

Chapter 3 Catching up strategies and multinational growth: the case of Geely Volvo

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1. Introduction¹

Since China's accession to the World Trade Organisation (WTO) in 2001, the Chinese automotive industry has been booming. China became the largest automobile market in the world in 2009. The very high average annual growth rate between 2000 and 2010 was around 35.84 per cent, reaching a sales volume of 18.26 million units in 2010. This was followed by a slowdown starting in 2011.

In the development of the Chinese automobile industry, foreign OEMs (Original Equipment Manufacturers) have played a central role, bringing in technology, management know-how and marketing capabilities, as well as building distribution networks and supply chains. International joint ventures between OEMs and domestic state-owned car companies have shaped the Chinese market. In the late 1990s, some domestic private companies accessed the automobile market and experienced rapid growth. Geely, Great Wall and BYD are the main examples.

This chapter focuses on the case of Geely. Without any experience of producing cars, Geely broke both industrial (technology, capital, managerial skills) and institutional barriers (government regulation limiting the number of OEMs) to access the automobile industry in the late 1990s. It is an interesting case for illustrating various ways of catching up and eventually becoming an emerging multinational. Geely's catchup efforts include technology imitation via reverse engineering,² product architecture innovation and asset-seeking acquisitions abroad, together with various forms of international growth, including exports, assembly abroad, market-seeking operations and (again) asset-seeking acquisitions abroad. Our findings offer an insight into the competitive strategy of firms in emerging economies in the new context of globalisation.

We shall concentrate on Geely's competitive strategies, exploring, on one hand, its catch-up trajectories and, on the other, its expansion in international markets and its multinational growth. The catch-up process in its early stages was driven mainly by technology, aimed at achieving low-cost and low-price solutions for the production

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Reverse engineering, or back engineering, is the process of imitating a product (in this case, a vehicle), by disassembling its components and parts, analysing and reproducing them.

of low-end cars. At the same time, overseas market expansion was the consequence of fierce competition in the Chinese market. In a subsequent stage, catching up and international growth were driven by asset-seeking acquisitions in the global market. In addition, these two dimensions interact and reinforce each other in a dynamic way. Figure 5 illustrates this double trajectory.

Our methodology is that of an in-depth, longitudinal case history, through interviews with senior executives in Europe and in China. Archival data quoted are from China Automotive Industry Yearbooks (CAIY) from 1998 onwards.

Asset-seeking motivations are at the core of the new theories, proposing specific explanations of multinationals from emerging countries operating in developed markets in most recent years. These companies are expected to lack ex-ante monopolistic advantages, in particular as regards technology, patents and strong brands. A common hypothesis of these theories is that emerging multinationals' FDI in industrialised countries may be explained not only by market-seeking drivers, but also (sometimes to a considerable extent) by the need to access the resources and assets they lack. Their strategy is therefore oriented to augment or even to create, rather than to exploit, their specific ownership advantages (Mathews 2002; Balcet and Ruet 2011; Balcet *et al.* 2012).

2. China's automotive industry: catch-up processes and policies

Wang (2007) illustrated the emergence of the Chinese automobile industry by means of a theoretical framework based on two institutional determinants (institutional environment of host country, namely China and global institutions, such as the World Trade Organization) and two microeconomic ones (domestic firms and multinationals).

The first stage (1949 and 1978) of China's automobile industry can be generally characterised as the government-driven industrial formation stage under a planned economy. Based on the production model of transplants from the former Soviet Union, three important industrial bases of the contemporary Chinese automobile industry were formed: First Auto Works (FAW) in the north, Dongfeng Motors (DFM) in central China and Shanghai Automobile Industrial Corporation (SAIC) in the east.

FDI became increasingly important during the transitional period (1979–2000) when China decided to implement opening-up policies and to shift towards a market economy. Nearly all the top ten world carmakers established joint ventures with local SOEs, under the supervision of the Chinese government. VW, followed by GM, had the first-comer's role and advantages. At the same time, the complex Chinese federal system (Qian and Weingast 1997) — which involves the relative autonomy of the provinces, on one hand, and powerful ministries, on the other — led to the fragmentation of the automobile industry with the establishment of more than 100 domestic carmakers (all vehicle types included). At this stage, FDI, governments and Chinese companies jointly shaped the industry.

The third stage commenced in 2001, when China joined the World Trade Organisation (WTO). The WTO intervened as an additional powerful force influencing the development of the Chinese automobile industry, together with the Chinese government and foreign and local companies. Interestingly, it is also during this period that Chinese carmakers progressively began to catch up at an early stage of internationalisation. Figure 1 shows the production of the top ten passenger car producers in China in 2015. Eight out of ten are Sino-foreign joint ventures.

