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The road to China

The relationship between entry strategy and intellectual property on the Chinese truck market

Commercial motor vehicles is one of the restricted industries in China and also an industry where market potential is enormous. For foreign commercial vehicle manufacturers market entry is only possible through highly regulated joint ventures with a domestic partner that requires transfer of core-technology. This highlights the intellectual property rights debate that has been a topic in China for years and affects foreign companies' willingness to bring the latest technology to the market.

The size of the Chinese market and the rapid economic development provides a context for studying foreign manufacturers' strategies on how to establish a presence in China. There is no doubt that a presence on the Chinese market will be a key for future success. This thesis looks at the relationship between entry strategy and intellectual property considerations given these governmental regulations through a case study on the two Swedish truck manufacturers Volvo and Scania. This study provides an insight into the two companies' reasoning behind establishing their business in China and why they believe their different strategy choices will be successful. This thesis finds that intellectual property and entry mode choice have a circular relationship; strategy regarding intellectual property affects entry strategy choice, which affects how intellectual property is managed.

Keywords: China, Sweden, trucks, IPR, IP, entry mode, strategy, Volvo, Scania, joint ventures, governmental regulations

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摘要

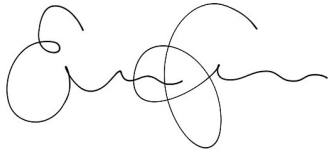
商业机动车在中国是有限制的产业但与此同时市场前景也是巨大的. 国外商业机动车生产厂商如果要进入中国市场必须要找到一个本土合作伙伴成立具备高度政府管控的合资企业并且转移核心技术。关于此知识产权议题在中国成为一个极具争议性的问题并且影响外国公司输入最新技术的意愿。

中国市场的规模及高速的经济增长为外国公司如何采用进入中国市场的策略提供了一个研究课题。毫无疑问，进入中国市场成为未来成功的要素。这篇论文将以瑞典的 Volvo（沃尔沃）及 Scania (斯堪尼亚)两个卡车生产厂商为案例分析，研究它们如何平衡进入策略及中国政府的知识产权的考虑。此论文将深入研究这两家公司进入中国的原因及为什么它们相信它们采用的策略会带来成功。此篇论文将揭露知识产权及市场进入策略具备一定相辅相成的关系：知识产权策略影响市场进入选择，而市场进入取决于如何管理知识产权策略。

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A handwritten signature in black ink, appearing to read 'Emma Forsman', with a large, stylized initial 'E'.

Emma Forsman

A handwritten signature in black ink, appearing to read 'Mathilda Eriksson', with a large, stylized initial 'M'.

Mathilda Eriksson

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1. Introduction

1.1 Background

1.1.1 The Chinese growth miracle and the importance of China

With GDP per capita increasing more than ten times since the beginning of the economic reforms, the Chinese economy has developed remarkably over the past three decades. In combination with a quickly growing middle class and a rapidly urbanising population, it is part of the reason why foreign investors are flocking to the “Middle Kingdom”. (Uddenfeldt, 2012)

For a long time, China has been an important market for Western companies, but the continued growth in combination with the extensive effects of the recession elsewhere in the world has made it even more significant. The potential market of 1.3 billion people holds a special allure as the central government tries to transform the country from a producer to a consumer with economic growth mainly driven by domestic demand. (European Union Chamber of Commerce in China, 2012)

According to “Trends and Challenges” published by the Swedish government offices (Uddenfeldt, 2012), China is Sweden’s largest trading partner in Asia. More than 400 Swedish companies are present in China, together owning assets worth at least RMB¹ 36 billion. Most large multinational Swedish companies have an established presence in China, and over the last decade hundreds of small to medium sized ones have entered the market. The importance of China for Sweden is partly illustrated by the heavy presence of the Swedish government offices in the country and the high-level exchanges between the two countries.

For more than half of the companies responding to [the](#) European Union Chamber of Commerce in China, EUCCC², survey (2012) the revenue from China made up more than 10 per cent of worldwide revenue during 2010. The country is considered to be a

¹ See vocabulary

² See vocabulary

top destination for foreign investors and 63 per cent of respondents in the survey reported plans of increasing investments in China.

1.1.2 Business challenges in China

While China offers plenty of opportunities for businesses, it is also known for the many challenges faced by foreign enterprises when doing business in and with China. These can be both regulatory and more informal ones such as corruption and the value placed on relationships, also known as 关系(guanxi)³. The related costs for foreign companies are both economical and societal, and they are substantial: 40 per cent of respondents in the EUCCC survey reported that they found “Chinese government policies towards foreign enterprises less fair than they were two years ago.” Half of the companies reported missed opportunities due to market access barriers and over 65 per cent of these assessed the value of these missed opportunities at 10-50 per cent of revenues. ”Trends and Challenges” (Uddenfeldt, 2012) list the major obstacles to trade for foreign companies as import and export procedures, poor intellectual property rights, non-transparent governance, local standards and tariffs.

In theory, when deciding to enter China the foreign investors have several legal entities to choose between. The decision is of crucial importance and should be influenced by factors of industry, amount of money invested, the need for a Chinese partner and some strategic respects. (JLJ Group, 2012) In reality, entry for many industries is highly regulated to foreign investors. Government approval for foreign investment has always been necessary and the Foreign Investment Guidance Catalogue lists investments as authorised, restricted (e.g. telecom) or prohibited (e.g. power plants). (Congressional-Executive Commission of China, 2012)

1.2 Purpose

Despite the problems companies face when entering and operating on the Chinese market companies all over the world are looking to establish themselves in China. With the same barriers to market entry, any other country would most likely be discarded, but the importance of the Chinese market makes international companies accept the obstacles the governance of China produces. The simple fact is that it is a market too big to ignore if one wants to compete globally. The Chinese government

³ See vocabulary

controls the environment that these companies compete in by regulating market access. The often unfavourable conditions posed are accepted and companies adjust their strategies in order to be competitive. Therefore it is interesting to look deeper into how companies who pursue the Chinese market handle these government-induced barriers to market access.

The current Chinese path to economic growth involves a larger focus on indigenous innovation⁴ and how domestic companies can achieve a higher level of technologic advancement (OECD, 2008). Since several Swedish companies are among those considered as the most innovative companies in the world (Thomson Reuters, 2012) these companies have assets that are of interest to the Chinese. Meanwhile one main concern among the companies surveyed by EUCCC (2012) was related to issues concerning Intellectual Property Rights, IPR⁵, an area of much discussion in relation to China and therefore this thesis will look closer at how these concerns are manifested in the entry strategy of Swedish high-tech companies and how the two issues interrelate as well as how they are affected by entry regulations imposed by the Chinese government.

1.3 Delimitations

The environment and regulations companies face when entering the Chinese market differs between industries. To further narrow down the research this thesis will therefore focus on one single industry to increase comparability. Motor vehicles is one of the restricted industries in China and it is also an industry where market potential is enormous. Market entry for foreign commercial vehicle manufacturers is only possible through highly regulated joint ventures, JV⁶, with a domestic partner. The directive of most vital importance for foreign investors of these regulations is the rule that a foreign party can hold a maximum of 50 per cent share in the JV (KPMG, 2011). A case study was therefore conducted to contrast the strategies of the two Swedish truck manufacturers; Scania and Volvo, who are both present on the Chinese market.

⁴ See vocabulary

⁵ See vocabulary

⁶ See vocabulary

1.4 Research Questions

- How was the entry strategy of Swedish truck manufacturers influenced by the Chinese government's requirement of a 50/50 joint venture with a Chinese partner?

And to add another layer of depth:

- How does concerns for IP and knowledge transfer relate to entry mode strategy?
- What implications does the strategic choices bring for the future of the companies?

2. Method

Much previous research has been made on the separate subjects of IPR protection in China, governmental regulations and market-entry strategies but this thesis focus on the interaction between the three subjects.

For this thesis a hermeneutic perspective has been employed since the study focuses on personal experiences and subjective involvement. Since individuals build the choice of market entry strategy and the risks that are involved on perceptions it suits this thesis better than a positivistic approach (Merriam, 1994). The fact that the study interprets answers from interviews confirms the perspective. Since a qualitative method is more focused on interpreting the empirical data collected and because the research question is not quantifiable but rather built on perception, personal experience and assumptions the choice of a qualitative approach was deemed to be more suitable for this thesis. (Merriam, 1994)

Preliminary research to this thesis was made by consulting several literary sources on the subject of IP-protection and entry-strategies for the Chinese market as well as previously written theses. With the increased knowledge of problems relating to IPR and the Chinese market a good foundation to problematise the issue was established.

Qualitative interviews were conducted in two manners; face-to-face and via telephone. The choice of combining the two was mainly due to logistical difficulties. Initially several interviews with Swedish high-tech companies operating in China was conducted. After a preliminary analysis the choice to focus on one single industry was

made although general empirical data from all company interviews was utilised to bring a broader perspective to parts of the analysis of the research question.

With the decision to focus on one single industry a case study was conducted looking at Scania and Volvo Trucks, two large Swedish high-tech companies within the truck industry. The research of Yin (1994) supports the choice of a case study if the following three conditions are met:

1. The research question has the form of “How” or “What”
2. The research focus on contemporary events
3. The researcher does not have control over behavioural events

Further, Merriam (1994) argues that case studies are “a well-adapted method for understanding and interpreting observations of phenomena”, which gives support to the choice of a qualitative case study for the research question of this thesis.

2.1 Case Study

According to Yin (1994) a case study is defined as an empirical inquiry that investigates a contemporary phenomenon within a real-life context. The common procedure of examining a case is by in-depth interviews and the case method is meant to provide a deeper understanding to what happened and why, which applies to this thesis where the authors uses a single case design. Yin further states that a single case study can be used to study a unique case, which this thesis does when looking at the specific relationship between IPR and choice of strategy on the Chinese truck market. Eisenhardt (1989) adds support to the choice by highlighting that a limited number of cases create a transparent observation. The choice of Scania and Volvo Trucks was made due to the single-industry focus on Swedish companies (Scania and Volvo Trucks being the only Swedish truck manufacturers).

