures the dramatic changes evident over the past 50 years as well as those that are currently underway.

Our evolutionary perspective sets the scene for the identification of a possible major shift in the way GVCs are configured – a shift away from GVCs defined by operational efficiency logics and orchestrated by MNEs from the advanced economies, such as the US, Germany, and Japan (Gereffi, 1999). The new “breed” of GVCs is led by MNEs from large, emerging economies (especially China and India) and combines operational efficiency with societal goals defined by the political system of the home country. Hence, political actors exercise considerable influence over GVC configuration. If these MNEs are not compensated in some way, the fulfilment of societal goals may occur at the expense of the GVC’s operational efficiency, which may weaken the competitiveness of emerging economies’ multinational enterprises (EMNEs). To ensure such compensation, EMNEs may be given access to various home-market location advantages, such as concessions, inexpensive production sites and utilities, public procurement qualification, favorable loans from state banks, or expedient processing of required approvals and permits. Given generous compensation, the politically influenced GVC may constitute a highly competitive alternative to the GVCs that have dominated the world’s manufacturing thus far (Gereffi, 1999; Humphrey and Schmitz, 2005).
In this paper, we investigate this new breed of GVC by studying the rise of a global player in the automotive industry, Zhejiang Geely Holding Group (ZGH) – a privately held Chinese company under the leadership of Li Shufu. ZGH’s rise from a position as a local player to a global actor is remarkable, especially in terms of its acquisitions of incumbent western firms, including the Volvo Car Corporation (VCC). We describe ZGH’s transformation of VCC’s value chain following the acquisition in 2010 – a transformation that serves to demonstrate the reconfiguration resulting from a new, more politically influenced logic.

Cooperation between MNEs and governments is not a new phenomenon. The influence of governments on MNE strategies, including their choice of location, was well-described in the early IB literature (e.g. Behrman, 1970; Boddewyn, 1988; Doz, 1979; Stopford and Henley, 1991; Vernon, 1971). It is also covered in contemporary contributions on the macroeconomics of international business (IB) (Agmon, 2017) and in the more recent IB version of institutional theory (for an overview, see Tihanyi et al., 2014). However, there seems to be a new side to government-business cooperation in relation to EMNEs – the close cooperation between EMNEs and their home governments. Previous IB research has mainly focused on the relationship between MNEs and host governments in both positive and negative settings (e.g. job creation and transfer pricing, respectively). However, the government plays a more prominent and proactive role in the geographical configuration of EMNEs’ value chains, especially among Chinese EMNEs.

Given this background our paper proceeds as follows. In the next section, we take a closer look at GVCs, and the factors and underlying logics that have historically determined their geographical configuration. Thereafter, we apply an evolutionary perspective on GVCs. As a conceptual framework, we use Porter’s (1986) industry-generic distinction between dispersed
and concentrated GVC configuration.\textsuperscript{2} We account for the general “megatrend” of moving from dispersed GVC configuration towards concentrated GVC configuration, which has been spurred by the liberalization and integration of trade and investment together with ICT advances since the 1960s (The Economist, 2017). We exemplify this evolution using developments in the automotive industry. We then put the spotlight on the new configuration logic, which is characterized by a strong political influence that unfolds in private-public partnerships between EMNEs and their home-country governments. To facilitate our understanding of this logic, we consult the literature on political embeddedness. After this theoretical and conceptual account, we justify and outline our case methodology, and we contextualize the logic by describing the configuration of ZGH’s global value chain. The final section offers our conclusions, highlights several limitations of our study, and suggests avenues for future research.

**Factors determining the configuration of GVCs**

Although the international division of labor in manufacturing has existed for centuries, MNE coordination did not take off until US multinationals began offshoring labor-intensive manufacturing processes to low-cost production zones in countries like Mexico and the Philippines in the 1960s. This surge in offshoring was supported by the establishment of tax-exempt and tariff-free export-production zones in a number of developing countries, and by the US government’s introduction of tariff provisions permitting duty-free re-entry of US-made components sent abroad for further processing or assembly (Maskell \textit{et al}., 2007). In the 1980s, the label “global value chain” was applied to this MNE-coordinated division of labor. The label referred to Porter’s (1985) popular value-chain template. As an international extension of his value-chain concept, Porter introduced the “global value chain” in which he differentiated between dispersed and concentrated global value-chain configurations.\textsuperscript{3} In the
former, an MNE locates each value-chain activity in a scattered manner, and certain value-chain activities are replicated from country to country. In some countries, only a few activities, such as marketing and sales, are carried out; in others, the corporation may replicate the full range of value-chain activities, thereby forming a “mini-replica”. MNEs may also configure their value chains in such a way that an individual activity is carried out at a few locations or at only one. In the extreme case, each of a firm’s value-chain activities occurs in a different country, such that the MNE is taking full advantage of factor-endowment differentials. In such cases, the local unit (organized as a subsidiary, joint venture, or contract manufacturer) is the sole performer of certain activities in the firm’s value chain and, as such, the unit has a corporate global mandate (e.g. Holm and Pedersen, 2000). In other words, an international division of labor takes place within the MNE’s value chain. Obviously, such a well-developed international division of labor creates a need for extensive coordination among the various units of the MNE.