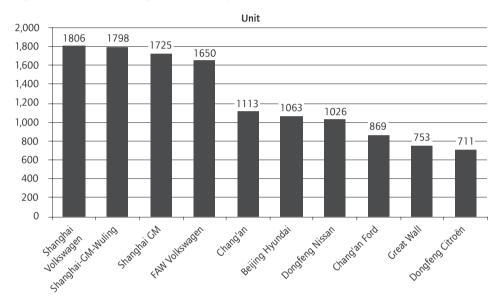


Figure 1 Top 10 passenger carmakers by volume in China, 2015 ('000 cars)

Source: China Association of Automobile Manufacturers (CAAM). http://www.caam.org.cn/zhengche/20160118/1005184043.html

The first decade of the new century witnessed five important developments in the Chinese automobile industry:

- (i) Market: acceleration of the growth of the Chinese market, with an average annual growth rate of 35.84 per cent between 2000 and 2010.
- (ii) The Chinese government increased its influence on the reshaping of the automobile industry, in the field of inward and outward FDI policy, a new round of technology transfer, a stimulus plan during the financial crisis and a new energy policy.
- (iii) The WTO and other country-based regulatory bodies increased friction with regard to trade and investment in relation to cars and components between China and other developed and developing countries.
- (iv) Foreign carmakers: all the major players, including Volkswagen, General Motors, Ford, Toyota, BMW and Chrysler, announced aggressive investment plans in

the forthcoming years. More new models adapted to local consumers have been developed.

(v) Chinese carmakers: the entry of significant new players out of the jurisdiction of central government (either private companies or indirectly backed by provinces, municipalities or local banks). Some of them are at the outset of internationalisation. The market share of indigenous vehicles (both passenger cars and commercial vehicles) represented 45.6 per cent of the total market, selling 6.27 million in 2010.

Figure 2 shows the market shares of brands by their origin (domestic or foreign). By 2015, despite the slight decline of market share, Chinese carmakers (call categories of vehicle) represented around 40 per cent of the market. It is worth noting that this market share on the part of Chinese brands is contributed by more than thirty carmakers, and the economies of scale per car are far below those of the global players.

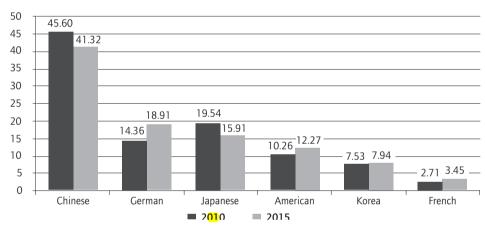


Figure 2 Market shares of passenger cars by country of origin of carmakers, 2010, 2015 (%)

Notes: Vehicles produced by Sino-foreign joint ventures are indicated in the foreign car category. Chinese vehicles indicate only those of indigenous brands.

 $Source: China\ Association\ of\ Automobile\ Manufacturers\ (CAAM).\ http://www.caam.org.cn/zhengche/20160118/1005184040.html$

The industrial development of China, which has been proceeding on a vast scale, has relied on two main forms of technology transfer: formal mechanisms, including FDI, licensing, joint ventures, turnkey plants and other contractual or non-equity forms of international investment (UNCTAD 2011), and informal mechanisms, including reverse engineering, where there is no direct connection with the technology emitter.

Chinese firms went beyond the traditional informal mechanisms of technology transfer by moving towards product architecture innovation. Chinese companies, in a collective manner, have not only conducted reverse engineering, but also transformed product architecture from 'close integral' to 'quasi-open' (Fujimoto 2006). Specifically, the best-selling products sold in China have been copied, reverse engineered and remodelled. Accordingly, components characterised as 'close integral' have since become generic

components and thus 'quasi-open'. Those generic components can be mass-produced, achieving significantly low costs, through economies of scale, purchased by Chinese companies to mix-and-match with a view to generating new products under a Chinese brand name (Wang 2008; Wang and Kimble 2010). The capacities of Chinese firms in terms of architectural modification and technology recombination are important for understanding China's cost advantages, beyond simple and intuitive judgements about 'low cost labour'.

In parallel with the uniqueness of the abovementioned product-architecture innovation at the firm level, the formal mechanism of technology transfer is driven mainly by China's government, via its imposition of the formation of international joint ventures for foreign direct investment. This was aimed at bringing about an 'the exchange between foreign technology and the Chinese market'. FDI in the Chinese automobile industry has had important positive externalities in terms of spillover effects and clustering (Richet *et al.* 2001; Yeung *et al.* 2006).