2.2 Selection of Theory

Though this thesis mainly focuses on empirical evidence from in-depth interviews, literature and theory holds some importance for its structure and offer further understanding of the actions taken by the companies. The approach to theory is therefore abductive and theory is not given from the start. The included theories focus on the strategic implications of IP considerations as well as what affects IP strategies.

The governmental regulations on market entry in China limit the options for market entry choice, but basic theory on the subject still provides an insight to the implications the chosen/imposed entry modes have when seen in the light of technology transfer. Knowledge of the consequences these entry theories impose affects the company's ability to control and monitor local operations, manage operational risk and fulfil strategic objectives. (Contractor & Lorange, 1998)

The technology transfer theories are based on a protectionist perspective, viewing the handling of knowledge transfer as a management of risk and are related to a transaction cost perspective. Alternative theory first proposed by Cannice et al (2004) suggests a reliance on the tacitness of advanced technology and value asymmetry when using technology in a system. It is not something discussed by interviewees and is therefore left out. Some theories on technology transfer exist that focus on a resource based perspective, useful if "the major strategic intent of a firm is to transfer its technology across borders" (Tsang, 1997) which is not the case in this study. The part regarding non-entry levers is held brief even though extensive research on it exists (Cannice et al, 2004) since the aim of this thesis is to explore the relationship between IP matters and entry mode choice, rather than practical IP protection.

2.3 Collection of Data

2.2.1 Secondary resources – Literature

Extensive use of secondary sources has been used for this thesis with the review of several literary resources. Background information pertaining to the Chinese market is almost exclusively from secondary sources combined with previous knowledge the authors have on the subject that has been validated using literature.

2.3.2 Expert and Company Interviews

Interviews with government office representatives from the European Union and Sweden in China was conducted to gain further insight in the political climate that affects the subject of this thesis. To further confirm their knowledge the authors interviewed an expert on the truck industry, Björn Alsén, regarding the truck industry in China. A list of descriptions of the interviewees can be found in Appendix 1.

According to Bryman (2002) it is important that interview questions are designed so that the interviewee can speak freely. Therefore a semi-structured interview approach was utilised (Bryman, 2002), where a questionnaire was prepared and sent out in advance to the interviewees but also complemented with questions that arose during the interviews. Prior to the interviews the questionnaire was created and tested.

The questionnaire also included company specific questions that differed between the case objects. For interviews with the government offices a separate questionnaire was utilised. Interviews with Scania, the Delegation of the European Union, The Embassy of Sweden and Ericsson were made face-to-face at each interviewee's office in China, while interviews with Volvo Trucks and Björn Alsén were made via telephone. According to Bryman and Bell (2010) telephone interviews are today considered just as representative as face-to-face interviews and the quality of the data is not judged to have been affected by this choice of method.

When conducting the interviews guidelines from Malhotra (2004) were used; questions were asked in the order they appeared in the questionnaire, questions that were not understood was repeated and expectant pauses were used in order to make the interviewees elaborate their statements and provide further explanations.

2.4 Quality of research

Bad analysis and misleading results are in general due to poor data according to Lekvall and Wahlbin (2001). It is therefore important that data is collected objectively, but complete objectivity is difficult to achieve since the data in this case is built on individual perceptions. However, since the interviewees were not those deciding on the chosen strategy and purpose and objective behind strategy choices are written down previous to these interviews the authors deem data to be fairly objective.

The quality of research is often measured through reliability and validity, which is mostly connected to quantitative research. How well the study can be replicated with the same results is the meaning of reliability. Many researchers, among them Lekvall and Wahlbin (2001), say that a quantitative approach generally is more reliable since it is easier to achieve the same results when the study is duplicated. The reliability of this thesis is affected by the choice of a qualitative approach since it is performed in a social environment, which in its nature is ever changing. To attain the highest possible

level of reliability, standardised interviews with the companies using a semi-structured script (included in Appendix 3) was used in order to increase the possibility of repeating the study.

Guba and Lincoln have long been on the forefront of arguing for a different measure of quality regarding qualitative research: "trustworthiness," containing four aspects: credibility, transferability, dependability, and confirmability. (Guba and Lincoln, 1981). Many efforts have been taken to ensure trustworthiness is achieved in this thesis:

The choice of company interviewees at Scania, Ericsson and Volvo was made by contacting the head of the relevant department at each individual organisation. To ensure that the correct person was interviewed each company was given a thorough background to the study as well as given the option to refer the interview to a colleague. For government offices it was the most senior person responsible for questions relating to IPR that was interviewed and within the companies it was a combination of people responsible either for questions relating to IPR or people with great insight into the company's strategy in China. In all cases the interviewees had great knowledge of both areas. Since the questionnaire was sent out in advance it also gave the interviewees the opportunity to prepare. Empirical data was afterwards transcribed and sent back to the interviewees for ensuring factual accuracy. It is therefore deemed that no other, or additional, employee would provide a better insight in to the subject.

Both authors participated during the interviews. The approach was necessary since the interviews could not be recorded due to security reasons. According to Eisenhardt (1989) and Trost (2010) there are benefits of such an approach: (1) With two people participating the analysis is more objective and confidence in evidence is enhanced (Eisenhardt, 1989) and (2) With two present people the likelihood to miss valuable information diminishes (Trost, 2010). Both authors later analysed the results to avoid personal biases.

The extensive use of secondary sources and interviews with experts used triangulation of data by asking similar questions, to confirm information and get an extensive overview and to achieve a more valid, reliable and varied view of the environment in which these companies are acting.

3. Theory

3.1 Mode of establishment-theory

The method used to gain entrance to the new market is referred to as entry mode. Most publications focus on the three most common entry modes: licensing, joint ventures and wholly owned subsidiaries. (Hill, Kim & Hwang, 1990; Anderson & Gatignon, 1986). The three choices of entry mode differ on degree of control, commitment of resources and dissemination risk, the latter referring to the risk of leaked IP, when setting up the foreign investment.

Licensing implies the lowest level of control but also the lowest resource commitment since the licensee takes on all operational risk. But the dissemination risk level is higher due to the need of transferring know-how to the licensee that could easily be leaked. (Hill, Kim & Hwang, 1990)

The ownership division agreed upon by the parties of a **joint venture** determines how much resource commitment and what level of control the investment implies. It can be very time-consuming trying to control a partner lacking in know how and experience. The dissemination risk also needs to be taken into account; company secrets might be leaked by the partner(s). (Hill, Kim & Hwang, 1990)

A **wholly owned subsidiary** is created through acquisition of a firm already existing in the chosen country or through establishment of new operations. The degree of control offered is the highest and the risk of dissemination lowest of the three choices even if it cannot be ignored, but it also leads to the highest commitment of resources. (Hill, Kim & Hwang, 1990)

The above is summarised in the table by Hill, Kim & Hwang (1990)

Table 1. Degree of control, Dissemination Risk and Resource Commitment per entry mode. By Hill, Kim and Kwang (1990).

Entry Mode \ Variables	Control	Dissemination risk	Resource Commitment
Licensing	Lowest	Highest	Lowest
Joint Venture	Middle	Middle	Middle
Wholly owned subsidiary	Highest	Lowest	Highest

3.2 Technology Transfer-protection

Knowledge is today considered the most important resource of companies and is internationally transmitted when it is exploited through foreign production. The transfer of technology is defined as "the transmission of knowledge which enables the recipient firm to manufacture a certain product or provide a particular service." (Tsang, 1997)

Technology and knowledge is often considered to be a public good in the sense that once it is shared with a business partner, the other company "may freely benefit from the technology", and companies seek out protection for it to keep their competitive advantage (Cannice et al, 2004). When technology is leaked and disseminated, one of the risks involved is that it might lead to new competitors establishing presence on the market with access to the same technology, diluting the competitive advantage of the company (Bruun & Bennett, 2002).

When seeking an establishment on a new market, companies need to consider which knowledge will need to be transferred to the host country as well as how. While wishing to access economies of scale and profits related to foreign investment, companies do not want to lose their technological advantage by granting other corporations access to their specific know how. Technology transfer is therefore closely related to matters of IP protection.

Most previous studies have focused on transaction cost theory as well as internalisation theory when analysing cross-border transfers of technology. These theories focus on the use of ownership by companies to protect their knowledge and technology. (Cannice et al 2004, Hill, Kim & Hwang, 1990)

There are however occasions when governmental regulations in the host country limit choices of transfer and entry mode, often with the hidden motivation of the host country seeking access to foreign technology. The entry mode theories then assist in

the understanding of implications associated with the limited choices but does not offer any ideas on how to protect IP.

When country regulations restrict the use of intra-firm transfers of technologies, companies rely more heavily on external mechanisms (Davidson and McFetridge, 1984). Also when important core-technology needs to be transferred, companies are likely to simultaneously use numerous technology protection levers - entry strategies as well as non-entry ones (Cannice et al, 2004). The possibility of further protection of core technology can ease the decision to use a, for IP-protection, questionable entry mode.

3.2.1 Implications of entry modes on IP matters

In the light of the above presented entry mode choices, internalisation theory claims that companies with substantial R&D invested in their products or that are technological leaders in their field are less inclined to use licensing for their foreign investment if they have the means and the possibility to undertake direct investment. (Davidson & McFetridge, 1984)

Theory also proposes that a wholly owned foreign enterprise is preferable when core-technology is involved in the transaction since the company then tries to control the technology by keeping it inside the own corporation, also known as internalisation. It may however not be enough of a precaution due to “rouge employees” who brings company secrets with them when transferring to a competitor. (Cannice et al, 2004)

Even though a joint venture allows partial internalisation, the JV option is a “poor substitute for intra-firm exchange” since it does not solve the underlying reasons for companies to internalise technology: 1. The unwillingness of local partners to value and pay an adequate return on the technology offered by the foreign company, and 2. The incentive for the local party to alter the terms of the transaction in its favour once it accessed the technology. (Davidson & McFetridge, 1984)

3.2.2 Non-ownership levers

3.2.2.1 IP management

IP management has over the past decade moved from being seen as a legal issue to a strategic matter in the sense that IP needs to be managed in relation to a company's

business strategy. The relevance of IP is therefore determined in relation to the company's core capabilities. (Smith and Hansen, 2002)

By consciously doing so and incorporating IP into the strategic decisions companies gain better knowledge of what they possess and how to not lose it. The management of IP consists of three parts:

Protecting it: Through identifying illegal infringement and taking legal action as well as through monitoring the environment to avoid future violations, a company can strengthen its barriers to imitation. It is up to the company to make sure it is not being copied.