In the ensuing years, scholars in international business (e.g. Dunning, 1993), development economics and sociology (e.g. Gereffi et al., 2005), and economic geography (e.g. Mudambi, 2008) pointed to the importance of contractual modes of governing global value chains. Instead of using hierarchical governance, MNEs often rely on subcontracting as an effective governance mechanism. However, irrespective of the governance mode, global value chains entail the international specialization of business activities, including manufacturing. Specialization on a global scale, which is the hallmark of global value chains, implies the geographical diversification of the value chain as a whole as well as the locational concentration of individual value-chain activities.
We build on Porter (1986), Dunning (1993), OECD (2013a, 2013b), UNCTAD (2013), and Dicken (2015) to specify six determinants of the geographical configuration of GVCs: (1) task interdependencies throughout the value chain; (2) economies of scale; (3) factor-endowment differentials that, for example, allow for labor arbitrage; (4) transportation costs; (5) import barriers; and (6) cross-border coordination and communication costs. All else equal, several characteristics pull in the direction of a dispersed GVC configuration consisting of many local mini-replicas: (i) a high degree of task interdependency, as is the case with the reciprocal interdependencies (Thompson, 1967) often seen in service production, (ii) no or low economies of scale; (iii) no or small factor-endowment differentials; (iv) high transportation costs; (v) high import barriers; and (vi) high cross-border coordination and communication costs.

In the next section, we examine how several of these determinants have been subject to significant changes in recent years. These changes have driven GVCs toward a more concentrated structure. However, this development is now being challenged by lower economic growth rates, and the introduction of more protectionist trade and FDI policies around the world (The Economist, 2017).

The move from dispersed to concentrated GVC configuration

Changes in the six determinants of GVC configuration have not been unidirectional. Some have pulled in the direction of dispersed GVC configuration, while others have pulled in the opposite direction. Factor-endowment differentials, for example, have tended to converge over the last many years (Porter, 1986; Friedman, 2005; Dicken, 2015), which, all else equal, reduces the economic gains of the global specialization associated with concentrated GVC configuration. Similarly, in some industries, economies of scale are diminishing owing to the
introduction of new, flexible manufacturing technologies and systems, such as additive manufacturing, 3D printing (e.g. Laplume et al., 2016). However, the changes favoring dispersed GVC configuration have been more than offset by changes supporting a more pronounced and sophisticated division of labor within GVCs (Zaheer and Manrakhan, 2001). Such changes include a reduction in transportation and coordination costs owing to the containerization of cargo transport and improvements in information and communication technologies, respectively, as well as substantial reductions in import barriers for manufactured goods as a result of international trade negotiations in the 1990s and 2000s.

These changes have fueled an unprecedented specialization of value-chain activities, including manufacturing, on a global scale (Dicken, 2015). The vertically disintegrated, fine-sliced, global-production network (e.g. Contractor et al., 2010) is itself a relatively recent trend, at least seen from the historical perspective of the industrial revolution. This geographical concentration of manufacturing is perhaps best illustrated by the emergence of China as the “factory of the world”. Today, the bulk of the world’s electronic equipment is produced in China. Moreover, the country is the largest exporter of clothing, toys, domestic appliances, and merchant ships (UNCTAD, 2013). Global value chains for sports shoes, furniture, and smart phones, as orchestrated by Nike, IKEA, and Apple, respectively, serve as examples of how production has moved further away from end-users.

Most researchers contend that the removal of trade and investment barriers around the world as well as falling transport and communication costs have driven GVC configurations in the direction of a more vertical division of labor (Zaheer and Manrakhan, 2001; Beugelsdijk et al., 2009). International management scholars have translated this phenomenon into a surge in “global integration” and “transnational strategies” (Prahalad and Doz, 1987; Bartlett and
Ghoshal, 1989; Yip, 1989). IB scholars have labelled the phenomenon “the global factory” (Buckley and Ghauri, 2004). Political economists and economic geographers have used terms like “global production networks” (Gereffi, 1999; Coe and Yeung, 2015) and “global commodity chains” to describe the new division of labor that is “governed” by MNEs (Gereffi, 1999; Schmitz, 2004; Humphrey and Schmitz, 2005). The evolution of the automotive industry throughout the twentieth century illustrates this reconfiguration of GVCs.

The internationalization of car production was an early phenomenon. Due to high transportation costs and tariff-escalation systems devised to protecting domestic production, Ford and GM operated assembly plants in 21 and 16 countries, respectively, by 1929. The two companies launched fully integrated plants in Europe in the 1930s (Altshuler et al., 1984). In other words, the internationalization of domestic US production was a direct effect of the high level of protection overseas. Later, the US passenger-car market, traditionally a net exporter, became a net importer, while Japan’s remarkable export expansion coupled with limited imports after the 1960s were largely the result of a combination of high import barriers and, until the early 1980s, an advantageous exchange rate relative to the USD. Reduced trade barriers as a result of the GATT negotiations and the significant appreciation of the JPY after 1985 paved the way for the massive offshoring of Japanese vehicle production to North America, Europe, and other Asian countries in the late 1980s. The internationalization of the German automotive industry is as remarkable as that of Japan.

The politically influenced GVC configuration

The shift from dispersed GVC configurations towards concentrated GVC configurations evident over the last fifty years has been influenced by the changing global institutional
landscape, especially the general lowering of international trade and investment barriers. In other words, the movement of goods, services, and capital has continually been liberalized, at least until recently (The Economist, 2017). One implication of this liberalization process is that the WTO member states (and, previously, the GATT countries) cannot hinder producers from other countries from supplying goods and services to domestic households and organizations. However, the international trade organizations have little to say about how member states incentivize MNEs to locate production in certain home regions as an integral part of their industrial policies. International trade disputes only occur when these incentives clearly infringe on fair competition from firms in other member states.

These incentives relate to one of the main characteristics of emerging economies – the state’s prominent role in the local business environment (e.g. Henisz and Zelner, 2005; Kostova and Zaheer, 1999; Lattemann and Zhang, 2015; Grosse, 2016), where direct or indirect discrimination by the state is critical (van Tulder, 2010). Governments in emerging markets often provide overt or covert support to domestic firms as they internationalize (Luo et al., 2010; Ren et al., 2012; Rottig, 2016), but the role of the state is more salient in the home market. In particular, we highlight the notion of home-grown (Bhattacharya and Michael, 2008) or national (Unger and Chen, 2015) champions – companies in emerging markets that are favored by the federal or local government. Governments can select such local firms with the intention of nurturing them as leaders in certain industries believed to be of strategic importance to the country. As such, national champions are intended to bolster the country against dominant multinational enterprises from advanced markets. Therefore, we must factor in the symbiotic relationship between EMNEs and their home-country governments in order to understand the configuration of GVCs led by EMNEs. Consequently, the public-private partnership should be added to the six determinants of GVCs’ geographical configuration that
were mentioned above. The key to understanding this partnership is the political embeddedness of the MNE.

