
Geely: a trajectory of catching up and asset-seeking multinational growth

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Abstract: China became the largest world automobile market in 2009, following a decade of rapid growth. Foreign carmakers played a central role in bringing in technology, management know-how and marketing capabilities, as well as in building supply chains; while domestic companies, mainly central or local state-owned, established joint ventures with foreign carmakers, which took the lion's share of the Chinese market. However, in the late 1990s, some domestic private companies accessed to this market and experienced rapid growth. In order to discuss the catching up and internationalisation processes of Chinese carmakers, and in particular the crucial relationship between the two processes, this paper focuses on the case study of Geely, which broke both industrial and institutional barriers to access this industry. It experienced various ways of catching up, including technology imitation via reverse engineering, product architecture innovation, and asset seeking acquisitions abroad; as well as various ways of international growth, including export, assembly abroad, market seeking operations, and (again) asset-seeking acquisitions abroad. This case study helps the understanding of catching up of Chinese firms, while offering insights into the competitive strategy of emerging multinationals. This paper explores jointly the trajectories of catching up and of multinational growth.

Keywords: Chinese automotive industry; asset seeking FDI; catching up; multinational strategies.

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1 Introduction: an original trajectory of catching up and multinational growth

After China's accession to World Trade Organisation (WTO) in 2001, the Chinese automotive industry has been fast growing. China became the largest automobile market in the world in 2009. The average annual growth rate between 2000 and 2010 was around 35.84%, reaching the sales volume of 18.26 million units in 2010. In 2011, the sales volume was 18.51 million units, a slight increase of 1.37%. Notwithstanding this conjunctural slow down, the Chinese authority, such as the State Information Centre, still forecasts the average annual growth rate until 2023 to be between 13%–15%.

Foreign original equipment manufacturers (OEMs) have played a central role in bringing in technology, management know-how and marketing capabilities, as well as in building distribution networks and supply chains. Domestic companies, mainly central or local state-owned, have established joint ventures (JV) with foreign OEMs. Therefore, JVs rapidly have taken the lion's share of the Chinese market. In the late 1990s, some domestic private companies accessed to the automobile market and experienced rapid growth. Geely and BYD are two leaders that rank among the top ten in terms of sales of passenger cars.

Different to the Brazilian and Russian automobile industry, Chinese and Indian carmakers are demonstrating the capability of catching up by producing indigenous cars in the first stage, and then going international later (Richet and Ruet, 2008; Balcet and Ruet, 2011). Chinese carmakers took 42.23% of 14.47 million passenger car segment in 2011.

Some studies have analysed the general situation of the Chinese automobile industry (Huang, 2003; Thun, 2006), while few have discussed and deeply analysed the catching up and internationalisation processes of Chinese carmakers, and no one the relationship between the two processes.

To fill this empirical and theoretical gap, this paper focuses on the in-depth case study of Geely. We choose this company as the focal study for the following reasons. Firstly, without any experience of producing cars, Geely broke both industrial barrier (technology, capital, managerial skills), and institutional barrier (government regulation limiting the number of OEMs) to access the automobile industry. Geely is an interesting case that covers various ways of catching up, including technology imitation via reverse engineering, product architecture innovation, and asset seeking acquisitions abroad; as well as various ways of international growth, including export, assembly abroad, market seeking operations, and (again) asset-seeking acquisitions abroad. In short, Geely is one highly significant case of catching up and international growth among Chinese automobile companies.

This case can help us make a global setting on the understanding of catching up of Chinese firms in the process of globalisation. Our findings also offer an insight into the competitive strategy of firms in emerging economies (Kim, 1998), and the motivations of internationalisation by emerging multinationals (Goldstein, 2007). This analysis, focusing on Chinese firms, will also serve as the basis of comparison for scholars to compare with other emerging or developing countries.

In this paper, we concentrate the analysis on the competitive strategies of Geely, exploring on the one hand its trajectories of catching up, and on the other hand its expansion on international markets and its multinational growth. The process of catching up in the early stage was mainly driven by technology, in aims of reaching low cost and low price solutions for the production of low-end cars. In the same time, the overseas market expansion was the consequence of fierce competition in the Chinese market. In a following stage, the catching up and the international growth have been driven by asset-seeking acquisitions in global market. In our work, we'll show how these two dimensions interact and reinforce each other in a dynamic way. Figure 3 illustrates this double trajectory.

Our methodology is that of an in-depth, longitudinal case history (Yin, 2003). Archival data quoted are from China Automotive Industry Yearbooks (CAIY) from 1998 onwards. The initial stage of case study debuted on 2002, during the PhD studies of one author (Wang, 2002). The second stage of case study focuses on the catching up of Geely via reverse engineering and product architecture (Wang, 2008).

