

# FDI in western China

A study of the factors behind location choices of Nordic companies

**Bachelor thesis in Development Economies (15 credits)** 

**Department: Department of Economics** 

Authors: Marcus Gyllestål and Daniel Ekström

**Supervisor: Prof. Arne Bigsten** 

August 22, 2013

# Acknowledgements

First we would like to thank the Elof Hansson Fund. Without the financial support from the fund we never could have realized this paper.

A special thanks to our supervisor Prof. Arne Bigsten who gave important advice and helped us to come in contact with the Embassy in Beijing. We would also like to express our gratitude to everybody at the Department of Economics at the School of Business Economics and Law at the University of Gothenburg.

The internship at the Office of Science and Innovation at the Embassy in Beijing gave great experience and contributed with important contacts to our research. We are very grateful to Christer Ljungvall, PhD and Ulf Andreasson, PhD who several times pointed us in the right direction and shared their experiences.

Finally we would like to tank every one of our respondents. Thank you for taking the time to answer our questions and give us your perspective, it has been crucial for this paper.

感谢

Göteborg 20/8 2013

Daniel Ekström

Marcus Gyllestål

# **Abstract**

Title: FDI in western China - A study of the factors behind location choices of Nordic companies

Authors: Marcus Gyllestål and Daniel Ekström

Supervisor: Prof. Arne Bigsten

**Department:** Department of Economics

**Pages:** 51

**Background and problems:** The extraordinary growth in China the last four decades has created large inequality within the country. Perhaps the most obvious is that between the developed coastal regions and the inland. To boost the economic development in the hinterland the Western Development Strategy was initiated in year 2000. In recent years the affected area has had the highest growth levels in all of China. At the same time more and more international companies is looking to invest in the area.

**Aim and Purpose:** The aim of the study is to examine what effects the Western Development Strategy has had on investments in western China and how Nordic companies are acting in this environment.

**Method and data collection:** The information was gathered in several ways. A quantitative study was done using data from the National Bureau of Statistics of China. Further information on the situation and decisions of Nordic companies active in the Western regions was gathered through interviews. Thirdly interviews were also held with organisations that were working with companies that are planning, or have invested in Western China.

**Result and Conclusion**: In the data analysis we find that the WDS has had an effect on the FDI inflow to western China. It is hard to draw any clear conclusions form the interviews on the effect of the WDS. The gross regional product is found has a positive effect on investments, suggesting that the local markets are important to investors and are becoming increasingly important to MNE's. We find that wage has a negative effect on investments. Infrastructure and education level are not found to have any effect on the localization on FDI.

We find that local markets are driving factor for the investments among Nordic companies. For the manufacturing companies also agglomeration was an important factor. Nordic companies are generally engaged in more advanced industries why wage is a less important factor. Most of the present companies are large which we suggest might be the result of corruption and the strong role played by government.

**Keywords:** China, Western Development Strategy, Foreign Direct Investment, Localization, Policy, Nordic companies

# **Abbreviations**

BDS - Balanced Development Strategy CDS – Coordinated Development Strategy CIT- Corporate Income Tax CJV – Contractual Joint Venture EJV – Equity Joint Venture ETDZ - Economic and Technology Development Zones FDI – Foreign Direct Investments FE - Fixed Effect GDP – Gross Domestic Product GRP – Gross Regional Product MNE – Multi National Enterprises **NBS - National Bureau of Statistics** OECD – Organization for Economic Corporation and Development OLS - Optimal Least Square PRC - Peoples Republic of China SME – Small and Medium sized Enterprises SEZ – Special Economic Zone **UDS – Unbalanced Development Strategy** WDS -Western Development Strategy

WOFE - Wholly Owned Foreign Enterprise

WTO – World Trade Organization

# Table of Contents

1. Introduction	6
1.1 Aim	6
1.2 Research Questions	6
2 Background	7
2.1 Economic Reforms	7
2.1 Reforms and inward FDI development	9
2.2 Previous policies and the lag of the west	9
2.3 Western Development Strategy	10
3 Theoretical framework	12
3.1 Foreign Direct Investment (FDI)	12
3.1.3 FDI and growth in China	13
3.1.4 Effect of policy incentives on FDI	13
3.2 Determinants of localization of FDI	14
3.2.1 Localization of FDI	14
3.2.2 Agglomeration economies	14
3.2.3 Wages	16
3.2.4 Taxes	16
3.2.5 Human Capital and FDI	16
3.2.6 Geography and infrastructure	17
3.2.7 Special Economic Zones and policy incentives	17
3.2.8 Cultural and spatial proximity	17
4.2.7 Government and corruption	18
4 Methodology and Data Collection	19
4.1 The Methodology of the Study	19
4.2 The Quantitative data	19
4.3 The Qualitative part of the Study	19
4.5 The selection process	20
4.6 Presentation of the interviewed companies	20
4.7 Presentation of the interviewed government bodies and other a	ctors21
4.9 Discussion of methodology	21

5 Interviews with investors	23
5.1 Results from interviews with companies	23
5.1.1 Local Markets - Blue Ocean	23
5.1.2 Agglomeration economies	24
5.1.3 Infrastructure	25
5.1.4 Taxes	26
5.1.5 Government and Institutions	27
5.1.6 Corruption	27
5.1.7 Wages	28
5.1.8 Human Capital	29
5.2 Results from interviews with organizations	29
5.2.1 Business Sweden	29
5.2.2 Invest Chengdu	30
5.2.3 Business Horsens / VIA University	30
6 The Data	31
7 The model	35
8 Results	37
8.1 OLS regression	37
8.2 Fixed effect regression	38
9 Analysis of the results	40
9.1 Wages	40
9.2 Human Capital	40
9.3 Agglomeration	41
9.4 Infrastructure	42
9.5 Markets	43
9.6 Policy Variable for WDS area	43
10 Concluding remarks	44
Appendix 1 – Descriptive statistics	49
Appendix 2 – Respondents	50

# 1. Introduction

China's economy has experienced unusually high growth the past four decades. Few or even no comparable examples are present in world history. At the same time as millions of people have been lifted out of poverty and enormous wealth has been created, the high growth has also lead to huge inequality within the country. While the wealth has increased dramatically in the gigantic cities of eastern China the countryside has largely remained unchanged. This development is the result of the growth policies adopted ever since the opening up in 1978. However in the past fifteen years several initiatives have been taken to direct growth to previously undeveloped areas. The most noticeable of these policies is the Western Development Strategy (WDS), a plan for development of the western regions of China. The strategy includes several features such as preferential policies and investments in infrastructure. Thousands of kilometers of road and railway have been constructed during the last decade. The WDS focuses particularly on attracting FDI to the region and to the industrial zones that has been created in the larger cities.

At a first glance, the strategy seems to have paid off. The inward FDI to the Chongqing province has grown by 58 percent annually since 2000, compared to 24 percent in Shanghai province (National Bureau of Statistics), and it has been a similar development throughout the rest of the western region. Is the increased investments the result of government policies or is other factors driving the development? Previous research has suggested that factors such as GDP, wage levels, agglomeration and infrastructure are important determinants for investment localization. Western China is different from the country's eastern parts in several of these factors. We therefore need to do a more comprehensive study before estimating the effect of the Western Development Strategy.

The move towards western China has been attracting attention also in the Nordic countries. Example of this is the Swedish company Volvo Cars which recently opened up a factory in Chengdu. Several other Nordic companies have also invested in western China in recent years. What makes these companies invest in Chinas hinterland, far away from the business hub of Shanghai and the political capital of Beijing? In this paper we will investigate what factors make Nordic companies locate in Western China, what role they play in the development of the region and how government policies have affected the localization decisions. This is a subject that is not well covered in the literature, but have seen an increasing interest in media lately.

## 1.1 Aim

We want to analyze the inbound FDI to Western China, to find out the reasons behind the increase in investments in the area and the reasons why Nordic companies invest there instead of elsewhere in the country. The question will be addressed through both macro- and microeconomic perspectives.

#### 1.2 Research Questions

Through our study we will try to answer the following three research questions:

- 1. Which factors are the most important for Nordic companies when investing in Western China?
- 2. How are the decisions to locate in Western China linked to geography, policies, costs and economic growth?
- 3. Do policy incentives from the government affect the willingness to invest in Western China?

# 2 Background

The Chinese Civilization dates back more than four thousand years. During its long history the country and the region has experienced times of great wealth and times of misery. Historical heights include the Tang dynasty and Ming dynasty, times when China was the leading economic and cultural power in the world. However, the last centuries, with colonial oppression under western powers and civil war made China weak and the country was outpaced. In October 1949 the People's Republic of China was established. The first decades which followed under communist rule, were strongly affected by unsuccessful industrialization programs as well as political instability. The economic reforms were introduced in 1978, and since then China has grown to become the second largest economy in the world in terms of GDP, surpassing Japan in 2009 (World Bank).

Traditionally western China, is made out of six provinces (Gansu, Guizhou, Qinghai, Shaanxi, Sichuan and Yunnan), three autonomous regions (Ningxia, Tiber and Xinjiang) and one municipality (Chongqing). However the Western Development Strategy that we will examine includes two more provinces, Guangxi and Inner Mongolia. In order to avoid confusion we will refer to the Western Development Strategy area (WDS area) as western China. In figure 1 we see the WDS area in purple.



Figure 1 - Economic Regions of China

#### 2.1 Economic Reforms

The transition of the Chinese economy has been gradual. To protect domestic industries and markets, the opening up towards the rest of the world has been heavily restricted and subject to strong political influence. The central and local governments have been the dominating actor in this. While opening up some industries for new players, others have been heavily restricted. Rodrik (2006)

remarks that the policies used in China resemble those of a country with growth problems rather than the other way around. The focus of the policies toward foreign businesses has changed over time; in the early days the inflow of capital where much needed, while in later years the focus has rather been to adopt technology and management skills from developed nations.

The first step in Chinas opening up was the establishment of four Special Economic Zones. In these zones foreign companies was provided with, Private Property Rights Protection, tax incentives and a different land use policy than for domestic investors. Foreign firms were allowed to engage mainly in processing trade, which means that components are imported, assembled and then products are exported, hence not affecting the local market. This gave producers the benefit of cheap labor. Over time more areas where opened up to foreign investors, and gradually the domestic market opened up to foreign competition.

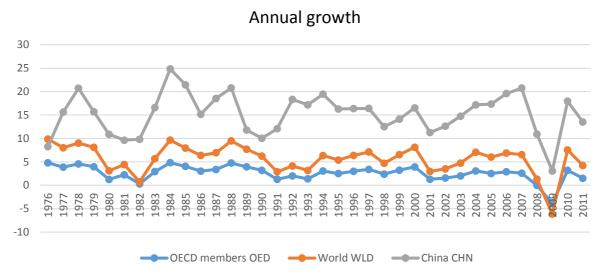


Figure 2 Growth levels for China, OECD-Countries and the World.

As shown in Figure 2 the growth in China has been distinctly higher than for OECD countries, as well as for the world as a whole since the reforms started. For example, between 1980 and 1990 the growth (inflation-adjusted) was 9.5 percent in comparison with the growth for the world at 3.1 percent (Wei 1993). Spurred by the initial achievements of the SEZ program the government began implementing the system in other parts of China as well.

Between 1953 and 1978, China had one of the highest average economic growth rates per year in the developing world (4 percent), but it was the reforms introduced by Deng Xiaopeng that unleashed the potential of China's economy and made the economy grow with over 10 percent on average annually between 1978 and 2011 (Haltmeier 2013). Rawski (1994) acknowledges the transition of the Chinese industry and the improved performance to the gradual transition from planned economy to market economy. He states that the introduction of SEZs should be seen as a step in that direction. The economic reforms introduced by Deng Xiaoping were an attempt to create growth in China. Instead of a long term plan, Rawski describes an improvised ad-hoc strategy.

