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**Technology transfer in the Chinese automotive industry:  
the acquisition of Volvo Cars by Geely Automobile as a  
potential new role model for the Chinese car manufacturers**

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*Abstract:* The dramatic shifts that occurred to the Chinese economy in the recent decades led to the emergence of companies that have fulfilled the internal market needs and now try to compete on the global level. Among others, Chinese automotive industry is currently struggling to establish its products in the markets of developed countries; however, the results are modest due to low level of technological development. A few decades of booming joint ventures have failed to create strong brands, and recently a new model for technology transfer in the Chinese automotive industry was implemented by Geely Automobile encountering into the acquisition of Volvo Cars. This thesis studies whether the approach to international cooperation taken by Geely can prove successful in the current Chinese automotive market, and whether it can serve as a new role model for other Chinese automobile manufacturers.

*Key words:* Volvo, Geely, China, automotive industry, technology transfer

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## **1. Introduction**

Half a century ago China was a country whose exports consisted mainly of food, raw materials and textiles, with over 80% of population living behind the poverty line. Goods that required up-to-date technologies to produce them were mainly imported from the developed countries. The impressive changes initiated in the 1970s led to a dramatic shift in its economy, allowing China to raise the companies that filled the internal market needs, substituted a significant part of imports, and increased exports to become the largest exporter in the world. On the verge of the new millennium the aim has moved further: after filling the domestic market needs, the Chinese companies now start their expansion to Europe, USA and other parts of the developed world. Money is in abundance due to wise fiscal policies, but the restraining factor is the lack of modern technologies and low brand awareness. On the other side of the globe, the leading Western companies have those qualities, but struggle because of fierce competition in the developed markets, especially in times of recent economic slowdown, and thus strive to settle themselves on the Chinese market which shows unprecedented rates of growth with respect to its size.

Among all sectors of the economy, automotive industry attracts a lot of attention as an important driver of growth, income, employment, and innovation. Since early 1990s Chinese automotive market entered the stage of rapid development, making the world witness multiple examples of cooperation between European and US car manufacturers with local Chinese companies. However, those were mostly in lower market segments and were using outdated technologies. This strategy granted its benefits to the Chinese manufacturers who were able to fill the internal market with cheap vehicles, as well as to world giants who got access to what recently became the largest automobile market in the world. Meanwhile, as the internal market saturation rose, Chinese car manufacturers set their eyes on the rest of the world. The expansion started with other developing countries like Algeria and Russia, where outdated but cheap vehicles were in demand. In 2000s, when the Chinese automotive industry became mature enough to compete on the markets of developing countries, Chinese manufacturers set the new goal on Europe and Northern America. However, such obstacles as outdated technologies and absence of recognizable brands have prevented them from successful external expansion yet.

After two decades of booming joint ventures a new strategy of business development was first suggested by Shanghai Automotive Industry Corporation (SAIC), which in late 2002 paid \$59.7 million to buy a 10 percent stake of GM's venture in South Korea, GM Daewoo

Automotive & Technologies. It was the first acquisition of an overseas automaker by a Chinese company. Two years later SAIC acquired 48.9% of the 4<sup>th</sup> largest Korean car manufacturer SsangYong for about \$500 million in October 2004 (China Daily 2004). Shortly after that Nanjing Automobile Corporation (NAC) followed the example and bought property rights on some models of British company MG Rover for \$104 million in December 2004 (The Auto Channel 2005). Despite optimistic prognoses, all three acquisitions failed to bring any significant benefits neither to the purchasers, nor to the aims. Both SsangYong and Rover filed for bankruptcy in the subsequent years, while Daewoo was later sold to Indian company Tata Motors.

Due to the turbulence that hit financial markets in 2008, also deteriorating global car sales, the next attempt to put the concept of technology transfer in practice was made only in 2010, but this time the level of the deal was significantly higher. Ford Motor Company which bought Volvo Cars (hereinafter referred as Volvo) in 2000 for \$6.45 billion, with the approval of the Swedish government agreed to sell it to Chinese company Geely Automobile (hereinafter referred as Geely) for \$1.8 billion. The deal was historical for China in many aspects. It was the first overseas acquisition by a Chinese automobile manufacturer valued at over \$1 billion; the first acquisition of 100% stake in a foreign car manufacturer; the first acquisition of a world-recognized automotive company by a Chinese investor. The exceptional importance of the purchase for China was also supported by the fact that in April 2012 Chinese Prime Minister Wen Jiabao has personally visited Volvo assembly plant in Gothenburg (Volvo Cars 2012), while Chinese Vice President Xi Jinping visited Stockholm during the negotiation process between Ford, Geely and the Swedish government back in 2010 (Reuters 2010). The goals and prospects were set high: at the time of the deal closure Li Shufu, Geely chairman, promised to boost Volvo's global sales to 600,000 vehicles, 200,000 of which in China, by 2015 (BBC 2013). Compared to global sales of 334,000 in 2009, of which 22,000 were sold in China, the plan was quite ambitious.

At the time of purchase Geely was a minor player on the Chinese automotive market trying to expand its activities on the local market as well as boost its exports. With a total production of over 300,000 cars in 2009, only 6% were shipped abroad (People's Daily Online 2010), partially due to the global economic crisis, but also because of deficient technologies and low popularity of the Chinese automobile brands. The acquisition of Volvo granted Geely everything it lacked – R&D facilities, modern cars and engines compliant with the latest European emission standards, leading safety technologies, and global marketing network and

supplier base. Moreover, Geely now was associated with the Swedish spirit and quality, lifting the company in the eyes of consumers. On the other hand an expensive purchase raised too many questions concerning the ability of the new union to reach its ambitious goals to raise Volvo sales twice globally and almost 10 times in China, compared to pre-acquisition 2009 (Reuters 2010). The ability of Geely to meet all the financial obligations that were taken to acquire Volvo was also a big concern among the industry analysts. Based on the issues described above, this paper analyzes the deal in the context of the trends that had recently shaped the Chinese automotive market, its policies, and the prospects of the state-owned and private car manufacturers.

### *Topic relevance*

In the worst case scenario, this deal can become another failure attempt to buy modern technologies and settle them in China. Considering the destiny of the three previous Chinese purchases, failure to implement the development plan may put at risk the existence of Volvo. Moreover, multibillion investments necessary to achieve all the goals put a significant financial pressure over Geely. In the best case, if both parties realize significant benefits, it can indicate a beginning of the new trend and new era of development of Chinese automotive industry. This thesis, based on the results gained by the two companies three years after the acquisition, assesses the degree to which the deal proved to be successful for both parties. The importance of the topic is caused by the influence that the Volvo-Geely deal can have on the automotive industry of China, and the fact that it can motivate other Chinese companies to substitute the joint venture model widely used during the last decades.

### *Research question*

The research question is whether the deal between Volvo and Geely can serve as the new role model for other Chinese automotive companies that strive to increase their presence on the global automotive market through applying the concept of technology transfer.

### *Limitations*

The limitation to this study is the time frame, as far as only 3 years have passed since the acquisition which makes it challenging to assess the results of cooperation. On the other hand, the novelty of the case makes it much more valuable due to the probability of discovering the new trend and studying it in the beginning of its development path, compared to the cases that are studied ex post.

## *Motivation*

When choosing the topic for the thesis, the range was first limited to China as one of the most promising economies of the present. Then the automotive industry was chosen as the one that I have personal interest in for the last 20 years, as well as professional expertise, having worked in car sales department for over a year. Finally, the Volvo-Geely deal was selected as the most significant event in Chinese automotive market in the last decade.

## **2. Data and methods**

This thesis is an exploratory research that relies mostly on qualitative methods of analysis, combining different sources of data. Exploratory research was chosen to create a deep understanding of the background that determined the path of development of Chinese automotive market and the role of China on the global market. Moreover, it is aimed to formulate the factors that underpin the differences between the state-owned and private companies, and the influence of the government policies on the market development. Inductive approach is used to study the case. The inductive approach was chosen to find the answer to the research question through creating a deeper understanding of the current situation on the Chinese automotive market and the particular position of Volvo and Geely on it.

Theoretical background of the thesis relies upon the concept of technology transfer, widely studied in the recent decades. The case of Geely-Volvo deal represents an example of horizontal technology transfer between two companies that operate in the same industry and on the same production level, although belong to countries with different levels of economic development. Thus, the case provides a valuable opportunity to study the effects of technology transfer from a high-end company from a developed country to a low-end company in the biggest and still developing automobile market in the world.

Primary data such as sales volumes by country and by manufacturer is used in order to assess the trends that took place in the automotive market globally and particularly in China over the last decades. Financial data from open sources such as Volvo and Geely financial statements, sustainability reports and other official documents is analyzed to get the insight into the current state of the two companies participating in the deal, and assess the financial benefits or losses that the both parties encountered during the time that has passed after the deal. The data collected is also used to estimate the prospects of development of both companies on their local as well as foreign markets.

In order to answer the questions raised, a deep understanding of the automotive market and the role of China in it is essential. Thus, the study makes an inquiry into the current state of affairs on the global automotive market, its level of development, main trends and parties that drive the market using multiple secondary sources to create a comprehensive picture of the development path of Chinese automotive market between 1970s and present time. The study goes further to analyze the process of development of the Chinese automotive market, the forces that have influenced it during the last four decades, and concludes with the assessment of the deal between Volvo and Geely, the degree of success of the deal in terms of technology transfer and the consequences that it can have on the Chinese automotive market.

Secondary sources of data include scientific articles written in the recent years that cover the case of Volvo and Geely, Chinese and global automotive market. Among them two studies that have covered the Volvo-Geely deal are used in more depth. The article by Zhou, Zhang (2010) explores the risks adherent to the deal and the strategic advantages and disadvantages that the deal bears for its participants. Considering that the article was published soon after the deal in 2010, a set of qualifications is made in this thesis in order to assess which of the risks were neglected during the period after the deal, and which are still active. The research by Ma (2012) studied the customers' moods in China using a survey. Changes in attitudes towards Volvo brand are assessed and, moreover, the differences in customers' behavior and habits inherent to China are studied as well. This thesis reflects upon the work of Ma and continues the study of the market forces and customers' perceptions on the Volvo-Geely deal. Various articles from specialized publications and other credible sources are used in order to access the relevant data as well as to cover certain aspects of the deal and current trends on the automotive market.

In total, over one hundred different articles, interviews, financial and industry reports, scientific articles and books were accessed and studied during the preparation of this thesis. Among them, over 50 were used as sources of information and can be found on the reference list.

### **3. Previous studies and theoretical background**

This thesis is built upon the study of an example of technology transfer which occurred in a merger and acquisition (M&A) deal. According to *The Journal of Technology Transfer*, technology transfer refers to “the process of transferring skills, knowledge, technologies, methods of manufacturing, samples of manufacturing and facilities to make scientific and

technological developments accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials or services'. It is closely related to, and sometimes even considered a subset of knowledge transfer.

The impact of technology transfer on innovations has been vastly studied in previous years. The value of combination of internal and external sources of knowledge is demonstrated in the works of Cassiman and Veugelers (2002, 2006), Vega Jurad et al. (2008), Frenz and Ietto-Gilles (2009), and Machikita and Ueki (2011). The concept of interactive learning through the interactions between the users or producers of technology was introduced by Lundvall (1985) and supported by the studies of von Hippel (1988). The concept of technology transfer is adopted as a theoretical foundation for this research, which studies the effects of knowledge exchange in the recent case of the Chinese automotive industry. Technology transfer can exist between the parties that are on the same or different production levels, thus occurring through vertical or horizontal linkages.

The issue of vertical linkages in technology transfer involving the participants from emerging or developing economies is covered by the studies of Aitken and Harrison (1999), Javorcik (2004) and Blalock and Gertler (2008). Another important channel of technology exchange is horizontal linkages, which is the case of this study, was explored by Mansfield (1991) and Bercovitz and Feldman (2007), discovering the theoretical background of the issue and the importance of industrial upgrading in developing economies. Various empirical studies found that vertical and horizontal technology transfer can be complementing each other and the effectiveness of each approach depends on the industry and level of cooperation between the parties. Moreover, a tradeoff exists between maintaining the sufficient level of quality of current operation and new product development, that has to be taken into consideration during the technological cooperation processes (Machikita and Ueki 2011).

In some cases technology transfer occurs through an acquisition or merger between two companies. A company encountering in the M&A process on the buy-side usually seeks ways to improve its performance through achieving financial, marketing or technology benefits. However, various empirical studies show disappointing results of mergers and acquisitions compared to the results that were predicted or expected initially. Straub (2007) suggests a complex model including six strategic variables (market similarity, market complementarities, production operation similarity, production operation complementarities, market power, and purchasing power) that can be used in order to identify the prospects of the future M&A

performance. Moreover, cultural differences have to be taken into consideration, both in terms of organizational peculiarities and customers' preferences.