The Chinese government has played a critical role in shaping the development of the automobile industry (Richet 2015). The Twelfth Five-Year Plan (2011–2015) emphasised the development of alternative energy vehicles and domestic innovations. These polices have to match the heterogeneity of the Chinese economy's industrial organisation, which is composed of different kinds of firms, namely state-owned, foreign-owned, private and listed companies (Table 1). Despite the great achievements, experience from various developing countries and local inter-industry comparison in China has demonstrated the drawbacks of policy-driven catch-up (Acemoglu *et al.* 2006; Tian 2007; Balcet and Ruet 2011).

Table 1 Different types of company in China's automobile industry

Category	Description	Examples
Large state-controlled enterprises	Usually monopolies or oligopolies. Minority shareholdings sold in public offerings.	First Auto Works (FAW) Dong Feng Motors (DFM)
Joint ventures	Usually involving foreign partner, providing technology in return for market access	Shanghai Volkswagen Dong Feng PSA Chang'an Ford
Private companies with some state influence	Encouraged by friendly government policy. Some measures to protect from foreign competition	BYD, Geely, Chery

Source: Adapted from The Economist (2011).

3. Geely's catch-up process via reverse engineering and product architecture innovation

Geely's catch-up process has been driven in different ways in different stages. In a first stage, starting in 1998, reverse engineering and product architecture innovation were the main ways to acquire, assimilate and imitate foreign technology. In a second stage, from 2006, the company tried to catch up via asset-seeking international mergers and

acquisitions: the main aim of this strategy was to access to foreign technology and global brands.

Before embarking on its automobile venture, Geely progressively formed a multistructured, widely diversified enterprise from 1984, including simple refrigerator components, motorcycles, materials for decoration, trading, real estate, hotels, tourism and higher education.

Based on its previous business success, Geely decided to tap into the automobile industry. Starting from scratch, the first car model produced in 1997, the Haoqing, was the result of reverse engineering of the Charade model from First Auto Works Xiali. There was a high level of similarity between Haoqing and Charade. Around 70 per cent of the components, including the engine, were interchangeable with the Charade model, based on technology transfer from Daihatsu, a Toyota affiliate. Two other models – the Meiri and the Ulio – were also based on the Charade platform, using 1980s technology.

When the technology level progressively improved, Geely started to innovate in product architecture, moving the company from simple reverse engineering towards changing product architecture from closed-integral to quasi-open design. Concretely, the Maple model produced in 2002 was based on the platform of the Citroën ZX, the French car assembled at Dong Feng Motors; Geely's own engine (MR479Q), derived from a Toyota model (8A model), was installed in this model. Therefore, Maple was a combination and integration of two foreign technologies: a Toyota engine and the Citroën ZX car. This mix-and-match and recombination demonstrated a higher engineering capacity at Geely.

A higher level of architectural innovation characterised the following three models, the Free Cruiser, the King Kong and the Vision, developed after 2000. These three models were based on Kia's Rio (also called the Pride) and Toyota's Viaos and Corolla. Compared with previous models that were all in the Aoo category (compact cars), the above three models were Ao and A class (small cars). The technological complexity was higher. Efforts were also directed towards developing an in-house engine (MR479Q) and transmission system, and integrating those key modules in the copied models.

The main result of the reverse engineering and product architectural change was the low cost of Geely's cars compared with those focal models. Wang (2008) has discussed in detail the mechanism of achieving low costs, including the buyer-supplier relationship. The low cost, and thus low price advantage drove Geely towards the commercial success. Geely ranked as the eighth largest carmaker in 2010 with sales of 416,000 units.

Meanwhile, Mr Li Shufu, the president of Geely group, was fully conscious of the drawbacks of trying to catch up via reverse engineering and product architecture modification. Geely could in this way only be a follower of more mature technology, thus positioning itself at the low end of the market. Based on previous commercial success, international asset-seeking acquisition turned to be a viable solution: this strategic choice has deeply affected the Geely's trajectory in recent years.

4. Geely's international expansion via exports and market-seeking operations

Geely debuted in the export market in 2003. Export volumes increased progressively to more than 38,000 units by 2011 (Table 2). By 2011, the cumulated export volume was 158,000 units. By 2010, Geely had developed 36 overseas agents in 36 countries with 344 dealerships. In terms of regional coverage, Geely's markets were mainly developing countries in the Middle East, East Europe, Africa, South East Asia, Central and South America. In the early stages, the Free Cruiser was the main exported model. Progressively, the King Kong was integrated in 2008, followed by the Panda in 2010. In the following years, more new car models were introduced to overseas markets.