# 2.2 Reforms and inward FDI development

The development of inward FDI to China can be divided in three phases before the WDS, where the first ranges from 1979 to 1983, the second from 1984 to 1991 and the third from 1992 to 1999. As a first step after the opening up the Chinese government established four SEZs in the coastal regions and the FDI was concentrated to these parts of the country. On average the growth rate of FDI was 55.4 percent annually during this period. Later on the government decided to open up even more parts of the country to the outside world, including Hainan Island and 14 coastal cities. During this period inward FDI continued to grow rapidly and growth averaged at 25.4 percent annually. In the third step the government decided to open up the majority of China to foreign investments. This meant that not only the eastern parts and coastal cities of China were to benefit from enhanced trade with the rest of the world. The average growth rate of FDI increased even further as more and more parts of the country implemented the policies that primarily came with SEZs (OECD 2000). An important event affecting later policies is China's WTO membership in 2001, since the membership strongly have impact on how China treats MNE's.

# 2.3 Previous policies and the lag of the west

Before 2000 mainly three national Chinese policies, dealing with the coordination of growth across China, had an impact on the development in the western regions. From the establishment of the Peoples Republic in 1949 we can talk about a Balanced Development Strategy (BDS). It lasted until 1978 and was aiming to develop all parts of China, and to overcome previous differences in development. As a result the Chinese hinterland on average received 58 % of investments in small and medium size infrastructure projects between 1953 and 1980 (Lu and Deng 2011). However, the view that all of China should develop concurrently changed with the open door policy, this has been referred to as the Unbalanced Development Strategy (UDS). The new policy resulted in rapid growth in the eastern parts of China, but did not contribute to the development of the west.

In response to the gap created between west and east, the policies from 1991 until 2000 tried to develop other areas apart from the few agglomerations along the coast. This strategy is known as the Coordinated Development Strategy (CDS). The strong development of the coastal regions can partly be explained by a more preferential policy environment. Foreign and human capital had flowed in under the UDS furthering the gap. Under the CDS all of China's regions were given equal preferential policies to enhance the flow of foreign and human capital to other parts of China as well. This did not prove to be enough, however. The head start of the east had given them a comparative advantage over the other regions, which could not be offset by restoring equality in policy. When the central and western parts gradually were opened up they could still not compete with the level of infrastructure, technology and human capital, in the east. In some extent the policies was successful, and central parts of China started to grow, but large areas in the west remained unaffected by the newfound wealth (Lu and Deng 2011).

There was and still is a growing concern for vast inequalities within the country, and especially the gap between the rich city population and the poorer rural population. Before the opening up China was poor, but the wealth was evenly distributed. The growth has raised the wealth manifold; however, it has not benefited all parts of the population. Figure 3 shows how the Gini-coefficient has developed over time, and how the gap between rich and poor has grown. An important explanation to the pattern is that there are spatial differences in wealth. As discussed earlier, the coastal regions

have been the key player in the rise of China, while the hinterland has largely remained unchanged. Even though the reforms have tried to keep the traditional agricultural sector unaffected.

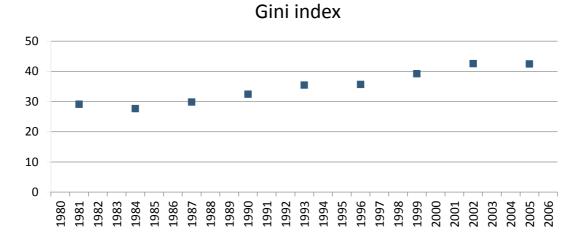


Figure 3 - Gini index for China, Source: World Bank Data

In year 2000 the provinces of the Western region represented 70 percent of the land area, 28 percent of the population but only about 13 percent of the total GDP in China. This was the result of past development policies that had promoted growth along the coast. Therefore the central government launched the Western Development Strategy in 2000, to promote endogenous growth in the west (Lu and Deng 2011).

# 2.3 Western Development Strategy

Like previous programs, the Western Development Strategy (WDS) consists of large public infrastructure projects in the region. The program has included the construction of over 210,000 km roads and 12,600 km highway, to connect the cities in the west with each other and the rest of China (Hongyi 2001). In the same way as was the case when the coastal regions where opened up, policies have been adopted to promote private investment. The government for example promotes investments in strategically important industries by tax breaks and other benefits.

Tax deductions are also one of the most prominent policy incentives under the WDFS. In 2007 China released a new Corporate Income Tax Law (CIT Law) that applies to both foreign and domestic firms. The general tax level was set to be 25 percent (KPMG 2012). The tax law has a special application of Corporate Income Tax that applies to western China. The authorities have used a concept of Encouraged Industries, which is based on the "Catalogue for Guiding Foreign Investment in Industries" (The Catalogue) that is given out by the National Development and Reform Commission and the Ministry of Commerce. It lists industries that are Encouraged, Permitted, Restricted and Prohibited. This list is also used in other circumstances regarding foreign investment in China.

Companies in western China can get reduced CIT rate of 15 present if they meet the requirements. The business must be listed as an encouraged industry in the Catalogue and derive 70 percent or more of its revenue from its main business. These incentives are said to remain valid until the end of year 2020. There are also further tax incentives such as the "2+3 tax holiday" that is applicable to some investments in western China. The tax holiday gives chosen firms two years exemption from CIT and a 50 percent reduction the following three years starting from the first profit making year after the investment, for foreign firms. To qualify for this tax holiday companies must be a newly

established enterprise engaged in transportation, electric power, water conservation, postal services or TV broadcasting in western China and meet certain requirements (KPMG 2012)(Lu and Deng 2011).

# 3 Theoretical framework

# 3.1 Foreign Direct Investment (FDI)

When we analyze capital and movement of capital, the origin of the capital is of interest. In the traditional Solow-model the capital stock is generated through investments, which in a closed economy comes from savings. In the last decades the national capital markets has grown closer together, and this concept is no longer entirely true. The savings of others can finance investments in one country; we therefore tend to divide capital dependent on its origin.

Foreign investors choose different strategies to invest abroad. There is a difference between Foreign Direct Investments (FDI) and portfolio investments. Portfolio investments are a passive investment in a security in another country. FDI however is an active investment, where the investor has managerial control over the investments. FDI is generally thought of as a subsidiary of a firm (a factory or a R&D facility) in another country. Although the concept is quite clear, there are several attempts to a more formal definition of the phenomenon. OECD defines FDI as:

"Foreign direct investment (FDI) is the category of international investment that reflects the objective of a resident entity in one economy to obtain a lasting interest in an enterprise resident in another economy."

There are even more ambitious attempts to define FDI. In IMF's *Balance of Payments Manual (BPM5)* FDI is defined as:

"A category of international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in an enterprise resident in another economy (the direct investment enterprise). The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise, and a significant degree of influence by the investor on the management of the enterprise. A direct investment relationship is established when the direct investor has acquired 10 percent or more of the ordinary shares or voting power of an enterprise abroad."

This definition does include the general 10% rule, which is an attempt to set a limit that allows for investments to be classified as FDI or not. This is necessary to do in any statistical analysis involving FDI. According to this definition a managerial influenced is reached as early as with 10% of the capital. This does also mean that several foreign investors can have stakes in the same companies without their investments being considered as direct, as long as no one holds a share larger than 10%.

In China foreign direct investments consists of three types of enterprises, Equity Joint Venture (EJV), Contractually Joint Venture (CJV), and Wholly Owned Foreign Enterprises (WOFE). Over time the popularity of different types of enterprises has varied, directly after the opening up many investors saw an advantage of having a local partner when setting up a business and Joint ventures was more common. Today WOFE is by far the most common with over 80% of newly established businesses. The second most popular is EJV that in 2012 represented around 18% of new foreign invested enterprises (China Statistical Yearbook 2012).

# 3.1.3 FDI and growth in China

Looking back on the past decades of growth in China, it is clear that the inflow of FDI has played an important role. The government has successfully directed investments in a way that has boosted the overall investments at the same time as important management skills as well as technology has been transferred to domestic firms. One example of how this works is the car industry. The car industry is classified as a restricted industry in the list over encouraged industries. One of the restrictions states that FDI in automotive industry only can be achieved through Joint Ventures. In this way Chinese companies can learn from foreign companies.

Studies on FDI in China have found strong evidence for the important role of FDI in the "growth miracle". Poncet and Madariaga (2007) investigate the impact of FDI on Chinese cities and find that a 7 percent increase in FDI would lead to a 4 percent increase in real income and lead to a 4 percent increase in FDI in surrounding municipalities. This is proof of the idea that FDI creates spill-overs to the local Chinese economy. Similarly Zhang (2006) used cross sectional data to examine the importance of FDI in China's growth. He identifies significant differences in both growth and FDI stock between the costal and the inland regions. Between 1992 and 2004 the coastal regions had a growth rate that was 2 to 4 percent higher than that of the inland regions. At the same time the vast majority (87 percent) of inward FDI went to the eastern coast.

Gilboy (2004) argues that the astonishing growth of China heavily depends on FDI and that the country would be worse off without it. This view is being somewhat contradicted by Shang, Poon and Yue (2012) as they point out that even if Chinas economic growth might to a large extent have been driven by FDI in the past, this has not been the case for the last ten years. They further point out that the objective of the Chinese government has changed when it comes to policies and nowadays they try to spur the domestic industry and innovation by other means than FDI, such as policy incentives and government transfers. An example of this is how the government is working to increase the R&D spending to the OECD average of 2.5 percent in 2020, up from 0.6 percent 1996.

Several strategies have aimed on developing the Chinese hinterland in the last decades and the results has varied. The government has put massive amounts in large infrastructure projects but in many cases has the results been weak. Shanzi Ke (2010) found that even though big amounts had been invested in western China, these have not resulted in endogenous growth. There was also a major difference between FDI and domestic capital. FDI investments were much more productive than domestic investments.

#### 3.1.4 Effect of policy incentives on FDI

FDI has become increasingly interesting for governments around the world in their effort to achieve growth. In a more and more globalized world, FDI is widely associated as having many positive effects on growth including agglomeration of capital as well as technology and management transfers. In the light of this countries have introduce policy incentives in order to attract foreign investments. Common policy incentives include so-called tax holiday and direct financial subsidies, such as favorable loans (Blomström and Kokko 2003). Besides giving tax holidays to foreign companies, the Chinese government is also giving financial subsidies through institutions such as the powerful China Development Bank. According to Blomström and Kokko (2003) the difference between the two subsidies are that they play dissimilar roles in influencing the investor's localization

decision. The financial subsidy is mostly influencing the decision where to locate, whilst tax holidays can affect the company's operations for a number of years.

Wren and Jones (2011) state that the result of grants and support to attract FDI are ambiguous. In their research they found that grants that were given in order to attract FDI in the United Kingdom did indeed increase the probability to locate in the area where they were given the grant. This view is shared by (Head, Ries and Swenson 1999) who looked at Japanese investments in USA. They found that government support in form of tax deduction, job creation subsidies and offered foreign trade zones, saw significant increases in investment overall, but that the effect was partly offset when other states introduced the same programs, and thus a geographical pattern of investment could not be seen. They also found that a state that had endogenous agglomeration effects would benefit from the effects of government support even if other states would introduce the same support.

#### 3.2 Determinants of localization of FDI

#### 3.2.1 Localization of FDI

The localization of FDI is a result of profit maximisation from multinational enterprises. Previous studies discuss several aspects of why companies choose to engage in FDI and how they locate their investments. In an early work Hymer (1960) discusses the causes that makes foreign companies choose to do directed investments instead of other forms of internationalisation such as export or licensing. He argues that there must exist a certain firm specific ownership advantage that makes international companies engage in FDI; this could include patents, techniques or economics of scale. Later works have focused on identifying this owner specific advantage. The OLI-paradigm (Ownership, Location and Internalization) also known as the eclectic-paradigm was first presented by Dunning (1980) as an attempt to describe the conditions necessary for a MNE to engage in FDI. According to Dunning, a profit maximizing company will only engage in FDI when all three conditions are satisfied.