There are different ways to measure the M&A performance, although the most common indicators are income or profit levels of the merged company, its sales volume or market share. Moreover, there is another important measure that has to be considered before calling a merger a success or a failure. In most cases the acquirer seeks to get a synergetic effect when, in terms of output, income or other indicators:

$$P_{A+T} > P_A + P_T,$$

where  $P_A$  is the performance of the acquirer and  $P_T$  is the performance of the target company.

In other words the desired effect is achieved when the elements combined in a system produce an effect greater than the sum of their individual effects. On the other hand, there are situations when the acquirer seeks to improve its own performance, not taking into account the performance of the target. In this case the M&A deal can be considered successful when:

$$P_{A+T} > P_A$$

Thus, the acquirer seeks not for a synergetic effect, but for an improvement in its own performance, disregarding the performance of the target company. However, this situation is more probable in case of hostile takeover than in case of merger or friendly takeover.

Technology transfer has a significant effect when occurring between the parties that represent companies or countries with different levels of development due to different levels of technological development. When occurring under the M&A deal, the largest effect is achieved when a low-tech company from a developing market acquires a high-tech company from a developed market. In this way the acquirer achieves a significant upgrading of its technologies and gets a competitive advantage over other companies represented on its market. On the other hand, such deals are quite rare as they usually put a significant financial pressure on the acquirer, and bear other risks.

### **3.1. Strategic analysis**

In case of Volvo and Geely, both companies seemed to achieve a perfect deal, getting what they desired and lacked over the recent years. However, besides the opportunities, the deal between Volvo and Geely contained significant risks for both parties. In case of Geely the risks were of not achieving the expected results, while for Volvo the biggest risk lied in the

possibility of losing its image due to the new linking with the Chinese manufacturer. The area of risks inherent to the deal can be divided into internal and external risks. Zhou, Zhang (2010) have analyzed the Volvo-Geely deal from the points of risks and competitive environment. The analysis included internal and external risk inherent to the deal, as well as the competitive environment evaluation, which consisted of industry barriers to entry and competitive situation within the industry. As far as the ability of the acquirer to achieve the desirable effect from the M&A depends on its capabilities in securing itself from competitive threats and its capacity to enter and occupy the markets taken by the competitors, the situation on the market has an important role when assessing the success of technology transfer. In this thesis the aspects covered by Zhou, Zhang (2010) are analyzed in terms of whether they were realized in the past, are still active or can be neglected now.

## **Internal risks**

### *Financial risk*

Considering the amount of capital required to make an M&A deal, the sources and conditions of fund raising are vital for the successful deal. No matter which way Geely decided to choose to finance its acquisition – cash, stock or debt financing, the risks were high. Extensive use of cash would have created enormous pressure on the production activities, which made Geely seek help of international bankers. Considering that in 2009 Geely reported its debt ratio to be at the level of 51.2% (with total liabilities at \$1.03 billion and total assets at \$2.01 billion), extensive debt financing would have increased its debt ratio to above 65%, which is a conventional alert level. Thus, a combination of different methods was chosen, including selling a 15.1% stake in Geely to Goldman Sachs for \$334 million (The Wall Street Journal 2012). This operation increased Geely's attractiveness for the investors and financial institutions, resulting in doubling of Geely's share price in 3 subsequent months, and helped get more favorable debt financing conditions.

### *Integration risk*

Bain & Company, one of the world's leading global business consulting firms, serving clients on issues of strategy, operations, technology, organization and mergers and acquisitions, has found in its survey that among all unsuccessful M&As only 20% of deals fail on pre-transaction phase, while other 80% fail due to inconsistent integration (Harding, Rovit 2004). In case of Geely, integration risks were in inability to achieve the expected level of production and technological synergy; failure to integrate personnel and culture; and negative impact on

business relationships with suppliers and customers. Considering the deep cultural differences between China and the Western countries, Geely was faced with a challenge of combining two cultures inside the company, as well as managing the perceptions of two totally different customer groups. Besides that, concentration on core business and establishing new organizational system and communication methods, inside the company as well as with customers and external stakeholders, is essential in order to achieve an effective cooperation after the closure or the deal. This risk is still active due to the ongoing integration process between the two companies.

#### *Anti-M&A risk*

Various studies show that the perception of M&A on the part of the target company is usually negative due to the fears of becoming an inferior company with respect to the acquirer. Moreover, target company' personnel can be aware of potential staff cuts, increasing the risks of decrease in the efficiency of production. This risk was largely neglected after assuring the Volvo staff that after the acquisition all workers on Swedish and Belgian plants will retain their positions, and Volvo and Geely will cooperate on equal terms (China Daily Europe 2011). Moreover, a strong resistance to the M&A deal can be met from the customers, who can assume that the qualities that they valued in the production of the target company would not be preserved under the new management, especially when talking about cross-cultural acquisitions. This risk was realized and will be discussed more in the following parts of the study.

#### *Principal-agent risk*

Principal-agent risk occurs when the executives that have an informational advantage may act in their own interests, neglecting those of the shareholders. Thus, the company may be encountered into an expansion in order to show the increasing short term performance without respect to the long-term consequences. In case of Geely this was avoided due to the fact that the company's founder, Li Shufu, is currently its CEO.

#### *Information asymmetry risk*

In case of the market with incomplete competition the acquirer may encounter a problem of incomplete information about the target. Thus, the target company management can conceal hidden losses or the true value of patents. In case of Volvo-Geely deal no such instances were discovered during the 3 years after the deal.

## **External risks**

### *Policy risks*

Policy risks take place when the government of the target company's country goes for protectionist steps trying to secure its interests or the ones of other business groups that have direct or indirect connection to the target or its area of business. Thus, national economic policy has to be taken into consideration. The major part of the policy risk applied to the acquirer, not the aim, as Chinese government still plays a large role in the development of automotive industry. However, the fact that Geely accessed the government long before the deal actually took place, gave it a handicap and allowed to settle all the necessary questions in order to grant itself the permit to acquire Volvo.

### *Legal risks*

During and after the M&A process the acquirer may face such aspects of legal risks as anti-monopoly laws, special provisions for M&A deals in the local law, and labor law risks. Due to the fact that anti-monopoly and M&A laws were sufficiently studied during the deal preparation process, the only current concern for Geely is the Swedish labor law and the fact that Swedish trade unions are known as some of the most powerful in the Northern Europe (The Wall Street Journal 2010). Thus, Geely may face certain restrictions in attempts to dismiss or rehire employees on the Swedish factories according to the fluctuations of the demand for Volvo production.

### *Industrial risk*

Industrial risk is currently one of the most important for the future of the deal. It refers to all kinds of factors that create uncertainty on the core market, like the changes in global and local economic situations or the peculiarities of industrial policy in cases when entering a new area of activity. In Geely's case the former risk can be disregarded as both companies work in the same industry and, moreover, on the same production level. Yet, the current economic situation in Europe can have a significant influence on the automotive industry and sales plans of Volvo, threatening the implementation of plans set by Geely, especially considering that in the Chinese market Volvo belongs to a luxury segment which shows high price elasticity of demand (Financial Times 2013).

## **Competitive environment analysis: industry barriers to entry**

### *Fund demand*

Operating in a cost-intensive industry, Geely is facing a high demand for funds needed to support its R&D and construction of production lines. Considering the speed at which Geely expands its production capacity, with current facilities in different locations inside China capable of producing over 1 million vehicles annually, and plans to reach 2 million mark by 2015, at the time of the purchase Geely needed \$1.5 billion of liquid capital. Thus, the acquisition costs and additional liquid capital needs amounted to over \$3 billion, creating further financial pressure on the operation of Geely. At the end of 2012 Geely had a strong financial position with net cash of \$270 million compared with a net debt of \$220 million a year before (The Wall Street Journal 2013). During the three years after the acquisition Geely paid dividends on annual basis, representing its stable financial position.

### *Scale of operation*

The ability of Geely to expand its scale of production remains a key factor to the success of its acquisition. Considering high R&D costs in the automotive industry, Geely will be able to achieve lower expenditures per each vehicle produced due to the transfer of technologies from Volvo. On the other hand, Geely will face additional difficulties in product planning and other aspects of operating the two brands. The constantly growing global and Chinese markets instill confidence in Geely's plans to earn \$1.2 billion in 5 years through establishing new factories in China. Yet, the warning fact is that after gaining a net income of 1.02 billion SEK in 2011, Volvo encountered losses of 480 billion SEK in 2012 (Volvo Car Group 2013), obviously failing to realize the potential effect of economies of scale on the Chinese market.

### *Technological content*

Considering that Volvo was perceived by the customers as one of the most secure vehicles in the world, Geely wanted to absorb Volvo's image of safe cars manufacturer, as well as acquire the technologies. On the initial stages of the deal there were concerns that government or trade unions may complicate the transferring process, although in the subsequent years these fears were not justified as several reports emerged in 2012 stating that Volvo was transferring some of the technologies to Geely. In some cases details were not disclosed, although it was reported that in 2012 Volvo shared the platform of its XC90 SUV with the Chinese engineers (Autoconsulting 2012). Still, technology transfer in Volvo-Geely case is a one way process, not presenting any visible preferences for the former. At the same time, unlike the previous Chinese acquisitions of SsangYong, Daewoo and Rover which failed to

transfer any valuable modern technologies to the acquirers, in case of Volvo-Geely deal at least one of the parties of the new alliance is getting a technological advantage as a result of the deal.

High barriers to entry in the automotive industry limit the potential market threats for the Volvo-Geely union only to the existing competitors. On the other hand, high competition in the market makes the task of maintaining the market share rather difficult, considering that Volvo global sales in 2012 fall 6.1% compared to overall market growth of 8.3%. The situation repeated itself in China, where Volvo sales in 2012 decreased by 10.1% while the national market grew 4.6% (Volvo Car Group 2013). Thus, Volvo is still exposed to the risk of losing its market share despite using the most updated technologies.

Thus, the analysis showed that financial risks have decreased over time. Principal-agent, anti-MA& and information asymmetry risks were discarded after the deal was settled. However, integration, legal, policy and industrial risks still have potential influence over the companies that were involved in the deal. Besides, some of them, like the risks of changes in the government policy or the risk of decline in the industry are not controlled by the parties involved, thus having an increased importance.

### **3.2. Market analysis**

On top of the risks that are inherent to the technology transfer, every company that encounters into an international M&A deal while selling its products in multiple countries faces a problem of dealing with different cultures, and thus different preferences of the customers. The practice of automobile marketing and creation of different product lines for different regions shows that at a single point in time customers' preferences in Europe, US and China can be significantly different. Thus, while the efforts to build cars with lower emissions, higher safety and better driving qualities are among recent European trends, the US customers historically prefer comparatively larger vehicles with bigger engines, showing less attention to the qualities favored by the Europeans. Meanwhile, China highly values cars like Ford Focus (Chinese best seller in 2012) – not too expensive, not too luxurious, and not too modern in terms of technologies, which also looks like an average car in Europe. However, Chinese customers have totally different demands when talking about the cars of higher market. While European customers value the safety and modern technologies in Volvo, the study by Ma (2012) revealed that 90% of potential Chinese customers doubted a purchase of a Volvo car because it wasn't luxurious enough for its price. Thus, it is vital for a car manufacturer to

know its customer in every market, and this part is dedicated to the analysis of the Volvo-Geely deal from the marketing perspective.

Among dealing with other aspects, this thesis evaluates the results achieved by Volvo on the Chinese and global markets in the recent years, as well as the recent success of Geely on the external markets. Moreover, cultural and taste differences in the automotive industry in different regions of the world are analyzed in order to find reasons for the changes in Volvo's performance on different markets. Finally, some suggestions are made on how the company's performance can be improved in order to achieve the goals that were announced by the company's management.

Ma (2012) conducted a survey among potential automobile customers in Shanghai in order to evaluate the prospects of Volvo cars in China and figure out the differences that distinguish the Chinese customers. The author conducted three interviews with the representatives of the automotive industry in Shanghai to get their views upon the attitudes of the Chinese customers towards Volvo cars. Considering the area and population of China, the results cannot be attributed to the whole country. However, Shanghai is a good example representing the big agglomerations of the Chinese East Coast where the majority of supply and demand in the automotive industry is located.

The three interviews conducted by the author with a journalist and Volvo dealers in Shanghai helped to develop seven main factors that influenced Chinese car buyers when they were distinguishing a car purchase. Those factors included price, brand, safety, exterior and interior design, fuel consumption, driving qualities and after sale service. Based on these factors the questionnaires were developed and sent to the interviewees. The participants of the survey were divided into different demographic groups, on the bases of age, gender, education, occupation and income, providing sometimes significantly different results for different groups. The respondents were almost equally male and female, aged between 26 and 59; most of them had higher education while holding various occupations; half of the respondents already owned a vehicle. Thus, the selection of the respondents was done quite well as most of them were potential car buyers and were able to share their preferences in cars, with a focus on Volvo vehicles. The answers were analyzed from different points of view.