Table 2 Geely's exports, 2004–2015 (number of cars; %)

Year	Geely exports	Geely total sales	%	China exports ^x	%
	А	В	A/B	С	A/C
2004	5,000*	96,693	5%	7,850	64%
2005	7,000*	133,041	5%	46,690	15%
2006	10,000*	164,495	6%	93,300	10%
2007	20,000*	181,517	11%	188,428	11%
2008	38,000*	204,205	19%	241,000	16%
2009	19,350	326,710	6%	101,840	19%
2010	20,555	415,843	5%	180,000	11%
2011	38,028	421,385	9%	476,072	8%
2012	101,908	483,483	21%	661,200	15%
2013	118,871	549468	22%	486,000	24%
2014	59721	417851	14%	533,000	11%
2015	25734	510097	5%	427,700	6%



Notes: * These figures are approximate data announced by Geely in its yearbook.

Source: Geely yearbook (http://www.geelyauto.com.hk/), CAAM (http://www.caam.org.cn)

The establishment of assembly plants, on a contractual base, represented a major strategy for consolidating international expansion, slowly implemented by Geely. According to Geely's annual report of 2010, there were contractual assembling plants in Russia, Ukraine, Indonesia and Taiwan. In contrast to Japanese companies in the US market in the 1980s, Geely had not yet reached the stage of direct investment in the establishment of its own foreign assembling plants.

Geely's strategy of overseas market expansion can be explained mainly as a reactive decision due to fierce competition in the Chinese market, dominated by large MNCs. Low-price vehicles with an attractive design was the main selling point for customers in developing countries. Geely's latest five year plan (2011–2015) announced that there should be 15 manufacturing (SKD and CKD) assembling sites in overseas markets. Total sales outside China were supposed to reach 1.3 million units, according to Geely's

⁺These data differ slightly from the announcement made by CAAM presented in Figure 1.

^x This is total exports of passenger cars; commercial vehicles are not included.

plans. Some developed markets in Europe and North America will also be explored. This forecast was seriously affected by the global economic recession from 2008, however (Table 2).

Geely's catch-up process and multinational growth via asset seeking FDI

Geely has pursued a consistent and clearly defined strategy of asset-seeking FDI, which represents a new stage both in the catch-up process and in its internationalisation trajectory. It has developed in three main steps.

Acquisition of London Taxi in 2006

Geely's first venture was the acquisition of shares in Manganese Bronze Holding (MBH) in 2006, owner of London Taxi. Targeting this niche player in the automobile industry corresponded to what Geely was realistically capable of at that time. Geely wished to acquire the potential value of the iconic London Taxi brand and its overseas marketing and sales network. In October, Geely Automobile (0175.HK), a subsidiary of Geely, acquired 30 per cent of new shares. Then, in November, the two companies established a joint venture in Shanghai, with a 52/48 per cent share split between Geely and MBH. After these two transactions, Geely became the biggest shareholder of MBH with a 23 per cent stake.

The agreement between Geely and MBH sheds light on the former's pragmatic approach: acquiring foreign technology, utilising the cost advantages in China and focusing on Chinese and Asian markets. The relocation of production to Shanghai Maple, a subsidiary of Geely, is aimed at acquiring new technology. In terms of sales, Geely is responsible in the Asian area and MBH had the right to sell in the rest of the world (Balcet *et al.* 2012).

In 2010, a new generation of London Taxis was developed, aimed at increasing fuel efficiency and improving adaptation to different market conditions. In 2013 Geely took full control.

Acquisition of leading Australian transmission producer DSI in 2009

During the financial and economic global crisis, in 2009, Geely took over Drive-Train Systems International (DSI), an Australian transmission producer and the world's second largest producer of Automatic Transmission (AT) systems. Before the acquisition, Geely used 4AT technology with low torque applied to small displacement engines (small cars). The Australian deal helped Geely to broaden AT production (to 4AT and 6AT with high torque) and thus to internalise the core technology for producing bigger cars.

In March, the 257.1 million HK dollar (33.1 million US\$) deal was signed between Geely and DSI. After acquiring the company, Geely became the leading Chinese carmaker, having internalised the entire series of AT technology. This 100% acquisition provided access to DSI's manufacturing equipment, factories and intellectual property, including trademarks, patents, software and research centre. We must stress that this opportunity to take over a frontier-technology component producer was created by the global crisis of 2008–2009.