Ownership-, localization- and internalization advantages translate into a number of actual circumstances. What is important might be very different between companies. The localization advantages is probably not the same between companies producing goods that are meant to be exported and companies that are selling to the domestic market. An investor who is going to sell the products abroad would most likely want to have cheap and reliable transports, along with low costs of the goods or services produced, whereas the investor directing at the domestic market is more interested in the demand on the local market. In the last decade the motives behind investments in China has changed dramatically and today the main reason is market access (European Chamber of Commerce in China 2013). An implication of this could be that the localization advantages today are more about the local market rather than access to deep water harbours.

As there are many different factors that could possibly affect the localization choice of an investor, we will in the next sections discuss some of the most important determinants.

#### 3.2.2 Agglomeration economies

Agglomeration economies accrue to companies when they benefit from being close to other companies in related industries by having productivity gains and getting lower costs of production. Through the years much research has been devoted to understand the benefits that agglomeration gives. Already in 1920, Marshall suggested that companies could benefit from agglomeration

economies if they are located in areas where there is much similar activity. These benefits could be access to skilled labour, specialized suppliers and spillovers from other businesses. In more recent literature, agglomeration has also been emphasized to be the main factor behind the so-called self-perpetuating growth, also called the natural growth phenomenon.

More recent studies have found that agglomeration has a strong impact on the location of FDI. Foreign companies who want to invest are likely to seek the benefits that agglomeration economies can give them. One of the largest benefits from agglomeration for an investor is the access they get to a pool of skilled workers. Alcacér and Chung (2009) argue that commodities and materials in general travel longer distances than what workers commute, and thus is much more mobile, giving less incentives to locate close to suppliers and more to locate in proximity to where good supply of labor is found. They also say that "skilled workers for any given industry will likely be located in only a few locations, and labor markets across locations may be less efficient if people hesitate to relocate".

Audretsch and Feldman (1996) argue that there is evidence that companies form clusters if they have a need for what they call 'new economic knowledge'. They define this as companies that demand highly skilled labour. These companies conduct much R&D and therefore are dependent on scientists, laboratories and research universities. This kind of incentive for companies normally is positive for already developed areas as they usually already have a supply of the factor that these firms demand. This might therefore be a problem for the development of the west, since the traditional clusters has been along the coast and it might also explain why the west experienced less growth even when the both parts of the country had the same policy environment.

Krugman (1990) identifies three reasons that by previous research have been established concerning agglomeration as a determinant of localization and more specifically on localization of manufacturing. The first is that a concentration of firms in one location allows the companies to access a pooled market of workers with industry specific skills, something Marshall concluded decades before. This secures the company against having labour shortage. Secondly, localized companies may help and support input goods, which are non-tradables. Thirdly, spillovers of information may enhance the companies' probability of improving productivity. Krugman also states that if holding everything else equal preferred site of localization is the one, which have access to a large market and a large demand for products, as transportation costs then are lower.

Although, most research suggests that firms and investors are attracted to agglomerate, there are also contrary views. In a much quoted paper by Myles Shaver and Flyer (2000) findings are put forward which shows that firms with the best technologies, human capital, suppliers and so on, will not have the incentives to agglomerate as they lose competitiveness in spillovers. The opposite goes for companies, which are "weak", and thus will be more inclined to agglomerate.

An important part in attracting investments and to achieve endogenous growth in western China is to create industry clusters. Cities are creating industry zones targeted on specific industries. A good example of the determination to attract investments, is Chongqing's plan of using 1,5 trillion yuan during a three-year period to build up "7 hundred-billion class industrial clusters with total industrial output value of over RMB 3 trillion" (Chongqing Municipal Government).

# 3.2.3 Wages

Arguably, wages will play an important role when deciding where to invest. This is a view shared by economists such as Cheng and Kwan (2000), who found in their research that 1 percent higher wage, would lead to a half percent decrease in FDI. In another paper Couglin, Terza and Arromdee (1991) argue that there is indeed a wage effect on FDI. They also found that higher unemployment rate had a positive effect on investment levels, due to better supply of labour. This is probably also correlated with wages, as higher unemployment rates mostly leads to a downward pressure on wages and thus lower production costs. Couglin and Segev (1999) share this view on wages, and in a paper on China they found that wages affects foreign direct investment negatively. Research both from China and other areas have shown quite a high effect on FDI overall, leading to the conclusion that wages are an important factor in the localization decision. However Ljungwall and Linde-Rahr (2005) does not find that labour costs have any significant effect on FDI inflow.

#### 3.2.4 Taxes

It is not a radical statement to suggest that tax levels is most likely affecting the localization choices of foreign investors. Lesser taxes mean lesser costs and thus more profit for the investor. However, if higher taxes would mean for example better infrastructure and higher levels of human capital, it might be the opposite.

Cheng and Kwan (2000) finds that tax is an important factor and so does also Coughlin, Terza and Arromdee (1991) in their research on FDI in the US. Tax levels might not be the most important factor for all investors and looking too much at taxes might be wrong as some firms (i.e. producing for the local market), will be less inclined to care about taxes. Generally higher tax levels are deterring FDI, whereas lower tax levels are attracting FDI. In China taxes might thus be a weapon for local governments in the fight to bring FDI to their area.

The magnitude of tax effects on FDI has been debated, most literature on the subject has taken the stand that the effect vary largely depending on which type of activity that is being subject to taxation and which type of tax (Blonigen 2005). In a study by OECD (2007) that analysed the findings of available empirical studies suggests that 1 percent higher tax would lead to a 3.72 percent decrease in FDI.

# 3.2.5 Human Capital and FDI

When foreign firms invest abroad, finding labor with the right skills is important. The demand for labor is affected by the characteristics of the company's operations. A high-tech company will require more specific skills from their workers compared with a garment producer. Broadman and Sun (1997) use adult illiteracy to measure human capital and find that it has a significant effect on inward FDI. In China Noorbaksh (2001) finds that that human capital is not only statistically significant determinant, it is one of the most important factors and it is becoming an increasingly important factor for FDI.

Cheng and Kwan (2000) uses measures on education level of the population from censuses as a proxy for human capital. They find that education as a proxy for the quality labour does not have any statistically significant effect on inward FDI. The same result was first found by Cheng and Zhao (1995). Ljungwall and Linde-Rahr (2005) use a similar approach in a study on how environmental

policies affect FDI. They reach a similar conclusion and cannot find any effect from human capital on FDI. These results go against the findings of Noorbaksh (2001).

### 3.2.6 Geography and infrastructure

In China the richest cities are located along the coast, and one of the reasons behind this is that their location eases transportation, as transport of goods is easier on sea than over mountains. In most of the area that is under Western Development Strategy, there is no presence of sea or waterways in the vicinity. To compensate for this shortage will be important if the inland provinces shall succeed with their growth strategy.

Mellinger, Sachs and Gallup (2000) states that access to waterways is very important for economic growth. This paper was cited by Weil (2013), who also adds that ocean transport as being the cheapest way to transport goods, both in 18<sup>th</sup> century and nowadays. The access to the ocean and to the world markets might be one explanation to why western China has lagged behind the coastal parts. It might be the case that this offsets other advantages of the west. Looking at the importance of infrastructure in China, scholars have used roads and highways as a proxy variable. Some studies show a positive effect of infrastructure on FDI in China (Cheng and Kwan 2000, Ljungwall Linde-Rahr 2005). These results are expected and are in accordance with the OLI paradigm. However Coughlin and Segev (1999) do not find any significant effects of highways on FDI inflow in China.

# 3.2.7 Special Economic Zones and policy incentives

China has used Special Economic Zones (SEZ) and Economic and Technology Development Zones (ETDZ) to attract investments. A study by Luo, Luo, Brennan and Yiang (2008), found that policy incentives such as ETDZ (Economic and Technology Development Zones) and industrial agglomeration to be the most important factor affecting FDI. They also found that companies tend to choose cities with high wages before low wages as it catered for high quality labor, which is a contradiction to other literature on the subject. Previous analyses have included a dummy variable for the provinces that got the first SEZ. These municipalities have had an astonishing growth even by Chinese standards over the past four decades. Cheng and Kwan (2000) find that SEZ has a positive effect on FDI inflow, which is in accordance to our expectations.

Similarly Wei (1993), states that SEZ has been a key component in attracting investments. The author adds that a main goal of setting up such zones is to foster so called agglomeration economies in these areas, by building clusters and attracting advanced technology facilities. A development of the SEZ is the industrial parks that now can be found in all Chinese provinces. Wang (2012) analyses the effects the construction of industrial parks have had on local economies. In 2008 there were 295 municipalities with industrial parks. The result of her research shows that municipalities with such industrial parks increased their level of per capita FDI by 21.7 percent alongside a 6.9 percent increase in FDI growth rate. This shows that SEZs and the policies that have been implemented in the wake of the introduction of such zones have had a strong impact on the local economies in China.

#### 3.2.8 Cultural and spatial proximity

Cheng and Zhao (1995) found that spatial proximity to Hong Kong has a strong positive effect on inward FDI. Similarly Du, Lu and Tao (2012) examined how cultural proximity affected FDI in China. They find a clear pattern of increased investments in areas with historical, cultural and spatial proximity. Clear examples of this are Taiwanese investments in Fujian province and investments from

Hong Kong in Guangdong province. This kind of proximity does mainly exist between the coastal regions and the outside world, why it might be an explanation of the lag of the west. However, this correlation is not very clear for investments from the western world, since the relatively difference in distances between provinces is very small.

#### 3.2.9 Government and corruption

An interest for evaluating government infrastructure and corruption has evolved among scholars, companies and policy makers. Habib and Zurawicki (2002) acknowledge the problems that corruption brings when doing business in other countries, which are more corrupt than the home country. It creates bottlenecks, brings uncertainty and comes with higher costs. Corruption creates distortions in the competition between companies, as some may get more preferential treatment than others and access to markets which are profitable. This keeps companies from investing as it can become very costly in the end, and as we have concluded before, companies do not like high costs. In their analysis the authors also found that corruption had significant negative effect on FDI.

Wei (2000) similarly found that corruption has clearly negative effect on FDI. At the same time he also brings up the example of China as a corrupt country but with large inflows of FDI, along with Indonesia. At the same time he found that FDI is negatively affected by taxes, and concludes that together with the corruption results. To illustrate the major negative effect that comes from corruption he compares Singapore and Mexico. He states that if Singapore's level of corruption would increase to that of Mexico, this would have the same effect on the FDI inflow as a 50 percent tax increase. This raises the question on how much FDI China is missing out on due to its high level of corruption.

It is widely argued that, good institutions, fair and stable legislation and governments of high quality are preferable if investing and thus improves economic performance. Globerman (2002) established that the determinants of good government infrastructure and political governance had a positive significant effect on FDI inflow. Especially important for investors was that the government promotes competition and open and transparent legal regimes. Benassy-Quere, Coupet and Mayer (2007) agree that institutions and quality of government substantially affects FDI inflows, since they found that almost all institution-determinants they tested for showed a significant effect on FDI. Especially high levels of bureaucracy and corruption have a significant negative effect on foreign investments. This leads to the conclusion that the quality of government and institutions, along with the level of corruption almost certainly affects the localization decision among the Nordic companies we are investigating.

# 4 Methodology and Data Collection

# 4.1 The Methodology of the Study

The study was performed as a field study in China during an internship at the Swedish Embassy in Beijing, Office of Science and Innovation. The information was gathered in several ways. A quantitative study was done using data from the National Bureau of Statistics of China (NBS). Further information on the situation and decisions of Nordic companies active in the Western regions was gathered through interviews and a survey. Thirdly interviews were also held with organisations that were working with companies that are planning, or have invested in western China. The time period for the study was from early April to late June with the interviews mainly executed from late May to late June. The internship allowed us to easier get in contact with respondents, which made the outcome in terms of number of respondents better, than had been the case otherwise.