The findings of the survey showed that 46% of the respondents would have chosen cars in the range of EUR 12,000 – 30,000, and 20% in the range of EUR 30,000 – 40,000, with only 12% of respondents targeting above that price. At the same time, only 3 models of Volvo's lineup

– S40, C30 and the cheapest modifications of S60 – were priced between EUR 30,000 and 40,000. No models fit the most popular category of “below EUR 30,000”, while the majority of the model range was priced between 40 and 100 thousands Euro. Thus, Volvo is currently selling the cars that do not fit 88% of customers’ price targets, meaning that it doesn’t get into a category of a mass brand, which it is in Sweden with an 18% market share (Volvo Car Group 2013). Instead, Volvo is in the luxury segment in China now, which makes the goal of selling 200,000 cars in China in 2015, as it was set at the time of the acquisition, probably too ambitious, especially considering the performance of the brand in the recent years that will be discussed later.

From the perspective of the car’s qualities most valued by the potential customers when choosing automobiles, the most important factor in China was the price of the vehicle, named by 21% of the respondents. Others, in decreasing order, mentioned driving qualities, fuel consumption and exterior design as the most important factors of their choice. Safety, the main trump card of Volvo, was only the fifth most popular answer, followed by brand, after sale services and interior design. On the other hand, when asked a question “Which factor do you consider as the most attractive in a Volvo car?”, 100% of respondents mentioned safety, the factor that only 21% of them valued as the most important when talking about cars in general. When asked about their associations with Volvo cars, 76% of respondents mentioned safety again, with 12% saying they were expensive, 9% luxurious and 3% mentioning the Swedish spirit and design. At the same time no respondents mentioned Volvo as cost effective, comfortable or well designed cars while these options were in the list (Ma, 2012). This may seem quite strange, considering that Swedish design and interior comfort have recently been among Volvo’s strengths. In fact, when asked about the comfort, many respondents answered that Volvo’s interior design “didn’t fit the Chinese consumers’ psychological conditions and consumption habits”. Moreover, due to historically established practice, Chinese parents were lacking safety awareness and were used to holding babies in their arms when driving in a car on the passenger’s seat, instead of putting them into a child seat. Thus, all the developments in the area of child safety were negligible for them, and sometimes were referred to as cost ineffective, due to the fact that they were neither used, nor appreciated (Beijing Morning News 2011).

Another controversial issue was the seatbelts and the systems that were encouraging the drivers to wear them when driving. Michigan University discovered that only 1 out of 4 drivers and 1 out of 20 passengers used to wear a seatbelt in Beijing, compared to 90%

seatbelts wearing rate in the UE countries. Moreover, many drivers saw seatbelts as a constraint while driving at low speeds in rush hour traffic (Beijing Morning News 2011). Thus, despite making an important mission of promotion of seatbelt wear, Volvo cars actually were repelling their customers due to excessive, by Chinese standards, safety measures.

Considering the influence of the acquisition of Volvo by Geely, 81% of the potential customers said they were going to rethink their attitude towards Volvo cars after the deal, along with 93% of respondents who said they expect Volvo cars quality to fall after the acquisition and 0% thinking it would rise. Thus, despite of the fact that Volvo cars were still mainly produced in Sweden after the acquisition, the deal itself had a negative impact on the customers' attitude towards the Volvo brand (Ma, 2012).

Seeming to realize that its safety features were insufficient factor in order to attract customers' attention in China, Volvo has changed the presentation of its cars in the advertisements, which had historically high rate of influence on Chinese customers' moods (the research of Ma stated that 35% of respondents said that advertisements influenced their decisions and were used to assess product information). Thus, since 2009 Volvo started to place extra emphasis on the Swedish design and less on safety. This had a rather controversial effect: after the traditional factors inherent to Volvo brand disappeared from the advertisements, customers rapidly accepted the new ones, but the safety features were also soon forgotten. This resulted in the fact that the customers who have been loyal to the company due to its known adherence to safety had left for other brands in search for safety when choosing their next car (Huang Gang 2012).

Therefore, Volvo's expansion on the Chinese market after the acquisition has lost its initial momentum due to significant differences in the perceptions of the brand by the Chinese customers, as well as their habits and traditions that made Volvo cars less attractive in their eyes.

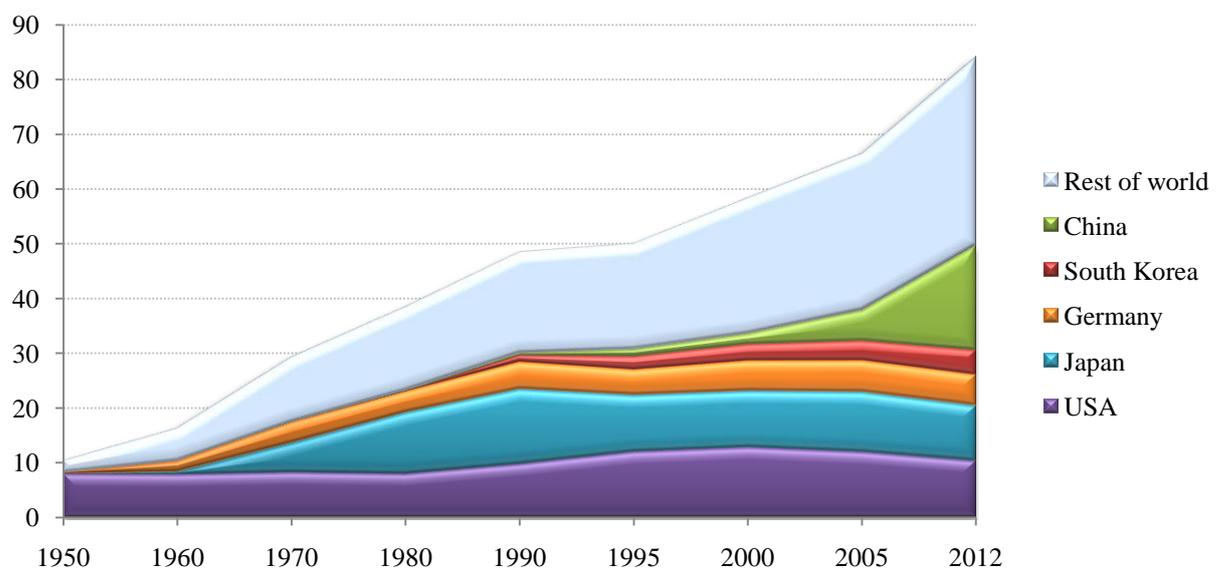
#### **4. Automotive market analysis**

##### **4.1. Global automotive market**

The significance of the automobile industry in the modern world is hard to overestimate. With the number of light vehicles in operation exceeded 1 billion in 2010, cars are a primary means of transportation in many developed economies. The Detroit branch of Boston Consulting Group predicts that, by 2014, one-third of world demand will come from the four BRIC

markets –Brazil, Russia, India and China. Other potentially powerful automotive markets are Iran and Indonesia, although the prospects of the former are shadowed by the political issues. Emerging automobile markets already buy more cars than established ones: according to a J.D. Power study, emerging markets accounted for 51 percent of the global light-vehicle sales in 2010, and the trend is expected to accelerate (Huffington Post 2011).

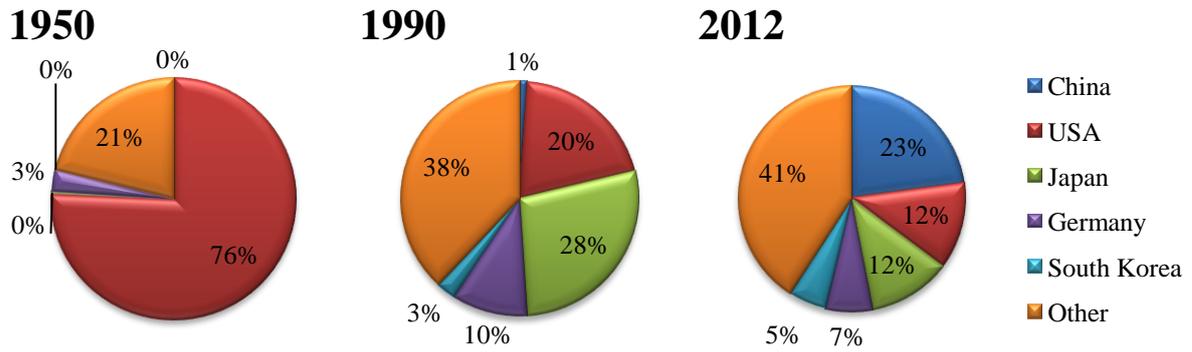
**Figure 1:** Automobile production in the world in 1950-2012, million vehicles



Source: OICA 2013a

The United States led the global automobile manufacturing since the emergence of the industry back in the 19<sup>th</sup> century. By the time of the Great Depression, the US automotive industry has produced over 90% of the global automobile stock, which amounted to 32 million vehicles. At that time the U.S. already had one car per 4.87 persons. During the first decade after WWII the US still accounted for 3/4 of world's automobile production (Figure 1), however, in 1980 it was overtaken by Japan for a decade, and regained the leading position in 1994. In 2006 Japan passed the US, but only for 3 years, until China took the lead by manufacturing 13.8 million units in 2009 (OICA 2013a). With 18.4 million vehicles in 2012, China produced almost as much as the US and Japan combined (10.3 million and 9.9 million combined).

**Figure 2:** Shares of global automobile production by country

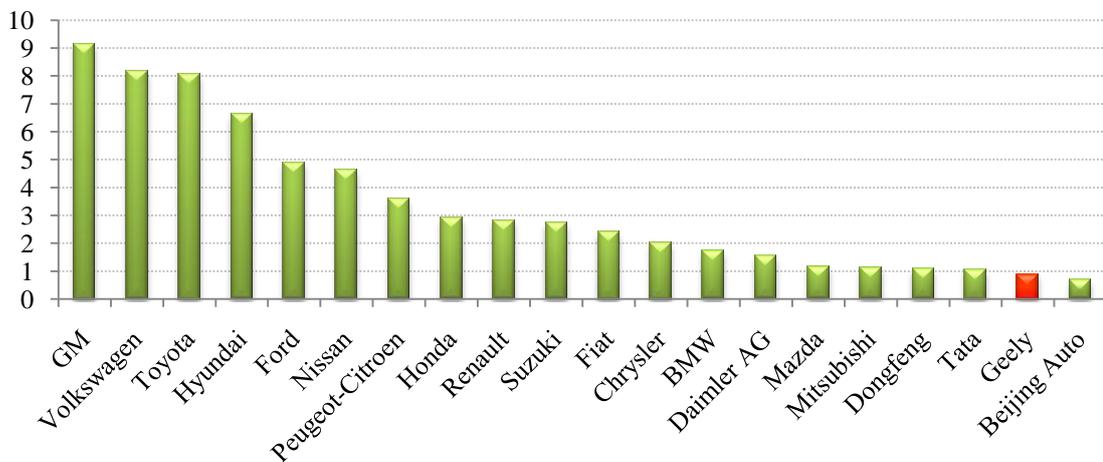


Source: OICA 2013a

Figure 2 shows that in 1950 3 out of 4 cars were produced in the US, while Japan, China and South Korea didn't produce any. By 1990 the world leadership has passed to Japan, and two decades later the third era of global automotive leadership began with China stepping in. Another important trend is that the market is becoming more diversified in terms of geography: while in 1990 top 5 car manufacturing countries accounted for 62% of global production, in 2012 this figure dropped to 59%, meaning that more facilities were reallocated to or launched in other countries (OICA 2013b).

From the corporate point of view, global automotive market is dominated by major groups. Top 3 groups produce 1 out of 3 cars in the world, while top 6 account for over ½ of global sales (Figure 3).

**Figure 3:** Automobile production in 2011 by group, million vehicles



Source: OICA 2012



will be analyzed in this chapter, as it imposes certain limitations on the current participants of the market.

In the beginning of the XX century, before the Communist Revolution, American cars conquered the Chinese market, with Buicks being the luxury cars in China while Ford's Model T was a more affordable product, but still achievable only for the elite. In the Mao era the private car market almost disappeared, with only the Party elite being able to access and afford them. Situation began to change in early 1980s, while first private vehicles appeared in Beijing in 1984. In 1985, the Chinese media gave front page coverage of the first farmer who bought his own truck.

After that points imports started to rise at high rates even despite the 260% import duty on passenger vehicles, as the domestic production was very limited. Soviet Union remained the dominant exporter of cars to China until 1984, when Japan's vehicle exports to China increased significantly, and by mid-80s China had become Japan's second biggest export market after the US. In 1985 China spent over \$3 billion on car imports, leading to a severe trade deficit. To slow down the outflow of money, Chinese government started a wave of propaganda and on top of that made foreign exchange much less accessible and increased customs duties on imported goods. As an ultimate measure, in September 1985 a two-year moratorium on nearly all vehicle imports was imposed (Mann, J. 1997, pp 139-140).