Following the same business logic of asset-seeking drivers, in association with the development of the Chinese market, Geely quickly integrated DSI's technology in nearly 10 models. This measure on one hand ensured a sales increase for DSI, and on the other hand, improved the overall technology level of Geely cars. In addition, the localisation of production to China via joint-venture plants was planned. By April 2010, DSI started to make a profit, less than one year after acquisition. Geely had the ambition to supply AT for other Chinese carmakers in the medium term and to export Chinese-made AT to overseas markets.

Acquisition of Volvo Cars in 2010

The acquisition of Volvo Cars on 2 August 2010 represented the latest step in Geely's long-term strategy of international asset seeking (Balcet *et al.* 2012). It was the result of the confluence of various internal and external conditions. Li Shufu asked its top management team to prepare the purchase of international carmakers in 2002, only four years after the establishment of Geely. Although its senior management teams were not convinced, some research work was started. One external factor was that Ford had registered a net loss of 14.7 billion US dollars in 2008. This critical financial situation pushed Ford to sell Volvo.

The final deal amounted to USD 1.8 billion, significantly lower than Ford's initial demand of USD 2.5 billion. Geely invested 4.1 billion yuan (600 million USD) via Beijing Geely Kaisheng International Investment Co., a company established in September 2009. Two government-supported companies or institutions invested 3 and 1 billion yuan, respectively. One is Daqing State-Owned Assets Co., the other Shanghai Jiaerwo Co., a company established in February 2010 by Shanghai Jiading District Government, Shanghai Municipality. The above three companies provided USD 1.1 billion. The remaining financing was from China Construction Bank (London) and Ford, with USD 200 million each.

Together with external consulting teams – mainly composed of Rothschild, the Freshfield law firm and Deloitte Touch Thomatsu – Geely conducted impressive work over four months. Before the acquisition, 6,473 documents were reviewed, more than 10 expert meetings were held and two site visits and three management presentations by Volvo were organised.

Great efforts were made to trace property rights with regard to the ownership of Volvo by Ford. For example, some components were shared between Volvo S40 and Ford Focus in

China produced in a joint venture with Chang'an group, another large carmaker. These two cars were produced on the same assembly line. The component-sharing between these two cars also existed in Europe. The clarification and separation of property rights was a must. Geely reviewed the technologies of thousands of components, one by one. Then commercial terms linked to the technology were clarified. During the negotiations, Geely demonstrated the strength of its negotiation skills.

A two-way internationalisation process has been under way since the acquisition. On one hand, Geely took control of Volvo, an enormous FDI undertaking. On the other hand, the new Volvo (under Chinese ownership) started to establish operations in China in terms of R&D, manufacturing and dealership development. Volvo's market expansion in China can serve as the foundation of a global market strategy.

6. Assessing the post-acquisition trajectory

Volvo's takeover by Geely Group, as has been pointed out, is a quite atypical case from a threefold standpoint. First, in the automotive sector, the Chinese catching up took place through cooperation with foreign firms in the form of joint ventures (Balcet and Ruet 2011; Richet 2015). The Chinese host companies, until recently, were platforms, allowing foreign operators to develop their activities in the country, leaving the bulk of market share to the foreign firms.

The acquisition of Volvo, a smaller – and bankrupt – Western firm, in the premium sector of the car market, was supposed to allow Geely, a mass-market producer, at the low end, to enter the premium segment and compete with large European firms present in the Chinese market (BMW, Mercedes Benz) by means of an external growth strategy.

Finally, the acquisition of this asset should allow growth in the Chinese market in the premium sector, providing a base from which to enter high-income foreign markets (such as the USA), under the aegis of the Swedish firm's name and technology. At the same time, through technological acquisition, it should allow the Chinese firm to develop new Class C models to supply the domestic market and the world market, particularly North America.

After a few years, promising results from this special acquisition can be observed. Success can be attributed to a number of factors.

Governance of the new entity

On the Swedish side, acquisition by the Chinese partner has brought more independence, which had been lacking under the former owner (Ford). This greater management autonomy has been accompanied by substantial financial support to renew investment in Sweden (modernisation of the production line with an investment of 75 billion SEK) and developing new production units in China. The new owner provided financial support in the face of declining sales at the beginning of the decade. The Chinese

side, led by its president, focused on strategic goals, leaving the Swedish management to implement the strategy. The Swedish side could operate in a secure financial environment in a longer-term perspective. This new organisational environment has helped to reduce design time for new models from five years to 30 months. In The chairman of Geely Holding Group, Mr Li Shufu, summarises the approach of the new ownership as follows: 'Releasing the tiger back into the mountains.'