### 4.2 The Quantitative data

The data used in the quantitative analysis was obtained from the National Bureau of Statistics, from the bureau directly and from their publication, China Statistical Yearbook. All data are on a provincial level, making it possible to examine the performance of areas under the Western Development Strategy (WDS). The data used is partly presented in the China Statistical Yearbook that is published by the National Bureau of Statistics. However, some key indicators where not presented on a regional level why the data was bought directly from the ministry.

# 4.3 The Qualitative part of the Study

This part of the study is divided in to three sub-parts; seven semi-structured interviews with representatives from companies that has invested in Western China, an online survey that was used in two cases where we did not have the possibility to arrange a meeting with the respondent and five interviews with organisations, companies and government representatives that works with companies that are about to, or already have invested in western China. We sought to have a mix of respondents from both investing companies and other organizations working with the former, to obtain both detailed answers from the investors themselves and more general opinions from the other respondents.

The interviews were executed during a time period of roughly one month. The aim with the interviews was to get a more thorough picture of how and why companies invest in the region and to get the information that is not shown in the data. We also wanted to combine the data collection with interviews in order to make analysis of the collected data easier. We used the method which is called semi-structured interviewing, which means that from a loose structure, in this case our questionnaire, you perform an interview and are able to explore different subjects more thoroughly as the interview form allow more open questions to be asked. It also has the advantage that we could change the order in which you ask questions from time to time and adjust the questions to the situation and the person who is interviewed (Ahrne and Svensson 2011). This is in contrast to the so-called structured interview with standardized questions. The questionnaire we used was originally intended to be used as a traditional survey, and did include all the areas that we were examining.

The interviews were conducted in person in ten cases and over telephone or Skype in two cases. The interviews were in three cases recorded and in the other cases we took notes. The recorded

interviews have been partly transcribed, so that the transcription includes the relevant parts but not nonsense discussions. Similarly the relevant parts of the interviews where we took notes were later written out. The questionnaire that we used included a part about corruption. This is a very sensitive topic in China, so we will not refer to any of the respondents in this section. During the recorded interviews we did also stop the recording during this section. We did this since we believed that the fact that we were recording would affect the answers.

# 4.5 The selection process

The selection of whom to interview was made in accordance with the view of Ahrne and Svensson (2011), which says that the best way to make a selection is by a two-step process where you first pick the organization or company of interest, then pick the individuals within this organization you want to interview. What we did was to first make a list of companies who had invested in western China. When this list was completed we discussed which to contact. At this time we realized that Swedish companies were overrepresented of the roughly 30 Nordic companies which had made investments, and thus we would focus on trying to get a proportional amount of companies from each Nordic country. We focused on companies with large presence and several offices, as these companies clearly prioritized their business in western China. We mainly had contact with the country headquarters since they would know more about the company's strategic decisions, than the local offices.

As a second step we screened persons within the company of interest and these persons were most often high-ranking officials. We aimed at those persons to get a good view of why the company decided to invest in the region and how they eventually executed it. To get hold of these individuals we used as many channels as possible, but mainly through help from persons we met in Beijing, and lists available for us by the Swedish Chamber of Commerce and the Embassy of Sweden.

# 4.6 Presentation of the interviewed companies

Our first interview was held with Pierre Mårtensson, China CEO at the direct retail cosmetics company Oriflame. The company has been rapidly expanding their presence in western China, as a part of their strategy of entering markets early. During the same visit in Shanghai we did also meet with three representatives for the packaging company Tetra Pak, who have a packaging material factory in Hohhot. We did also hold a phone interview with Robert Gustafsson at Finnair who was responsible for the company's expansion in western China. The Finnish airline was the first international airline to start direct intercontinental flights to Chongging.

We held a phone interview with Volvo Car's CEO in China, Lars Danielsson and had the chance to meet Christer Wikström, Manufacturing Engineering Director, who gave us a tour of the Chengdu factory. In Chengdu we also met with the CEO of a property development concept called "Nordic city of living and learning", Prof. Per Jenster. The development project is located in a northern suburb of Chengdu and the complex also host several companies among them the Business Sweden representatives office. At AstraZeneca we met with the China CEO David Snow and the vice president John Xu. AstraZeneca is present all over China and have several offices in the WDS area, why we wanted to interview them.

# 4.7 Presentation of the interviewed government bodies and other actors

Three interviews were conducted with government agencies involved in foreign investments in western China. The Investment Promotion Commission of Chengdu (Invest Chengdu) is a government body of Chengdu Municipality Government with the purpose of "arrange investment promoting work of key industries, projects and districts". We met with Yan Huang, Division Executive who introduced us to the business climate in Chengdu and what the local government did to attract foreign enterprises. The answers from a Chinese government body might not be objective; however we wanted to meet with a government organization in order to see if they have a different opinion from the companies.

The opening up of Business Horsens office is a cooperation between Hedensted Erhverv and Business Horsens and is a result of that Horsens and Chengdu became friendship cities in 2012. The aim is to provide support and help to Danish companies wishing to establish contacts or business in Chengdu. Their representative in Chengdu is Jian Li, who apart from representing Business Horsens also works with attracting Chinese students to VIA University College and to establish cooperation with local universities. The office was opened in the spring of 2013.

Business Sweden is the result of a merger of the Swedish Trade Council and Invest Sweden, founded on January 1, 2013. The organization can be said to be working as consultants, supporting Swedish companies when they are operating abroad. In the spring of 2013 they opened its first office in western China in Chengdu, where they in June 2013 had one employee stationed. We met with two persons from the organization on separate occasions in Beijing and Shanghai, Charlotte Rylme, Area manager for China and Swedish Trade Commissioner and Songhong Li, Project Manager.

Fredrik Ektander is the Chief Representative for SEB in China. We interviewed Fredrik to get information on how FDI is financed in China and in western China, and to get his view of what attracts companies to the Western region.

# 4.9 Discussion of methodology

Early in the process we examined the possibility of conducting a survey among Nordic companies that had invested in western China. Such a study could be customized to fit our research question and would bring data which could make the study more unique and interesting. However, several factors made us change this strategy. The Nordic companies that have invested in the WDS area are few, so few that it would be hard to get quantitative data. This is a problem that also Business Sweden encountered when they were conducting a study on the western Chinese market before opening their representative office. The small sample is a problem because companies are active in a wide range of industries and have very different corporate structure. We also thought the large variations between in size as a problem since collected answers would be strongly affected by how we defined different business units, and how they were weighted against each other.

We were also confronted with the problem of getting respondents. Our first step was to make a list of all Nordic companies present in the area. This proved somewhat difficult, since no institution has a complete list of all present companies. We mainly used information from the Chambers of Commerce of the Nordic countries as well as from the different business councils in order to list as many companies as possible. In total we identified around 90 business units in western China and about 30 companies present. The fact that so few companies where present made us hesitate

whether it was realistic to get enough respondents in order to get a statistically interesting data set. This in combination with the earlier mentioned problems made us change the strategy towards trying to obtain more qualitative data through interviews. This has been an important contribution because it has given us a better picture of the reality that companies faces, and how they think of localization issues.

The aim of this paper is to examine the WDS and this is mainly studied in the econometric analysis. However as we also wanted to look in to the Nordic conditions we decided to also conduct a micro study on a small selection of Nordic companies. This proved to be a good way to put the finding from the regression in perspective, and did also help us to get a better understanding for the actual condition facing companies that do business in western China. One should not take the answer from these few companies as representative for all foreign companies in western China. We do however believe that the micro study contributes to the paper by giving the reader a better understanding for the circumstances and that that the econometrical study and the micro study benefits from each other.

We had our base in Beijing wich gave us many benefits from being close to the Embassy. However this also meant that we were far away from Shanghai and Chengdu which turned out to be the most interesting areas for conducting interviews. Most of the larger Nordic companies have their headquarters in Shanghai, which can be described as the business capital of China. The only interview that was conducted in Beijing was with Fredrik Ektander at SEB.

# 5 Interviews with investors

The roughly 30 Nordic companies present in western China are found in many different industries and the motive behind being present in the area varies largely between companies. It is therefore hard to find any clear pattern of companies that invests in the region. Retail companies like IKEA, H&M and Oriflame is all targeting the market in western China. Similarly large industry logistics and service companies have sales offices in the western region to sell and provide service for their corporate customers. Example of this is ABB and Maersk. Some companies have also invested in factories in the area, the most prominent examples of this is probably Volvo Cars and Tetra Pak. From the list of the companies it is clear that the majority of companies are large, even though a few smaller companies have presence. All of the interviewed companies had made so-called greenfield investments.

# 5.1 Results from interviews with companies

#### 5.1.1 Market access

From four of the respondents, Nordic City of Living and Learning, Finnair, Oriflamme and AstraZeneca, it was clear that the potential market of western China that was the main driving force behind their investments in the region. The reason they explained was that while the market in eastern China was full of both domestic and international competitors, the market in western China was growing at a fast pace, had fewer competitors and was less mature. At Nordic City of Living they referred to a business strategy called 'Blue Ocean', published in 2005 in the book 'Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant' by authors W. Chan Kim and Renée Mauborgne. According to the strategy, firms should instead of outperforming in current markets, seek and create new markets and therefore make competition less relevant. In the Chinese context this means that companies rather focus on the relatively less developed markets in the western regions of China where few competitors are active, rather than trying to compete in the more developed coastal areas, where strong competition and overcapacity in the industry makes profits low. This goes back to the fact that there are great differences within the Chinese markets. A company is not only faced with the question whether or not to enter the Chinese market but also how and where to enter. The respondent who spoke about Blue Oceans was in the process of building a concept city called Nordic City of Living and Learning, in an area outside Chengdu. He described it as a market where you could come up with a strong concept, in this case a city with Nordic living standards, and have an enormous growth in the business. As the wages in Chengdu grew more people could afford a modern apartment. As Nordic City of Living and learning can offer a higher standard of living than most competitors sales grow fast.

Finnair also stated that market motives were behind their decision to open up two new routes to western China (to Xi'an and Chongqing). The route to Chongqing was the first to be opened and there were two main reasons behind the opening of the route. Firstly they would be the first intercontinental airline to establish in Chongqing, avoiding the growing competition on international routes to Chengdu. Secondly, they believe in the western Chinese market and that it has high growth potential. It would be beneficial to have a strong presence in Chongqing when the importance of the city grew. Finnair also stated that they wanted to increase the number flights per week to Beijing and Shanghai, but as the cities respective airports have an under capacity today, the decision to look elsewhere in China was not far away. The trend in the airline business is to look at second tier cities

in China in order to expand business. The market for international flights in western China is growing fast, but is still very fragile. If Finnair could establish a strong position on the west Chinese market, they mean that they have great prospects to have a large market share in the long run.

The story of how Oriflame entered China highlights the importance of choosing the right entry strategy. The company entered the Chinese market late (2004), and had a hard time to compete with the bigger and well-established firms in the first tier cities. They also found it hard to recruit people to become private sales representatives for the company. As a result they decided to change strategy. The current CEO Pierre Mårtensson describes it as "We choose to listen to what Chairman Mao said, first you take the country side and then you go for the big cities". The company started to focus on fourth and fifth tier cities. The new business model quickly paid off and as a result the company has grown on average 55 percent in the last three years.

Astra Zeneca describes how the company is following the development of health infrastructure. The development of modern hospitals means new markets for the company, and in recent years this development has brought the company to expand in western China. The construction of hospital and health infrastructure is something that is largely affected by the development strategies from the central government. Many second tier cities sees the development of modern hospitals and healthcare as important factors in becoming more attractive to investments and businesses. Astra Zeneca is mainly present in the WDS area through sales offices. This development could also be seen as benefits from agglomeration since the companies chose to invest close to their customers. Similarly one could also say that AstraZeneca is dependent on health infrastructure. However the main force behind their decision is the new markets why we say that markets was their main objective.