While limiting imports, China also tried to increase local production by boosting various joint-venture passenger car production agreements. Thus, in 1983, American Motors Corporation (later acquired by Chrysler Corporation) signed a 20-year contract to produce their Jeep-model vehicles in Beijing. The following year, Germany's Volkswagen signed a 25-year contract to produce passenger cars in Shanghai, and Peugeot agreed to to make vehicles in the prosperous southern city of Guangzhou. These early joint ventures did not allow the Chinese to borrow much foreign technology, as knock-down assembly made up the majority of manufacturing activities (Mann, J. 1997, pp 150-152).

1990s saw the emergence of a new wave of automotive enterprises, of which some came from the defense industry, like Chang'an and Hafei Motor, or originated from old state-owned companies. Among the latter were BYD, Brilliance and Chery. Besides that, a few private companies emerged on the Chinese market, such as Geely and Great Wall. All these companies belonged to the groups that had different level of dependence from the government policy, thus affecting their paths of further development.

#### 4.2.2. Recent trends

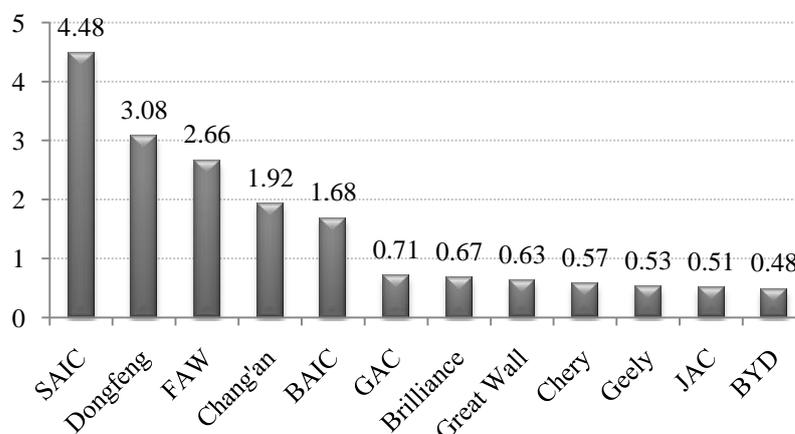
The situation China has found itself in after having developed the joint ventures was quite controversial. On the one hand, since 1980s China has set a goal of building its own automotive industry to cover internal needs, and this mission was accomplished. On the other hand, the initial goal on a deeper level was to form joint ventures with foreign carmakers in order to absorb the technology and eventually build cars on their own. At present it can be said with confidence that this goal has failed, as the six leading SOEs expected to lead the cars production today account for only 2% of Chinese car market, when not counting sales by their foreign joint venture subsidiaries.

The problem that the Chinese automotive industry has encountered was that joint ventures turned out to be a very comfortable way of doing business. He Guangyan, a former machinery industry minister, described the joint venture set up as being “like opium” (The Wall Street Journal 2012). In fact, instead of receiving the modern technologies from the global leaders, Chinese companies’ managers found a better (at that time) way of companies’ operation: to simply make and sell outdated but cheap cars through the joint ventures. According to the government regulations half of the ownership of joint ventures and a corresponding share of profits belonged to the China. Thus, the managers succeeded in generating jobs, profits and securing their own promotions simply by assembling and selling old foreign cars.

Among the shortcomings of this strategy was the fact that while producing over 15 million cars a year, by the end of 2000s Chinese automotive industry was still unable to compete on developed markets. Three of the most common complaints about the Chinese cars were outdated technologies, inappropriate exterior design and lack of well-known and respected brand. Japan and South Korea have developed their automotive industries by closing their domestic markets to the foreigners and giving domestic brands the time and the audience to practice and develop the necessary capabilities. China has chosen the opposite way, letting in the foreign carmakers, but on condition that they worked with local partners. The unsatisfactory results of the industry as a whole were compensated only by the unexpected rise in recent years of independent Chinese carmakers like Geely, Chery, Great Wall and BYD. Not being a part of Beijing policy makers’ official plans for the industry, these smaller companies grew during a short period over the past twelve years, led by entrepreneurs working in concert with provincial governments. While still lagging behind the state-owned enterprises, by the end of 2011 Chery, BYD, Great Wall and Geely had become China’s top car brands, overshadowing the state-owned enterprises in terms of R&D and unique exterior

design that started to create their brands awareness on the external markets and boost their exports.

**Figure 5:** Largest car manufacturers in China in 2012, million vehicles



Source: The Economist 2013a

The side effect of a sharp rise of private automotive companies was that they started to put pressure on the larger state enterprises due to their dissatisfactory results in building Chinese-branded cars. Despite their modern and much more prospective approach, China's top independent automobile manufacturers are still unable to compete with state-owned companies in terms of sales volumes: in 2012 Geely, Chery and Great Wall combined produced about 1/3 of SAIC's output, the state-owned market leader (Figure 5). Due to a sharp rise in the sales levels of SOEs, independent manufacturers have slightly decreased their cumulative market share in China in 2012, as 3 out of every 4 cars are still produced by the state owned companies, which is the highest level in six years, according to figures from LMC Automotive, a forecasting company (KPMG 2013).

BYD, another private Chinese manufacturer, saw its profits drop 94% to \$14 million in 2012 (Global Times 2013). Geely achieves total sales growth due to rising exports. Great Wall and Chery were sued last year after asbestos was found in the engine gaskets of their cars shipped to Australia. Thus, despite producing the most competitive cars in China, private automobile manufacturers are still feeling unstable compared to their state owned competitors. On the other hand, when looking at long-term period, it is the private companies that have the best perspective, due to their drive to develop new technologies and design instead of copying the competitors.

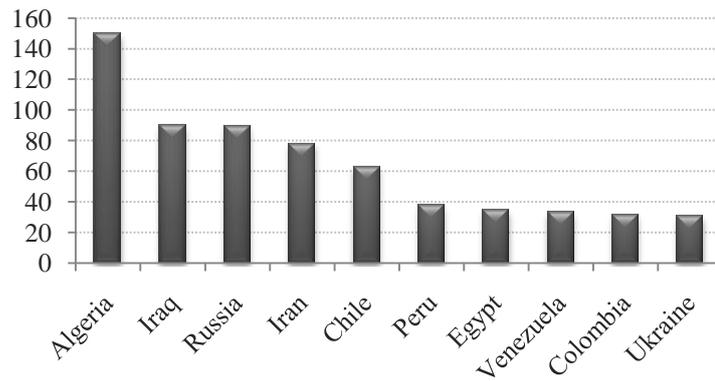
It can be said that the current state of Chinese automotive industry is unacceptable for the government, considering the aims that were set. Among the mechanisms that were traditionally used to speed up the Chinese automobile production are tax breaks, special loans, export subsidies and other preferences. Some of them help, as China had increased its car exports to over 1 million vehicles in 2012, a 29.7% growth compared to a year before (Financial Times 2013). However, these are half-measures, unable to create a really competitive automotive industry. All these mechanisms used to buy time can prove useful, however, only in case if during this time Chinese automotive industry learns how to produce a unique and competitive product. Thus, at present time the prospects of private automobile manufacturers in China look much better than those of state-owned enterprises. If the situation doesn't change, state-owned companies risk to be locked inside China, while private companies will continue their expansion abroad.

China is now the largest manufacturer of automobiles as well as the largest buyer of them. In 2009, when Chinese automobile production hit 13.79 million units, it surpassed Japan, whose production fell to a 33-year low in 2009 to 7.93 million units, a 31.5 percent drop from the previous year. Japanese production was at its peak there in 1990 when it reached 13.49 million units and has not recovered since then (Facts and Details 2012).

According to a Ward's Auto report, in 2010 China was the world's second largest car population, with 78 million vehicles, although still heavily lagging behind the United States which constitutes the largest vehicle population in the world with 239.8 million cars, 3 times more than in China. However, in terms of the amount of vehicles per capita, the difference is much more significant with one private vehicle per 1.3 inhabitants in the US versus 17.2 in China.

In addition to rising production for internal needs, China is steadily growing its exports. Thus, vehicle exports from China surpassed 1 million annually, reaching 1,056,091 units in 2012. This meant a significant 29.7% increase compared to 2011. The main importer of Chinese cars in 2012 was Algeria, accounting for almost 1/6 of Chinese automobile exports, followed by Iraq and Russia (Figure 6). Notably, top 10 countries that imported Chinese cars in 2012 belong to the developing markets.

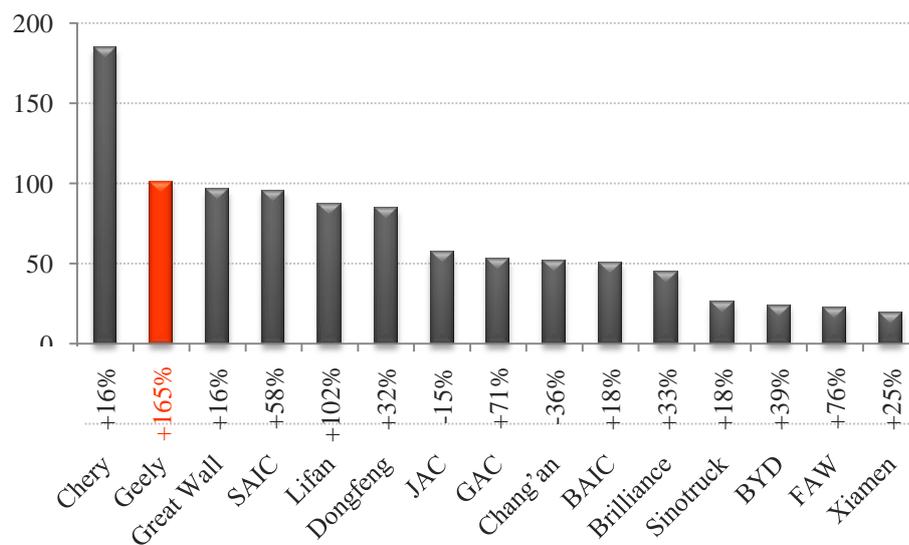
**Figure 6:** Largest importers of Chinese cars in 2012, thousand vehicles



Source: The Economist 2013

According to the data provided by China Association of Automobile Manufacturers, 37 Chinese car manufacturers were engaged into overseas sales in 2012, with the majority of vehicles shipped to emerging markets. Chery was the largest automobile exporter, selling 184,757 cars abroad (Figure 7). Geely held second place with exports rising 165% compared to 2011. Lifan was another private Chinese automotive company which had its foreign sales more than doubled in 2012. At the same time state-owned JAC and Chang'an saw their exports fall 15% and 35% respectively. Remarkably, private manufacturers take top 3 positions in the rating of largest Chinese car exporters in 2012.

**Figure 7:** Export of Chinese car manufacturers (thousands units) in 2012, change to 2011 (%)

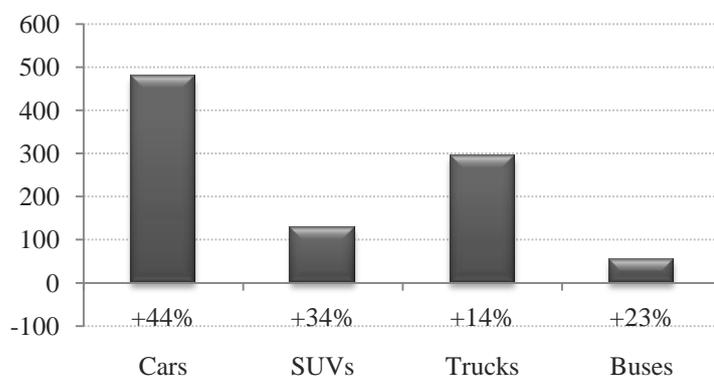


Source: China Auto Web 2013

In 2012, passenger cars were the most popular part of exports, followed by trucks, sport utility vehicles (SUVs) and buses (Figure 8). Passenger cars accounted for 62.6% of the exports, commercial vehicles held 37.4%.

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**Figure 8:** Chinese automobile exports in 2012 by category, thousand vehicles



Source: The Economist 2013

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Meanwhile the global giants' adoption of standard platforms, on which a wide range of models can be built, combined with China's rising wage bills, mean that Chinese makers' cost advantages are fading. Thus, it is vital for China to develop the automotive brands that will be able to compete on the global markets not only due to a reduced price, but because of their consumer qualities. At present private Chinese car manufacturers seem to have a much better perspective to establish themselves in the foreign markets than the state-owned enterprises.

#### 4.2.3. Government policy

Government policy has played a significant role in the development of the Chinese automotive market. For the last decades Chinese government policy in the automotive industry was focused at the aim of fulfilling the needs of internal market to substitute imports and prevent the outflow of capital. When that goal was reached in 1990s, the goal shifted further, to conquering the foreign markets. The implementation of that policy affected millions of customers, as well as thousands of automotive companies present on the Chinese market, including the world giants like General Motors and Volkswagen who were allowed to open their subsidiaries in the Chinese territory. Despite the internal market needs were fulfilled, it is obvious that now the state policy needs an improvement, as it has not achieved the second goal of creation of competitive brands. The joint ventures have supported the Chinese manufacturers; however, they failed to make them competitive on the global arena.