The home-market performance of an EMNE closely correlates with its degree of political embeddedness, which is not necessarily connected to state ownership. In its wider understanding, “political embeddedness” refers to ties between firms and governments that ensure mutual influence and mutual benefit. Hence, the concept is broadly defined as “bureaucratic, instrumental, or affective ties to the state and its actors” (Michelson, 2007, p. 353), and includes formal and informal, individual and organizational ties to the state. This definition implies that political embeddedness resides at the interpersonal level in managerial ties to political actors and at the inter-organizational level in organizational ties to political institutions, including central and local government bodies.

The financial benefits of political embeddedness in emerging markets have been estimated to be substantial in a number of empirical studies of both local (Peng and Luo, 2000; Michelson, 2007) and foreign firms (Henisz, 2000). On the flip side, political embeddedness may be harmful if the political landscape shifts dramatically and the political elite lose power (Fisman, 2001; Sun et al., 2010). However, little is known about the financial costs of political embeddedness in a stable political landscape. As Okhmatovskiy (2010, p. 1022) points out:

“If we look at ties that provide the government with opportunities to exercise some control over the firm, it appears that such ties do not necessarily have positive effects on performance. In fact, many economists describe state control as a source of inefficiencies”.

10
Not surprisingly, governments tend to pursue their own political or socio-economic goals, and they may use their control to divert firms’ resources away from what corporate objectives would otherwise prescribe (Schleifer and Vishny, 1998; Okhmatovskiy, 2010). Political embeddedness is also associated with costs in terms of the time and effort managers spend on political lobbying (Choi et al., 2015). The cultivation of good relationships with politicians and government officials require that a considerable amount of time be spent on meetings and other face-to-face interactions (Peng and Luo, 2000) – activities that distract managers from day-to-day operations and strategy planning and execution. Furthermore, political embeddedness may result in adversarial treatment in foreign markets due to geopolitical tensions (Fan et al., 2007; Wu et al., 2013) or accusations of price dumping as a result of home-country subsidies.

In fact, the literature offers mixed findings on the net effects of political embeddedness (Sheng et al., 2011; Zhang et al., 2015). Some scholars find a positive impact (e.g. Chen et al., 2014), others find no effect (e.g. Wang et al., 2009), and some find a negative impact (e.g. Fan et al., 2007). In the latter case, we may talk about “political overembeddedness” (Hagedoorn and Frankort, 2008; Uzzi, 1996). In these situations, the costs of ties to the government on a local or central level exceed the benefits and, consequently, the overall performance impact on the firm is negative (Okhmatovskiy, 2010).

Case research methodology

The case-study data were gathered during the period starting with the acquisition of VCC in 2010 and ending in late 2017. In other words, we used a longitudinal, qualitative approach. This longitudinal perspective is important, as it enables us to follow the evolution of ZGH’s strategy and operations over time. The opportunity to follow changes over time is one
advantage of the case-study method (Pettigrew, 1990). Furthermore, the value of initially defining a pair of theoretical constructs (GVC configuration and political embeddedness) and a set of variables, and then collecting data in order to explore the relations between the construct and the empirical data is stressed in Eisenhardt’s (1989) and Mintzberg’s (1979) seminal contributions to the case-study methodology. While Eisenhardt (1989) describes the importance of undertaking theory-building research “as close as possible to the ideal of no theory under consideration and no hypothesis to test”, she also acknowledges that “it is impossible to achieve this ideal of a clean theoretical slate” (p. 536).

Much of the data were gathered from a substantial number of interviews and other forms of personal communication with senior managers during our frequent visits to Volvo Cars Corporation’s corporate headquarters and to the joint Geely-Volvo R&D center, China Euro Vehicle Technology (CEVT), which is located in Gothenburg, Sweden. Interviews were also undertaken during visits to Volvo Cars units in China, including its Chinese headquarters in Shanghai (Jiading and Pudong), its car-assembly plants in Chengdu (Sichuan province) and Daqing (Heilongjiang province), and the engine factory in Zhangjiakou (Hebei province). We also conducted interviews at one of Volvo Cars’ minority owners, the State Asset Operations Company in Daqing. In addition, we interviewed key actors from Geely during visits to their headquarters in Hangzhou, and during visits to Geely assembly plants in Chengdu and Cixi between 2011 and 2014. Numerous interviews were conducted between September 2011 and April 2016. The interviews were carried out in person, and all were done in English. A list of the interviews is provided in Appendix A. In addition, a number of shorter communications and fact checks with Geely and VCC officials took place between 2010 and 2017.

Other case-study data were gathered from secondary sources, including company documents
from VCC and Geely. The substantial number of informants made it possible to triangulate the primary data, such that we generally rely on information provided by two or more people, often with different and complementary management responsibilities, ranging from production managers at the assembly plants to top-level executives, including Li Shufu, Chairman of ZGH; Gang Wei, Deputy CEO of CEVT; and Hans-Olov Olsson, former Vice Chairman of VCC. Some of the information originally provided by the respondents was also confirmed in officially published company reports and reports in the business press. We mainly refer to company informants in cases where relevant data are not publicly available.