To have deeper understanding on the catching up of Geely at the global level, a new round of on-site, face-to-face or phone interviews was organised in 2011. On February 22nd, one-day intensive company visit in Hangzhou city by the three authors was conducted. Public Relations Director, Mr. Victor Yang was interviewed in English during two-and-half hours, guided by a prepared list of questions. Then, the new assembling plant in Ningbo city that demonstrated technology upgrading was visited. Four days later, one of the research team members conducted a two-hour face-to-face interview in Chinese, with the president of Group Geely, and Chairman of Board at Volvo Car Corporation. This event was organised by 21China Business Herald, a leading business newspaper. In aims of cross-check important information, Paul Gustavsson, Senior Vice President, working in President's Business Office of Volvo Group was interviewed on the phone, during the gathering of three authors on June 7th in Paris, France.

Further more, on July 28th, the Vice Director of Geely research institute, Mr. He Wei, was interviewed, followed with the visit of research institute based in Hangzhou. On August 23rd, the former Vice President of Geely in Shanghai, Mr. Wang Ziliang, was

interviewed. These two interviews helped us to further clarify Geely's asset-seeking strategy. On November 16th and December 9th, two groups of Volvo Car middle level managers have received three-hour training respectively by one of the author in Shanghai. Around 40 participants have nearly covered all the key functions of the company. The interaction during the training has also helped better understanding from the perspective of Volvo personnel.

We have put great efforts on the careful selection of interviewees, in aims of obtain useful and detailed information in line with the research scope, and to ensure heterogeneous and balanced perspective of interviewees. Most of the findings have been cross checked by raising the same questions to different interviewees. As we can see above, the research team has made great efforts to cross check views from the China side, and foreign side, from top management (board level) to important functional management (including research institute and manufacturing).

In the following sessions, we will overview some relevant theories on new multinationals from emerging countries (Section 2). After a quick overview of catching up processes in the China automobile market, with a focus on the passenger car segment (Sections 3 and 4), we explore the case of Geely (Sections 5, 6 and 7). We conclude with our main findings and implications both for scholars and practitioners (Section 8).

2 Emerging country multinationals in global markets: a theoretical framework

Applying general theories of international business to multinational companies from developing countries has a better fit to explain the South-South flows of FDI, while new and specific explanations have been proposed in order to explain the South-North flows of FDI by emerging country multinationals to developed market.

According to the best established theories of the multinational corporations (MNCs), three main drivers may explain the multinational expansion of firms: resource-seeking motivations (targeting natural resources, energy and agricultural goods, or low-cost labour and production factors); market seeking motivations (aiming at the access to new markets); and finally strategic asset-seeking motivations, in the case of acquisitions targeting in the first place at technology, knowledge, brands and skills incorporated in a foreign company (Dunning, 1993). Accordingly, South-South FDIs have been explained on the base of some kind of ex-ante specific advantages of the investing companies, including the ability to develop technologies appropriate for the developing countries' conditions, at a smaller scale, in order to match the local needs or tastes. It was the case of early Indian multinationals investing in Asia (Lall, 1983).

Asset-seeking motivations are at the core of the new theories, proposing specific explanations of multinationals from emerging countries 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' FDIs to industrialised countries may be explained not only by market-seeking drivers, but also (sometimes at a large extent) by the need to access resources and assets they lack. Their strategy is therefore oriented to augment or even to create, rather than to exploit, their specific ownership advantages.

Tolentino (2008) points out that for LDC companies that have already accumulated a certain level of technological knowledge, asset-seeking FDIs represent a means to

improve such level by accessing new technological resources, giving rise to a variety of multinational experiences, while Moon and Roehl (2001) point out that –paradoxically – a firm may go abroad to overcome its own disadvantages, such as the lack of technology or management know-how, or a limited market share. However, they admit that some ex-ante ownership advantages are needed also in the case of asset seeking FDIs. Luo and Tung (2007) argue that emerging multinationals use outward investments as a ‘springboard’ to acquire strategic assets. Mergers and acquisitions and strategic alliances in advanced markets are used to access sophisticated technology as well as brands and managerial skills. The competitive advantages, not originally possessed by the companies, were mainly generated through their participation in international alliances or acquisitions.

Mathews (2002) argues that the multinational growth represents the way through which latecomer MNCs, including ‘dragon multinationals’ from Asian home countries, acquire resources and improve their competitive position. He proposes a ‘linkage, leverage, learning’ (LLL) framework, as these companies are skilled in establishing *linkages* (inter-firm relations) with incumbent firms. Moreover, emerging country multinationals show a leapfrog attitude, because as latecomers they tend to internationalise rapidly and to catch up incumbents (Mathews, 2002; Luo and Tung, 2007).