Partially this was a fault of the policies bearing a trace of planned economy, as free entry to the industry was restricted, especially to foreign companies which had to obtain permission for the investments and still were limited in their ownership to 50% of the joint ventures. On the other hand, until 2002 all new products of the carmakers had to get an approval by the government (Gao 2004). The rule was abandoned then, showing that some positive shifts in the policy towards more freedom of manufacturers take place on the Chinese market.

The policy that was implemented during the last decades led to a controversial outcome. At present, it has achieved a quantitative victory, but a qualitative defeat as state-owned enterprises still rely heavily on their foreign partners in search of technologies. This makes the whole Chinese automotive industry dependent on the US, European and Japanese companies, contrary to the outcome that was pursued by the policymakers back in 1980s. Another drawback of the automotive industry policy in China is the requirement for the joint ventures to purchase a certain amount of automobile parts from the local manufacturers. Being quite common and efficient in many other countries, this rule was influenced in a negative way by the fact that many of the suppliers are cost inefficient state-owned companies (Gao 2004). As a result, in some cases Chinese consumers pay more, not less as it is supposed to be, for the cars manufactured in China than the same or comparable models produced in the countries of their origin.

The emergence of successful private companies on the Chinese market seemed unlikely due to a significant market advantage received by the state-owned enterprises in the form of cheap land, funding and other preferences they were endowed by the government. However, the 1990s saw the appearance of Geely, Chery, Great Wall and other manufacturers, while in the 2000s they rose to the level when they were capable of competing with the state-owned enterprises on the internal market. 2010s will have to give an answer to the question of which companies, state-owned or private, will lead the Chinese industry to conquer the external markets. Despite all the barriers that the private companies had to surpass, their production levels are now several times higher than those of the state-owned enterprises, when taking into consideration only the models sold under the Chinese brands. Among the benefits that the private companies can enjoy is the freedom of the decisions they make. This allows them to negotiate for the best deals with any supplier, not being tied to the state-owned manufacturers, to avoid licensing fees that joint ventures pay to the foreign partners, and choose distant cities for opening their new factories, therefore acquiring the advantage of lower land price and wage rates in the remote areas (Chin 2010).

The government policy that was pursued during the last decades led to the confrontation between the two camps of state-owned and private companies. While the former can enjoy the benefits of their ties with the government and foreign partners, the latter benefit from the entrepreneurial mindset. Despite the more stable current position of the state-owned enterprises, private companies have chosen the market way that as proved to be successful in many other countries. Naturally, the limitations of the free market in China can grant some significant benefits towards the state companies, but on the external markets, where the best-sellers are chosen by the customers and not appointed by the government, Chinese private automobile manufacturers currently have much higher chance for success. Yet, Chinese officials seem to insist on the continuation of the current policies. Thus, in 2012 Chinese giants Chang'an and FAW were encouraging their customers with up to \$1000 subsidies, creating pressure on the smaller manufacturers (China Auto Web 2012a). This made the latter put more efforts in the foreign markets with a fair competition, which resulted into a 29% increase in car exports from China in 2012 compared to the previous year.

Chinese policymakers are worried that the local market can suffer from overcapacity which will lead to a significant margin pressure among the automobile manufacturer, including the state-owned ones. One of the ways out is to direct a part of the production out to the foreign markets. Meanwhile General Motors, Volkswagen and Ford are building new factories and assembly lines. China's top 10 auto groups are expected to almost double their capacity by 2015 and be able to build over 30 million vehicles a year, compared to 18 million in 2012 (Nasdaq 2013). Neglecting the fact that private manufacturers are currently leading the Chinese automobile exports, Chinese policymakers use quite ambiguous steps to organize the market. In 2012 it was announced that those of the 170 automobile manufacturers in China who manufacture less than 1000 vehicles per year will have to cease the production (The Wall Street Journal 2013b).

With the regulation of the minimum size of the companies that are allowed to operate on the Chinese automotive market the policymakers do the exact opposite to what needs to be done in order to boost the external vector of the market. While in many countries small and medium sized companies are integral parts of the market, China tries to put them out of the game by establishing entry barriers in order to ensure the high profit margins for the state-owned enterprises that currently don't have any future on the foreign markets. The funds allocation and preferential treatment of state-owned carmakers also distort the market forces that have proven effective in choosing the long-term winners in the market economies.

Thus, the desire of the Chinese government to protect the state-owned companies seems to deteriorate the prospects of the industry in the future. Moreover, its wish to have a control over the industry pushes it towards the elimination of the smaller companies that potentially could have grown into significant market players. At present, extension of the current policy that favors the joint ventures model promises nothing but more subsidies for inefficient state enterprises, uncompetitive on the foreign markets. Considering the historically high role of the government in the evolution of the Chinese economy, it will continue to have an influence on the forces that shape the market. However, the policy has to be adjusted in order to encourage the automakers to engage more into R&D projects. While currently the state suppresses the private companies by giving preferences to the state-owned enterprises, it should, on the contrary, use the profits from automotive joint ventures to finance R&D projects carried out by local manufacturers as they are leading the innovations on the Chinese automotive market now. In this way government can promote the technical capability of the Chinese automotive industry, while the invented technologies can be licensed and used by other local manufacturers who lack funds to carry out the research on their own (Gao 2004).

In 2009 Chinese policymakers issued the “Plan on Shaping and Revitalizing the Auto Industry”, that was a part of the national stimulus package implemented as a response to the economic drawdown of 2009-2010. The plan set the target of producing 500,000 electric vehicles between by 2015, aiming at the 5% share of the automobile market, and 5 million by 2020. However, only 8,000 electric cars were sold in China in 2011, almost all going to government fleets. According to the plan, \$1.4 billion were to be invested in R&D to boost the development and production of electric vehicles, and popularization of the low-emission cars among the customers (The Economist 2012a). Despite some steps like the expedited creation of public charging facilities and deploying the electric vehicles in taxi, public transport and other public utilities, the industry analysts tend to state that the program have failed to boost innovations as the majority of the manufacturers conduct their alternative fuel programs only to match the government’s requirements. The reason is the absence of the demand, caused by the lack of infrastructure and high price of the vehicles. In 2011 16,000 recharging were installed, while the goal was almost 10 times higher. Moreover, the cost of electric vehicles for the customers is still much higher than of a regular car, even despite the generous subsidies of up to \$18,000. McKinsey analysts argue that China has overreacted to the challenges of the alternative fuels by switching its attention straight to the fully electric vehicles instead of going through more common way of developing hybrid vehicles first (Marquis et al. 2013). Despite all the shortcomings to the electrification of Chinese

automobile community, local brands have already stepped into the race for the creation of electric cars. And again, in most cases the hopes are put into the joint ventures. Thus, Brilliance has announced its union to create electric vehicles with BMW, SAIC is counting on GM and Volkswagen, Dongfeng is cooperating with Nissan and Honda in search of the Western low-emission car technologies (China Car Times 2012a). Thus, it is vital for the development of the electric vehicles industry in China that the automakers learn the mistakes of the first wave of joint ventures and not rely fully on the technologies of their foreign partners.

### **4.3. Global automotive M&A market with a focus on China**

Mergers and acquisitions as forms of combining of two business entities under common ownership usually pursue the goal of achieving synergetic effects. Corporate synergy refers to a financial benefit that a corporation expects to realize when it merges with or acquires another corporation. Corporate synergy occurs when corporations interact congruently.

There are two distinct types of corporate synergies: revenue synergy and cost synergy. The former means the opportunity of a combined entity to generate more revenue than its two predecessor companies would be able to generate due to the ability to sell the products of both companies to the merged customer base. The latter is also related to the concept of economies of scale and refers to the opportunity to reduce expenses through elimination of duplicated positions in the merged entity or negotiating for better suppliers' prices (IFLR 2013).

As evident from the map of the automotive world from the Car magazine, automotive industry has historically been very active in M&A. The idea of cooperation in the automotive industry has gained popularity quite long ago. However, it has not always brought the desirable results to the companies who decided to go into empire-building. One of the best modern examples of a successful multi-brand automotive group is Volkswagen which sells passenger cars under Audi, Bentley, Bugatti, Lamborghini, Porsche, SEAT, Škoda and Volkswagen brands. It also holds a 19.9% stake in Suzuki and has two major joint-ventures in China – FAW-Volkswagen and Shanghai Volkswagen. The total output of the group in 2012 exceeded 9.3 million vehicles.

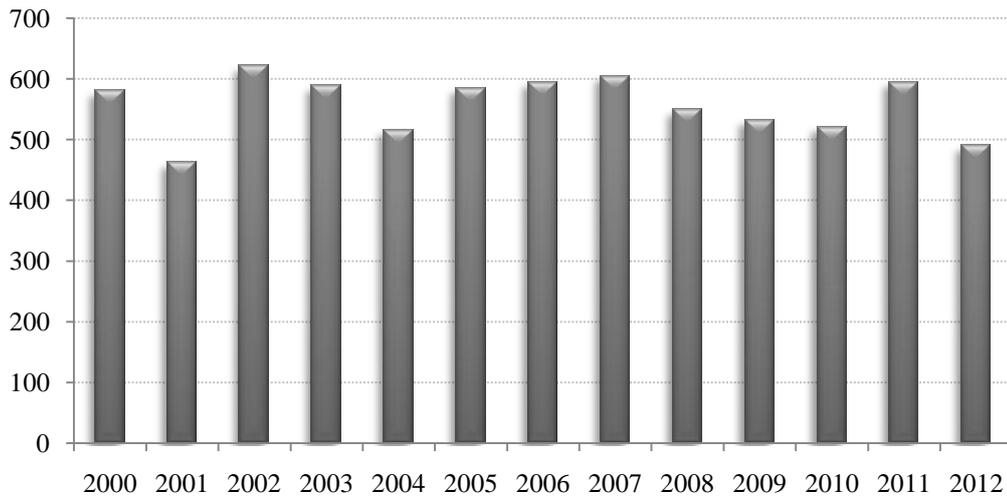
However, the automotive world has also witnessed rather unfortunate attempts to create multi-brand empires, the most noticeable among which are Daimler (Mercedes brand) and Ford. In 1997 Daimler-Benz reached an agreement to acquire 92% of Chrysler Corporation for enormous \$36 billion, while the deal was called “marriage made in heaven” and “the merger

of equals” (The New York Times 2003), hinting at how well both parties supplemented each other’s needs. The idea belonged to the chairman of Daimler, Jürgen Schrempp, who attempted to build what he called "Welt AG" (“world company”), a global automotive alliance well established on all continents. The idea went on to the acquisition of a controlling stake in Mitsubishi Motors Corporation (Japan) in 2000 and 10% in Hyundai Motors (South Korea). The alliance turned out to be so cost ineffective that in 2007 Daimler sold Chrysler to Cerberus Capital Management, a New York equity firm, for \$7,4 billion. Thus, Daimler’s loss on the acquisition of Chrysler amounted to almost \$30 billion, not considering the funds that were spent by the companies make the alliance work between 1997 and 2008 (Street Directory 2009). The cooperation with Mitsubishi turned out a failure by mid-2000s. Due to continuous losses of the Japanese manufacturer multiple recapitalizations were made between 2003 and 2005 which led to a dilution of Daimler’s share. Mitsubishi stock price slid 41 percent in 2004 to approximately one quarter the value of when DaimlerChrysler first became involved, making the alliance a failure not only for the acquirer, but also for its target (Forbes 2009).

Ford encountered into M&A even earlier than Daimler, with the acquisition of Jaguar and Aston Martin in 1990 and 1994 respectively. During the second wave Volvo and Land Rover were acquired in 1999 and 2000. Premier Automotive Group (PAG), an organizational division within the Ford Motor Company was formed in 1999 to oversee the business operations of Ford's high-end automotive brands – Jaguar, Volvo, Land Rover and Aston Martin. In total Ford had spent around \$17 billion to acquire the brands that were included in PAG (Forbes 2004). Due to the consecutive losses of PAG Ford sold Jaguar and Land Rover to the Tata Group (India) in March 2008, with Aston Martin sold in 2007 and Volvo in 2010. In total, Ford sold the PAG companies for less than half of the money that were spent to acquire them.

Recently Asian, and in particular Chinese, companies in search of the new ways to improve their competitive positions have been increasing their role on the global M&A market. According to a PricewaterhouseCoopers report, in 2012 there were 490 mergers, takeovers or partial acquisitions in the auto industry worldwide with a total combined disclosed value of \$30 billion, compared to 594 deals worth \$45 billion in 2011 (Figure 9). Asian investors accounted for 33% of the global automotive M&A volume last year, opposed to 27% a year before (PricewaterhouseCoopers 2013).