The politically influenced GVC configuration: The ZGH-VCC case

The acquisition of VCC

The case starts with the spectacular acquisition of Volvo Car Corporation (VCC) by the Chinese Zhejiang Geely Holding Group (ZGH) in 2010. It was the first major acquisition of a prestigious global brand in the premier segment by a private company, listed and incorporated outside China, but financed by a mix of private and local public interests within China (Alvstam and Ivarsson, 2014; 2017). An understanding of VCC’s unusual ownership and control situation after the acquisition is essential for explaining how VCC’s global strategy was complemented with a strategy for China, and how the new spatial pattern of production that was introduced immediately after the takeover was established. In the following, we discuss the outcomes of the acquisition in terms of its effects on the corporate ownership and management structure, and on plant-location decisions.

The acquisition can be seen as the result of ZGH “seizing the opportunity” to buy a prestigious global brand while simultaneously investing in future technology and knowledge transfers within automotive manufacturing. Ford had acquired VCC in 1999 at an official
price of USD 6.5 billion. The Volvo Group divested its passenger-car business because the company’s top management team made a strategic decision to focus on commercial vehicles and construction equipment – areas in which Volvo was a leading player in the global market. While under the Ford umbrella, VCC underwent an extensive production-integration process with other brands in the group, and it expanded successfully on the American market, especially in the SUV segment. Volvo cars were also assembled in China together with Mazda and various Ford models at the Chang’an Ford Mazda Automobile Corporation, located in Chongqing. Notably, Volvo did not manufacture passenger cars at a larger scale in North America, either before or after the acquisition by Ford. Instead, it relied completely on exports from its plants in Gothenburg and Ghent.

After a decade of mixed results and experiences within Ford’s “Premier Automotive Group” and a deep financial downturn in 2008-2009, the Volvo brand was sold off by Ford along with its other “foreign” brands – Aston Martin, Jaguar, Land Rover – in order to enable Ford to avoid total collapse. After a long negotiation process involving several bidders, VCC was acquired by ZGH in early 2010 at an official price of USD 1.8 billion.

The final bid was initiated by a self-made businessman, Li Shufu, who had built up the Geely car brand from his home base in Zhejiang Province. Li’s aggressive expansion policy included the opening of nine assembly plants in China and an annual production volume of 400,000-500,000 cars, as well as several acquisitions of foreign companies, including the UK’s Manganese Bronze (2007/2013) and the Australian automatic transmission maker DSI (2009). Notably, when Geely was founded in 1986, its business was refrigerators, not cars, and the company did not produce cars until 1998. The Holding Group was listed in Hong Kong and incorporated in the Cayman Islands.
ZGH’s bid was built on a complex chain of indirect ownership in which the final shares held by the three partners – ZGH, Daqing State Asset Operation, and Shanghai Jiaerwo Investment Company – were 51, 37, and 12 percent, respectively. Later, in 2017, ZGH acquired the shares held by the two minority partners, so that VCC is now wholly owned by Li Shufu and his family. Notably, there were no bids from other Chinese actors. One might have expected initiatives from the major state-owned enterprises (SOEs) and from other Chinese private entrepreneurs who were more well-known and established than Li Shufu. Geely’s share of the domestic car market was less than 3 percent at the time. It is possible that ZGH was sanctioned by the Chinese central government to be the sole Chinese competitor.

Even though the official price of the acquisition was less than USD 2 billion, the total volume following the acquisition has been far larger, at an estimated USD 10-15 billion. The new management board of VCC immediately announced highly ambitious expansion plans, with production expected to rise from about 370,000 units annually in 2010 to 800,000 units in 2015 (later moved to 2020). Production in China was to become the third pillar in the geographical distribution of VCC’s assembly system (Alvstam and Ivarsson, 2014). The domestic sales of the Volvo brand amounted to about 30,000 units in 2010, mainly of models assembled in Chongqing. The sales target in China for 2015 was set at 200,000 cars, or about 20 percent of China’s premium segment (Alvstam and Ivarsson, ibid.). Even though this target was viewed as unrealistic from the beginning, it signaled the ambitious vision for expansion in China and set an optimistic standard for the development of the new company, especially in Sweden, where the acquisition had been met with mixed feelings. As such, the fear that production would gradually be moved from Europe to China was addressed through an expansion plan that seemed to keep the Gothenburg and Ghent plants at existing levels,
while allowing for growth in production and employment. Nevertheless, the largest share of expansion was to take place in new plants in China.

Post-acquisition collaboration

The main challenge for the management board of the “new” VCC was ensuring an appropriate balance between the Volvo and Geely brands. Volvo was a prestigious, global brand with an emphasis on values like “quality”, “safety”, and “environmental responsibility”, while Geely was a small, low-end actor in the Chinese market without a reputation for quality.

As of 2017, the mantra “Volvo is Volvo and Geely is Geely” that had been expressed on numerous occasions by the majority owner has remained unchanged. VCC has been given considerable freedom to sustain and develop its own corporate identity. Relatively small adaptations to the Chinese markets were made when the new platform (SPA\(^5\)) was launched in 2014.

As of 2017, VCC and Geely cooperated in three main areas. First, the coordination of parts and component sourcing, especially of low-end plastic, metal, and rubber materials, and of a number of other items that were not “visible” to the consumer. The second area concerned the common development of a large engine plant at Zhangjiakou in Hebei province northwest of Beijing. Even though the two brands’ engine production was to remain separate, numerous synergies were expected from the use of joint premises and logistics, and from the future common development of engines for small-sized cars for the new joint brand LYNK & Co.
LYNK & Co is to be developed through a 50/50 technology joint venture, *GV Automobile Technology*, which is headquartered in China with a subsidiary in Gothenburg. VCC owns 30 percent of the shares in LYNK & Co, while Geely Auto holds 50 percent and ZGH the remaining 20 percent. In addition, VCC will invest USD 800 million, with financial support from ZGH, in relaunching VCC’s shelved *Polestar* brand as a new standalone, high-performance brand of electric car. This is part of the spectacular and visionary commitment to electrification. Five fully electric cars will be launched in 2019-2021 and, as of 2018, all other new models will be hybrids.