# 5.1.2 Agglomeration economies

Agglomeration economies are probably the most complex determinant of localization to evaluate after interviewing the companies and organizations. Tetra Pak described both market potential as well as spatial proximity as the most important factors behind their investments in the WDS area. As a system supplier for dairy producers, Tetra Pak works with their costumers both before and after the costumer have set up its plant. The factory in Hohhot produces packages that are delivered to their costumer's plants. There are thus large benefits of being in proximity to the costumers. The so-called 'cow belt' stretches through northern parts of China and through the provinces of Heilongjiang, Inner Mongolia and Xinjiang and is the dairy center in China. There is an obvious reason for producing the dairy product close to the source of the raw milk. After the production it is possible to ship the products to areas where there is a stronger market for dairy products such as the richer southern and eastern parts of the country. This was the most important reason for locating in Hohhot, although other factors might have had a somewhat positive effect on the decision.

Volvo Cars decision to locate in Chengdu was not entirely motivated by benefits from agglomeration economies, but through the whole process it has been a prominent feature. The land on where the new factory has been built was dedicated to Geely, Volvo's owner, at first, but was later assigned to Volvo for an undisclosed, but low cost. The factory is situated in Chengdu Economic and Technological Development Zone where several large vehicle makers are present. The zone is named as a "...hotspot in the Great Western Development of China, enjoys broad development prospect" on Invest Chengdu's official website (Invest Chengdu). Apart from Geely, whose factory is neighboring

Volvo's, companies like Faw-Toyota, Faw-Volkswagen, Sinotruk Wangpai and other prominent vehicle makers have factories and plants in the area. Already in 2008 there were 16 whole-vehicle manufacturing and assembling companies along with 139 parts manufacturers present in the city of Chengdu (European Business Network), a number which most likely will have grown substantially since then. These companies have effectively created an automobile cluster in the city. According to the theory of agglomeration economies, companies who come to a cluster where competitors already have established, have an advantage as they can attract already educated personnel from its competitors. An anecdote from Christer Wikström at the Volvo Cars factory in Chengdu, tells that when they were employing people at an event downtown Chengdu, whole work teams from Faw-Toyota came to the event as they saw Volvo as an attractive employer. This shows the benefits to enter a cluster if you are an attractive company. Volvo along with Sweden overall have a very good reputation in China, or as one of the representatives at Tetra Pak put it "Sweden is what China wants to become one day. A lead example of a middle road between richness and modesty".

Locating in a cluster has several other advantages. The transport network is already in place, which eases the transport of the cars being produced. A network of suppliers has also been built up, enabling access to material and components. But in the case of Volvo, there is also synergy effects with being so close to Geely, its owner. For Volvo as they get access to Geely's network, and for Geely as they get access to Volvo's technology.

Finnair, on the opposite, said that it had both advantages and disadvantages starting up a business where few others had being investing before. The advantage was that they could pick the 'best' employees first, but the disadvantage was still that it was so few people that were interesting to recruit. The supply of people with 'right' education and experience from working in an international company was low, which complicated the task of finding 'right' labor a lot.

#### 5.1.3 Infrastructure

None of the respondent was referring to infrastructure (in terms of roads, railroads and waterways) as the most important factor to their establishment in western China, but it was a general concern when locating to the region. At Volvo Cars they described the infrastructure as good, which was a condition for investing, but this was not something that made Chengdu unique. This is the general picture that we got from companies, that infrastructure was a basic condition for investing in a location. However, when a certain standard was ensured, better infrastructure did not affect the investments anymore. All of the interviewed companies stated that their investments in western China was a part of their expansion on the Chinese market, in contrast to companies making export focused investments. It is possible that companies that are export oriented require a higher level of infrastructure, waterways not the least. Maybe the lack of access to waterways indicates why the presence of such companies seem to be low.

Invest Chengdu stressed the importance of providing good infrastructure for foreign investors, and among major investments that have been made the last decade is the special cargo railway that connects Chengdu and the Polish city of Lodz that was opened in April, 2013. Transporting goods to Europe will take 15 days, and they hope that this will serve as a major attraction for manufacturing companies. A new airport is also planned to be in service by 2018 and serve approximately 80 million passengers a year, the same as the capacity of Beijing Capital International Airport.

Oriflame talked about the infrastructure from a network marketing perspective. Oriflame has outsourced all logistics services to Alibaba, the major Chinese online retail company. The reason behind this decision was the lack of countrywide services; previously they had several contractors across the country. The access to the Alibaba network means that the company can reach more costumers and only have one logistics supplier. This shift has been a good move for Oriflame, and they stated that range of the logistics system is impressive, even though the company's strategy of entering early sometimes pushes the system to the edge. When entering the market of Chinas far north, the company needed to uses special heated railway carriages in order for the products not to freeze during the transport. It was crucial that the products did not get damaged, not only for the customers and sales representatives, but to avoid drawing attention from the authorities. Problems with quality could lead to problems with obtaining licenses and such in the future.

In the case of Finnair the infrastructure in terms of air transports was described as very good. Robert Gustavsson described it as, "The volumes on domestic flights are growing to become one of the highest in the world, but international flights are not there yet". The network from and to the airport in Chongqing was really good and helped Finnair to connect their own flights with a lot of domestic flights, easing the sales of tickets. For a network airline like Finnair, good flight connections to other airports in China are very important.

Telecommunication and internet is an important function in the daily operations of most companies. There are contradictory views on how well it works though. Both Tetra Pak and Oriflame state that they it works fairly well, while Finnair think it works worse than is acceptable. They therefore let the Internet connection go through their system in Finland to assure good access.

# 5.1.4 Taxes

One of the most important findings of the interviews with the different companies is the complexity of taxes. In the review before the construction of the survey and before conducting any interviews we found two general tax cuts that were applicable to companies making FDI in western China. Our hypothesis was that this would have a strong effect on companies, making investments more attractive, as suggested in the literature. However when we talked to companies, we found that the situation was much more complex. The tax rebate was only one of several factors that could be classified as government support policies. Furthermore the actual tax level that companies face is set on an individual basis after negotiations with the local tax office. This meant that there is no certainty that an investment in the western provinces results in lower taxes than what is the case in the east. Sometimes even districts within a city compete with each other by offering better tax deals than the other, in order to get a company to locate in their district.

SEB described how the list of encouraged industries, which determines if a company, can get the preferential tax policies or not, is hard to apply why sometimes the first item of negotiation is whether or not investment is an encouraged industry. Furthermore the local government has lots of power in the process and its own interests; this might create conflicting interests between different levels of government. At Nordic City of Living and Learning we were told that the governments higher up sometimes is pushing local governments to accept investments that for the local government most certainly will mean a large cost. We were given an example of a city government pushing a city district government to give good conditions to a large factory that will benefit the city as a whole. That every decision is up for negotiation is good for some companies but bad for others.

A factory that employs a large proportion of the inhabitants of a city has a good position when negotiating for a new tax agreement. However, a smaller firm might not get the same benefits.

#### 5.1.5 Government and Institutions

There are also several other ways in which companies can be supported in order to promote investments. In the case with Volvo Cars the main reason for the establishment was that their owner Geely already had a factory in Chengdu, which helped them to get cheap land and quickly start the construction of the factory. The local government can also make it easier for companies to access credit from banks and can help give companies cheaper credit. As an investor you will need to see the bigger picture of the support you are getting from the government. In Volvo's case the fact that they quickly could start building the factory in combination with the advantages that the automotive cluster offered where convincing. At the same time you are not free to set up a factory wherever you want, and setting up a car factory in an area that the government has a different strategy for might cause problems. So when the current location gained support from the different government bodies in combination with satisfying infrastructure, an already present owner and cluster advantages, the Chengdu location came out as the best alternative. So far Volvo is satisfied with the location, and sees an even better situation in the future as more and more suppliers locate in the area.

For all companies present in China government relations are very important, the same is the case in western China. All of our responding companies mentioned government relations as an important factor in succeeding in western China. Nordic City of Living and Learning described the Chengdu government as very progressive and business oriented. Volvo Cars, also shared this view, and described the local government as helpful, and willing to get the company to locate in the city. However, several of the respondents are describing it as much easier to get permits and get help from the government if you are a 'large' company. The main reason behind this is that 'large' companies are creating more jobs, increase demand in the local economy and create higher tax revenues. In many cases city governments of western China are much focused on attracting FDI and therefore they are very helpful towards foreign companies. However, to firms investing in China with their origin in more liberal countries, the process still means many permits from several government bodies. The general picture from the interviews is that the governments of western China are as easy to do business with as those in other cities in China.

Invest Chengdu emphasized that the government of Chengdu are working hard to create a good business climate in the city. One example that was told to us was that Chengdu became a National Pilot city for Copyright Protection in 2008 and became the first National Pilot city for IPR in 2007. The government has also tried to ease the application process for starting a new business by putting several of the government functions you need permits from in the same location in what they call the Governmental Service Center. Instead of needing to visit all involved agencies the investor only needs to visit the service center, which speeds up the process considerably.

# 5.1.6 Corruption

In general the level of corruption in western China is not considered worse than in other parts of China. It is a problem when doing business in China overall, however. As good government contacts are crucial to getting permits and access to markets, it is commonly believed that corruption in some way exists in all industries. All our respondents were very clear with that they were avoiding getting involved in any form of corruption. Overall, this is a sensitive subject and it is quite hard to evaluate

the results in this part due to this. However, they were convinced that it existed and that competitors were engaging in corruption of some kind. Therefore they considered corruption to be a problem as they might lose revenue and end up with higher costs.

The largest source of corruption is not always directly linked to the government, however. A common form of corruption is the so-called kickbacks. Kickbacks refer to when employees makes personal profit, usually in the form of a percentage of the deal a company makes. Kickbacks exist on all levels in organizations and are seen as a big problem. An example of a kickback could be a purchasing director asking for a certain amount in order to accept an offer from a supplier. Another example of this kind of corruption is when an employee who is making a standard purchase for the company asks a shop owner to raise the price, and then share the difference between the original price and the new higher price. This raise the expenditures for the company as well as it are costly to prevent such actions from taking place.

# 5.1.7 Wages

From the responses in our interviews and from the online forms the general picture is that there are lower wages in western China. This conforms to the general statistics of the wages across China. However, the picture from the responses is somewhat more diversified. The wages for unqualified labor is generally lower; Finnair estimated them to be 50 - 70 percent lower in western China compared to eastern China. The majority of respondents estimate the wages to be around 70 percent of the levels along the cost. As a result of lack of local labor with specific knowledge and relevant experience, companies were sometimes forced to recruit personnel on a national level, mainly from more developed areas in the east. This caused the wages to increase for theses group of employees. This was the case when both Tetrapak and Volvo set up their factories in western China.

One of the reasons for the lower wages in the west is the lower living costs, according to Invest Chengdu. The respondent goes as far to say that Chengdu has a comparative advantage to Beijing and Shanghai, as the living costs are so much lower. This effects on all levels and is a major reason to why employees are seeking to work in the west. It can also be noted that in Chengdu whose universities educate many in the field of Information Technology are said to not experience a severe 'brain drain' to the cities in Eastern China.

Volvo saw the lower wages as a benefit of being in western China, but they also said that the investment in a factory is very long term. Since the wages in the west in the long run are expected to increase, it would not be smart to build a car factory only because of cheaper labor. Christer Wikström at the Chengdu factory thought that the lower wages affected the design of the factory to become less automated and more labor intensive. He also said that only during his time at the factory in Chengdu, the wages had increased sharply. This in itself is a problem as the turnover is large. Several of the respondents however, saw it as much harder to attract the 'best' people in Shanghai and Beijing, and expressed it, as the labor turnover was much worse in those cities. Some respondents said that while they had to pay really large amounts for the 'best' management in the bigger cities, they had to pay large amounts in western China because of the low supply of good management people.