Finally, it must be stressed that some pre-conditions are needed for a successful asset-seeking strategy: as it is argued by Makino et al. (2002), it requires a significant and effective absorptive capability in the investing firm, which depends on prior knowledge and expertise in a given field.

3 China’s automotive industry: an outlook

Wang (2007) illustrated the emergence of Chinese automobile industry through one theoretical framework for the determinants of the formation of Chinese automobile clusters. This framework contains two institutional determinants (institutional environment of host country, i.e., China and global institutions, such as World Trade Organization) and two microeconomic (domestic firms and MNCs). The author empirically illustrated how different determinants intervene and interact to shape the clusters since 1949.

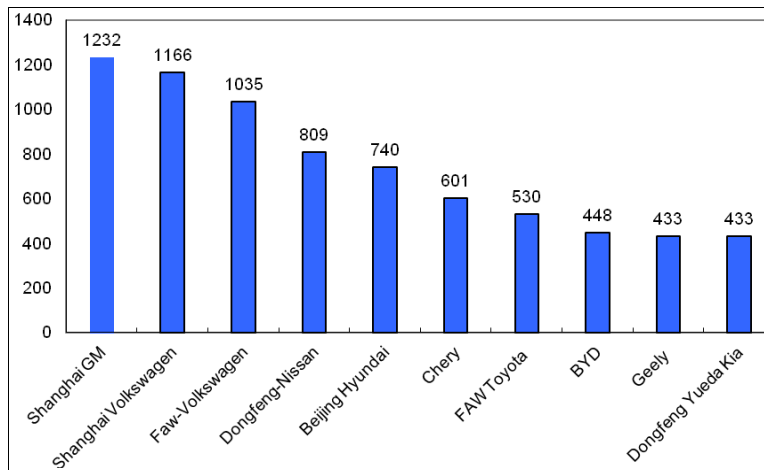
The first stage (1949 and 1978) of China automobile industry can be generally characterised as the government-driven industrial formation stage under the regime of planned economy. Based on the production model of transplants from former Soviet Unions, three important industrial basis of contemporary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

FDI demonstrated increasing importance during the transitional economy period (1979–2000) when China decided to implement opening-up policies, and shift the whole nation towards market economy. Nearly all the top ten world carmakers have established JVs with local SOEs, under the supervision of government. While at the same time, the complex Chinese federalism (Qian and Weingast, 1997), which means the relative autonomy of the provinces from one hand, and powerful ministries on the other, have facilitated the fragmentation of automobile industries by establishing more than 100

domestic carmakers (all vehicle types included). At this stage, FDI, governments and Chinese companies jointly shaped the industry.

The third stage debuted in 2001, when China accessed the WTO. The WTO intervened as the additional powerful force to influence the development of Chinese automobile industry, together with Chinese governments, foreign and local companies. Interestingly, it is also during this period that Chinese carmakers progressively caught up, and demonstrated their early stage of internationalisation.

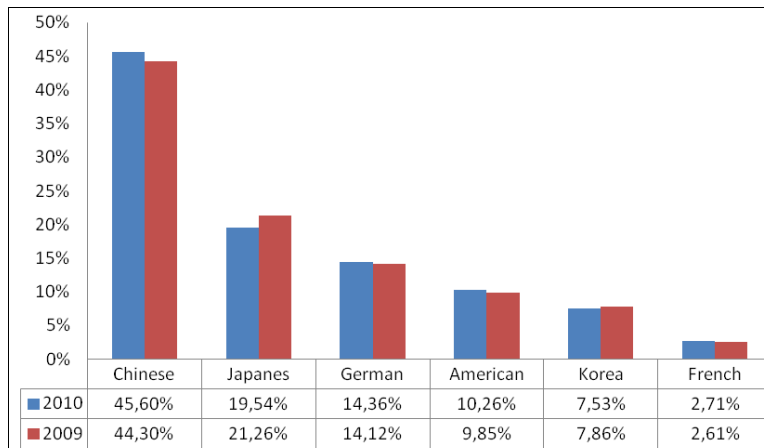
Figure 1 Top 10 passenger carmakers by volume in China, 2011 (see online version for colours)



Note: Unit: 1,000 cars

Source: China Association of Automobile Manufacturers (CAAM)

Figure 2 Market shares of cars by country of origin of carmakers, 2009–2010 (see online version for colours)



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

Source: China Association of Automobile Manufacturers (CAAM)