Valuing it: IP is an intangible asset and easily overlooked, but quantifying it is only interesting when it is put in relation to how well can the company can make the knowledge valuable for its customers.

Generating it: Companies have limited resources at hand and need to make choices between different projects. The decisions on what R&D to undertake should be guided by the overall strategy and in line with what the customers value. If not, however genial the thought behind it may be, the company might end up with irrelevant IP that is not integrated to produce the highest rate of return. (Smith and Hansen, 2002)

3.2.2.2 Technology life cycle-theory

Chen (1996) points to companies being likely to prefer transferring older technology to foreign subsidiaries and business partners when important technology is involved. By only sharing dated knowledge the company does not risk losing out on a competitive advantage. A comparison can be done between the theory of product life cycle and the life cycle of technology. The theory suggests that a company begins by producing newer products on their domestic market and will not transfer the technology to a new market until the domestic market has matured, the foreign market has grown or when competitors are able to advantageously produce it on a foreign market.

Non-core technology might however be launched on a global scale to reach a first-mover advantage and gain market shares. (Makadok, 1998)

3.3 Other strategic considerations

Apart from entry mode choice and a desire to protect core-technology, the strategic choices of a company can play a part in decisions of technology transfer. Technology sharing can be deemed a desirable alternative if the advantages coming from it are believed to outweigh the implied risks.

When presenting a technologically advanced product to a new market, collaboration should seriously be considered to avoid liabilities due to distrust of small or new players on the market as well as cultural differences between the company and its customers. A local business partner with knowledge of the market might be crucial to establish a presence. (Burgel and Murray, 2000)

Also political risk, very much present in China, is a common reason for partnerships with local businesses. (Tsang, 1997).

Finally, an overseas investment should be assessed in the context of the company's overall strategy. While a foreign collaboration might be operating at a loss, it may be sustained for strategic reasons, "such as establishing a pre-emptive market presence in the host country, gathering first-hand market information and so forth." (Tsang, 1997).

4. Empirical data

In order to understand the obstacles facing foreign companies entering the Chinese market it is important to understand what makes the Chinese market unique. China's political system ferments every part of the Chinese society and the transportation industry is not an exception. China has since the revolution in 1949 been a one-party state and is ruled by the Chinese Communist Party (CCP)⁷. The government is today deemed to be authoritarian rather than totalitarian. It values economic growth but does not tolerate opposition. (Link and Kurlantzick, 2009)

⁷ See vocabulary

4.1 Political areas of importance in China

For the scope of this thesis looking closer at some political areas will increase the understanding of how the transportation industry works and how the interviewed companies are affected.

4.1.1 Environment

During the 18th National Congress of the CCP, NPC,⁸ ecological civilisation was stated as one of five strategic areas together with economic, political, cultural and social development for “socialism with Chinese characteristics”. The aim is to “establish a resource-efficient environmental-friendly society by creating a green industrial structure, production and consumption pattern and improving the ability of sustainable development”. China is now ready to acknowledge that protection of the environment and natural resources is an important factor for future social and economic welfare. However, emission reduction is difficult to balance with continued economic growth. (Ministry of Environmental Protection, 2013)

The Minister for Environmental Protection Zhou specifically mentioned transportation in his congressional speech and stated that with more than 15 million new motor vehicles each year, pollution will increase unless measures are taken to reduce vehicle pollution. (Ministry of Environmental Protection, 2013)

Emission standards for heavy-duty trucks⁹ in China follow the European ones with some time delay – historically around 7-8 years. Currently China III is the implemented standard. These apply to newly sold vehicles. On July 1 2013, China IV will be implemented. (Ministry of Environmental Protection, 2012) The numbering corresponds similarly to the European standards Euro III, Euro IV, Euro V etc. for the different engines. In Europe Euro VI (as of January 2013) is the current standard. (European Union, 2009)

⁸ See vocabulary

⁹ Specified to “heavy-duty vehicles over 3500 kg, equipped with compression ignition engines or positive natural gas or liquefied petroleum gas engines”

4.1.2 Innovation

In the 12th Five Year Plan, FYP¹⁰, "indigenous innovation" is a key concept and China's leaders are investing heavily in strategic industries and R&D in order to increase innovation. Innovation is seen as the key to go from "Made in China" to "Developed in China". Governmental regulations stipulate that foreign companies in several industries have to share knowledge with domestic companies in order to gain market access. Though not stated explicitly the purpose is to support the development of Chinese companies. (The Economist, 2012) Joakim Movander at Ericsson agrees, saying "China will do what is best for China". He further comments that knowledge transfer is required in the telecom industry and anticipates that as Chinese companies grow stronger, Chinese operators will award business to Chinese communication technology companies.

Second-generation innovation¹¹ is encouraged in China, mainly because it is proven to work. When economic growth is the goal, adapting proven technologies ensure that short-term projects are successful. While the talks concerning indigenous innovation are in the forefront, authors Breznitz and Murphree (2010) argues in their article "Run of the Red Queen" that second-hand innovation will continue to be the Chinese way of innovation. Cutting-edge technology will be left for foreign companies to develop and the Chinese will adapt it to suit their purposes. The most important part of China's innovation politics is to ensure that China does not fall behind but have access to the technology that guarantees continued growth. It is not that China lack innovative minds, but their system fails to support them. This attributes to the educational system, the governmental involvement and ineffective goals.

4.1.3 Transportation

Logistics and transportation is a key industry for China's development according to the 12th FYP. Growth in the central and western regions of China relies on the ability to transport the necessary goods and equipment from ports and factories in the eastern regions. The development of infrastructure is vital to support intraregional trade and include development of roads, aviation, railroads and water transport. (Benesch Attorneys at Law, 2012)

¹⁰ See vocabulary

¹¹ See vocabulary

China will invest substantially in expanding its highway-system and improve the quality. As China becomes a global player, social aspects become more important, demand for safety and quality will increase, slowly pushing the Chinese truck market higher on the scale. However, for now, and the foreseeable future, price (low-cost) will be the main concern for Chinese customers. (Benesch Attorneys at Law, 2012)

4.2 The IPR environment

According to Roberto Cecutti, First Secretary at the Trade and Investment Section at the Delegation of the European Union to China, the 2012 report on state of IP in Third World Countries ranks China as the number one most problematic country regarding IP related problems. Cecutti described that patents and trademark infringement are the problems of most importance compared to issues regarding copyright and design patterns.

He further explained that the problem mostly lies with the implementation (especially regional) whilst legislation has much improved over the years. For the first 10-20 years after the opening-up there were mostly legislative problems. Now the issue is enforcement: customs, police and the judicial system (civil and criminal). According to companies it has worsened over the past five years with the judicial system being open to influences/corruption and a flawed administrative system. This is a view wholly supported throughout the conducted interviews. Movander also points to the lack of transparency that further adds to suspicion of local interests dominating the system.

To Cecutti's knowledge there are many ways for protected information to get stolen. While directly illegal means such as trade secret theft is somewhat common, theft also occurs through documents sent in for approval, government procurement and certification requirements. He further stresses that JVs can be risky since it is difficult to protect company specific information.

China does not recognise world registration of intellectual property. Therefore some companies planning to enter the country have encountered that someone entirely un-associated with the brand already has registered their trademarks. These "bad faith applications" are not uncommon and leaves the company with two choices: targeting

another market or negotiating with the other part. Companies need long term strategies to avoid this and to register pre-emptively long before market entry is even thought of.

Cecutti claims that China sends out ambiguous messages regarding IPR protection. Even though the Ministry of Commerce¹², MOFCOM, uses special campaign enforcement during high profile events, business usually go back to normal afterwards. While the government wishes to move from a job intensive to a high tech market, it is not possible to “wipe out” the entire illegal industries overnight. Jobs need to be preserved to ensure stability. Mathias Hultgren, Second Secretary at the Embassy of Sweden in China, also said that the law seems to be viewed as a point of reference in China rather than something necessary to follow. He believes that this will change since it provides challenges for Chinese companies when they go global and encounter stricter enforcement abroad.

Innovation is a new key word in China and it is a complex phenomenon. Cecutti clarified “You can always guarantee economic and human progress if you truly innovate.” While R&D as well as the political and economical environment are a driver of innovation, China seems to have trouble seeing the part played by IP protection; “Why should I innovate if it gets stolen?”

However, the common view of the participants of this study seems to be hopeful. Company representatives point toward the increasing number of patent applications from indigenous companies. They believe that IP problems between Chinese actors will put pressure on the government to act and that things then “will sort themselves out” (Olsson 2013), bringing the IPR standards up to European levels, even if it may not happen in the near future.

4.3 The transportation industry in China

4.3.1 The current market condition

The Chinese market for trucks is the largest one in the world – bigger than the European and the North American ones combined (Volvo Group, 2013a). The

¹² See vocabulary

Chinese market grew from 10 per cent to 29 per cent of the global market for commercial vehicles between 2008 and 2009 and replaced the US as the largest one. (KPMG, 2011)

China currently has the second-longest national highway network and with the massive roadway investments taken on by the government, there is a great expectancy for further growth. (Boston Consulting Group, 2012) Sales of commercial vehicles are related to economic growth with increased demand for transportation of goods. (KPMG, 2011) Though China's growth is expected to slow down in the coming years, the Chinese market still offers huge potential as development spreads west and the current market matures. (Boston Consulting Group, 2012)

The Chinese truck market is characterised by low technical standards and low prices and local manufacturers dominate the market with a market share of over 95 per cent. There is a huge potential in the market, between 2000-2010 the share of goods transported by rail decreased from 69 per cent to 39 per cent in favour of road-bound traffic. (KPMG, 2011) Expectations from customers are lower and more focused on function and purchase costs than safety and quality. (KPMG, 2011) This is however expected to change in the coming years with government regulations and customer awareness. More sophisticated trucks will be in demand with more comfort, safety and better fuel efficiency. Still it will take a number of years before the Chinese market catches up with the advanced markets of the Triad¹³ (the developed markets; North America ex Mexico, Western Europe and Japan). (Boston Consulting Group, 2012) The main difference from the Triad is the after-sales services, which are not as much in demand in China. While Triad customers want a truck with a long life expectancy to invest in, the Chinese customer looks for the cheapest truck. (Alsén 2013)

All of the five market leaders on the Chinese market are domestic and have a market share of nearly 70 per cent (KPMG, 2011). The whole market is extremely scattered. In 2010, 19 companies sold 20 000 trucks or more. (Boston Consulting Group, 2012) Only 2,1 per cent of sales were foreign manufactured trucks (KPMG, 2011).