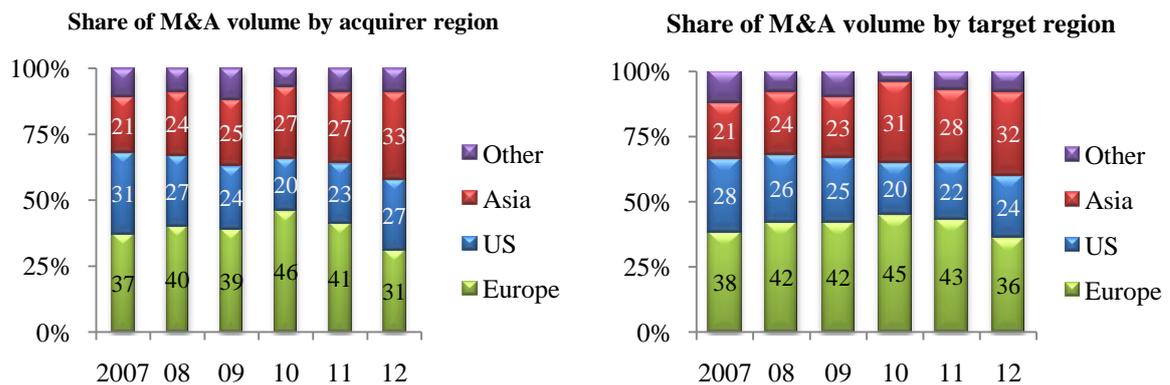
**Figure 9:** Number of M&A deals in the automotive industry in 2012



Source: PricewaterhouseCoopers 2013

According to the report, Asian companies made \$3.3 billion of acquisitions in other parts of the world, while European and North American companies invested \$3.3 billion and \$1.3 billion, respectively, outside their home regions. The role of Europe on the automotive M&A market has been decreasing over the last 2 years, while Asia increases its weight with the amount of incoming and outgoing M&A deals increasing between 2010 and 2012 (Figure 10).

**Figure 10:** Shares of M&A volumes by region, 2007-2012, %



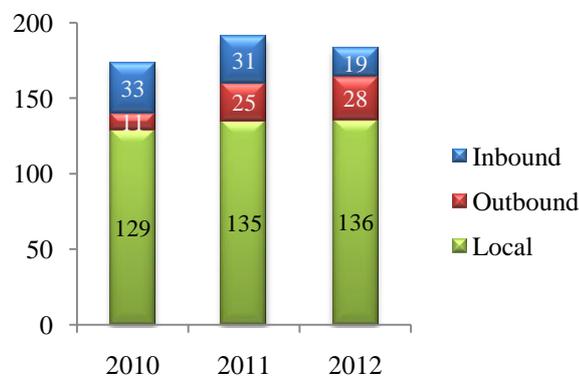
Source: PricewaterhouseCoopers 2013

PwC states that Chinese interest is focused on companies that are well positioned in established industrial countries and on suppliers with strong technologies. Especially small and mid-sized companies, which are an important part of the German automotive supplier industry fit well into the Chinese M&A focus. In Europe, there are three prominent examples

of recent big Chinese automotive acquisitions. Except for the Geely-Volvo deal, in 2011 Chinese Hebei Lingyun Industrial acquired German Kiekert, the world's largest maker of automotive locking systems. The same year Beijing Hainachuan Automotive Parts acquired Dutch roof systems maker Inalfa for \$373 million (Automotive IT 2012). PwC forecasted that recent acquisitions in Germany could mark the beginning of a wave of consolidation.

Overall, the majority of M&A deals in Asia in 2012 were local, representing  $\frac{3}{4}$  of the overall volume. A small trend is visible in the rise of outbound M&A deals from Asia: their amount has steadily risen from 11 in 2010 to 28 in 2012, representing the growth of their share from 6% to 15% (Figure 11).

**Figure 11:** Local vs. cross-border investment in Asia, number of deals



Source: PricewaterhouseCoopers 2013

Thus, the recent data shows that Asian and particularly Chinese automotive companies have been increasing their engagement into the M&A processes in the recent years. Despite the majority of the deals are intraregional now, the interest in the foreign companies is rising, and the trend is expected to remain as more Chinese manufacturers will try to engage into technology transfer through the acquisition of companies from the developed countries.

## 5. Analysis of the acquisition and its influence on the industry

### 5.1. Financial analysis

This part of the thesis aims to estimate the influence of the acquisition on both companies and their situation on the Chinese and global automotive markets.

Despite Geely's plans to acquire Volvo were revealed to the society only in 2009, it first emerged almost 8 years prior to the day when the deal was closed. However, when Li Shufu, the founder of Geely, shared this idea on the internal meeting in 2002, Geely was too weak to

convince Ford to sell Volvo. The opportunity turned up only in 2007, when the global financial crisis started to unravel and Ford faced the declining market and losses of its Premier Automotive Group, a part of which was Volvo. The first round of talks with Ford senior management had no success until Geely signed a deal with Rothschild, the most prestigious investment bank in the automobile industry, to step in and support the acquisition (Forbes 2012). Considering the circumstances, the second meeting between Ford and Geely in 2009 had more success, as Geely was promised to be informed as soon as Ford would be ready to sell Volvo. The deal gained momentum in spring 2009 until the final agreement was signed in August, 2010.

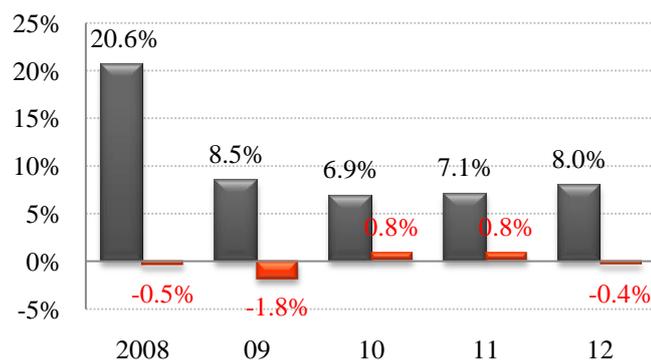
After the deal with Volvo, the debts of Geely Holdings, the parent company, rose from \$753 million in 2008 to \$11.19 billion in 2010, representing 73.4% of its total assets (Automotive World 2013). The acquisition of Volvo cost Geely \$2.7 billion in total, including \$1.8 billion for Volvo's assets and \$900 million necessary for maintaining subsequent liquidity funds. In addition, Geely reportedly had to repay \$3.5 billion in debts owed by Volvo to Ford. Considering that in June 2008 the Geely group reported its fixed assets at \$579 million and liquid assets at \$789 million, totaling \$1.36 billion (Reuters 2010), it is obvious that Geely lacked the capacity to acquire Volvo at its own cost and had to rely on external loans. The funding came in almost equal parts from the local governments and state banks, and the overseas funds, including those from the US, Europe, and Hong Kong. The largest share of external funding reportedly belonged to Goldman Sachs which obtained a 15% stake in the company for the total amount of \$322 million worth of stocks and convertible bonds, thus becoming Geely's second-largest shareholder after its founder Li Shufu (The Wall Street Journal 2013c).

According to the financial statements, Geely claims that by the end of 2010 its liabilities amounted to 62% of its assets and that the combined liabilities of Geely and Volvo reached 73% of assets, compared with 70-80% for the world's leading auto firms. The strong operational cash flow during the subsequent years combined with the full exercise of all the warrants and the partial conversion of the convertible bonds in November 2012 had resulted in much stronger financial position of Geely with net cash of \$270 million at the end of 2012 compared with a net debt of \$220 million a year before. The Group's Board of Directors recommended payment of a final dividend of HK\$0.039 per ordinary share, 39% more than in 2011 (The Wall Street Journal 2013d).

Goldman Sachs sold 600 million shares of Geely Automobile worth \$263 million in November 2012. This amounted to approximately 45% of the stake the bank bought for \$245 million back in 2009, before the Volvo-Geely deal. Geely said that since 2009 Goldman Sachs exercised all of its warrants and part of its convertible bonds issued by Geely, proving that company's performance in the recent years was satisfactory. After the sale of half of its stake, Goldman still owns over 700 million of Geely's shares worth around \$300 million, close to the amount given for the full stake, proving that the acquisition of Volvo had positive influence on Geely's share price (Bloomberg 2012a).

The acquisition of Volvo influenced not only the price of Geely's shares, but also its net financial performance. Except for 2008 when Geely was in the process of accumulation of all of its parent company's automotive assets, net profit margins in recent years have fluctuated between 6.9% and 8.5% (Figure 12). At the same time Volvo's net profit margin during the last five years fluctuated around zero – between -1.8% and 0.8%.

**Figure 12:** Net profit margins of Geely and Volvo, 2008-2012, %

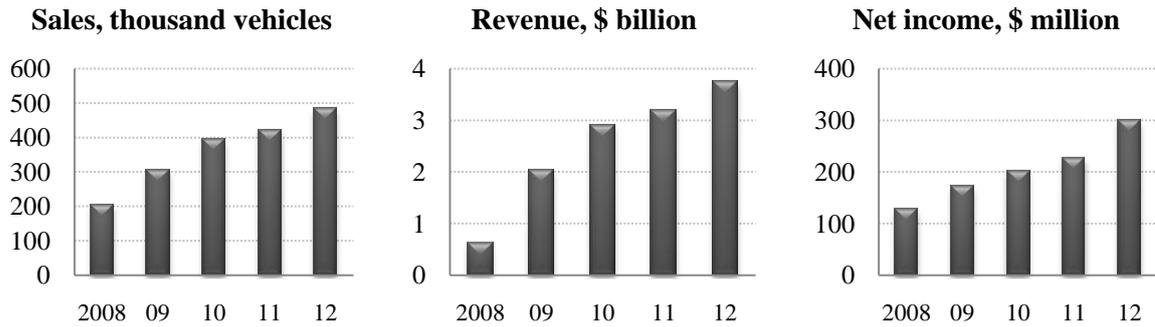


Sources: The Wall Street Journal 2013d, Volvo Car Group 2013

By 2012 the two companies were equal in terms of annual sales (Figures 13 and 14), although Volvo was considerably larger in terms of revenues, considering that the average price of a Volvo car was about 5 times higher than in case of Geely. On the other hand, Geely reported a net profit of \$621 per each vehicle it sold in 2012, much better than a loss of \$166 reported by Volvo. Overall, Geely's position after the acquisition has been considerably better than Volvo's one. In terms of sales Geely has surpassed Volvo in 2012 for the first time since the acquisition, having sold 483,000 vehicles compared to Volvo's 421,000. Thus, compound annual growth rate of sales between 2008 and 2012 in Geely's case was 24% versus 3% for Volvo. The compound average growth rate of Geely's revenue between 2009 and 2012 was 22%, twice as much as Volvo's 11% (China Times 2011).

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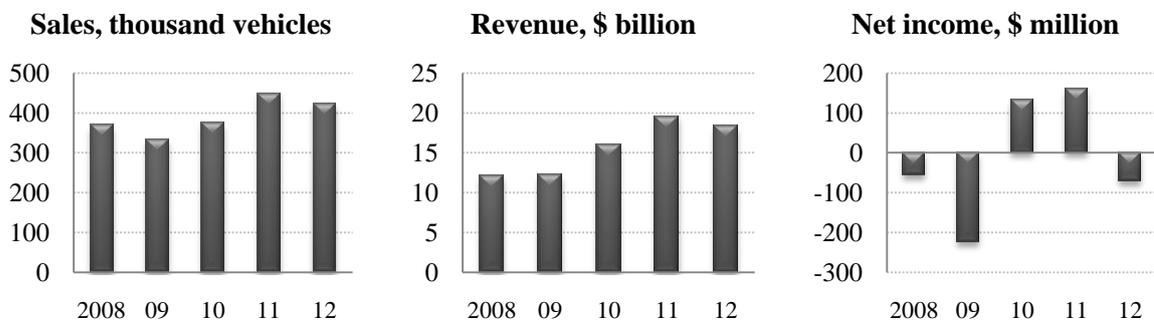
**Figure 13:** Geely's performance in 2008-2012



Source: The Wall Street Journal 2013d

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**Figure 14:** Volvo's performance in 2008-2012



Source: Volvo Car Group 2013

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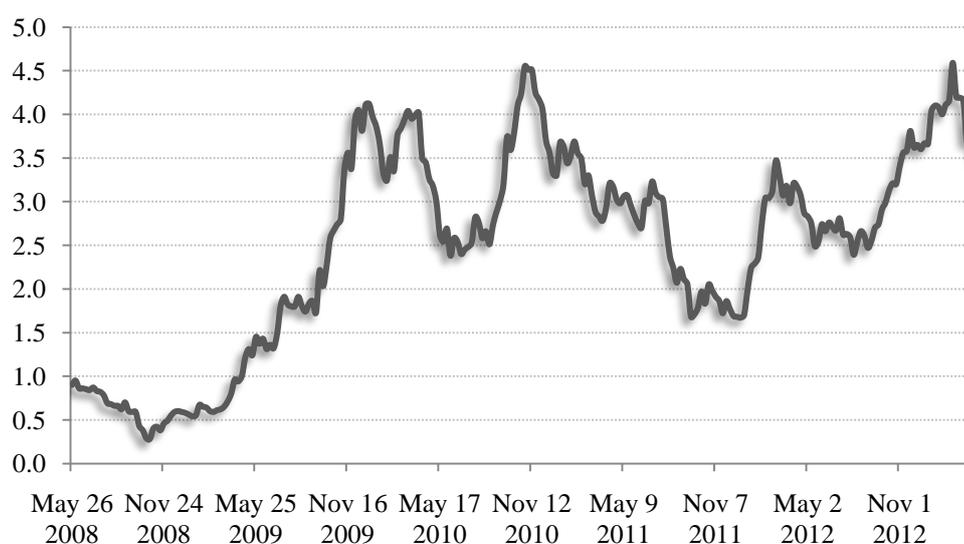
In terms of net income Volvo was also outpaced by Geely: while the former reported losses in 3 out of 5 last years, Geely's net income grew steadily from \$128 million in 2008 to \$300 million in 2012. Thus, after the acquisition Geely has been able to achieve much more stable situation, compared to Volvo. Among the factors that drag down Volvo's financial performance are high expenditures on R&D and inability to change the number of employees according to changes in the demand for its production.