The third area, which is likely to be the most strategic in the long run, is the common development of a new platform for small cars, known as “*Compact Modular Architecture*” (CMA), and a global design center for the Geely brand. This project is organized in a wholly owned ZGH company, *China Euro Vehicle Technology* (CEVT), which has been located in central Gothenburg since 2013. It is a pure R&D, product-development, and design center that employs a mix of Chinese and European engineers. After four years of existence it had about 2,000 employees and external consultants as of October 2017. In addition, in June 2017, ZGH announced a major investment in a European Innovation Centre for Geely, located close to the CEVT premises and with space for more than 3,500 employees. This new venture is planned to open in 2020.

The strategic cooperation between Volvo and Geely brands should also facilitate the sharing of the significant R&D costs related to new technologies. In VCC’s case, these costs relate to the development of the “Advanced Driver Assistance System” (ADAS) and, more generally, to autonomous driving technologies. In this regard, a joint venture (*Zenuity*) with the Swedish-American leader in automotive safety systems, *Autoliv*, was launched by VCC with
the aim of developing the necessary software. Another venture in the same field is the partnership with the ride-sharing company, Uber. These endeavors, which would not have been possible without the financial backing of ZGH, will eventually also be beneficial for the Geely and LYNK & Co brands.

As a result of these joint activities, in the first five years after the acquisition, VCC managed to maintain a balance between its global, “Swedish” image while expanding its activities in China. In fact, China became VCC’s largest single market in 2014, and accounted in 2017 for 20 percent of global sales: 110,000 out of a total VCC car sale of 555,000 (2017 estimate) against only 8 percent in 2010. Notably, the majority of seats in the Board of Directors and positions on the top management team are not held by Chinese citizens.

VCC returned to black figures in 2014. In 2016, it reported a profit of USD 1.25 billion, which was the largest in its history. Much of this was due to the fact that margins in China were higher than in VCC’s traditional markets. However, the prerequisites for success are thin and are pending continued expansion of the sales in China, despite the general slowdown in China’s car market as a whole, especially in the high-end segments. In 2016, VCC entered a new phase of consolidation. The minority owners in Jiading and Daqing transferred their shares to ZGH after operations were established in these two cities. Furthermore, VCC has undertaken two large bond issues and offered preferential shares to a number of institutional investors. These measures are rumored to signal that preparations are underway for an IPO of VCC in the near future.

In the following sub-sections, we look at the geographical configuration of ZGH’s GVC in detail. We account for the specialization and logistics of the various production sites as well as the socio-economic and political determinants of their locations.
The plants in Gothenburg and Ghent

AB Volvo was established in Gothenburg in 1926. It was initially a business area within the far larger ball-bearing manufacturer SKF. Car manufacturing expanded rapidly after World War II, and Volvo cars became the most popular brand in Sweden among the increasingly affluent middle-class. Moreover, demand for commercial vehicles was growing among industrial customers. Exports quickly became necessary given the limited home market, but Volvo’s 1963 decision to locate its first major car and truck plant abroad in Ghent, Belgium, was a direct response to signals from the government that Sweden would not become a member of the European Economic Community within the foreseeable future. For several decades, the Gothenburg and Ghent plants were the company’s main plants, although small assembly plants were opened in the Asia-Pacific region to avoid high import barriers.

Despite the above-mentioned fear that the transition of ownership to China would result in the gradual reduction of production by the European plants, the new owners’ strategy has been to maintain and strengthen the European leg while expanding activities in China. Therefore, the geographical balance has shifted in relative rather than absolute terms. The production volume achieved in Europe in 2016 and 2017 was higher than any level previously reached under either Swedish or American management.

Chengdu

Despite the shift at the global level from Europe to China, a power balance existed among the three shareholders that was soon manifested in the expansion plans for China. Two new assembly plants were slated for construction, each with an annual production capacity of 120,000 cars. The first plant commenced operations in Chengdu (Sichuan province) in 2013,
while production at the second plant in Daqing (Heilongjiang province) began in 2014 (see Table 1).

The Chengdu plant reflected the close collaboration with Geely, which owned the land and already assembled cars at a nearby facility. The location decision was also in line with the central government’s mission, of prioritizing industrial development in China’s central provinces. In addition, the decision found strong support on the provincial and local levels. As such, the location decision reflected a combination of the local Geely presence, which sped up the building of a plant, and the active support from local, regional, and national authorities, all of which had planning ambitions that coincided with those of ZGH. Even though no local investment company held direct ownership in ZGH, the indirect investments on behalf of Geely as well as the local infrastructural support were obvious.

**Daqing**

The Daqing plant was clearly an acknowledgement of investments made by the local State Asset Operation, which had played a key role in the financing of the takeover. Neither the Chengdu nor the Daqing plants are optimally located from a sourcing or distribution point of view. Chengdu is situated 2,000 kilometers from Shanghai and 1,500 kilometers from Beijing, while Daqing is even more remote, as it is 1,400 kilometers north of Beijing and 1,300 kilometers from the port of Dalian – three days by rail. In this respect, it is China’s northernmost car plant.
Local authorities participated in the acquisition of VCC owing to the urgent need for a shift away from the area’s dependence on the oil-extraction and petrochemical industries toward a more balanced economic situation. A general upgrading of the value chain was also desired. The VCC investment is only one component of the city’s grand modernization plan, which also encompasses advanced petrochemistry, petrochemical equipment, biomedicine, aluminum, new energy sources, tourism and leisure activities, and cloud-computing services. The industry partners behind the Daqing State Asset Operation Company are large, state-owned enterprises undergoing rapid internationalization (e.g. PetroChina and ChemChina) as well as internationalized firms launched by private entrepreneurs and listed in Hong Kong and elsewhere (e.g. Lenovo and China Zhongwang Aluminium).