¹³ See vocabulary

Government regulations make it more difficult for foreign manufacturers to establish themselves on the Chinese market. According to a report by KPMG (2011) foreign Original Equipment Manufacturers are:

- Limited to two joint ventures; in the passenger and commercial vehicle sector in China, with a maximum of a 50 per cent share in a joint venture.
- The joint venture must involve the establishment of a research and development institution in the country for a minimum of 500 million Yuan.
- The 50 per cent share can be increased if a production site is constructed in China for a minimum of two billion Yuan.
- However, if the joint venture operates more than one brand and 30 sales offices, the Chinese joint venture partner remains the controlling partner.
- Interestingly, joint ventures are not required for companies solely focusing on exports. For setting up a purely export-oriented venture on Chinese soil, foreign companies only need obtain a State Council approval.

Hultgren mentions that the underlying motive of 50/50 JV for Chinese companies usually seems to be access to technology to later on build up their own business.

Out of the total truck registrations in 2010, only 1 per cent was in the premium segment, the midmarket accounted for 36 and the low-cost market for 63 per cent. Higher emission standards and customer requirements are driving forces behind market upgrades. (Boston Consulting Group, 2012)

Since the mid-2000s domestic truck production have exceeded domestic demand. Exports of Chinese trucks are modest and the risk of overcapacity in the market is visible. This increase puts pressure on foreign manufacturers who have to compete on the low-cost market while having larger expenses due to R&D and manufacturing. (KPMG, 2011) While Chinese manufacturers struggle to meet customer demands in the heavy-duty truck segment, foreign manufacturers struggle to compete in the low-cost segment. (Boston Consulting Group, 2012)

4.3.2 The future of the truck industry in China

According to Boston Consulting Group (2012) “revenues in China will grow more

than twice as fast as sales volumes” between 2010 and 2020. These revenues will come largely from an increased medium segment, as customer demands become more sophisticated. Growth will also be passed on to the advanced segment, although there will be some time before the Chinese market will have demands in the same category as the Triads. With the expected growth in China, the market is expected to account for near half the world’s truck market by 2020. (Boston Consulting Group, 2012)

Foreign companies face obstacles in China. Björn Alsén points to it being thoroughly proven that the Chinese are not interested in buying cars specified to European standards, neither concerning environmental nor comfort and safety – they cannot afford it. While that slowly is expected to change, there will still be exceedingly few willing to pay premium-prices in the foreseeable future. Alsén indicates that comfort is the biggest issue. To his knowledge, the driver is seldom the same person as the owner. And the owner does not care at all about the comfort of the hired driver. He mentioned that a drastic change in the will to pay would presuppose one of two things: that the owners drive themselves or attain a friendlier view of their hired drivers, both of which he deems unlikely.

The environmental standards on the other hand can be predicted in the FYP. But being able to manufacture trucks that meet Euro VI standard is of no use in a market that is satisfied with Euro IV. Alsén also mentions that the Chinese rather see the European environmental standards as barriers to trade. In some part the high standards protect the European home market because they are hard for Chinese manufacturers to reach at this stage.

4.4 Cases

4.4.1 Case: Volvo

4.4.1.2 Company Background

Volvo Trucks is a subsidiary in the Volvo Group with its head office in Gothenburg in the southwestern part of Sweden. Volvo was founded in 1926 and in 1928 the first truck was produced. Volvo Group consists to 70 per cent of trucks – it is the largest legal entity and has the most employees (Olsson 2013). Today their market consists of over 140 countries worldwide. (Volvo Trucks) Aside from the Volvo Trucks brand, Eicher, Mack Trucks, UD Trucks and Renault Trucks are also part of Volvo Group’s

truck business. All brands are represented in China apart from Eicher, which has not yet been introduced. With several brands Volvo covers the whole range of market segments, from basic to premium. The brand “Volvo Trucks” caters to the premium market segment. (Volvo Group, 2013b)

In 2012, Volvo made a profit of 11,3 billion SEK. The truck operations account for 53% of Volvo Groups net sales. The European market (defined as EU 28 minus Bulgaria plus Switzerland and Norway) is currently the largest market for Volvo. (Volvo Group, 2013b)

4.4.1.2 Volvo in China

Volvo Trucks has sold trucks to China since 1934, although business really took off in 1997 (Volvo Group 2013b). China’s share of Volvo’s global operations is still small, but is expected grow over the coming years. Volvo’s main reason for entering the Chinese market is its size and the opportunity that it presents. “All companies want to be in China,” Olsson said.

In 2003 Volvo partnered with China National Heavy Truck to open a joint facility of truck manufacturing for the Chinese market. When it opened in 2004 Volvo became the first European truck manufacturer to have local production in China (Volvo Group, 2013b). The cooperation ran into problems with the Chinese authorities and the manufacturing facility closed. In 2009 Volvo exited the JV (Global Times, 2009). Former CEO Leif Johansson attributes the fiasco to multiple and incongruent strategies (Dongmei and Bates, 2012) but other sources hint that Volvo was cheated when the government implemented a law prohibiting the joint truck from the market and CNHT later had success with its own truck largely based on the shared technology. (Ollevik, 2009)

Despite the failure, Volvo is adamant to make it in China and in January 2013 Volvo announced its JV with Dongfeng Motor, China’s second largest automaker (Ying and Bi, 2013). Volvo Group will have a 45% stake in the new subsidiary called Dongfeng Commercial Vehicles. The minority stake will make Volvo Group the largest manufacturer of trucks in the world. (Volvo Group, 2013c)

When entering into a JV, Volvo views the general challenge to lie within the ownership and how to regulate it - who controls what and who is in charge. There are several options and approaches, each with its pros and cons. “You have to be ready to compromise and it is important to make sure that the knowledge transfer runs smoothly and to regulate what information and knowledge belong to which company – the JV or the mother entities.” (Olsson 2013)

Volvo sees the main advantage of going into a JV with an already established partner as the structure already being in place. The foreign company can bring their knowledge and take advantage of the partner’s physical establishment, which will speed up the procedure, compared to building something from scratch.

“When you enter into a JV there are a number of processes that you go through. The first step is to decide what rights and knowledge you want to put in to this JV and after that you look at what you want from the other partner. A rough estimate is done of which IP each partner can contribute with and then negotiations begin. It is important to do this thoroughly so that the JV-partner does not have side activities that you hear of six years later” Olsson said.

4.4.1.3 How Volvo views the Chinese market

China requires foreign truck manufacturers to enter into JVs. Due to the highly regulated environment, this is the only way to go for actors wishing to sell their products on the Chinese Market according to Olsson. He said that the Chinese market does not stand out compared to other countries in this aspect. “Any foreign manufacturer would most likely have preferred to wholly own their operation in China, but since that is not possible the manufacturers have to adapt.”

Olsson said that the IPR development in China is different from that of other countries. It is mainly attributed to the fact that China is a one-party state and thus decision-making comes easier since there is no democratic process. He believes that the legal systems will start to work better as the Chinese themselves put pressure on the system. The Chinese do not only copy from the west but they copy what they find profitable. When they start to copy one another the government will act and things will sort themselves out.

The Chinese market has a demand for technology with lower standard than western countries. Thus the procedure is to use old core-technology and manufacturing equipment. However, the procedure is dependant on which market segment is the target. For high-profile brands like Volvo Trucks the product has to be advanced and then quality is more important. It is the market that drives the demand and deciding on which technique to use is a commercial decision. Different brands have to be kept separate otherwise there would be no point in using different brands. They all stand for something different and the trucks have different functions. (Olsson 2013)

4.4.1.4 Global strategy

According to Olsson Volvo's strategy is to grow aggressively through JVs and acquisitions. Within Volvo Group there is a focus on business and profit optimisation regarding R&D. The main idea is to make minimal investments that can be used in several entities. In theory this works well but local adaption are almost always necessary which requires local expertise.

Volvo tries to optimise when possible. "You have to be thorough with this approach. What we saw when we bought UD Trucks was that you acquire parts you already have; you get departments that do the exact same things. Internal coordination is needed since you ideally want to create a transmission box that can be used in all your products. R&D-planning consist of doing "as little as possible" meaning that you want to use as much as you can in as many places as possible. For trucks it is mainly physical appearance that differentiates them. "Platform thinking is key in R&D management" explained Olsson.

4.4.1.5 Intellectual property issues

Volvo claims to not have experienced any major IP infringements. Pirate copies of spare parts exist, but pursuing the pirates legally takes time and is costly and the legal system is not easy to navigate. "Even if you bust a site and close down factories it is almost certain that they will pop up somewhere else", Olsson explained.

Volvo applies for patents preventively, in countries they would like to operate in one day. This also applies for spare parts.

Olsson said that China in general “looks at Western Europe and ‘steals’ the parts that we have done well.” He believes their IPR-system to be under development and that within a couple of years it will be just as good as the ones Sweden has.

4.4.1.6 The future

Volvo is well aware of the risks and opportunities that come with operating in a country like China. Unexpected knowledge transfer is a threat, but it is also a risk that is worth the possible outcome. Volvo’s latest venture in China bares high expectations from the management and is supported from the top, which indicates that the company deems it a risk worth taking. “We want a window to China to sell trucks” (Olsson 2013).