Lower wages might for some companies be the most important reason behind locating to the WDS area. SEB is describing how companies are locating call centers and IT support functions in western China. One example off this is the telecom company Ericsson that has invested in a global service

center in Xian (Ericsson). According to SEB these companies are choosing these locations because the salaries are low compared to the coastal areas. At the same time the operations are less dependent on spatial proximity, as long as the IT infrastructure is sufficient a costumer will not notice if the support function is located in the same city or on the other side of the globe.

# 5.1.8 Human Capital

Access to qualified labor is varying across western China. While cities like Chengdu, Chongqing and Xi'an have large universities that increase the access to skilled labor, the situation might be worse in smaller cities. The previously mentioned trend with IT support and call centers being located shows that the area can offer educated labor. However, both of the respondents that had invested in factories in the areas expressed a problem finding experienced personnel in areas such as management and production engineering. In order to resolve this, both companies had to turn to other areas in China to recruit personal, which forced them to pay higher wages.

Opposite to what one might think Oriflame finds that it is often harder to recruit relevant people in Shanghai compared to western China. In less developed areas a foreign employers is more attractive to talents, which makes the recruitment easier. There are also less companies competing for talents, which means that it might be easier for companies to recruit and keep talents in the WDS area. In the case of Oriflame they find the loyalty to be higher among educated people in western China compared to other areas. For uneducated labor the situation is the opposite.

# 5.2 Results from interviews with organizations

#### 5.2.1 Business Sweden

Business Sweden has recently opened their first representative office in western China. This was the result of a long period of increased interest from Swedish companies towards the western provinces. Before the establishment a survey of the situation in the western regions was conducted and among international firms with presence in the area. In the report Business Sweden found the main reason for investing in western China is to exploit the local market, this can be seen in figure 4. The location was most often chosen after their own study on appropriate locations for investing. However, the survey conducted was only answered by 11 out of the 45 contacted companies, so the results can hardly be seen as statistically significant, but it can give some indication for the general situation in the area.

# Exploit the local market Use the local resources Look for strategy cooperation Reduce the costs

Reason for investment

Figure 4 - Reason for investment, Source: European Chamber of Commerce

Business Sweden chose to locate in Chengdu. This was the first step for Business Sweden in entering the western Chinese market. So far the office does only have one local employee, but the interest from Swedish companies has turned out to be big according to Business Sweden. They state that the interest for western China is increasing quickly and that it is possible that the operations will be expanded in order to be able to provide more services.

# 5.2.2 Invest Chengdu

Invest Chengdu has representative offices in Beijing, Shanghai and Shenzhen, where the Shenzhen office also covers Hong Kong. Invest Chengdu tries to identify which companies that might be considering making an investment and then help them by showing the possibilities that Chengdu can offer depending on what is relevant for the individual companies. In this process they discuss what support and preferential policies they can get from the government, but also what the government might require in return. As we have presented above Chengdu is working very actively to attract investments. The majority of companies that is considering investing in Chengdu have already invested in eastern China. It is easier for companies that have already experience from China to do a new investment.

# 5.2.3 Business Horsens / VIA University

There is indeed an interest in the region from Danish companies, but there is a long way from being interested to actually take the step of engaging in the local market. Up to now the interest has been quite low. Most companies that show interest for the Chengdu market have a strong niche, such as environmental technology or medical equipment. However this is generally small companies even by Danish standards and become even smaller in a Chinese context. If you are a small company you have a hard time to get noticed both by governments and the market itself. It is also very difficult for a small firm to deal with the authorities, as it is much harder to get around all the bureaucracy and processes with permits compared with larger firms. Despite this hard struggle he said that the response from the Chengdu government of opening up the office had been really good and they were really eager to attract Danish companies.

# 6 The Data

The data used in the empirical analyses is a panel data set for 31 provinces over the period 1997 – 2011. The data includes the four city municipalities Beijing, Shanghai, Tianjin and Chongqing as well as the autonomous regions of Xinjiang, Inner Mongolia, Ningxia, Tibet and Gunagxi. Previous research has not included Tibet autonomous region due to lack of data, but the data availability has become much better in later years so we have chosen to include it in the analyses. We choose to start our time series in 1997, since it is the first year with data for both Chongqing and Sichuan as separate provinces; before 1997 Chongqing was a part of Sichuan. Due to the fact that the cities of Chengdu (Sichuan) and Chongqing are the most developed cities in the WDS area we believed that the alternative to leave out the provinces in order to get a longer time series would affect the result negatively. The data has been obtained from the National Bureau of Statistics and been complemented with data presented in China statistical yearbooks 1998-2012.

Table 1

	1997	1999	2001	2003	2005	2007	2009	2011
Increase in total investment, index year 1997								
North China	100	103.4	116.1	148.3	194.3	279.9	331.8	397.3
North East China	100	108.7	145.7	182.9	207.3	283.1	309.6	384.8
East China	100	101.6	121.2	178.1	262.5	359.8	420.4	525.7
South China	100	99.0	99.1	105.1	130.3	190.3	211.4	218.3
WDS area	100	105.9	112.4	136.5	185.7	273.8	377.0	479.6
Increase in total investment, index year 2000								
North China			105.0	121.0	159.6	235.9	284.1	354.5
North East China			97.5	122.5	138.8	189.6	207.4	257.7
East China			114.5	168.3	248.0	339.9	397.2	496.7
South China			99.6	105.6	130.9	191.1	212.4	219.3
WDS area			104.7	127.1	172.9	254.7	350.9	446.5
Increase in total investment, index year 2005								
North China					100	147.8	178.0	222.2
North East China					100	136.6	149.4	185.7
East China					100	137.1	160.2	200.3
South China					100	146.0	162.2	167.5
WDS area					100	147.3	203.0	258.2

Our dependent variable, annual FDI is defined as investment by foreign funded enterprises, including joint-venture, cooperative, sole (exclusive) investment industrial enterprises and limited liability corporations with foreign funds. All provinces have positive levels of FDI inflow during the entire period, and there is a clear trend of increased investments over the period. In table 1 you can see the development of inward FDI over the studied period; we find that the invested amount has increased almost fivefold in the WDS region from 1997 until today. The development has only been stronger in east China over the period. If we look at the annual growth in total investments which can be found in figure 5 we can see that the increase in eastern China was particularly strong under the first half of

the 00's. Correspondently if we look at the development of FDI in the second half of the same decade, which can be found in table 1, we see that the strongest increase has accrued in the WDS area. In Figure 5 we can also see that the growth in FDI in the WDS area surpassed eastern China in 2005 and that the increase in the area has been the highest for any area in China after 2008. Since the global financial crisis in 2008 the increase of FDI has slowed in all provinces, but in recent years the trend has stabilized.

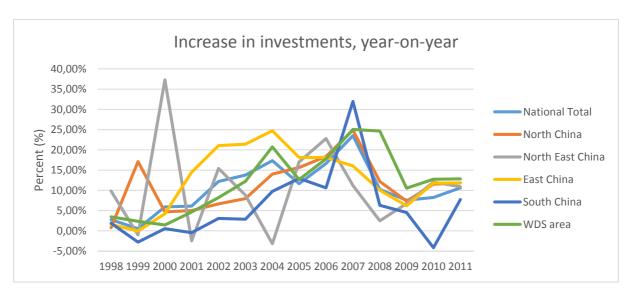


Figure 5 Annual increase of investments Source: National Bureau of Statistics

The share of total FDI that goes to the WDS area is still very small, but has increased over the period, which can be seen in figure 6. The share of FDI to eastern China has increased dramatically and has for the second half of the period constituted 50% of all inward FDI to China. The WDS are has in recent years passed North East China but does still attract less than 10% of total FDI.

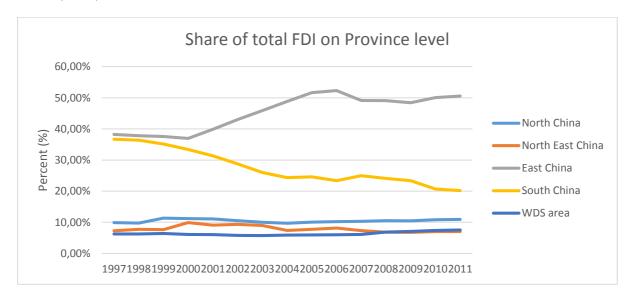


Figure 6 Share of total FDI to geographic areas as percentage of total: National Bureau of Statistics

The Gross Regional Product (GRP) per capita is used as an estimator on the size of local markets. GRP is expected to have a positive impact on FDI inflow, since a high value would imply large potential markets. We use a per capita measure of GRP in order to be able to compare different provinces. We consider the risk for multicollinearity between GRP and FDI to be low. For the entire country FDI as a

percentage of total GDP has been below 4% in recent years. The per capita gross regional product (GRP) has increased significantly for all regions in China over the period. The WDS area was and still is the poorest region in China at the end of the period. In real terms the differences between the states has increased over the period. There has been no change in the rank in per capita GRP between regions over the period, but the relative difference has declined some. In 1997 northern China, the richest area in China had a GRP 2.5 times as high compared with the WDS area. In 2012 the same number was 1.9. Similarly if we only look at the increase over the period we find that the WDS area had the highest increase in GRP. This development has been particularly strong over the last five years, and match well in time with the biggest increase of FDI inflow to the region.

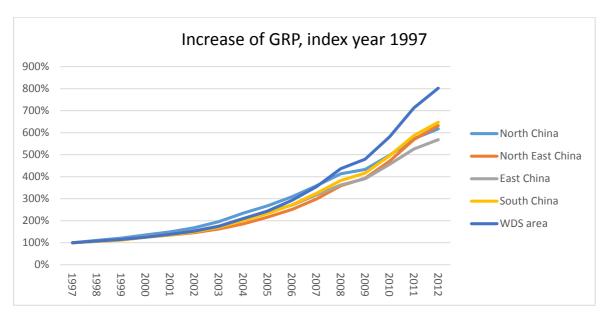


Figure 7 Increase of GRP with index year 1997 Source: National Bureau of Statistics

We control for the difference in human capital by using the fraction of the population with a Senior Secondary/Secondary Technical School education. The measure was not available on an annual basis but was presented as the result from the fifth and sixth national censuses in 2000 and 2010 respectively. We used the values to construct a linear progression over the period. Since the proportion of the total population with a certain degree of education is changing gradually we expect the linear progression to be close to the real values. This had not been possible for a variable that show bigger movement year-on-year like GDP. A similar approach is used by Cheng and Kwan (2001). Over the period we see a large increase for all provinces. As is expected the highest values is found in the city municipalities Beijing, Shanghai and Tianjin, while the lowest values are found in Tibet, Guizhou and Yunnan, all in the WDS area.

We expect that lower wage costs will have a positive effect on inward FDI. We use data from the China Statistical Yearbook on average wage of staff and workers in yuan. The data is not presented under the same name for all yearbooks but was compiled by comparing time series. We control for the level of agglomeration in provinces by the agglomeration variable that measures the proportion of population living in cities. This variable is expected to have a positive effect on FDI as urbanization is associated with several aspects of agglomeration benefits. The data was missing for 1997-2000 and from 2002-2003. To resolve this we used linear regression based on the values of 2001 and 2004 to

estimate values. Similarly as with the education variable this measure changes gradually why we expect the estimated values to be close to the real proportion.

We experiment with two different measures for infrastructure. We use a similar approach as Cheng and Kwan (2000) and Ljungwall Linde-Rahr (2005) when we look at the length of highways and railways separately and divide the length with the area of the province to make the data comparable between provinces. We expect that longer transportation routes adjusted for province area should have a positive effect on FDI inflows. We choose to look at two different measures, since we wanted to see if there was any difference in the results.