Strategy of the new group

This took shape with the development of production in China, including Class A models. In a few years the firm has begun to take market share in China, while increasing its sales in Europe and the United States (Figure 3). Meanwhile, Geely has continued to develop its models and maintain sales in China, a very price-sensitive market. The Chinese firm has continued its internationalisation strategy by building factories in central and eastern Europe and Latin America to sell its own brand. Meanwhile, production under the Volvo brand started in China in new plants. In 2016, the Volvo factory in Chengdu (Sichuan Province) exported 3,500 units of the S60I model to the United States (5 per cent of its production) with the aim of doubling the number in a few years. The Chinese group plans to invest in a greenfield factory in the United States, in South Carolina, which should be operational in 2018.

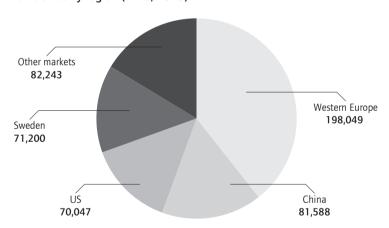


Figure 3 Volvo sales by region (units, 2015)

Source: https://www.media.volvocars.com/global/en-gb/media/pressreleases/172301/volvo-cars-reports-record-sales-of-503127-in-2015

Meanwhile, the group has decided to launch new models in category C under each brand to supply the Chinese and Western markets (Europe and USA).

Research and development

Operating in different segments Volvo has developed a new modular building system, SPA (scalable product architecture) for large cars, based on which the company created the new CX90. The company has also built new four-cylinder engines which will equip the new models. By 2019, it will have a line-up of nine new or reworked vehicles: three sizes in three different styles.

Technological cooperation between the two brands took shape with the setting up in 2013 of a joint development centre in Gothenburg, the China-Europe Vehicle Technology AB (CEVT). Volvo and Geely, within CEVT, introduced a new platform (CMA compact modular architecture) to reduce costs and increase margins on B and C segment cars. This cooperation provides Volvo the possibility to produce more engines, increasing volume. For Geely, it offers the possibility to create a new image and substantially increase its market share (Sharman 2015). The new joint platform can be used by both brands for their new products in segment C. It is expected to lead to considerable cost savings in terms of development, testing and sourcing. The new L model (for Lynk & Go) jointly developed by Geely and Volvo on the CMA platform was unveiled in late October 2016. This is a model for both the global and Chinese markets. In China, Geely will sell this car at a higher price, approaching the prices of foreign producers. Joint research in this centre will expand to other areas, such as engines, transmissions, powertrain and further research on connectivity and self-driving cars. The output will be shared

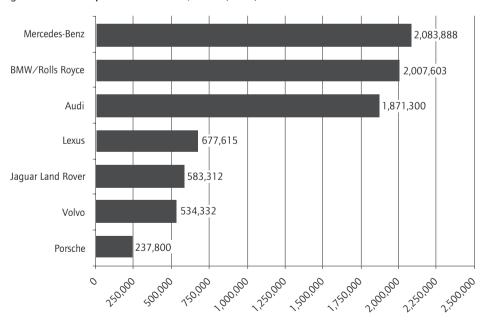


Figure 4 Global premium car sales, 2016 (units)

Source: https://www.statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/statistics/262921/global-production-of-luxury-cars-by-make/statista.com/stati

between the two brands. This is the main channel through which joint research and technology transfer take place, leading to technology convergence.

Geely Chairman Li Shufu sums up the spirit of cooperation that has developed between the two parties: 'the sharing of knowledge and technology had to take place without jeopardising brand integrity and individual product development, testing and sourcing' (Bottet 2016).

Markets

The two components of the group have both strengths and weaknesses: reputation, mastery of technology and innovation on the part of the Swedish group; mass market, rationalisation and cost control, and adaptation to fluctuating markets for Geely Group. The two groups also have structural weaknesses. In the case of Volvo, poor volumes and economies of scale (compared with major global carmakers), limited market share (Volvo produces a quarter of the volume of BMW or Mercedes), and a limited (S40, S60, S90) and undiversified production range. The Chinese firm is still operating at the low end and is strongly constrained by competition on price and quality in a very fragmented market. Nevertheless, sales prospects should enable the group to ensure its growth and achieve its objectives in the coming years by positioning in segments with higher added value.

Industrial relations

In 2009 a letter of intent from Geely promised that Volvo facilities in Europe would not be affected by the future acquisition. Moreover, a meeting in China between a delegation of Swedish trade union leaders and chairman Li Shufu eased post-acquisition industrial relations. This pragmatic and collaborative behaviour represented a remarkable change vis-à-vis other experiences of conflictual labour relations on the part of other Chinese multinational investors (Miedtank 2015). Good industrial and financial performance, driven by post-acquisition expansion in the Chinese market, required the starting of a third shift at Gothenburg's historical factory in 2015.