The biggest challenge for Volvo Trucks in the future in China is however likely to lie in the operations of the JV. “In general there are always problems in such co-operations. The way to handle those problems are to send staff from other countries to the site to handle any problems when they occur”, Olsson said. With the Dongfeng co-operation Volvo will increase their presence in China. This also gives them room to drive market development. By bringing better technology to Dongfeng development will be smoother and faster. The technological experience Volvo has is worth a lot to Dongfeng and will facilitate their progress. “When you have a partner to ask ‘Can we do this? Can we do it in this way?’ things will proceed faster when you can say ‘that is the wrong way to go’”. (Olsson 2013)

Björn Alsén is somewhat less optimistic: “This far, Volvo Trucks have not succeeded in China, all you have to do is look at the numbers”, he said. European trucks are of much higher quality both regarding comfort and exhaust emission control, which are drivers of costs. He explained that Volvo of course could produce a vehicle adapted for the lower Chinese standards of environment, but that they will have a hard time attaining a level of cost that can compete with the indigenous manufacturers. He points to it being thoroughly proven that the Chinese are not interested in buying cars specified to European standards – they cannot afford it. While that slowly is expected to change, there will still be exceedingly few willing to pay Volvo-prices in the foreseeable future.

Alsén does however see potential in the newly finalised deal between Volvo Trucks and domestic brand Dongfeng. Volvo's technology and Dongfeng's network could be the recipe for triumph. A service network for the vehicles is necessary to succeed as well as a product specification and price adjusted for the Chinese, something Alsén claims that Volvo does not offer yet, but might attain through the co-operation.

4.4.2 Case: Scania

4.4.2.1 Background

Scania was founded in 1891 in Sweden. Throughout the course of the company's existence it has merged with other companies, most notably Saab, but became an independent company again in 1995. The same year the company was listed on the stock exchange in Stockholm and New York. Since 2008 Volkswagen is the majority owner of Scania with 68,8 per cent of the shares. (Scania, 2012)

The first truck was manufactured in 1902 and today Scania is one of the world's conceptual leading manufacturers of heavy trucks and buses. Scania's main markets, where they also have production facilities, are Europe and Latin America. Scania's research and development operations are located in Södertälje together with the head office. (Scania, 2013a) Scania has local procurement offices in China, Russia and the United States. (Scania, 2013b)

According to Mats Harborn at Scania the company caters to the premium market segment of heavy-duty trucks. They focus a great amount of resources on R&D. Scania's most important market is the Brazilian market. (Scania, 2013b) Over all Scania's objective is to focus on emerging markets. (Harborn 2013)

4.4.2.2 Scania's approach to the Chinese market

Scania has been selling trucks in China since 1965 and since 2007 Scania has their own wholly owned importer along with eleven independent and one wholly owned retailer in China. Scania is the only foreign truck manufacturer that has a wholly owned distributor in the country. (Harborn 2013)

Out of Scania's global sales, China only comprises two per cent, equal to about 1000 trucks per year. However, the Chinese market is important, simply because 1/5 of the

world's population comprises it. Even though the market is immature at the moment, the development is continuous and it is important to be present here. "You need to be present in China and have an approach towards China" Harborn said and continued, "The question is *how* you should be present in China, and that is up to each individual company to decide on." When China became a member of WTO it opened up the opportunity to establish a wholly owned import company followed by the opportunity to establish a wholly owned distribution company. When this occurred Scania established such companies. (Harborn 2013)

Scania has a different approach to the Chinese market than their competitors. Instead of having production in China, they focus on improving the efficiency in the transportation industry. The most important thing for Scania is to look at what is called the cost per tonne kilometre.¹⁴ For China, this cost is twice as high as it is in Europe. Being a planned economy, which China is to an extent, focus lies predominantly on hardware. However, it is within the management area that China needs the most help to improve according to Harborn – it is the efficiency within transport that needs to be enhanced for the market to mature. This is the area where Scania focus their resources. (Harborn 2013)

The main problem with the Chinese transportation industry is that it is under developed. Currently foreign manufacturers holds a rather small market sales volume compared to domestic manufacturers; only around 2 per cent and while the market share is that small, China holds little interest for Scania at the moment (Ahlbom and von Schultz, 2008). The market can according to Harborn be described as a three-layer market with a premium segment, a medium segment and an under developed segment with a 5 – 15 – 80 per cent spread and by switching focus from the hardware to the software Scania hopes that the market will mature and that the top segment will expand. The interest for the operations that Scania is currently pursuing is great and will affect the market over time. Scania is conceptually leading in this area and several stakeholders approach Scania to discuss this opportunity. (Harborn 2013)

¹⁴ See vocabulary

4.4.2.3 Scania's view of the Chinese market

“To enter the Chinese truck market, one needs to enter into a 50/50 joint venture with a Chinese partner. The foreign company thus have to share, or give away, their knowledge. The effect that approach has is that no foreign manufacturer wants to take their latest technology to China since they would give away what they have invested a lot of money in. Instead foreign companies bring previous generations of technology to China.” Harborn stated and continued by posing the question for Scania: “Should we [Scania] play along in this game?” referring to the alternative to conform to the demands of the Chinese market. “That is not the way Scania operates” claimed Harborn and further explained “Old technology is scrapped once new technology is developed and it is not a part of the company strategy to use old technology on any market”. Subsequently that leads to Scania not being willing to enter into 50/50 JV in China and give away technology the company have invested money in. “You cannot do that to your shareholders when you have invested millions in R&D”. (Harborn 2013) To enter in to a JV there needs to be two parties with something unique to contribute to the cooperation and according to an article featuring Harborn, that is not the case in China today (Ahlbom and von Schultz, 2008).

“In the Chinese culture there is a concept called 抄学 (chaoxue)¹⁵, which simplified can be described as the act of copying the master until one is better than the master.” This concept is common in China and means that one copies on the surface without understanding the principle behind the act. In that particular case function has no meaning. This describes the truck industry rather well and why the market is under-developed; the Chinese manufacture vehicles with the previous generation's technology and subsequently they are always one step behind the master/leader. Harborn believes that Chinese companies need better R&D operations and better gross margins in order for the truck market to mature and the higher-end segments to increase. (Harborn 2013)

China's difficulties with innovation is attributable to their history according to Harborn: “China has failures embedded in their system as a heritage from the communist history, which have built the belief that rules and regulations are enough,

¹⁵ See vocabulary

leaving little room for innovation to take place. There is a clear lack of performance management and too great focus on ‘cheap, cheap, cheap’ instead of quality’. The innovative effort is thus put on going around the problems instead of dissecting them to find a solution. “Scania wants to break down the problem – that is innovation,” Harborn said. “Quality and passion are drivers of innovation – not regulations. China’s greatest shortage is the lack of quality focus and performance management regulations, which are two very important pre-requisites for innovation.”

Despite the barriers that are associated with the Chinese market the benefits outweighs the costs. “It is definitely worth it for Scania to be present in China” Harborn commented. “The new leadership will turn China on to a more sustainable growth path. The leaders and different think-tanks have a clear picture of what China needs to do but it is the infrastructure, regional interests and the individual interests that needs to be overcome for the change to be successful.”

4.4.2.4 Scania’s strategy

While Scania is not prepared to give away their technology knowledge, they are more than happy to share their knowledge of efficient tonne kilometres¹⁶. This knowledge does not need protection since it is not generating any profit. “China needs to increase efficiency and decrease the environmental footprint and these are areas where they need help and we can help. By sharing our knowledge concerning efficiency it is Scania’s hope that the premium market, where Scania operates, will increase”. The main strategy for Scania in China is to be ready when demand increases (Ahlbom and von Schultz, 2008). Harborn explained that manufacturing in China is not prioritised. Instead the key is to build up a market and create a demand and subsequently to market the brand. Compared to competitors such as Mercedes and Volvo, the Scania brand is relatively weak in China. This is to a great extent attributable to the fact that Scania does not sell passenger cars. (Harborn 2013)

Another reason for Scania to not enter in to a JV is the lack of experience. It has never been a part of Scania’s over-all strategy. By making the strategic decision to not enter in to a JV Harborn believes that it provides Scania with a greater deal of freedom

¹⁶ See vocabulary

especially when looking ahead. When asked about the role of IP Harborn confirms that IP is a contributing factor to the chosen strategy.

Scania does not have the will nor the intention to adapt their products to the current demands of Chinese market – “Such an adaption would sell out the brand” according to Harborn. Instead Scania is waiting for the market to mature enough for the demand for Scania’s products to increase.

Harborn explained Scania’s strategy with an example of a copyright infringement case involving Scania. “The identity of the vehicle, the design, is what defines the company. You want to copy the master, and in China, Scania is the master. We [Scania] were involved in a case where a Chinese company made identical copies of Scania trucks. Instead of taking the case to court, where we most likely would have been seen as “David versus Goliath” and suffered bad press on the market, we visited their headquarters and reasoned with them. A brand is a promise to the customer that we guarantee what we stand for. The brand is not just the logotype, but the graphic design as well. This is what we tried to convey to the Chinese company. We told them that they were good enough without copying our design, and by doing so their message to the market was that their identity was not strong on its own. We explained to them what made our design unique and could not be copied and also explained the function and thought behind the design. We helped them change their truck design, which they consequently respected and accepted. That type of knowledge transfer we are happy to contribute with. We actually took the world’s leading truck designer and placed him at one of our biggest competitors to sort this problem out”.

4.4.2.5 Intellectual Property issues

The majority of problems that Scania has encountered are related to spare parts. Pirate copies lead to lost sales since the market for premium parts is very small. Harborn proceeds to explain that copying is needed in China since the economy is in a developmental phase. “As a company you have to choose your battles and Scania’s focus is to develop the premium market. At the moment, the customers who buy these copies could not afford the real deal. It does hurt the brand, but that is why we work with educating the copycats”. The problem is not considered to be severe since the customers who buy fake parts know that they do not buy the real product and thus the

brand is not damaged in the same way it would be if customers thought they were buying the real product.

4.4.2.6 The future

For Scania, having production on site in China is not of importance. Instead Harborn predicts that the 50/50 JV requirement will be absolved in the future. “The transition will begin tomorrow [March 5 2013] with the start of the NPC.” The key for the future will be efficiency in order to lift China closer to a market economy.