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

- Market: the acceleration of the growth of the Chinese markets, with an average annual growth rate of 35.84% between 2000 and 2010.
- Chinese carmakers: the entry of significant new players out of jurisdiction by central government (either private, or companies indirectly backed by provinces, municipalities, or local banks). Some of them are in the beginning of internationalisation. The market share of indigenous vehicles (both passenger cars and commercial vehicles) represented 45.6% of the total market, by selling 6.27 million in 2010 (Figure 1). Indigenous passenger cars had 30.89% of the market, or 2.93 million units.
- Foreign carmakers: All the major players, including Volkswagen, General Motors, Ford, Toyota, BMW and Chrysler, among the others, have announced aggressive investment plans in the forthcoming five years. More new models adapted to local consumer needs will be developed.
- Chinese Government: increases again its influence on the reshaping of the automobile industry, in the field of inward and outward FDI policy, new round of technology transfer, stimulation plan during the financial crisis, and new energy policy
- WTO and other country based regulation body: increasing friction on the trade and investment of cars and components, tyres between China and other developed and developing countries.

4 Catching up in Chinese domestic market: company driven and government driven

The industrial development of China, on a big scale, has relied on two main ways of technology transfer: formal mechanisms, including FDIs, licensing, IJVs, turnkey plant, other contractual, or non-equity forms of international investment (UNCTAD, 2011), and informal mechanisms, including the processes of reverse engineering, when there is no direct connection with the technology emitter.

Chinese firms went beyond the traditional informal mechanism of technology transfer, by moving towards the 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). Concretely, the best-selling products sold in China, have been copied, reverse engineered, and remodelled. Accordingly, those components with the feature of 'close integral' have become generic components, and thus 'quasi-open'. Those generic components can then be massively produced, reaching significantly low costs, through economies of scale, being purchased by Chinese companies to mix-and-match with the aims of generating new products under a Chinese brand name (Wang, 2008; Wang and Kimble, 2010). The ability of Chinese firms in architectural modification and technology re-combination is one important source to understand China's cost advantage, instead of simple and intuition judgement on the low cost labour.

In parallel with the uniqueness of above indicated product architecture innovation at the firm level, the formal mechanism of technology transfer is mainly driven by China’s government, via its imposition on the formation of international JV as the form of foreign direct investment FDI. This was in aims of ‘the exchange between foreign technology and Chinese market’. FDI in Chinese automobile industry had important positive externalities in terms of spill-over effects and clustering (Richet et al., 2001; Yeung et al., 2006).

We can observe that the Chinese Government has played critical roles to shape the development of automobile industry. The central government has launched, in different periods (1994, 2004), comprehensive industrial policies to pool both Chinese and foreign company competencies and knowledge, to catch up, and to localise the car production (Richet and Ruet, 2008). Recently, the 12th five-year plan (2011–2015) has emphasised the development of alternative energy vehicles, and domestic innovations. These policies have to match the heterogeneity of the industrial organisation of the Chinese economy which is composed of different kind of firms, i.e. 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 drawbacks of policy-driven catch up (Acemoglu et al., 2006; Tian, 2007; Balcet and Ruet, 2011).

Table 1 Different types of companies in China automobile industry

<i>Category</i>	<i>Description</i>	<i>Examples</i>
Large state-controlled enterprise	Usually monopolies or oligopolies	First Auto Works (FAW)
	Minority shareholdings sold in public offerings	Dong Feng Motors (DFM)
JVs	Frequently 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
Companies backed by publicly owned investment funds	Investors include foreign private-equity and venture-capital funds as well as city and provincial governments	BitAuto China Auto Rental Ltd.

Source: Adapted from The Economist (2011)

5 Geely’s catching up via reverse engineering and product architecture innovation

Geely’s catching up has been driven by 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, since 2006, the company tried to catch up via asset-seeking international merger and acquisitions: the main driver of this strategy was to access to foreign technology and global brands.

Before embarking on the automobile adventure, Geely progressively formed a multi-structured diversified enterprise since 1984, including simple refrigerator components,

motorcycles, materials for decoration, trading, real estate, hotels, tourism and higher education.

Based on the 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 Charade model from First Auto Works Xiali. There was a high level of similarity between Haoqing and Charade. Around 70% of the components, including engine, were inter-changeable with that of Charade model, that was based on the technology transfer from Daihatsu, Toyota's affiliate. Two other models, Meiri and Ulio were also based on the platform of Charade, a 1980s-old technology.