As a supplement to the Volvo plant, there are also plans to build a supplier park with both domestic companies and foreign “follow-source” suppliers (e.g. Johnson Control). The next step will be to create a free-trade zone along the same lines as the zone in Shanghai in order to attract additional foreign ventures to the area. This step will include granting the local airport permission to serve international flights.

The Daqing location can thus be seen as reflecting a combination of regional and local development-planning ambitions. At the local level, in addition to its the 37 percent share of the initial purchase (i.e. an investment of about USD 700 million), the city has contributed heavily in the form of subsidized land, energy infrastructure, water-cleaning facilities, the promotion of an auto-supplier park, and access to general business and technology support within the High-tech Industrial Development Zone. Unlike the Chengdu plant, the Daqing location does not benefit from nearby Geely production, although our interviews have
indicated that Li Shufu had long-standing relations with the local political leadership and that there were plans to establish a Geely plant before the Volvo opportunity arose.

The local authorities put a significant amount of pressure on VCC to speed up the construction. The plant, which is a copy of the Chengdu design, was completed earlier than VCC had planned. In order to start operations as quickly as possible, assembly of a “completely knocked down” (CKD) imported Volvo XC models from the old platform was initiated on a small scale in 2014 before regular production on the new platform began in late 2015. In late 2016, the company announced that Volvo’s most prestigious model, the S90, would be produced in Daqing. During summer 2017, the first batch of S90s was sent by rail along the revived “Silk Road” connection to Europe.

In all of these respects, Daqing offers an excellent example of how FDI from China aimed at acquiring better access to strategic assets also builds up technology and knowledge capacity in China as a whole. In addition, it aims to promote local and regional development in remote areas and regions undergoing industrial transformation.

**Jiading/Pudong**

The third shareholder behind the 2010 acquisition of VCC was Shanghai Jiaerwoo Investment Company, which was fully owned by Shanghai Jiading Corporation. This company acquired a total of 12 percent of the shares.

The Jiading district in northwestern Shanghai is a good example of how regional planning authorities aim at dispersing population and employment in the overheated coastal region. The district’s proximity to central Shanghai, the good access to land for industrial and
residential development, the availability of an international airport, and the close proximity to the automotive cluster have helped make Jiading a favorable location for foreign enterprises.

Our interviews indicate that Jiading was the initial choice for the first plant, but reluctance on the national level to support additional car-production capacity in the coastal region and the favorable conditions found in Chengdu led to a change of plans. Instead, Jiading was chosen as a site for various management activities, including product development, purchasing, supply-chain management, and human resource management, as well the general coordination of Volvo Cars China. The availability of qualified staff with experience from other automotive producers in the greater Shanghai region also motivated the decision to concentrate support and management functions, rather than manufacturing, in the area of the third owner. From the perspective of a regional development company like Shanghai Jiaerwoo Investment Co., an increase in employment opportunities for a somewhat lower number of highly skilled staff within the professional business service sector should outweigh a slightly higher number of manufacturing workers. Jiading’s role in VCC’s global structure was recently enhanced by the establishment of a Global Manufacturing and Export Centre, which implies that Volvo cars manufactured in China will be exported to the rest of Asia and to the Americas at some point in the future. In addition to the Jiading location – a decision that was clearly based on the minority owner’s location – an office was opened in the Pudong district of Shanghai with responsibilities related to marketing, sales, and investor relations. This latter location is the only one that can be assessed from a professional (rather than an ownership-related) viewpoint.

Zhangjiakou

One of the most crucial elements in building an integrated automotive industry is engine manufacturing and assembly. This is also where the greatest investments are needed. While
the establishment of a complete integrated plant with a production capacity of 200,000 units, including stamping, a body shop, a paint shop, and final assembly, requires an initial investment of about RMB 250 million, an engine plant to support such a plant would cost about RMB 1.5 billion. An initial condition of the establishment of Volvo production in China was that the cars should be equipped with original Volvo engines developed within the new “Volvo Engine Architecture” (VEA). In this respect, Volvo was to be completely separate from Geely’s engine-production system, which relied on local and Japanese technologies. Due to the significant investment that was needed, the decision to establish an engine plant in China took somewhat longer and did not occur until 2012. The location of a new engine plant was complicated, given that the distance between the two assembly plants was more than 3,000 kilometers. The alternative of expanding capacity in Skövde, Sweden, and shipping CKD engines to China was considered, but judged to be an acceptable, temporary solution only if the production plans for China were not to be realized.

The location-decision process again reflected a combination of local initiatives, long-standing relations with the local government, and Li Shufu. In addition, active support from the national government was required to ensure industrial transformation and growth in this sensitive area. The decision was to choose a “satisfactory” location from a logistics point of view. This location was the city of Zhangjiakou in Hebei province, which is 200 kilometers northwest of Beijing and near the border of Inner Mongolia. Although the initial preference was apparently the Shanghai area, Zhangjiakou better fulfilled the criteria of sub-national location advantages.

The premises opened in 2014. Initially, the main activity was the assembly of CKD engines from Sweden, but the plan was to gradually expand to complete engine production within the
VEA framework. The collaboration with Geely concerned joint operation of the premises, in which VCC was the minority owner, and the development of a common engine for the small-sized cars LYNK & Co were to be built in Taizhou/Luqiao in Zhejiang province.

**Taizhou/Luqiao**

It is somewhat paradoxical that one of the parts of China that has not been directly involved in the location decisions for new Volvo plants is Zhejiang province, the home of Geely and of Li Shufu himself. While Geely’s nine plants are distributed across several Chinese regions, its main production facilities and the Group’s headquarters are located in Zhejiang (see Table 1).