The development concerning IP protection will improve as the market matures. The Chinese themselves will be demanding better legal rights and better protection as the market economy develops which in turn will drive the development of IPR protection forward. “The infrastructure is in place but the problem is the lack of a critical mass.” Harborn notes. “80 per cent of all IPR conflicts in China are between Chinese stakeholders. This drives the protection of product development since it is no longer a case of ‘we against them’. The legal environment thus improves for all stakeholders, even the foreign ones.” (Harborn 2013)

5. Analysis

5.1 Analysis Volvo

Volvo has earlier tried and failed to enter a JV with a domestic truck manufacturer but has just recently entered into another one with domestic brand Dongfeng. This implies that Volvo still believes in the strategy of accepting the JV requirement imposed by the government. No source inside the company wants to confirm the rumours that Volvo was cheated in the first JV. Despite the reasons for the first JV attempt defaulting, it prepared Volvo for this second JV attempt. Undertaking such a huge investment once more is a sign that Volvo has not been discouraged from partnering with a Chinese manufacturer and that Volvo believes in their chosen strategy.

The required JV structure forces Volvo to share core-technology with their Chinese partner. Volvo’s strategy incorporates the will to learn from the Chinese; how to build a truck that caters to Chinese demand. In order to gain that knowledge they find a JV to be a prerequisite, which means that IP becomes less of a priority. Overall, it is the

“other strategic factors” that influence the strategic choices of Volvo regarding their presence in China. They are after the local knowledge of the market, wish to decrease their political risk and are aware that they are not able to produce the low cost trucks demanded by the Chinese on their own.

The focus of Volvo’s IP management is instead put on how to protect the shared technology and ensure that technology that is not a part of the JV is safe. A large part of Volvo’s IP strategy is to use legal protection to the largest possible extent. This is partly illustrated by their pre-emptive patent registration but also through the use of highly detailed contracts with Dongfeng. Another measure is the use of dated technology transferrals when possible, especially for the less advanced segments. IP and knowledge transfer risks are factors naturally taken into consideration when entering the collaboration, but Volvo deems the risk of IP infringement to be one worth taking – being present on the market is considered much more valuable.

Volvo focuses on building their brand awareness on the market through the collaboration with Dongfeng and targets the medium- and premium segments of the Chinese market. They reach a larger part of the market through their adapted brands than they would by competing only with the advanced technology catering to the few upper per cent of the buyers. Even though the market is maturing, it will take time until the entire market requires trucks of European standards. Without the help of their local partner, Volvo would have a hard time competing on cost within the medium segment of the market.

The collaboration with Dongfeng also implies a dependence on the Chinese partner. It gives Volvo less control over their own operations and should they in the future decide to end the partnership, they will have helped build up a strong global competitor. The partnership also gives them less control over their own brand; being associated with Dongfeng could possibly be damaging for the Volvo brand if the Dongfeng brand is damaged in any way.

The lack of enforcement of IPR legislation could put Volvo in the same position as after their last JV; having lost knowledge and technology without anything to show for it, but most experts seem to agree that enforcement will gradually improve. In accordance with the arguments of Breznitz and Murphree (2010) Volvo seem not to

fear to lose too much technology to the Chinese, possibly because they do not believe that the Chinese will be able to overtake Volvo in this department. As long as the partnership works, both Volvo and Dongfeng will benefit from the JV.

Future implications for Volvo include the risks mentioned above but there are also possible rewards in the future. If the market continues to develop Volvo is in a good position to build their brand awareness and customer relationship for the time when the market is mature enough to demand Volvo's more advanced products, at the same time as they grab a piece of the middle-segment pie today.

5.2 Analysis Scania

Scania's strategy entails that they refuse to enter JVs and therefore they do not have manufacturing on location in China. They instead go for everything wholly owned that's allowed: distributor and import companies. Their presence in China is also complemented by a representation office in Beijing from where they conduct their strategy: to educate the Chinese truck market in order to make it mature faster. Without manufacturing in place, Scania's current presence in China could therefore be deemed to be mostly pre-emptive.

Scania's aim is to be a market leader within the advanced segment. Fear of losing IP combined with the refusal to utilise previous and now discarded technology prioritises the importance of IP protection. Their technology is cutting edge and instead of adapting it to local Chinese demands, Scania hopes to gain market share when the market has matured. Their strategy is to bring the market to Scania, and when it is ready Scania will be there with the products that are in demand.

The brand identity holds great importance for Scania and they are very careful to take any action that could possibly be damaging to it. They admit to currently holding weaker brand recognition in China since they unlike some competitors do not sell passenger cars, which gives them more reason to protect their reputation. IP is a strong factor taken into consideration with issues relating to the brand identity. Scania see it as irresponsible to "give away" company specific knowledge, something necessary to enter a JV since it is hard to regulate what information gets passed on in these collaborations. Part of why Scania does not enter a JV anywhere is their refusal to use dated technology since it is considered to be damaging to their brand.

Scania's chosen strategy has not protected them entirely from IP infringement. Instead of having technology and know-how stolen from them part of their brand identity was copied. For a company like Scania, to whom brand identity is of great importance, this is just as serious. Local manufacturers cannot steal the technology Scania uses but by copying their design they can fool customers into believing that they are buying a Scania truck. If this truck does not measure up to the high technology standards that the Scania brand promises it can cause great damage. The implication could be that by the time the market is mature enough for Scania, their brand could be diluted.

Scania values their core-technology highly and follows theoretical thought on the matter when refusing anything not wholly owned.

Predicting the future is always difficult and in a one-party state like China, there are no guarantees that what is promised today will be delivered in the future which makes the future of the market uncertain. The efforts Scania put towards helping the market mature might not render them the outcome they have envisioned. Of course this is a risk the company is aware of and deem worth it.

5.3 Combined analysis/Conclusions

While it is impossible to predict the future development of the market, there is no doubt that a presence on the Chinese truck market will be crucial for the companies according to all sources in this thesis. Not solely because it will be the largest market, but also to achieve economies of scale necessary to compete globally, which competitors present on the Chinese market will have access to. Historically companies have entered China mainly for low cost manufacturing, but with the rapid development of the market some companies, including Volvo and Scania, are present because of the market opportunity.

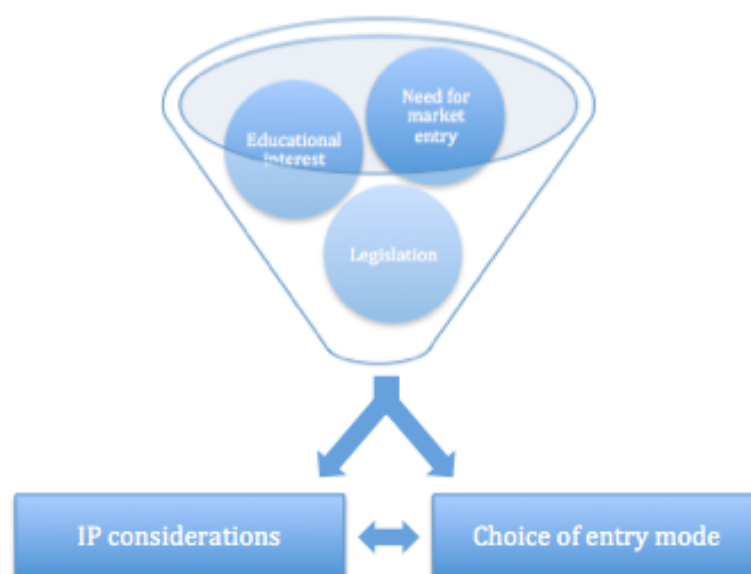
The "chaoxue"-concept of copying the master together with China's communist heritage explains a great part of the Chinese view on IP. Since it is embedded into their culture, the Chinese will never look at the question the same way that Western countries do. This implies that even with greater implementation of law, protecting company IP will always be an important consideration for businesses in China.

This case study has looked at two companies with two very different strategies;

1. Enter the middle segment with dated technology and a domestic partner to build market share and gain market knowledge (Volvo)
2. Refuse to compromise the brand and educate the market until it is mature enough to demand the latest technology (Scania)

As stated in the theory, a wholly owned subsidiary is to be preferred in the case of truck manufacturers, which both Scania and Volvo commented on. However, with the regulations imposed by the Chinese government, their only option for manufacturing is a JV with a Chinese partner. Other possibilities such as licensing are not deemed a viable choice for either company. For Scania there is clearly no other option than wholly owned.

Entering the Chinese market is an action companies must take, but as shown in the case study, companies have options when choosing how to enter if they are willing to abstain from manufacturing. This choice is highly influenced by IP considerations. But depending on that entry mode choice, the question of how to manage IP will also look different. In these equations IP strategy is both a dependent as well as an independent variable that changes according to two factors; the entry mode choice and the political environment in China, and affects the choice of entry mode. This picture illustrate the relationship between these factors:



The funnel represents the ever-changing context of China; the political environment, the importance of the market, the IP environment and so forth. The need for market entry, the educational interest and legislation are variables that will change according to how China changes. These changes are variables a company cannot affect, and the need for market share is a valuation that is up to the individual company even though experts claim the urgency of it. The educational interest that reflects the strategic intent of the market entry is however optional. Legislation is given by China but can change. This all transpires down to a valuation of IP matters as well as a choice of entry mode. These in turn affect each other; IP considerations will affect which entry mode is chosen and the chosen entry mode affects how IP is managed.

The main identified difference in strategy between Volvo and Scania is the attitude towards the educational element. A main component of Scania's strategy is to educate the Chinese market so that in the future, the Chinese market will be adapted to the technology choices of Scania. They do not see potential in a JV and are focused on using the latest technology. This implies that they do not wish to learn from others, which puts the IP matter in the foreground and it is so highly emphasized that it becomes a hurdle. The strategy for Volvo is to utilise the JV to the full potential; they wish to learn from the Chinese and to co-develop vehicles. They believe that the knowledge acquired through the JV is important for future business and in developing a vehicle that suits the Chinese demands. This decreases the priority of the IP matter. While Scania's entry mode strategy is dependent on their IP considerations, Volvo's entry mode strategy shapes their IP concerns.

Without knowing how the future will unfold, saying that one strategy is better than the other is impossible. The different strategies of Volvo and Scania infer different risks and opportunities. While Volvo wagers losing IP to their partner, Scania risks spending a great amount of resources on developing the market without any assurances of future gains. However, Scania has spent fewer resources on FDI¹⁷.