Previous research has found that the provinces where the first special economic zones were established have a higher level of FDI. To take this in to account we include the SEZ variable which is a dummy variable for the two provinces of Guangdong, and Fujian. Thus we expect a positive sign for this variable. It has also been found that cultural proximity is an important factor determining localization of FDI, especially for FDI from neighboring countries. However we do not include a variable for this since the most prominent example of provinces with strong cultural ties with neighboring countries are the same provinces that first opened economic zones. Instead we expect this effect to be captured by the SEZ variable.

We use a dummy variable to examine the effect of the Western Development Strategy. The dummy variable measures the effect that is specific to the WDS after a certain point in time. We use two points in time to analyze the effects of WDS on FDI and how this has changed over time. The policy was launched in 2000 and therefore we look at the effect in the area after the initiation (WDS 2000). However, it is likely that the policy did not get implemented directly and that there is a certain lag of the inflow of investments. We therefore introduce a second variable that measures the effect in the area starting five years after the policy was launched (WDS2005). If the policy has had any effect on the inflow to the WDS area we expect a positive and significant result.

# 7 The model

In table 2 you can find a short description on used variables. Descriptive statics for the variables can be found in Appendix 1.

Table 2

1.	FDI	Investments by Foreign funded enterprises in 100 million USD;
		Foreign Funded Enterprises refers to all industrial enterprises
		registered as joint-venture, cooperative, sole (exclusive) investment
		industrial enterprises and limited liability corporations with foreign
		funds
2.	GRP per capita (GRP)	Gross Regional Product (100 million yuan) at current prices
3.	Education (HC)	Proportion of population with a Senior Secondary/Secondary
		Technical School education. We used the observations from the fifth
		(2000) and the sixth (2010) national census to construct a linear
		regression for the period
4.	Wage (LC)	Average wage of staff and workers in yuan
5.	Agglomeration (AGG)	Proportion of population living in cities
6.	Highways (TR)	Length of highways and expressways (km) / province area (km²)
7.	Railways (TR)	Length of railways (km) / province area (km²)
8.	SEZ	Dummy variable for the provinces (Guangdong and Fujian) that first
		was allocated special economic zones
9.	WDS2000 (WDS)	Dummy variable for the WDS area after year 2000
10.	WDS2005 (WDS)	Dummy variable for the WDS area after year 2005
<u> </u>		

In the regressions we have used two different models. The first is the basic Ordinary Least Squares (OLS) model and the second is the fixed effects model (FE). The FE model is an OLS model that includes dummy variables for every group or subject in the data set. This is done in order to create individual intercepts for the groups or subjects. In this case we have data for 31 provinces. The intercept will most likely differ between this groups, as all else equal; the FDI level will be lower respectively higher in some provinces than in others. This is most likely the cause of a lot of factors, that we have not taken account for in our regressions. That is why we end up with different results in the OLS regressions and the fixed effects regression. Why we present both of them in the analysis is to emphasize the fact that the provinces have different starting levels of FDI.

When doing panel data we can choose between two models. Besides the fixed effects (FE) model we can also use the random effects (RE) model. The difference between the two of them is that while the FE model measures the differences in intercepts across groups, the RE model investigates differences in error variances. To choose which model to use, we ran the Hausman test. This tests the null hypothesis that the difference in coefficients in the two models is not systematic. If the null hypothesis is rejected, the estimators created by the RE model is biased, thus the FE model will be

better to use. The result of the test is found in Appendix 1. The test could not be completed for numerical reasons since the test assumes that the standard errors in the FE model are larger than in the RE model, but in our test three of them were not. As the FE model is considered more of a safe choice, we therefore choose to use that one.

What we have described up to now is a one-way FE model, which takes into account the different intercepts between groups. In our data we also have a time variable. Thus we have to correct for if there is a time effect on our results as well. To do this we create dummies with 1997 as the base year. When we have completed these two steps and run our regressions, we have corrected for both differences between time and regions and we have now used a two-way FE model. Below you can see the function of the used model.

$$\log(FDI_{i,t}) = \alpha_{i,t} + \beta_1 GRP_{i,t} + \beta_2 HC_{i,t} + \beta_3 LC_{i,t} + \beta_4 AGG_{i,t} + \beta_5 TR_{i,t} + \delta_1 SEZ + \delta_2 WDS2000_{i,t} + \delta_3 WDS2005_{i,t} + u_{i,t}$$

In our regressions time is not the interesting part as we focus on the differences between the provinces. We therefore include dummy variables for time in both regressions, in order to enlighten the differences in the estimators.

#### 8 Results

The result from the regression analysis is presented in tables 3 and 4. In order to examine how different analysis methods affect our result we present the results from both an OLS regression as well as a fixed effect regression. As is described in the previous section the FE regressions are different from the OLS regressions, since it captures characteristics that is correlated to individual provinces. Both regressions include time dummies why the time trend will not affect the results.

### 8.1 OLS regression

In all regressions the education variable is insignificant. It does carry the expected sign and is close to significant in the fourth equation. The GRP has the expected sign and is strongly significant in all equations. The effect of GRP is both statistically and economically significant; an increase of 10000 in per capita GRP leads to an increase of investments by around 60 percent. Agglomeration also carries the expected sign and is significant or strongly significant for all regressions. The effect is very strong, an increase of the urban population with 10 percentage points leads to an increase of investments by around 20 percent.

Table 3 - OLS

	1	2	3	4	5	6
Constant	4.4649	4.4649	3.8028	3.6958	3.4284	3.3566
	(.2251)	(.2464)	(.2350)	(.2729)	(.2044)	(.2017)
Education			2.0517	4.6703	0.6383	0.6771
			(2.3842)	(2.8570	(2.0255)	(2.0198)
GRP*			0.7360***	1.1590***	0.5640***	0.6050***
			(.1030)	(.1110)	(.0089)	(.0089)
Agglomeration			0.0079**	0.01420***	0.0199***	0.0213***
			(.0038)	(.0045)	(.0034)	(.0034)
Highways			2.2986***		2.0910***	2.3547***
			(.2034)		(.1890)	(.1873)
Railways				-2.6078		
				(5.6709)		
Wages**			-0.1143***	-0.1174***	-0.0988***	-0.1090***
			(.0121)	(.0140)	(.0107)	(.0107)
WDS2000	-2.1776***				-0.1831	
	(.1394)				(.1224)	
WDS2005		-2.1758***				0.2896**
		(.1912)				(.1436)
SEZ					2.0758***	2.1625***
					(.1644)	(.1618)
R <sup>2</sup>	0,42	0,30	0,67	0,57	0,76	0,76

<sup>\*\*</sup>In 10000 yuan \* In 1000 yuan

We try with two different variables for infrastructure, railroads and highways, and find highways to be both significant and have the expected sign, while railroads have neither. We therefore choose to continue with the highway variable as a proxy for infrastructure. The highway variable indicates a strong effect of infrastructure on FDI. To illustrate the effect from infrastructure, a 10 percent increase of the average ratio 0.43 (appendix 1) will result in an increase of total investments by

around 10 percent. Wages has a strong effect and is significant in all regressions. A 1000 dollar increase in wages will lead to a decrease in FDI by around 10 percent in all regressions.

We do not find the expected result of the policy dummy variable. The 2005 variable is significant in both regressions while the 2000 variable only is significant in the first regression. The 2005 variable is significant in both regression but have different signs which might imply some problem with the model or the variable. It is likely that the strong negative effect of the dummy is linked to the fact that the WDS area has had lower levels FDI throughout the period. The SEZ variable is strongly significant in both regressions and implies that provinces that were granted with special economic zones first have twice the FDI of other regions. As we add variables the R<sup>2</sup> increases and in the last equation over three quarters of the variation can be explained through the model.

# 8.2 Fixed effect regression

Similar to the OLS we do not find any relevance of the education variable in any regression with the fixed effects estimators. GRP is strongly significant in all regressions and has a positive effect of between 10 and 15 percent for an increase of 10000 yuan in per capita GRP. This must be said to be economically significant and is according to our expectations. We do not find that agglomeration has any explanatory significance of the FDI inflow. This is different from the results in the OLS regression and suggests that what was suspected to be agglomeration rather was due to differences between provinces.

Table 3 – Fixed Effects

	1	2	3	4	5	6
Constant	4.4649	4.4649	4.5718	4.5466	4.5440	4.559408
	(.0576)	(.0576)	(.3228)	(.3112)	(.3220)	(.3216)
Education			-1.6642	0.1983	-0.5131	-0.5005
			(3.2132)	(3.1981)	(3.2567)	(3.2487)
GRP*			0.1180**	0.1260***	0.1340***	0.1420***
			(.0046)	(.0045)	(.0046)	(.0047)
Agglomeration			0.0002	-0.0002	-0.0018	-0.0026
			(.0081)	(.0081)	(.0082)	(.0082)
Highways			0.0600		0.1088	0.1552
			(.1310)		(.1329)	(.1382)
Railways				-7.9712		
				(7.8347)		
Wages**			-0.0129*	-0.0098	-0.0146**	-0.0154**
			(.0072)	(.0074)	(.0072)	(.0073)
WDS2000	0.0554				0.1500*	
	(.0690)				(.0771)	
WDS2005		0.0310				0.1557**
		(.0612)				(.0748)
SEZ					omitted	omitted
					-	-
R <sup>2</sup>	0,08	0,09	0,15	0,11	0,14	0,17

<sup>\*\*</sup>In 10000 yuan \* In 1000 yuan

Similar to the OLS regression we try two different infrastructure variables. None of them show any significance but the highway variable shows a better performance with a positive sign why we choose to include it in the later equations. The wage variable have a negative effect in all regressions and is significant in the third, fifth and sixth equation. This result conforms to the expected effect. The result is also economically significant as a 1000 yuan increase of average wages will lead to a 1.5 percent decrease of FDI to the region. The SEZ is omitted due to collinearity with the province dummies.

We find a significant effect of the policy dummy for Western Development strategy. The result is significant on the 10 percent level for the 2000 dummy and on a 5 percent level for the 2005 dummy. The result is positive which suggest that the WDS strategy has had a positive effect on FDI levels. The effect is more positive and more significant in later years. The result suggest that the provinces under the Western Development Strategy has had a 16 percent higher increase of investments after 2005 compared with other provinces, which is a relatively large effect. This result is different from the results in the OLS regressions. This is probably because we include individual intercepts.

# 9 Analysis of the results

# 9.1 Wages

Wages in China have increased manifold between 1997 and 2011. In the literature there is strong evidence that wages affect FDI negatively. The result from our regressions suggests that wages have a negative effect on FDI inflow to a province. This conforms to the theoretical framework which means that investors will prefer to invest in areas where they will pay lower salaries, everything else equal. At the average wage level in China of around 20000 yuan (appendix 1) a 5 percent increase of wage will result in a 1.5 percent decrease in FDI inflow. According to our findings a region whose wages are rising fast in absolute values, but low in percentage terms would see a larger decrease in investments compared with a region whose wages are increasing fast in percentage terms but not in absolute terms. An example of this could be Yunnan that starts off from a very much lower level than Beijing. This might imply that provinces in the WDS area will have a comparative advantage in wages for some time ahead. These findings, however, might also be the result of the specifications of the model.

The result from the data analysis is also consistent with the answers in the interviews. Most respondents did not regard wages as the most important factor for investing in western China, but saw it as a clear advantage. These answers might have been affected by the fact that Nordic companies are not representative for all foreign companies investing in western China. In the interviews the general picture given by the respondents was also that wages in western China is lower than in the eastern parts. This would thus lead to an increase in FDI in western China, compared to eastern China. In some cases the wages were told to be over 50 percent lower, but the consensus was that on average wages were about 70 percent of those in eastern China. Our interviews were with companies mainly investing in industries which are not as labor intensive as for example, the garment industry. As the respondents in general said that wages for more qualified labor was often equivalent to the level in eastern China, they might not have the benefits from the lower wage costs in the WDS area.