Therefore, after initial concerns over the Chinese acquisition, the assessment from the Swedish stakeholders, including trade unions and local authorities, has on the whole been quite positive. Problems and divergences remain, however, mainly between Swedish and Chinese managers on product development strategies.

7. Conclusion

In the early stages of corporate development in the domestic market, Geely's catching up took place via reverse engineering in the production of low-end cars. This was a typical practice that has been observed also in Japanese and Korean companies. Catching up via product architecture innovation is unique to Geely (and other Chinese carmakers).

This strategy has contributed to the development of low cost and eventually low price cars.

After achieving stabilisation and a certain level of commercial success measured by increasing sales, and while the catch-up process continued, Geely decided to expand further. The growth in the second stage was driven by the expansion in overseas markets, via the sales of its indigenous best-selling cars to developing countries.

The third stage – asset seeking acquisitions abroad – provided access to core technologies, brands and intellectual property rights. This was the main strategy that helped Geely to expand into medium and higher category cars. Besides the operations in China, Geely established its first overseas R&D centre at Gothenburg, and three overseas styling design centres in Gothenburg, California and Barcelona. These centres can carry out the design of all new products on the class A and B platforms synchronously. In contrast to what would have been possible if Geely had tried to upgrade its technology alone, the external acquisitions allowed it to accelerate its catch-up process, and eventually also growth, in both the domestic and international markets (Table 3).

Table 3 Geely's trajectories of catching up and multinational growth, 1998–2016

	1998–	2003-	2006–
Mission	Low-price, low-cost to enter the market	Reactive internationalisation to avoid fierce competition in the Chinese market	Technology leadership Full-range and global carmaker
Announced slogan	'Attractive affordable cars for Chinese people'	_	'With the safest, most environmentally friendly and most energy-efficient cars, Geely goes global'
Strategy implementation	Technology imitation, reverse engineering, product architecture innovation	Car exports Contractual assembling of CKD, SKD	Asset-seeking foreign acquisitions: MBH, DSI, Volvo Establishment of R&D centre at Gothenburg and four global styling centres
Result	Volume of sales in 2002: 43,500 units, No. 9 in China	Volume of sales in overseas markets in 2010: 20,555 units in 36 countries, 11% of China's car exports	Expansion to middle and upper category car segment Short-term commercial success: Volvo global sales: 503,127 vehicles in 2015, a historic high in its 89-year history

Source: Balcet, Wang and Richet 2016.

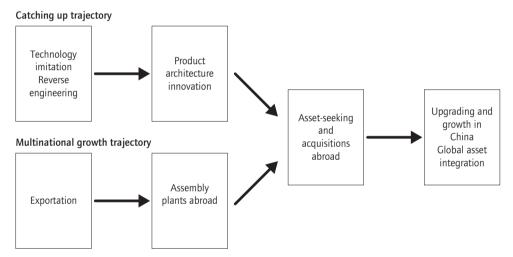
As shown in Figure 5, the evolution of Geely's asset-seeking acquisitions abroad represents the final stage of two parallel trajectories, analysed in this chapter: technological catching up and international growth. In fact, these foreign acquisitions, including the Volvo deal, both strengthen the strategy of technological catching up and upgrade international expansion.

Taking into account that Geely has a significantly shorter history than other global carmakers, it will only be possible to fully assess the results and impact of catch-up

strategies in the coming five to ten years. This chapter is intended as a call for future studies on the catching up and multinational growth of Chinese carmakers.

- From the point of view of technology, it is worth investigating in detail how the acquired technology is integrated, assimilated and upgraded.
- From the point of view of asset-seeking acquisitions, future research can focus
 on how Geely managed the transition and integration of Volvo into the Geely
 group, the integration of two corporate structures and cultures, product portfolio,
 synergy in terms of platforms, modularity of components and the exploration of
 Chinese and global markets.
- From the point of view of multinational growth, little analysis has been carried
 out of Geely's car exports and contractual assembly plants in overseas markets.
 We do not know how Geely has developed its sales network, built its brand and
 maintained after sales service.

Figure 5 **Geely's growth trajectory**



Source: authors' elaboration.

More broadly, Geely is not an exceptional case of catching up. Despite the fierce competition from foreign carmakers, there are around twenty major Chinese companies producing indigenous passenger cars, representing around 31 per cent of the market. This chapter can serve as a benchmarking exercise or a framework for the analysis of other Chinese carmakers' development trajectories, such as SAIC, BYD, Chery, Great Wall and JAC, among others.