Volvo's strategy might not necessarily make them a future market leader, but it will most likely ensure that they hold a share of the Chinese truck market even though they act in a very uncertain environment. By accepting and adapting to the regulations

¹⁷ See vocabulary

of the Chinese market the company risks being misled by their partner as well as the government. But by trying to meet demands for cheaper, less developed trucks on the Chinese market, Volvo is able to compete for a share of the much larger middle segment, rather than the premium one that their core technology is adapted for. They face difficulties competing in this middle segment on a cost basis and hope to gain advantages through their partnership with domestic Dongfeng. Volvo also possesses the technology to quickly adapt when the market finally matures to demand European standards and they will be able to compete for the premium segment as well. If size estimates are true, then even a small share of the Chinese truck market will comprise a significant part of global sales for any truck company.

Scania on the other hand will most likely remain a conceptual market leader with good relations to decision makers. But the question remains if that will be good enough for customers to abandon their current brands in favour for Scania once the market matures. China is an unpredictable country and without market development, Scania are only able to target a vanishingly small part of the market. Even if Scania might succeed with educating the market and are able to steer it in a favourable direction, the efforts will give their competitors time to adjust their technology. If brands like Volvo “float along” while the market develops they have time and resources to put towards building strong customer relationships, which could crowd-out the effort of Scania. While Scania’s strategy is much more secure in relation to not jeopardising neither their IP nor their brand, the company might miss the China train and the consequences of that could be much more drastic.

The main questions remaining are whether or not you need a Chinese business partner to truly be able to address the market and how important it will be to master budget trucks in the future. If Volvo learns to produce “value trucks” that also can compete on a cost basis, there are many more emerging markets in the world to take on.

6. Answer to the Research Questions

6.1 How was the entry strategy of Swedish truck manufacturers influenced by the Chinese government's requirement of a 50/50 joint venture with a Chinese partner?

For both Volvo and Scania the choice of entry mode strategy was heavily influenced by the JV-requirement. Simply put it is an either/or-question; you either comply with the requirements posed by the government or you do not enter the market as a manufacturer. Volvo has chosen to comply and to enter into a JV, while Scania has chosen not to enter the market as a manufacturer. Instead Scania has chosen other modes of establishment – they have a representative office that works with their strategy as well as two wholly owned companies; a distributor and an importer.

6.2 How does concerns for IP and knowledge transfer relate to entry mode strategy?

IP concerns were a contributing factor to the entry choices of both Volvo and Scania. For Volvo IP concerns came second to the gains of learning about the market from their partner Dongfeng. The danger of losing IP was a calculated risk as well as a regulated part in the agreement. When the entry mode has been chosen Volvo's way of protecting their IP is to focus on preceding technology for the transfers when possible. Having previous experience from a failed JV, Volvo has learned that regulating the flow of knowledge is very important. Scania's strategy to not enter into a JV was greatly influenced by the refusal to share their technology. Not entering into a partnership was a conscious decision where they clearly stated that one of the main reasons for not doing it was due to the knowledge transfer requirement; Scania cannot "give away" their technology that they have spent money on developing.

IP concerns are closely tied to the changing environment of Chinese politics, but they are also closely tied to the entry strategies chosen by the companies. External factors such as government regulations dictates the felt need to protect IP. This need will in turn influence which entry strategy a company chooses and the chosen strategy will affect how protection of IP is managed.

6.3 What implications do the strategic choices bring for the future of the companies?

Depending on how the market unfolds, these strategies provide different implications. By being there to develop the market, Scania has the chance to affect the direction it is taking, while Volvo being a part of the market has the chance to affect what the customers are seeking.

Volvo's strategy seems to hold a lower risk; they are following the market as it matures and are seeking to establish a relationship with customers. They operate in an uncertain environment through the JV but will almost certainly grab at least a small piece of the pie since they also try to compete for a share in the medium segment.

Scania's strategy on the other hand is more of a gamble; their brand and IP are kept intact while they are a part of developing the market, educating their competitors with the hope that it will increase the speed of maturation and thus bring the market to Scania instead of Scania to the market. But if this gamble does not pay off Scania could be left without a share of the important Chinese truck market.

7. Discussion

As shown in this thesis the chosen company strategy is completely dependent on regulations set up by the target country. The uncertainty of entering a new market pushes companies to take the safer road; to use the same strategic concept as is used globally, which could prove to be damaging in the future since the development of the market is volatile. This thesis further shows that companies have options when faced with specific conditions for market entry; one can choose to enter and adjust to the conditions posed, or one can choose a different method and still be present on the market. The choice is largely influenced by IP considerations.

The risk of IP loss is a contributing factor to the choice of strategy, not necessarily exclusively in China, but globally. The interviews display a pattern showing that even though the companies might not explicitly state that IPR plays a larger role in China than in other countries, the actions prove otherwise. It is clear that companies need to

thoroughly investigate market conditions before entering a new market and incorporate concerns and risks into their strategy. Further, the chosen strategy will affect how IP management strategy can be developed going forward.

This thesis focused on the truck industry in China and the influence of government regulations as well as IPR for Swedish companies. The most significant limitation to this study was the delicate nature of some topics for the companies. Problems related to IPR as well as problems relating to JVs are sensitive for the companies to disclose due to competitive reasons. All companies that were interviewed, including those left out from the case study, initially claimed to have no problems with copyright infringement. When they admitted to having experienced problems they were played down. The nature of IPR problems in China is well known to the public; the existence of pirate copies, whether it is DVD's, clothes or cell phones, are close to a sightseeing stop for tourists in China. However, when considering the political environment of the Chinese market, the lack of criticism of government regulations was not surprising.

Looking closer at the strategic choices of each company it was surprising that neither company was willing to admit on their own accord to the potential flaws the chosen strategy might entail. Volvo did not communicate the risks of a JV but were altogether very positive and did not talk about much about their failed earlier attempt. Scania on the other hand is focused on not manufacturing low-cost vehicles, which might be damaging in the future. Culturally the Chinese culture and market differs very much from both Europeans and Americans, which makes it uncertain to predict that the Chinese truck market will develop in the same direction as the Triads'. Referring back to the sensitivity of this subject in terms of competition it is less unpredicted that the companies uphold a positive façade.

7.1 Academic Contribution

As is the nature of a case study of a specific industry in a specific country, this thesis draws on specific environmental variables that limit the ability to generalise the results and the forecast. The thesis does however contribute to the understanding of what factors influence companies' strategy choices when entering a new market, specifically the effect of strict governmental regulation and IPR in sensitive markets.

Further, this thesis sheds light on foreign business in China. For many industries, including the truck industry, establishment on the Chinese market will be crucial for future success. How IP is treated in China has been a topic of debate and interest for years. By looking at the relationship between entry strategy and IP management this thesis provides an insight to two companies' reasoning behind establishing their business in China and why they believe their different strategy choice will be successful.

7.2 Further research

7.2.1 Global truck industry

A study focusing on the future development of the global truck market would add a layer of depth to the significance of the Chinese market. The importance of succeeding to provide the Chinese with the cheaper trucks demanded could increase drastically if other markets such as the Triad markets would demand value-trucks (low cost, but high value trucks) in the future.

7.2.2 Financial perspective

The study partly shows how attempts to protect IP that affect company strategy might have negative implications. While hard to quantify, it would be interesting to see an attempt at determining how much IP infringement does cost a company, and therefore how much is “saved” by these pre-emptive measures.

7.2.3 Other industries

While this thesis looked at IP from the perspective of the truck industry a similar study on a different industry such as telecom (which is also highly regulated by the Chinese) could bring more insights to factors affecting strategic choices.

7.2.4 Culture

Volvo and Scania are both Swedish companies with long histories. Comparing companies from different countries could add value to see if there are any cultural differences that affect strategy choice.

References

Literature

- Anderson, E and Gatignon, H (1986), *Modes of Foreign Entry: A Transaction Cost Analysis and Propositions*, Journal of International Business Studies, Vol. 17, No. 3 (Autumn, 1986), pp. 1-26
- Breznitz, D and Murphree, (2010) *Runt of the Red Queen*, New Haven; Yale University Press (May 31, 2011)
- Bruun, P and Bennett, D (2002), *Transfer of Technology to China: A Scandinavian and European Perspective*, European Management Journal Vol. 20, No. 1, pp. 98–106, 2002
- Bryman, A (2002), *Samhällsvetenskapliga metoder*, Malmö: Liber
- Bryman, A and Bell, E (2010), *Business research methods*. Oxford: Oxford University Press. 2. ed.
- Boston Consulting Group (2012), *Winning the BRIC Truck Battle*
- Burgel, O and Murray, G.C (2000), *The International Market Entry Choices of Start-Up Companies in High-Technology Industries*, Journal of International Marketing, Vol. 8, No. 2 (2000), pp. 33-62
- Cannice, M, Chen, R and Daniels, J (2004), *Managing International Technology Transfer Risk: Alternatives and Complements to Ownership Structure*, MIR: Management International Review, Vol. 44, No. 1, Contemporary Issues in Multinational Strategy and Structure (2004), pp. 129-152
- Chen, M (1996), *Managing international technology transfer*, International Thomson Business Press, London.
- Contractor, F. J and Lorange, P (1988), *Competition vs. Cooperation a benefit/cost framework for choosing between fully owned investments and cooperative relationship*, Management International Review, Special Issue, pp.5-18
- Davidson, W. H and McFetridge, D. G (1984), *International Technology Transaction and the Theory of the Firm*, Journal of Industrial Economics Vol 32.3 1984 pp. 253-263
- Eisenhardt, K (1989), *Building Theories from Case Study Research*, The Academy of Management Review, 14(4), pp. 532-550
- European Union Chamber of Commerce in China (2012), *European Business in China Business Confidence Survey*, Beijing
- Guba, E. G and Lincoln, Y. S (1981), *Competing paradigms in qualitative research*. In N. K.

Hill, C. W. L, Hwang, P and Kim, C. W (1990), *An Eclectic Theory of the Choice of International Entry Mode*, Strategic Management Journal, Vol. 11, No. 2 (Feb., 1990), pp. 117-128

JLJ Group (2012), *China Market Entry Handbook*

Lekvall, P, and Wahlbin, C (2001), *Information för marknadsföringsbeslut*, Sweden: IHM Förlag

Makadok, R (1998), *Can first mover and early mover advantages be sustained in an industry with low barriers to entry/imitation?*, Strategic Management Journal, Vol 19, sid 683-696.