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

A higher level of architectural innovation was based on the following three models, Free cruiser, King Kong, and Vision, developed after 2000. These three models were based on the imitation of Rio (also called Pride) from Kia, Vias and Corolla from Toyota respectively. Compare to previous models that were all in the category of A00 (compact cars), the above three models were at the A0 and A class (small cars). The technology complexity was higher for reverse engineering and architectural change. Efforts have been made also in the development of its own engine (MR479Q) and transmission system, and integration of those key modules into the copied models.

The main result of the reverse engineering and product architectural change was the low costs of Geely's cars compared to those focal models. Wang (2008) has discussed in details the mechanism of reaching low costs, including the perspective of buyer-supplier relationship. The low cost, and thus low price advantage drove Geely toward the commercial success. Geely ranked as N° 8 carmaker in 2010 with the sale of 416,000 units.

Meanwhile, Mr. Li Shufu, the president of Geely group, was fully conscious of the drawback of catching up via reverse engineering and product architecture modification. Geely could only be the follower of mature technology, and thus being positioned on the low end markets. Based on the previous commercial success, the international asset seeking acquisition turned to be the viable solution: this strategic choice affected the trajectory of Geely in the most recent years.

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

Five years after the establishment of the company, Geely debuted exportation in 2003. The volume of exportation progressively increased to more than 38,000 units by 2011 (Table 2). By 2011, the cumulated exportation volume was 158,000 units. By 2010, Geely developed 36 overseas agents from 36 countries that covered 344 dealer shops. 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 stage, Free cruiser was the main model. Progressively, King Kong was integrated in 2008, then followed by Panda in 2010. In the coming years, more new car models have been introduced to the overseas markets.

The establishment of assembling 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. Different to Japanese companies in the US market in the 1980s, Geely did not yet reach the stage of direct investment on 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 attractive design was the main selling point for customers in developing countries. Geely's latest five year plan (2011–2015) announced that there should have 15 manufacturing (SKD and CKD) assembling sites in overseas markets. The total sales outside China should reach 1.3 million units, according to Geely's plans. Some developed markets in Europe and North America will also be explored.

Table 2 Geely's exportation: 2004–2011

	<i>Geely export</i>	<i>Geely total sales</i>	<i>%</i>	<i>China export</i>	<i>%</i>
	<i>A</i>	<i>B</i>	<i>A/B</i>	<i>C</i>	<i>A/C</i>
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

Notes: *Those figures are approximate data announced by Geely in the yearbook.

⁺This data is slightly different to the announcement by CAAM in Figure 1.

Source: Geely annual yearbook (Geely Automobile Holdings Ltd, 0175.HK), CAAM

7 Geely's catching up and multinational growth via asset seeking FDI

Geely showed a consistent and clearly defined strategy of asset-seeking FDIs, which represents a new stage both in the catching up process and in the internationalisation trajectory. It developed in three main steps.

7.1 First try: acquisition of London Taxi in 2006

The first try for Geely was the acquisition of shares from Manganese Bronze Holding (MBH) in 2006, owner of London Taxi. Targeting this niche player in the automobile

industry corresponded to the capacity of Geely at that moment. Geely wished to access the potential value of iconic London Taxi brand and its overseas marketing and sales network.

In October, Geely Automobile (0175.HK), a subsidiary of Geely, acquired 30% of new shares (£14.25 million) from MBH. Then, in November, the two companies established a JV in Shanghai, with a 52% and 48% share split between Geely and MBH. After these two transactions, Geely became the biggest shareholder of MBH by holding 23% stake.

Based on the agreement between Geely and MBH, we can see the pragmatic approach of Geely: acquiring the foreign technology, exploring the cost advantage in China, and focusing on the Chinese and Asian markets. The relocation of production to Shanghai Maple, a subsidiary of Geely, is made in order to learn new technologies. In terms of sales, Geely is responsible for the Asian area, and MBH had the right to sell in the rest of the world.

According to our analysis, this project was still at the stage of take off, and did not reach the objectives of Geely. On August 2010, Geely declined the offer of purchasing 20 million new ordinary shares of MBH, and diluted its share to 19.97%. At the same time, a new generation of London Taxi (TXN) was developed, in order to increase fuel efficiency and better adaptation to different market conditions. Geely kept the objective of sales increase.

7.2 Second step: 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, an Australian transmission producer, the second world producer of automatic transmission (AT) systems. Before the acquisition, Geely managed technology on 4AT with low torque applied to small displacement engines (small cars). This deal helped Geely broaden the AT production (to 4AT and 6AT with high torque), and thus 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 world's second largest independent transmission manufacturer, Geely became the leading Chinese carmakers that internalised the entire series of AT technology. This 100% acquisition gave the access to DSI's manufacturing equipments, factories, and intellectual properties, including trade mark, patent, software, and research centre. We must stress that this opportunity of taking over a frontier-technology component producer was created by the global crisis of 2008–2009.