In addition, the specificity of the institutional context in China, and in emerging countries in general, is another interesting point of analysis. This goes beyond the scope of this contribution, but it is clearly important to analyse how corporate strategy takes into account complex institutional factors and how corporate strategy and institutional

factors interact and co-evolve. This angle of analysis has important implications both for companies operating in developing countries and for the development of industrial policies.

Bibliography

- Acemoglu D., Aghion P. and Zilibotti F. (2006) Distance to frontier, selection, and economic growth, Journal of the European Economic Association, 4 (1), 37–74.
- Balcet G. and Ruet J. (2011) From joint ventures to national champions or global players? Alliances and technological catching-up in Chinese and Indian automotive industries, European Review of Industrial Economics and Policy, 3.
- Balcet G., Wang H. and Richet X. (2012) Geely: a trajectory of catching up and asset-seeking multinational growth, International Journal of Automotive Technology and Management, 12 (4), 360–375.
- Bottet G. (2016) Lynk&Co, la nouvelle marque de Geely. http://www.leblogauto.com/2016/10/lynkco-nouvelle-marque-de-geely.html
- Fujimoto T. (2006) Architecture-based comparative advantage in Japan and Asia, Discussion Paper 94, Tokyo, University of Tokyo, Manufacturing Management Research Center. http://merc.e.u-tokyo.ac.jp/mmrc/dp/pdf/MMRC94_2006.pdf
- Kim L. (1998) Crisis construction and organizational learning: capability building in catching-up at Hyundai Motor, Organization Science, 9 (4), 506–521.
- Mathews J.A. (2002) Dragon multinational: a new model for global growth, Oxford, Oxford University Press.
- Miedtank T. (2015) Chinese investment in Europe: business strategies and employment relations. http://poreen.eu/files/2015/12/Chinese-investment-in-Europe-Business-strategies-and-employment-relations.pdf
- Milne R. and Shepherd C. (2016) Volvo: remaking the marque, Financial Times, 19 June 2016. https://www.ft.com/content/bfed4c32-339f-11e6-bda0-04585c31b153
- Qian Y. and Weingast B. R. (1997) Federalism as a commitment to preserving market incentives, Journal of Economic Perspectives, 11 (4), 83-92.
- Richet X. (2015) L'industrie automobile chinoise : de la coopération à l'internationalisation, in Huchet J.-F., Richet X. and Ruet J. (eds.) Chine, Inde : les firmes au cœur de l'émergence, Presses Universitaires de Rennes, 109-124.
- Richet X. and Ruet J. (2008) The Chinese and Indian automobile industry in perspective: technology appropriation, catching-up and development, Transition Studies Review, 15 (3), 447–465.
- Richet X., Wang H. and Wang W. (2001) Foreign direct investment in the Chinese automobile industry, China Perspective, 38, 40–47.
- Sharman A. (2015) Volvo aims high with its second premium model. Chinese owned carmaker seeks to take on German rivals, Financial Times, 28 December 2015. https://www.ft.com/content/2b45a7ca-a96e-11e5-955c-1e1d6de94879
- The Economist (2011) Privatisation in China: capitalism confined, 3 September 2011, 20–23.
- Tian L. (2007) Does government intervention help the Chinese automobile industry? A comparison with the Chinese computer industry, Economic Systems, 31 (4), 364–374.
- UNCTAD (2011) World Investment Report 2011, Geneva, United Nations Conference on Trade and Development.

- Wang H. (2002) The reconstruction of Chinese automobile industry, what is the trajectory towards the globalisation? PhD thesis, Institute of Economic Research on Production and Development, Grenoble, University of Pierre Mendès France. [in French]
- Wang H. (2003) Policy reforms and foreign direct investment: the case of the Chinese automobile industry, Journal of Economics and Business, 6 (1), 287–314.
- Wang H. (2007) Determinants on the formation of automobile clusters in China, paper presented at 15th GERPISA International Colloquium, What have we learned about the dynamics of automobile firms and systems over the past 15 years?, Paris, 20–22 June.
- Wang H. (2008) Innovation in product architecture. A study of the Chinese automobile industry, Asia Pacific Journal of Management, 25 (3), 509–535.
- Wang H. and Kimble C. (2010) Low-cost strategy through product architecture: lessons from China, Journal of Business Strategy, 31 (3), 12–20.
- Yeung H. W. C., Liu W. D. and Dicken P. (2006) Transnational corporations and network effects of a local manufacturing cluster in mobile telecommunications equipment in China, World Development, 34 (3), 520–540.

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