It is obvious that the demand from the national authorities, mainly the NDRC, has been that new plants should not be located in the coastal provinces. Instead, they are to be located in regions, provinces, and cities that are considered to be of strategic importance for regional industrial transformation. However, the latest location decision regarding VCC’s China presence will be an exception to this rule, as the new joint plant for the Geely and Volvo brands, together with the common brand LYNK & Co, will be opened in the Luqiao district in the city of Taizhou, 300 kilometers south of Shanghai and 230 kilometers southeast of Hangzhou. The city is already host to a Geely plant, which will be near the new venture. The joint plant, which will be owned by Geely but managed and run by VCC, will open in 2018.

**Charleston, SC, USA**

The important US market was never supplied from a local manufacturing plant, even though some small-scale assembly took place in Halifax, Canada, between 1963 and 1998. Volvo did investigate the possibility of building a complete, integrated plant during its early years under the “Swedish Volvo” umbrella, but all of these analyses arrived at the same conclusion – that
a US manufacturing plant was not justified from a business perspective. Similar studies were carried out under Ford’s ownership, especially in terms of the possibility of co-location with a Ford plant in a manner similar to the joint plant in Chongqing, China. It was, therefore, somewhat paradoxical that a decision to build a Volvo plant in the US was not made until the company was under Chinese ownership in May 2015.

The US site will be located in Charleston, South Carolina. The plant is scheduled to open in 2018 with a planned initial capacity of around 100,000 units. In the second stage, to be completed in 2021, the annual capacity is expected to increase to 150,000 vehicles and, at that point, the plant should employ nearly 4,000 people. The decision was even more extraordinary, given the fact that the US market for Volvo cars had been in decline for an extended period of time. However, the decision can also be seen as an attempt to develop a third leg in its global production network, also to increase local contents by taking advantage of the domestic supplier network and, in this respect, as a “timely” way to address the new American protectionist policy by assembling the majority of Volvo cars for the US market within the country. The US market will also be served to some extent by the Chengdu and Daqing plants.

Summary of the empirical case

The acquisition of VCC by ZGH gave rise to an intensive decision-making process regarding the location of new production facilities worldwide. This process transformed VCC from a “Eurocentric” manufacturer with its main markets in North America and Europe (although with a global reach) to a Euro-Chinese “hybrid” with China as its main market and a growing home base for manufacturing in China (Alvstam and Ivarsson, 2014, 2017; Jansson and...
Söderman, 2015). At the same time, the ambition to remain a globally prestigious brand was not only sustained but also strengthened.

Traditional location factors within the automotive industry sector are not entirely useful for explaining the decisions regarding the two newly completed plants, the integrated plant under construction, or the new engine plant – all of which are situated within the respective home bases of the new owners and/or with close connections to Geely’s production sites. The only stakeholder that was not granted proximity to manufacturing was instead related to the choice of site for management and coordination of the activities in China. At the same time, the local ownership interests coincided with the missions and visions regarding regional development, and with those related to industrial transformation on the national level.

Notably, car production in general and in China in particular is characterized by growing overcapacity and fierce competition. In addition, the investments required in China after the successful acquisition far exceed the price of the acquisition itself. VCC has in this respect taken the strategic decision to undergo a rapid transformation to electric vehicles and self-driving technology, which in both cases are well in line with China’s national ambitions. Moreover, the logistical costs involved in the reconfiguration of the global supply-chain lead us to the conclusion that the new manufacturing locations are suboptimal, not only from a global context but also within China, but are balanced by an increasingly favorable market position, both in China and the rest of the world.

**Conclusions, limitations, and future research**

The thrust of this paper has been to cast light on what appears to be a new GVC configuration logic practiced by multinationals from emerging economies in close collaboration with the
political institutions of their home countries. It differs from the logics applied by multinationals from advanced economies because it views societal and industrial/regional policy goals as important supplements to cost-efficiency concerns. Hence, this politically influenced GVC configuration challenges existing GVCs configured primarily on the basis of operational-efficiency objectives, such as economies of scale, labor arbitrage, low transportation costs, and effective communication and coordination among various business units. The growing number of acquisitions of multinational, western-based firms by firms from EMNEs makes the study of this new GVC configuration particular relevant.

The emergence of GVCs in the 1960s was nurtured by the increasing liberalization of trade and FDI. The political influence of national governments on MNEs was weakened as supranational institutions, such as GATT, WTO, NAFTA, and the EU, were able to enforce principles of free and fair competition based on operational efficiency rather than governmental support. However, the political influence of national governments may return with the election of national-chauvinist politicians in the western democracies.

The observation that outward FDI, including FDI related to the GVCs of multinationals from emerging economies, should also be examined from the local and regional domestic perspectives is not new (see, e.g., Chadee et al., 2003; Chu, 2011; Lau and Bruton, 2008; Lau et al., 2010; Liang, 2008; Liu, 2007; Meyer et al., 2011; Tsai, 2013). The previous expansion of inward FDI in China, especially within the automotive industry, took place in remote regions and in local areas subject to industrial transformation. The new feature is the insistence that both foreign and Chinese actors (state-owned enterprises as well as private small- and medium-sized entrepreneurial firms) contribute to a better regional economic balance and to a reduction in the gaps between different parts of the country.
This study has demonstrated that EMNEs’ strategic asset seeking abroad has given rise to a new key aspect of production location – the acquired strategic assets are used to build up production capacity at home in order to create a “national champion” for future export expansion. In this sense, the transfer of foreign strategic assets to domestic industry can be seen as an indirect form of market seeking in which the national champion also becomes a world-stage aspirant or, at least, a global niche player (Luo and Tung, 2007; Gugler and Vanoli, 2015). However, production capacity in this case (measured in absolute terms) did not move from the existing locations to new locations. Instead, total production capacity has expanded significantly. Hence, the new location logic seems supplementary rather than substitutional.