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

7.3 *Milestone: the acquisition of Volvo Cars in 2010*

The acquisition of Volvo Cars on 2nd August 2010 represented the latest step of Geely's long-term strategy of international asset seeking strategy. During the face to face talk with Li Shufu with one of the authors in February 2011, he recalled:

“I know the general trends of western business driven by Wall Street logic. CEOs of automobile groups can buy and sell some brands among their portfolio, for the sake of major share holder's interest. It is not a pure logic of industrial development. I do not know which brand might be sold by which group. But I firmly note that this day may come. Therefore, I have to better prepare for the coming of that day.”

The successful acquisition of Volvo cars by Geely was the result of the association of various internal and external conditions. Li Shufu requested its top management team to prepare the buying international carmakers in 2002, only four years after the establishment of Geely. Despite its senior management teams were not convinced, some research works started. On the external factor, Ford reached the net loss of 14.7 billion US dollars in 2008. This critical financial situation pushed Ford to sell Volvo.

The final deal amounted to 1.5 billion US dollars, significantly lower than the initial proposition of 2.5 billion US dollars by Ford. Geely invested 4.1 billion yuan (600 million USD) via Beijing Geely Kaisheng Internatinal 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 is Shanghai Jiaerwo Co., also a newly established company on Feb 2010 by Shanghai Jiading District Government, Shanghai Municipality. The above three companies provided \$1.1 billion. The remaining financing was from China Construction Bank (London) and Ford, with \$200 million each.

7.4 *Managing the acquisition of core assets by Geely*

It is worth to discuss more details on how Geely stick on the core value of foreign assets, especially the intellectual property rights. Together with external consulting teams mainly composed of Rothschild, Freshfield Law Firm, and Deloitte Touch Thomatsu, Geely conducted an impressive work during four months. Before the acquisition, 6,473 documents were reviewed, more than ten expert meeting, and two site visits, and three management presentations by Volvo, were organised. During the negotiation, more than 15,000 revisions and remarks were conducted on the 2,000-page contract with Ford, widely covering all the aspects of important details, including transaction pricing, accountant, taxation, intellectual property right, engine, component supply, mould, information technology, pension, car financing, among the others (Wang, 2011).

Great efforts have been invested on tracing the origin of property rights, the ownership between Volvo and Ford. For example, some components have been shared between Volvo S40 and Ford Focus in China produced in JV with Chang'an group, one of the large carmakers. These two cars were produced in the same assembling line. The component sharing between these two cars also exist in Europe. The clarification and separation of property right was a must. Geely has reviewed technologies of thousands of components one by one. Then commercial terms linking with the technology were clarified. During the negotiation, Geely had demonstrated its art and strength of negotiation.

A two-way internationalisation process is on the way since the acquisition. On the one hand, Geely took the control of Volvo, through a huge FDI. On the other hand, new Volvo (under Chinese ownership) started to establish operation in China through R&D, manufacturing, and dealership development.

Volvo's market expansion in China can serve as the foundation of a global market strategy.

Table 3 Geely's trajectory of catching up and multinational growth, 1998–2011

	1998-	2003-	2006-
Mission	Low-price, low-cost to enter the market	Reactive internationalisation to avoid fierce competition in China market	Technology leadership Full-range and global carmaker
Announced slogan	"Made affordable nice cars for Chinese people"	N.A.	"Made most safety, most environment friendly, and most energy efficient cars, let Geely cars go global"
Strategy implementation	Technology imitation, reverse engineering, product architecture innovation	Car exportation Contractual assembling of CKD, SKD	Asset seeking foreign acquisitions: MBH, DSI, Volvo
Result	Volume of sale in 2002: 43,500 units, N°9 in China	Volume of sales in overseas market in 2010: 20,555 units to 36 countries, 11% of China car exportation.	Expansion to middle and upper category car segment. Short term commercial success: Volvo global sales 449,255 vehicles, 20.3% increase. Highest growth since 2007. Sales in China: 47,140, 54% increase.

Source: Authors, based on information from Geely's company website.

8 The twin trajectories of Geely: future perspective

Starting from scratch in 1998, the phenomenal growth of Geely in the past 14 years, and especially the acquisition on Volvo in 2010 attracted great interest of scholars on the study of the trajectory of catching up in the Chinese automobile industry, as well as on the international growth of Chinese new multinationals.

From the point of view of catching up theories, and international business theories, Geely provides an interesting textbook case. Geely's trajectory of growth is consistent with the theory of catching up and new theories of the emerging multinationals.