Geely's share price has surged after it announced its plans to acquire Volvo in late 2008, and by the time of the acquisition its market capitalization exceeded \$3 billion. Since then company's market value experienced sufficient fluctuations. The worst year occurred in 2009 when Geely's shares lost 54% of their value in Hong Kong dollars (Figure 15). However, since then company's share price regained its losses and set a new all time high: in February 2013 Geely's shares traded almost 5 times higher than before the deal was first announced.

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**Figure 15:** Geely share price over 5 years, Hong Kong dollars



Source: Yahoo Finance 2013

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Moreover, Geely enjoys the multipliers that are significantly above the average compared to the average in the automotive industry (Table 1). Thus, its Enterprise Value / Revenue ratio is 8.43 compared to the average for the US and European automobile manufacturers of about 1.0. Enterprise Value / Revenue ratio in case of Geely (90.9) is also much higher than the average of 5-10.

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**Table 1:** Geely's financial indicators compared to peers, as of May 2013

	Market capitalization	EV/ Revenue	EV/ EBITDA
Ford	58,7	1,04	11,9
Geely	4,2	8,43	90,9
GM	45,9	0,27	5,1
Honda	75,4	0,97	8,42
Hyundai	16,7	0,46	3,9
Tesla Motors	10,1	11,4	-40,2
Volkswagen	99,8	0,77	7,7

Source: Yahoo Finance 2013

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Thus, after the acquisition of Volvo, Geely's financial performance improved, despite the financial risks that hovered over the company after the deal. Due to the improved image and increasing brand awareness outside China as a result of the acquisition, Geely was able to increase its exports which now accounts to over 20% of its total sales. While the transfer of

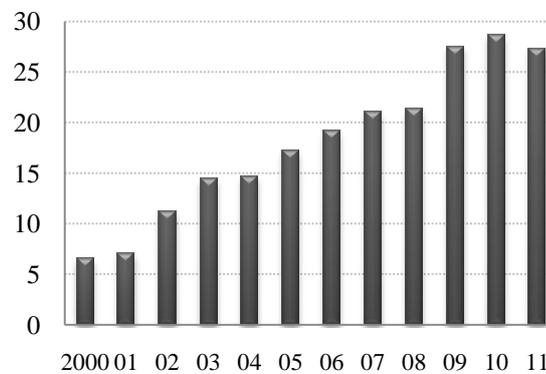
the technologies is still under way and will grant its benefits to Geely in the subsequent years, the changes in the attitude towards the Geely brand have already benefited the company. Volvo, on the other hand, was unable to realize any opportunities of growth yet. Its Chinese and global sales are stagnating at the levels of late 1990s, keeping it on the verge of profitability. Moreover, Volvo has yet failed to increase its sales on the Chinese due to a slightly deteriorated brand image after the acquisition. Considering that Geely, not Volvo, was the one to benefit from the technology transfer, while Volvo was counting on the growth of its sales in China as a result of the acquisition, it can be said that up till the present moment Geely was able to use the acquisition much better to its benefit than Volvo did.

## 5.2. Sales analysis

### Joint ventures

Until 1970s China's annual passenger car production was less than 3,000 vehicles, virtually nothing compared to the country's size. In last 4 decades the industry has grown to employing 30 million jobs, or about 4% of the total workforce. In 2009 – 2011 automobiles represented over ¼ of total retail sales in China (Figure 16).

**Figure 16:** Automobile sales in China as a % of total retail sales in 2000-2011



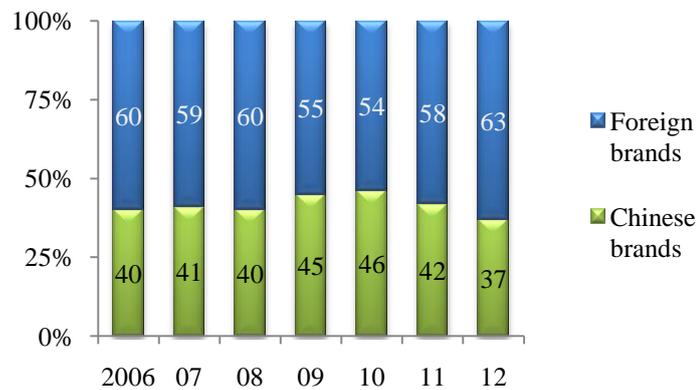
Source: BBVA 2012

Private Chinese manufacturers like Geely, Chery and Great Wall start conquering foreign markets, having exported over 1 million cars in 2012. Despite a shift from manufacturing t-shirts to manufacturing low class cars is a significant achievement itself, it is too soon to claim a victory of the Chinese officials who set to build a competitive automotive industry, as the local car manufacturers still rely too much on copying rival's designs as well as technologies, lacking own R&D base.

### *Joint ventures in China*

The strategy of creation of joint ventures was implemented in China three decades ago, and now it seems to fail its main goal, as far as it still has not created strong Chinese brands. Moreover, virtually no modern technologies were transferred from abroad to the Chinese manufacturers during the decades of cooperation (Gallagher 2002). These resulted into a threatening situation for Chinese automotive companies, especially the private ones. While the state-owned enterprises continue enjoying the rising profits from reselling foreign cars, the private companies have lost 9 percentage points of the market in the last 2 years, as their share dropped from 46% in 2010 to 37% in 2012 (Figure 17). Moreover, foreign brands continue to expand their distribution networks to the smaller cities which historically have supported national brands. This deteriorates the local brands' share even more (The Economist 2013b).

**Figure 17:** Shares of Chinese and foreign brands in the Chinese automotive market



Sources: Bloomberg 2012b, The Economist 2012b

The situation is quite ambiguous. On the one hand, joint ventures helped China to pass the first stage of the industry development and achieve a great success as China has recently become the largest global automobile market, making every car manufacturer desire to be present at the Chinese market. According to J.D. Power & Associates, currently there are 410 car models available in China, more than on any other national market (China Car Times 2012). On the other hand, China is now on the verge of letting its automotive industry being controlled by the foreign companies, the result that is unlikely to be perceived as satisfactory by the Chinese government. The easiest way of the future development is to allow the state-owned enterprises to increase their market share and bring more profits to the treasury, while the most perspective way in terms of global presence is to support the private manufacturers and let them create strong brands that will be competitive on the external markets.

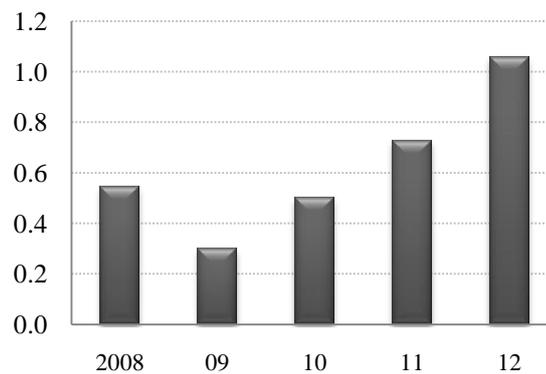
### *Exports and prospects*

Despite all the problems, Chinese cars are steadily improving. According to another J.D. Power study, the owners of the Chinese cars have reported a 30% drop in problems with their vehicles in 2011 compared to previous year, due to improvements in design and production quality. However, on the Chinese market local cars cause 75% more troubles to their owners than those of foreign brands. Another challenge that the Chinese automobile manufacturers are facing is that they need to produce about 2-3 model cycles until the customers change their perceptions towards the Chinese cars which have slightly inferior image when compared to the strong global brands. Thus, it may take up to 5-8 years since the Chinese manufacturers start producing really competitive cars before they earn the customers' recognition.

In order to make the customers show attention to their cars, Chinese manufacturers have already started to entice well-known automobile designers to work for the Chinese brands. Besides ex-Volvo and now Geely's designer Peter Horbury, BAIC hired Leonardo Fioravanti, the designer of many of Ferrari models back in 1980s, as chief design officer; Brilliance lured Dimitri Vicedomini from a world-famous design house Pininfarina; Great Wall, China's biggest maker of sport-utility vehicles, appointed former Mercedes-Benz designer Andreas Deufel as design director in 2011; Chery hired ex-Porsche designer Hakan Saracoglu in 2013 (Automotive News 2013). These moves start to bring their results on the foreign markets, as the exports have risen 3 times over the last 3 years to over 1 million vehicles, more than doubling the pre-crisis 2008 results (Figure 18).

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**Figure 18:** Chinese car exports, million vehicles



Source: Bloomberg 2012b

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The domestic market has met the Chinese government's goals only partially so far. The plan was to have 2-3 national automakers with annual sales exceeding 2 million units and 4-5 with more than 1 million deliveries each by 2011. In fact, SAIC, Dongfeng, FAW and Chang'an sold more than 2 million vehicles that year, and only BAIC surpassed the 1 million-unit mark. However, despite the 5 largest manufacturers sold over 9 million cars, taking about 50% of the market cumulatively, less than 10 percent of their profits were generated from selling the cars of their own brands (Bloomberg 2012b).

#### *Volvo expansion in China*

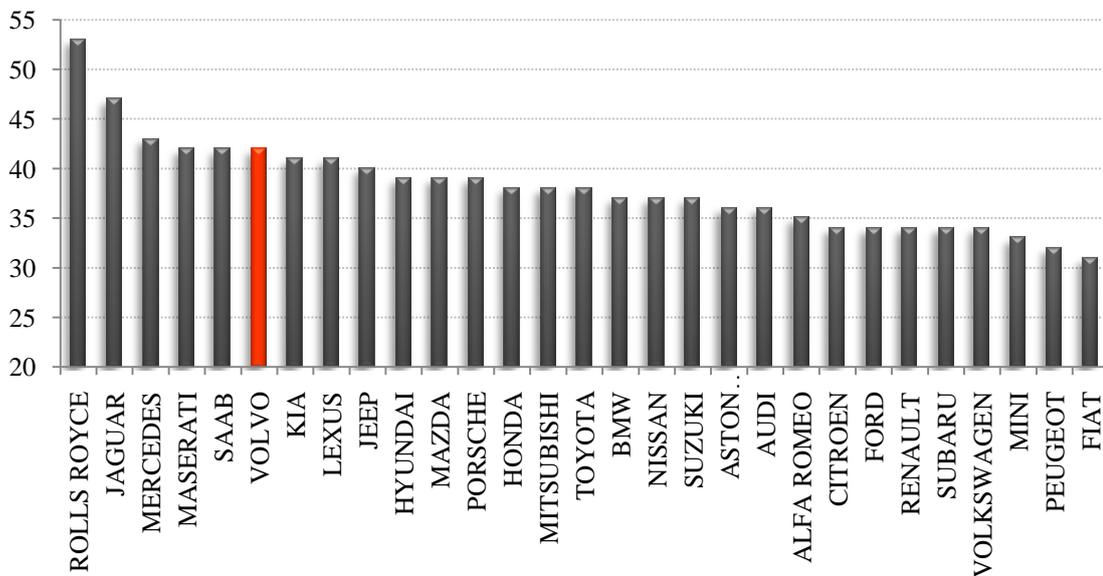
In order to achieve the goals that were set back in 2010, Volvo is currently constructing two plants that will give it the total capacity of over 200,000 vehicles by 2015. The Chengdu plant was announced in 2010 and is expected to start manufacturing in June 2012 with an expected capacity of 125,000 vehicles (China Daily 2013). In June 2011 Geely received an approval from the Chinese government to construct the second Volvo manufacturing plant in China in June. The plant will be situated in a remote northeastern city of Daqing whose government provided a significant portion of the \$2.7 billion that Geely spent on Volvo purchase, without disclosing the exact amount of the loan. In return, the carmaker will invest \$708 million to build the plant which is expected to start production of Volvo XC60 later in 2013 and reach the capacity up to 80,000 cars by 2015 (The Wall Street Journal 2011). Moreover, construction of a Volvo engine plant is underway in the city of Zhangjiakou which was chosen after Geely had negotiations with several cities in the past two years. Previous media reports said Volvo engines would be made in Jiading, Shanghai, where Volvo China is based, or Chengdu. The reasons for choosing Zhangjiakou were in its proximity to the capital (45 minutes on the high-speed rail), and the generous subsidies from the local government in the form of cheap land, favorable tax terms, and promise of infrastructure building. The Zhangjiakou plant is set to open in 2014 and will be able to produce up to 600,000 engines a year. The engines of four different types of 1.3-2.5L displacements are expected to power Volvo cars made in Chengdu and Daqing as well as some of the upcoming Geely models. In order to keep up with the ambitious growth plans Volvo borrowed \$1.2 billion from China Development Bank to refinance existing loans in December 2012. According to the analysts' estimates, manufacturing Volvo's in China would decrease their prices by up to 30% on the Chinese market, giving them a significant price advantage compared to the vehicles that are currently being shipped from Sweden (China Auto Web 2012b).