Malhotra, K. N (2004), *Marketing Research: an applied orientation*, Upper Saddle River: Prentice-Hall International, 4. ed.

Merriam, S. B (1994), *Fallstudien som forskningsmetod*, Lund: Studentlitteratur

OECD (2008), *OECD Reviews of Innovation Policy: China*, Paris; OECD Publications (September 2008)

Smith, M and Hansen, F (2002), *Managing intellectual property: a strategic point of view*, *Journal of Intellectual capital*, Vol 3 Nr 4, sid 366-374.

Trost, J (2010), *Kvalitativa intervjuer*, Lund: Studentlitteratur, 4. ed.

Tsang E. W. K (1997), *Choice of International Technology Transfer Mode: A Resource-Based View*, MIR: Management International Review, Vol. 37, No. 2 (2nd Quarter, 1997), pp. 151-168

Uddenfeldt (2012), *Swedish Business in China: Trends and Challenges*, Embassy of Sweden in China, Beijing

Yin, R. K (1994), *Case Study Research: Design and Methods*, Thousand Oaks, CA: Sage Publications

Electronic sources

Ahlbom and von Schultz (2008), *Olika vägval i Mittens Rike*, Ny Teknik [online] <http://www.nyteknik.se/nyheter/automation/article249163.ece> [Accessed 2 May 2013]

Benesch Attorneys at Law (2012), *Transportation & Logistics Under China's 12th Five-Year Plan*, [online] <http://www.beneschlaw.com/Transportation--Logistics-Under-Chinas-12th-Five-Year-Plan-01-17-2012/> [Accessed 15 March 2013]

Congressional-Executive Commission on China (2011), *Human Rights and Rule of Law – News and Analysis*. [online] <http://www.cecc.gov/pages/virtualAcad/index.phpd?showsingel=172436> [Accessed 12 February 2013]

- Dongmei and Bates (2012), *Volvo's Street Guide to China*, [online] <http://english.caixin.com/2012-08-13/100423314.html> [Accessed 23 March 2013]
- The Economist (2012), *From brawn to brain*, [online] <http://www.economist.com/node/21549938> [Accessed 6 March 2013]
- European Union (2009), *REGULATION (EC) No 595/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2009*, Official Journal of the European Union [online] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:188:0001:0013:EN:PDF> [Accessed 6 March 2013]
- Global Times (2009), *Volvo to exit JV with China National Heavy-Duty Truck Group*, [online] <http://www.globaltimes.cn/autos/editor-picks/2009-07/450692.html> [Accessed 14 March 2013]
- KPMG (2011), *Competing in the Global Truck Industry – Emerging Markets Spotlight*, [e-journal] <http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/global-truck-industry/Documents/global-truck-industry.pdf> [Accessed 30 April 2013]
- Link and Kurlantzick (2009), *China's Modern Authoritarianism*, Wall Street Journal [online] <http://online.wsj.com/article/SB124319304482150525.html> [Accessed 2 March 2013]
- Ministry of Environmental Protection (2012), *关于实施国家第四阶段重型车用汽油发动机与汽车排放标准的公告* [online] http://www.mep.gov.cn/gkml/hbb/bgg/201207/t20120731_234136.htm [Accessed 8 May 2013]
- Ministry of Environmental Protection (2013), *Speech by MEP Minister Zhou Shengxian at 2013 National Work Meeting on Environmental Protection* [online] http://english.mep.gov.cn/Ministers/Speeches/201303/t20130320_249648.htm [Accessed 3 April 2013]
- Scania (2012), *Historia*, [online] <http://www.scania.se/om-scania/historia/> [Accessed 25 February 2013]
- Scania (2013a), *The history of Scania*, [online] <http://www.scania.com/scania-group/history-of-scania/> [Accessed 25 February 2013]
- Scania (2013b), *Scania Annual Report 2012*
- Ollevik (2009), “Ta lärdom av lastbilshaveriet”, Svenska Dagbladet [online] http://www.svd.se/naringsliv/ta-lardom-av-lastbilshaveriet_3728513.svd [Accessed 11 May 2013]

Thomson Reuters (2012), *Top 100 Global Innovators*, [online]
<http://top100innovators.com/> [Accessed 18 January 2013]

Volvo Group (2013a), *Volvo to become world's largest heavy-duty truck manufacturer following strategic alliance with Chinese company Dongfeng Motor Group*, [online] http://www.volvogroup.com/group/global/en-gb/newsmedia/pressreleases/_layouts/CWP.Internet.VolvoCom/NewsItem.aspx?News.ItemId=137906&News.Language=en-gb [Accessed 2 March 2013]

Volvo Group (2013b), *Volvo Trucks in China*, [online]
http://www.volvogroup.com/group/global/en-gb/productsandservices/customercases/vtc_china/Pages/vtc_in_china.aspx
[Accessed 8 March 2013]

Volvo Group (2013c), *Focus Dongfeng - Strategic alliance with Chinese company Dongfeng Motor Group* [online]
<http://www3.volvo.com/investors/finrep/ar12/eng/focusdongfeng/introduction.html> [Accessed 23 March 2013]

Volvo Trucks, *Decades of Driving Process* [online]
<http://www.volvotrucks.com/trucks/global/en-gb/aboutus/history/Pages/history.aspx> [Accessed 8 March 2013]

Ying and Bi (2013), *Volvo to Invest in Truck Venture With China's Dongfeng Motor*, [online] <http://www.bloomberg.com/news/2013-01-26/volvo-to-invest-in-truck-making-venture-with-china-s-dongfeng.html> [Accessed 23 March 2013]

Interviews

Alsén, Björn, expert, 2013-04-08

Cecutti, Roberto, Delegation of the European Union to China, 2013-03-05

Harborn, Mats Scania, 2013-03-04

Hultgren, Mathias, Embassy of Sweden in Beijing/Ministry of Foreign Affairs of Sweden, 2013-03-06

Movander, Joacim, Ericsson, 2013-03-06

Olsson, Henrik, Volvo Group, 2013-04-05

Appendix 1 – Description of interviewees

Mats Harborn, Scania

Executive Director of Scania China Strategic Office and previous Chairman of the Swedish Chamber of Commerce in China

Henrik Olsson, Volvo Group

Global IP Director of the Volvo Group

Roberto Cecutti, Delegation of the European Union to China

First Secretary at the Trade and Investment Section at the Delegation of the European Union to China

Mathias Hultgren, Embassy of Sweden in Beijing/Foreign Ministry of Sweden

Second Secretary at the Embassy of Sweden in China

Björn Alsén, expert

Björn Alsén is Managing Director and Founder of Time Zone, a company consisting of advisors to high tech industries. He possesses a vast knowledge of the Chinese truck market after consulting for a company in the industry

Appendix 2 – Vocabulary list

CCP Chinese Communist Party

Chaoxue (抄学) Chinese concept of learning where the student copies the master until he learns to perform the act as well as the master. It implies lack of knowing the function behind the act, but merely go through the motions. Until one understands the function, one can never become better than the master

EUCCC The European Union Chamber of Commerce in China

FDI Foreign Direct Investment: Direct investment into business or production in a foreign country

FYP Five Year Plan. Every five years the Chinese government reveals its Five Year Plan, FYP, with goals and targets for the next five years for the country. The current plan is the 12th plan and thus named the “12th Five Year Plan” (hereby after referred to as 12th FYP or FYP). The 12th FYP covers the period between 2010 and 2015 and key concepts are sustainable growth and environmental protection and with a focus on domestic consumption

Guanxi (关系) Interpersonal relationships’ influence on decisions, common in Chinese society and business

Indigenous innovation Innovation by the means of only local resources; domestic innovation by Chinese individuals/enterprises/organisations

IP Intellectual Property. Includes copyright, patents, trademarks etc. In this thesis mostly used in a wider sense including company specific know how

IPR Intellectual Property Rights

JV Joint venture

MOFCOM The Chinese Ministry of Commerce, responsible for foreign trade policy as well as export/import regulations and the regulations of foreign direct investment

NPC National People’s Congress, the highest organ of state power in China, parliament with close to 3000 members

PRC People’s Republic of China

RMB Renminbi, the local Chinese currency. Internationally it is traded under the acronym CNY

Second-generation innovation The act of improving an already existing product or service or further developing existing technologies

Tonne-kilometre Unit of measurement of transport efficiency representing the freight of one tonne of goods for one kilometre

Triad The developed truck markets, defined as North America ex Mexico, Western Europe and Japan

In this thesis the terms “IP” and “IPR” include all company specific knowledge, even resources that are not specifically protected under IP legislation but that are of importance for the companies.

Appendix 3 – Interview questionnaire

Frågor företagsintervjuer Beijing

ETABLERING/FÖRETAG

Berätta fritt om företags etablering i Kina!

När och varför samt hur in på marknaden?

Storlek?

Verksamheter i Kina?

Finns produktutveckling i Kina - Varför/varför inte?

Såg inträdesstrategin annorlunda ut i Kina jämfört med andra marknader?

Hur ser samarbeten med kinesiska bolag ut? Ägarstruktur?

Hur starkt är företags varumärke på den kinesiska marknaden?

Hur viktigt är Kina för företaget, storlek i relation till global försäljning?

Hur har den kinesiska marknaden förändrats sedan företags inträde?

IP: SKYDD OCH INTRÅNG

Är ni rädda för IP-stöld?

Finns det några Kina-specifika problem gällande kunskapsöverföring, IPR?

Problem som man själva upplevt?

Hur avhjälpas de? Är processerna annorlunda än i andra länder?

Hur jobbar man för att motverka problem som dessa?

Finns det siffror med intrång per år? Vad kostar det er?

Hur kan man skydda sig mer än rena patentansökningar?

Hur pass stor inverkan hade risken att bli av med IP på valet av inträdesstrategi?

FRAMTID

Vad ligger bakom mind-setet att inte respektera IP i Kina?

Är det något som förändras?

Hur ser utvecklingen av marknaden ut?

Största hoten för företaget på marknaden?