In the early stage of corporate development in the domestic market, we have observed Geely's catching up via reverse engineering in the production of low-end cars. This was a typical practice that has been observed in Japanese and Korean companies.

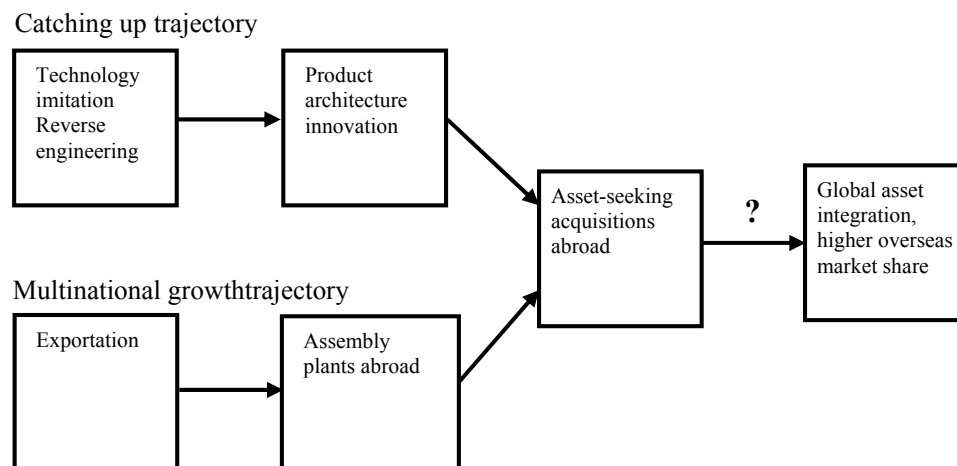
Catching up via product architecture innovation is unique at Geely (and other Chinese carmakers). This strategy contributed to the achievement of low cost and eventually low price of cars.

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

In the third stage, asset seeking acquisitions abroad, providing access to core technology, brand, and intellectual property right, represented the main strategy that helped Geely to expand to middle to upper category cars. Compared to conducting the technology upgrading by Geely itself, the external acquisitions allowed Geely to speed up its catching up, and eventually speed up the growth, both in domestic and international market (Table 3).

As shown in Figure 3, in the evolution of Geely, asset seeking acquisitions abroad represent the final stage of two parallel trajectories, analysed in this paper: that of technological catching up, and that of international growth. In fact, these foreign acquisitions, including the Volvo deal, on the one hand strengthen the strategy of technological catching up, and on the hand upgrade the international expansion.

Figure 3 Geely’s trajectory of growth



Source: By authors

As summarised by Ma (2011), Vice President of Geely Automotive Technology Center,

“The rapid development of Geely (in the Chinese market) enables Geely-centered international collaboration and overseas acquisition. While international collaboration becomes accelerator of Geely’s (future) development.”

Taking into account that Geely has a significant shorter history than that of global carmakers, it will only be possible to fully assess the results and impact of catching up strategies in the coming five to ten years. This paper is intended as a call for future study on catching up and multinational growth of Chinese carmakers.

- From the point of view of technology, it is worth to investigate in details how the acquired technology is integrated, assimilated, and upgraded.
- From the point of view of asset seeking acquisitions, future research questions can focus on how Geely manage the transition and integration of Volvo into Geely group, the integration of two corporate structures and cultures, product portfolio, the synergy in terms of platform, modularity of components, exploration of Chinese and global market.
- From the point of view of multinational growth, little study has been done in order to analyse Geely's car exports and contractual assembling plants in overseas markets. We do not know how Geely developed sales network, built its brand, maintained after sales service.

From a broader point of view, Geely is not an exceptional case of catching up. Despite the fierce competition from foreign carmakers, there are around 20 major Chinese companies producing indigenous passenger cars, representing around 31% of the market share. This paper can be served as a benchmarking or a framework for the analysis of other Chinese carmakers trajectory of development, such as SAIC, BYD, Chery, Great Wall, JAC, among the others.

In addition, the specificity of the institutional context in China, and in emerging countries in general, is another interesting point of analysis. This analysis goes beyond the scope of this research, but it is definitively important to take into account how the corporate strategy take 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 regional policies.