At the 2012 Beijing auto show, Volvo said that it targeted to produce and sell 200,000 vehicles a year in China by 2016 and release 10 new models between 2012 and 2018. In March 2013 Volvo announced that it is currently engaged in the development of a new car that will be the first all-new vehicle introduced by Volvo as a unit of Geely. The car will be presented in late 2014 and will be a successor to the Volvo XC90. At the same time, during the New York auto show, the news was released about the joint development of a new compact platform, a common underpinning that can be used on several different vehicle models. Considering that Volvo already has a compact C30 car and generally relies on larger models, while Geely's model range gravitates more towards the compact class, there is a chance that the new platform will serve mostly Geely's needs, or may also be used for launching new Volvo models aimed specially on China (Reuters 2013).

*Drivers' age*

The research by Tesco Compare company based on 500,000 insurance claims in the US in 2011 has provided interesting results concerning the average driver's age by brand (Figure 19). The research showed that the manufacturer's image does not always corresponds to reality, with the cars that are often presented as designed for the youth are in fact driven by much older people and vice versa.

**Figure 19:** Average drivers age by brand in 2011



Source: Tesco Compare 2012

Volvo cars drivers turned out to be among the oldest, conceding only to Mercedes, Jaguar and Rolls-Royce, with an average Volvo driver being 42 years old. This figure seriously dissents with the image an average Volvo driver promoted by the company as being young and aimed at high performance of the cars and their sportive design. On the other hand, the average age of Volvo driver well corresponds to Volvo's actual image among the customers, as the majority of them think of safety, not driving qualities as the main advantages of buying a Volvo.

#### *Stereotypes in the automotive market*

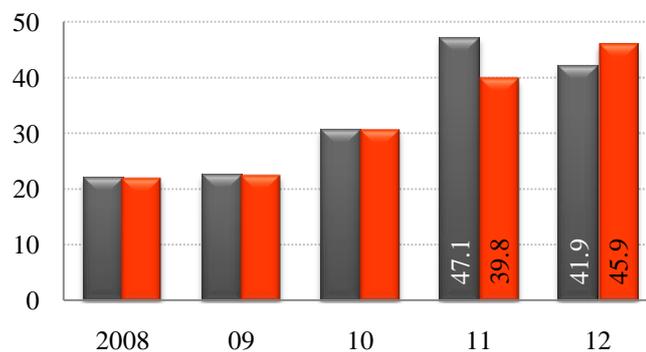
As the survey by Businessinsider (2013) showed, the Chinese and the US customers have quite different stereotypes for the same car makers. Thus, the Americans see Audi as a new luxury car for the youth, while in China Audi is a widespread car of the government and elite, which makes its image far from young and sporty. BMWs are known in America for their excellent driving qualities, although in China they are considered overpriced while their drivers are seen as people who tend to overspend money. Mercedes suffers a similar problem: while being a symbol of high status in Europe, it is seen just as a choice for the elderly people in China. Among the rare examples of Western cars that have more success in China than in their home country is Buick. While being a "grandparents' car" in the US, in China Buick is one of the most desirable and luxurious cars, which made its model Buick Excelle the number one passenger car in China in 2011. Being an American brand, Buick sells almost 3 times more cars in China than at home. Volvo's 2011 Sustainability Report announced that Volvo engineers discovered that decreasing the tire size from 17 inches to 16 or even 15 inches decreases the fuel consumption and emissions by a few percents (Volvo Car Corporation 2011). In the developed countries that are focused on the environmental issues such a discovery could be well received by consumers, while in China a change towards smaller wheels could decrease sales due to the fact that cars with smaller wheels look less aggressive and sporty. Thus, Volvo should consider these deep divergences in the customers' perceptions of brands and market them in China according to the local needs.

#### *Volvo and Geely sales comparison*

In the middle of 2012 Volvo was forced to change its incentive program for the dealers in China after discovering big distortions in the sales volumes in the region. Despite the reported sales in 2012 fell 11%, the industry analytics cited by the Financial Times say that 2012 sales were comparatively higher, because the results of 2011 were overstated (Financial Times

2012). According to the analysts, Volvo sales in China rose in 2012 by 15% compared to a 30% increase in 2011 (Figure 20). The official figures provided by the company state an 11% decline in 2012 after a sharp 54% rise in 2011. Nevertheless, the sales figures shown in 2012 are still very far from those planned for 2015. Moreover, Volvo still lags heavily behind its main rivals in the luxury segment. While Mercedes sold 196,000 cars China, BMW 326,000 and Audi 405,000, Volvo sales, regardless the distortions, were below 50,000 vehicles. This case is another example proving that Volvo has to put in more work to distinguish the differences between its experiences of selling cars in China and other countries.

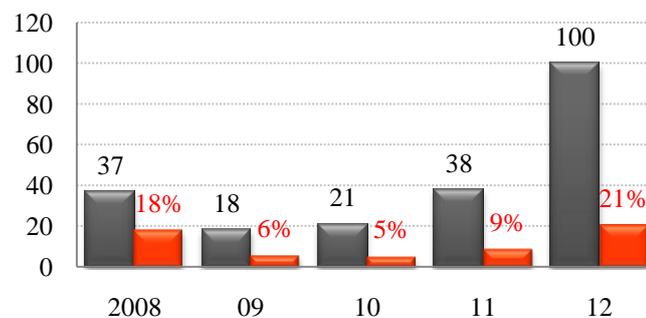
**Figure 20:** Volvo sales in China, official (left) and estimated (right), thousand vehicles



Sources: Financial Times 2012, Volvo Car Group 2013

At present, the biggest market for Volvo is the US with the annual sales of 68 thousand vehicles sold in 2012, compared to 51,000 in Sweden. Moreover, the US was the only market among the top 5 for Volvo that has shown an increase in sales in 2012. Geely has been steadily increasing its exports during the last 4 years. In 2012 21% of its total sales occurred in foreign markets (Figure 21). Volvo is by far a more international company, as only 12% of its sales accounted for the domestic market in 2012, while 88% were sold abroad.

**Figure 21:** Geely exports in 2008-2012 (thousand vehicles); exports as a share of sales (%)



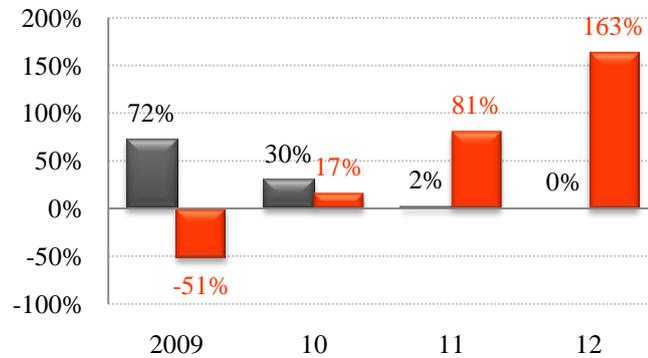
Source: Automotive World 2013

The importance of exports for Geely is even bigger, considering that domestic sales during the last 3 years showed almost no growth (Figure 22).

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**Figure 22:** Geely's internal (left) and external (right) sales growth in 2009-2012, %



Source: Automotive World 2013

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Despite growing overall demand, Geely has achieved its sales growth in recent years mostly due to an increase in interest in its cars from abroad. Among other factors, the acquisition of Volvo was one of the reasons for increasing foreign sales as Geely's brand image has improved after the customers started to associate it with the Swedish company. The trend is expected to strengthen in the future as more people discover about the acquisition and as the technologies are transferred from Volvo to Geely, improving the consumers' qualities of the latter. Meanwhile, Volvo has suffered a loss to its brand image as according to various interviews a significant share of potential consumers were afraid that the quality of Volvo cars was to decrease after the acquisition, while a much smaller share of respondents expected any improvements. Therefore, in terms of market position, Geely has received much more benefits as a result of the acquisition, than Volvo did over the same period. The improving brand image of Geely let it significantly increase exports which supported the company's growth due to a flat demand on the domestic market. The latter can be explained by the subsidies that still take place when talking about the state-owned car manufacturers, thus adding non-market competition methods to the Chinese automotive market. State support that still goes to the joint ventures makes it difficult for the private manufacturers to compete with state-owned giants in the local market. However, technology transfer and improvements in customers' perceptions let Geely achieve the largest increase in exports among top 15 Chinese automobile manufacturers, making it less dependent on the internal demand and significantly increasing its chances to lead the foreign expansion of Chinese automotive brands.

## 6. Conclusions

The unprecedented changes that China has gone through during the last decades not only let it substitute the costly imports of high-tech products, but also made it the largest exporter of goods in services in the world. Among all Chinese industries automobile manufacturing has a prominent role. While in 1980s China spent \$3 billion annually to import private vehicles, by the end of 2000s it became the largest consumer and producer of automobiles, while also increasing its car exports to other countries. Moreover, cars now account for about 25% of all retail sales in China. On the other hand, a sharp rise in the levels of car manufacturing in China led to controversial results. The joint ventures that enjoyed the government support and rising profits despite the outdated technologies, started feeling uncomfortable in the presence of independent manufacturers who are now trying to win the market share with the help of modern, not just cheap, cars. The government policies still have an important role in the Chinese automotive market and the decision about the shift in the current policy is to be made in the nearest future. The right way is to let the private car makers compete with the state-owned companies on equal grounds, and thus ensure the long-term development of authentic Chinese brands that once will be able to fight on the global arena. The easy and tempting way is to continue supporting the state enterprises with the subsidies that let them maintain high market shares without the need to increase the technological level of their production.

The research has showed that the technology transfer that was launched between Geely as a company representing the low-market segment from a developing country and Volvo, a high-end company with a famous brand, has provided controversial results for its parties. Geely was threatened by high risks after the acquisition; however, it was able to neglect some of them during the subsequent years, while others are currently under control or have no significant influence on the company. Meanwhile, Geely managed to improve its brand image that helped it achieve steady growth in the foreign markets and stable financial results over the years that followed the acquisition. Moreover, the Chinese company has already received some of the Volvo technologies and will start selling cars that use them in 2013 and 2014, thus improving its positions in the eyes of the customers even more. On the side of the deal, Volvo has found itself in a much more difficult situation. There are two facts that cast doubts concerning Volvo's nearest future. First, it has currently failed to achieve long-term profitability, considering the losses that the company encountered in 2012. Second, the successful implementation of the sales plan set in 2010 is under big doubts now. While the main benefit for Volvo was meant to be in the expansion on the Chinese market, the

achievements are quite modest there. On top of that, deterioration of customers' perceptions due to the linkage with a Chinese company and vague marketing strategies on the main markets, in China and the US, add uncertainty to the nearest future prospects.

Therefore, the facts and arguments gathered in this study witness that by now Geely received much more benefits from the deal than Volvo did. Considering that only three years have passed after the deal, this trend can be expected to continue. The study has showed that in the case of modern automobile industry technology transfer can bring significant results to a company from a developing country even in the short term. The competitive advantage that Geely has obtained as a result of the acquisition, and the modest results of joint ventures in technology transfer and R&D, allows to give a positive answer to the research question set in this thesis. The results achieved by Geely, the quantitative and qualitative changes that the company has undergone during the recent years allow to state that it is highly probable that the other Chinese automotive manufacturers will try to repeat Geely's way in order to acquire the modern technologies that will enable them to compete in the local and, even more important, in the foreign markets.

#### *Limitations and suggestions for the further studies*

While writing this thesis, an effort was made to cover different aspects that influenced the deal, and to assess the areas that were affected by it. This allowed to create a deeper understanding of the Volvo-Geely deal in the context of historical characteristics of the Chinese market. However, this led to the fact that some areas were paid less attention than they deserved. Therefore, the future studies can be narrowed down to the comparison of Geely's performance with one or more of the state-owned enterprises as the representatives of the two rival camps on the Chinese automotive market that take different approaches to the issue of technology transfer in cooperation with foreign partner companies from the developed countries.

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