Accordingly, the interpretation and explanation of the new geographical pattern of manufacturing must be viewed from a different perspective than has traditionally been the case in research on the economic geography of the automotive industry or research on the geography of the multinational enterprise. We argue that our empirical example heralds a new logic of global production location built on the shift in ownership and control of manufacturing and services from advanced economies to emerging markets in general and to China in particular.

Our study has some limitations. We have focused on strategic asset seeking by one company in one industry in one emerging economy. As such, one might question the external validity of the study. For example, the insights derived from our study may not be valid for industries in emerging markets that are subject to less regulation than is the case for the Chinese automotive industry. Furthermore, we have focused only on the geographical/locational
configuration of GVCs and basically ignored the ownership/governance aspects. The global value chain of ZGH/VCC is governed hierarchically, but it could, in principle, have been configured in the form of contract manufacturing or joint ventures. Another limitation and, therefore, an avenue for future research is the fact that we only paid attention to political influence in terms of fulfillment of regional and industrial objectives for the home country (China). We could also have studied potential governmental impacts with regards to the fulfillment of geopolitical objectives. Such strategic objectives would most likely primarily affect GVC configuration outside the home country.

One crucial factor that requires further elaboration is the time dimension. The initial investment and its short-term impacts on the location pattern for value-added activities in the acquired firm should be viewed in light of subsequent events. Our case has shown that the launch of production in China has not affected VCC’s existing locations when it comes to absolute size or employment figures, rather the opposite. Instead, the acquisition has initiated a major investment in a global R&D and design center, as well as in a European innovation center for the domestic Chinese brand Geely in the heartland of VCC in Gothenburg, Sweden. The production volume of the Volvo brand in Gothenburg is at present at all-time-high. In this respect, the shift in the GVC toward China and the US, measured in relative terms, will be partly compensated by the shift in the GVC toward high-value-added elements related to R&D and design from China to Sweden. On the other hand, a major shift in the geographical pattern of production and management activities may come in a subsequent step. Therefore, the connections among geography, location, and global strategy should still be seen as a dynamic and volatile triangular relationship.
REFERENCES


Table 1. Main operations of VCC and ZGH in China as per late 2017

<table>
<thead>
<tr>
<th>Company</th>
<th>Location City (Province)</th>
<th>Type of operation</th>
<th>Capacity (Annual production)</th>
<th>Starting year</th>
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<td>Ningbo &amp; Cixi (Zhejiang)</td>
<td>Car assembly</td>
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<td>Geely</td>
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<td>1996</td>
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<td>...</td>
<td>2010</td>
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<td>Chengdu (Sichuan)</td>
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<td>Volvo Cars</td>
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<tr>
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</table>

Source: Own compilation based on websites of Zhejiang Geely Holding Group (ZGH) and Volvo Car Corporation (VCC)
### Appendix A. Company visits and personal interviews in Sweden and China 2011-2016.

<table>
<thead>
<tr>
<th>Venue</th>
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<tr>
<td>VCC Gothenburg</td>
<td>Chief Engineer, Vehicle Architecture</td>
<td>Sept. 2011</td>
</tr>
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<td>VCC Gothenburg</td>
<td>Sourcing Manager</td>
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</tr>
<tr>
<td>VCC Gothenburg</td>
<td>Sourcing Manager</td>
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<tr>
<td>VCC Gothenburg</td>
<td>Purchasing Director</td>
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</tr>
<tr>
<td>VCC Gothenburg</td>
<td>Sourcing Manager</td>
<td>Mar. 2012</td>
</tr>
<tr>
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<td>Vice President, Sourcing</td>
<td>Sept. 2012</td>
</tr>
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<td>VCC Gothenburg</td>
<td>Vehicle Line Management, Large Cars</td>
<td>Aug. 2011</td>
</tr>
<tr>
<td>VCC Gothenburg</td>
<td>Vice Chairman, VCC</td>
<td>Oct. 2014</td>
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<tr>
<td>VCC Jiading</td>
<td>Director, System Engineering</td>
<td>April 2011</td>
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<tr>
<td>VCC Jiading</td>
<td>Vice President, Engineering and R&amp;D</td>
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</tr>
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<td>VCC Jiading</td>
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Endnotes

1 Hence, we focus on the spatial dimension of GVC configuration and pay little attention to the governance/organizational aspects (i.e. whether the various value-chain activities are performed in-house, outsourced, or organized under partial ownership as a joint venture).

2 When presenting his GVC configuration framework in 1986, Porter did not apply an evolutionary perspective. On the contrary, he presented his framework as a cross-sectional snapshot of US multinationals at the time. However, as we demonstrate, there has been an evolutionary trend from dispersed to concentrated GVC configuration.

3 We recognize that other labels have been applied to MNEs’ geographical configuration of their manufacturing activities. The empirical studies conducted by Gereffi (1999) with the aim of the establishing the distribution of gains between MNEs and suppliers from developing countries in certain industries consolidated the terms “global production networks” and “global commodity chains” in the developing economies.

4 We may be at a turning point where the post-war liberalization of international trade and FDI gives way to more protectionist policies (The Economist, 2017). This possibility was reflected in US President Donald Trump’s “America First” campaign which may already had have some effects. In February 2016 the Carrier Corporation (a furnace and air-conditioner producer) announced the closure of a plant in Indianapolis with the loss of 1,400 jobs. The company would allegedly save USD 65 million per year by shifting production to factory near Monterrey, Mexico. As a result of pressure from President Trump, Carrier later changed its decision. Furthermore, according to The Economist (2017:16), the Ford Motor Company, browbeaten by Trump, “agreed to cancel a new plant in Mexico and invest more at home”.

5 Scalable product architecture, developed for the medium and large models, and the first “post-Ford” platform. At the same time, a new generation of engines was developed within the VEA (Volvo Engine Architecture) project. Both of these ventures symbolized the dis-integration from Ford and the entry into a new generation of car manufacturing within VCC.