References

- Acemoglu, D., Aghion, P. and Zilibotti, F. (2006) 'Distance to frontier, selection, and economic growth', *Journal of the European Economic Association*, March, Vol. 1, No. 1, pp.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', *ERIEP European Review of Industrial Economics and Policy*, December, No. 3, pp.1–24.
- Dunning, J.H., (1993) 'Multinational enterprises and the global economy', Addison-Wesley, New York.
- Fujimoto, T. (2006) 'Architecture-based comparative advantage in Japan and Asia', Manufacturing Management Research Center (MMRC), Discussion Paper Series, MMRC-F-94, Graduate School of Economics, University of Tokyo, August, available at http://www.ut-mmrc.jp/dp/PDF/MMRC94_2006.pdf (accessed on 10 April 2007).
- Goldstein, A. (2007) *Multinational Companies from Emerging Economies*, Palgrave Macmillan, Basingstoke.
- Huang, Y. (2003) *Selling China: Foreign Direct Investment during the Reform Era*, Cambridge University Press, Cambridge.
- Kim, L. (1998) 'Crisis construction and organizational learning: capability building in catching-up at Hyundai Motor', *Organization Science*, Vol. 9, No. 4, pp.506–521.
- Lall, S. (Ed.) (1983) *The New Multinationals. The Spread of Third World Enterprises*, John Wiley & Sons, Chichester.

- Luo, Y. and Tung, R.L. (2007) 'International expansion of emerging market enterprises: a springboard perspective', *Journal of International Business Studies*, Vol. 38, No. 4, pp.481–498.
- Ma, M. (2011) 'Global collaboration and Geely's international practice', *The 7th International Conference on Global Manufacturing and China*, 4th September, Zhejiang University, Cambridge University, Hangzhou, China.
- Makino, S., Lau, C-M. and Yeh, R-S. (2002) 'Asset-exploitation versus asset-seeking: implications for location choice of foreign direct investment from newly industrialized economies', *Journal of International Business Studies*, Vol. 33, No. 3, pp.403–421.
- Mathews, J.A. (2002) *Dragon Multinationals. A New Model for Global Growth*, Oxford University Press, Oxford.
- Moon, H. and Roehl, T.W. (2001) 'Unconventional foreign direct investment and the imbalance theory', *International Business Review*, Vol. 10, No. 2, pp.197–215.
- Qian, Y. and Weingast, B.R. (1997) 'Federalism as a commitment to reserving market incentives', *Journal of Economic Perspectives*, Fall, Vol. 11, No. 4, p.5.
- Richet, X. and Ruet, J. (2008) 'The Chinese and Indian automobile industry in perspective: technology appropriation, catching-up and development', *Transition Studies Review*, Vol. 15, No. 3, pp.447–465.
- Richet, X., Wang, H. and Wang, W. (2001) 'Foreign direct investment in the Chinese automobile industry', *China Perspective*, November–December, No. 38, pp.40–47.
- The Economist (2011) 'Privatisation in China. Capitalism confined', 03 September, pp.20–23.
- Thun, E. (2006) *Changing Lanes in China: Foreign Direct Investment, Local Government, and Auto Sector Development*, Cambridge University Press, Cambridge.
- Tian, L. (2007) 'Does government intervention help the Chinese automobile industry? A comparison with the Chinese computer industry', *Economic Systems*, Vol. 31, No. 4, pp.364–374.
- Tolentino, P.E.E. (2008) 'Explaining the competitiveness of multinational companies from developing economies: a critical review of the academic literature', *International Journal of Technology and Globalization*, Vol. 4, No. 1, pp.23–38.
- UNCTAD (2011) *World Investment Report 2011*, Geneva UNCTAD.
- Wang, C. (2011) 'World looks East. Successful factors of Geely's acquisition on Volvo', *Strategic Management Forum 2011, The Internationalization Strategy of Chinese Firms - Dialogue Between Entrepreneurs and Scholars*, 23 August, Euromed Management Ecole de Marseille, Shanghai, China.
- Wang, H. (2002) 'The reconstruction of Chinese automobile industry, what is the trajectory towards the globalisation?', PhD thesis, IREPD (Institute of Economic Research on Production and Development), University of Pierre Mendès France, France (in French).
- Wang, H. (2007) 'Determinants on the formation of automobile clusters in China', *GERPISA 15th International Conference, What have we Learned about the Dynamics of Automobile Firms and Systems over the past 15 years?*, Ministry for Research, 20–22 June, Palais of Luxembourg, Paris.
- Wang, H. (2008) 'Innovation in product architecture. A study of the Chinese automobile industry', *Asia Pacific Journal of Management*, Vol. 25, No. 3, pp.509–535.
- Wang, H. and Kimble, C. (2010) 'Low-cost strategy through product architecture: lessons from China', *Journal of Business Strategy*, Vol. 31, No. 3, pp.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*, Vol. 34, No. 3, pp.520–540.
- Yin, R.K. (2003) *Case Study Research: Design and Methods*, Vol. 5, 3rd ed., Sage Thousand Oaks, CA.