The conclusion is that wages indeed affect Nordic company's decision to invest in western China, but that the importance of it differs between companies, industries and the kind of investment made. This was surprising as there is strong evidence about the negative impact on FDI in literature and because one of our hypotheses was that this was a driving force behind "moving west".

#### 9.2 Human Capital

We did not find any significant effect of the education variable on the inflow of FDI. This is not what we expected, since several previous papers have found human capital to be an important factor for localization of FDI. Besides not being significant the variable did also have a negative sign in the FE regressions, which further shows that the variable did not have any explanatory value. This result can have several reasons, either human capital does not affect the localization of investments, or secondary school education is a bad proxy variable for human capital. The variable might also suffer from the fact that we did not use annual data but rather a linear projection of values from two censuses.

From the interviews we found that human capital was affecting the investment is some cases, but it was not always the case that firms found it harder to find quality labor in western China. Both Volvo

and Tetrapak expressed little problem to find unqualified labor but had difficulties to find experienced manufacturing engineers. This is very different from the answers that were given by Oriflame that on the opposite found it easier to recruit skilled labor in the WDS area. This highlights how companies might view labor quality very differently. The education level is generally lower in western China compared with eastern China. This does not imply that the labor market is a disadvantage in the eyes of investors. Our findings from the interviews rather suggest that it might be beneficial in some aspects, for example less competition when recruiting talents.

The variable we use is capturing the general difference in education levels in the different provinces, but it is possible that the fraction with senior secondary education is not affecting the investments. It could be the case that other measures such as university education would have given a better result. However, when you look at the result from the interviews it is clear labor quality is a relative factor that is determined by the demand of the companies. As the demand is very different between companies it is hard to find a general measure for human capital. This might explain why we do not find any clear effect of the education variable.

Neither from the data analysis, nor from the interviews can we find any clear effect from human capital on investment decisions. Our main conclusion based on the interviews is that the labor demand is very different between companies. It is therefore hard to find a measure that captures the demand for all companies.

# 9.3 Agglomeration

The regressions give two different results on agglomeration. In the OLS model the variable has the expected positive sign and is significant, but when using the FE model it is not significant at all. The reasons for this is probably that provinces that have a high FDI level from the beginning, such as Beijing and Shanghai, is most likely also the provinces that have reached furthest in their urbanization process. Economic development has often come hand in hand with urbanization, and urbanization as a sort of agglomeration has been found to have a strong positive effect on businesses. When correcting for different intercepts between provinces the variable is no longer significant, showing that it is something province specific and not directly affecting FDI.

Of course, we could have had another result if we had created another variable, such as one with density of firms within the same industry in a certain area, or one measuring the granting of industrial zones over time. The latter might be better to use as this could affect the companies more directly. However, the interviews we held gave us a diverse picture. Some respondents did not care about locating in proximity to other firms within the same industry, suppliers or in a cluster, while there in some cases was more of importance to do so. In the literature strong evidence of an agglomeration effect has been presented for that agglomeration economies have a strong effect on localization choices. However, other research has shown that the attractiveness to locate in an area to benefit from agglomeration economies is more prominent for some companies than for others.

The importance also differs between companies, as some might benefit from clustering, while others will not. From the interviews it seems like it is companies engaged in manufacturing of some kind, that is most attracted by agglomeration. For companies that are selling to a local market locating in proximity to competitors might not be as beneficial, as they might lose more than they gain. They are therefore more likely to go for the Blue Ocean strategy described earlier in this paper. The conclusion

is therefore that there is not clear what effect agglomeration economies have on the localization choices of Nordic companies.

### 9.4 Infrastructure

In the regressions we can see that the two infrastructure variables used are not statistically significant in any of the regressions executed with the FE model. According to these results infrastructure would not have an impact on the decision where to invest. The variable that best correlates with our hypotheses of how infrastructure should behave is the highway variable, which has a positive sign, but is not significant. This might be because it is a blunt measure, which does not completely can describe infrastructure. Including other variables might however be difficult, as most of them are constant over time and specific for provinces, such as access to waterways and proximity to coastlines. Like the SEZ variable such a variable would be omitted in the FE model, since province specific features are included in the intercepts provided by the model.

The results are much corresponding to our results in the interview part. The general view was that infrastructure indeed is a concern when deciding where to invest, but only if whether the infrastructure was of a sufficient standard or not. Beyond this level the companies were indifferent between where to invest. The basic standard of infrastructure needed will be different between companies, as they might use it in different ways. A company which exports most of their products would be more interested in good infrastructure than if the investment is a call-center. As an example, for the IT companies locating to Chengdu the importance of railways is most likely low.

An explanation for why infrastructure does not have an impact in our results may also be that the Chinese government has invested a lot in infrastructure projects in different regions, and thus reducing the difference between provinces. A large part of the initial goals of the WDS was to build railways and roads. Overall the infrastructure in western China was described as good. Especially when it came to air transportation, but also the supply of internet and telecommunications seemed to be of good standard and on level with other parts of China.

In the literature infrastructure is presented as an important variable for attracting FDI in general, and in most papers it has a positive significant effect on FDI. As we have used measures similar to that of Cheng and Kwan (2000) and Ljungwall and Linde-Rahr (2005) among others. These papers also showed a positive effect of infrastructure on FDI. However, Coughlin and Segev (1999) did not found that their "Hiway" variable (total length of paved roadway in a province, divided by its area), had a significant on FDI inflow in China.

The conclusion is that infrastructure is not among the more important factors for Nordic companies to locate in the WDS area. It might be overall, but not specifically to the locations where the interviewed companies have invested. The only objection against this conclusion is that almost all of the Nordic companies that have invested in the WDS area have done it in Chongqing and Chengdu. These are large cities, aspiring to become the new Shanghai and Beijing and have good infrastructure both of them. Chengdu for example opened up a railway line to Lodz in Poland in the spring of 2013. The infrastructure in other provinces might thus prevent companies from investing there, but this we do not know.

#### 9.5 Markets

We find that the per capita gross regional product have a positive effect on FDI stock. The finding is in accordance with our expectations that GRP as a measure for local market size would have positive effect on investments. Similarly we find that several of the interviewed company's mention markets as the main reason behind their investment in western China. All of the companies saw their investments in western China as a step in their expansion on the Chinese market, instead of producing for export. Previously export oriented production have been an important target when investing in China, however this has lost importance in recent year as several foreign companies look at the potential of the Chinese markets. In this development the local market becomes a more important measure for inward FDI. In other words the importance of GRP as an explanatory variable for FDI is increasing when China is becoming an important market rather than only a producer.

When we examined Nordic companies in western China, it was striking that so few were present in the WDS area. Nordic companies in China are almost exclusively present in the most developed coastal regions. It shows which important driver the local market is for localization. This is consistent with our findings in the data analysis about how GRP levels affect FDI. This result is also similar to the findings by Cheng and Kwan (2000), who found a positive impact of average income on FDI.

# 9.6 Policy Variable for WDS area

Both dummy variables are significant and have the expected positive effect. The significance increases for the 2005 variable, which shows that the effects of the policy have become stronger in later years. This is reasonable, since it takes time to implement this kind of policies. The variable shows that the growth in FDI has been larger in the WDS area in later years. The variable does not tell us the reason for this development, however. It is reasonable to believe that the preferential policy environment could be a major reason for the result. This suggests that the efforts from the Chinese government's side have been successful.

The findings correlate with the hypothesis that preferential policy is affecting the localization of FDI. The WDS has meant several preferential policies, including taxes, easier financing and a generally better treatment of foreign firms. Our findings cannot tell which of these effects that has had the largest effect, but suggest that the joint effect has been positive. That the variables did not give any result in the OLS regression might depend on the fact that there is a large difference between provinces that the OLS regression does not take in to account.

The connection between the investment decision and the WDS is somewhat complex to analyze based on the findings from the interviews. When we discussed taxes the general answer was that this was affecting investment decisions. The background research suggests that the tax lever should be lower in western China; however this is something we have not been able to confirm in our interviews. From a firm perspective tax level is something that is negotiated with the local tax office, and is determined based on how well the firms profile fits the strategy of the city. It is still possible that the tax level in western China is lower on an aggregated level, something that we have not analyzed. Thus tax might still be contributing to the high investments in the WDS area.

Something that we could conclude is that the local government in the WDS area is working hard to attract FDI. We did also find that the governments are trying decrease the bureaucracy, and is working actively together with the companies to resolve problems. A good example of this was the

Chengdu "one-stop" initiative to speed up the decision process of the government. A business friendly environment is making the area more attractive for companies as they then can focus on their operations rather that government bureaucracy. From the interviews we find that the business friendly environment and the active work of the local governments to be important factor in the increased investments in the area.

# 10 Concluding remarks

By analyzing the regional distribution of FDI in China we have been able to determine the effect of different factors on FDI. We find that the increase in FDI has been particularly strong in the western regions which suggest that the WDS strategy has been successful. This view is also strengthened by the fact that the effect becomes more significant over time. We find that GRP has a positive effect on investments suggesting that the local markets are important to investors. Compared with previous research we can confirm the picture that business surveys previously have given, that the Chinese market is becoming increasingly important to MNE's in China. Further, we find that wage has a negative effect on foreign investments. Infrastructure and education level are not found to have any effect on the localization on FDI. The different results in the two regressions clearly show how much differences between provinces affect the result.

Nordic companies are found in several different industries, why the answers differ some. The answers in interviews do also suggest local markets to be the main factor for the investments among Nordic companies. For the manufacturing companies agglomeration was also an important factor, which could not be concluded in the regressions. In general the answers from our interviews conform to the findings from the data analysis. The exception is wage which is not found to be as important by Nordic investors as the data analysis suggests. We believe the main reason behind this is that Nordic companies are generally engaged in more advanced industries where wage is a relatively smaller cost. The fact that most present companies are large is consistent with the interview finding that corruption and government relations are affecting the firms. This is because smaller firms have smaller resources to work with government relations and might not be given as preferential treatment as larger firms.

Our findings suggest that the WDS has had effect on the FDI inflow to western China. However it is hard to draw any clear conclusions from the interviews on the effect of the WDS. The interviews suggests that there are a generally business friendly environment in western China and that local governments are working actively to attract investments. At the same time companies does not find that the tax levels are lower in general in the west. It could be hard to find the effects from a large policy like the WDS for individual firms since the strategy might affect indirectly. Therefore the aggregated analysis might give a better result.

### **Reference list**

#### Research, books and papers

Ahrne, G., Ahrne, G. & Svensson, P. (2011). Handbok i kvalitativa metoder. (1. uppl.) Malmö: Liber.

Audretsch, D. B., & Feldman, M. P. (1996). R&D Spillovers and the Geography of Innovation and Production. *American Economic Review*, *86*(3), 630-640.

Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007). Institutional determinants of foreign direct investment. *The World Economy*, *30*(5), 764-782.

Blomstrom, M., & Kokko, A. (2003). The Economics of Foreign Direct Investment Incentives. In H. Herrmann, R. Lipsey (Eds.), *Foreign direct investment in the real and financial sector of industrial countries* (pp. 37-56). Heidelberg and New York:.

Blonigen, B. A. (2005). A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, *33*(4), 383-403.

Broadman, H. G., & Sun, X. (1997). The distribution of foreign direct investment in China. *The World Economy*, 20(3), 339-361.

Cheng, L. K., & Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of international economics*, *51*(2), 379-400.

Cheng, L.K., Zhao, H., 1995. Geographical patterns of foreign direct investment in China: location, factor endowments, and policy incentives, Department of Economics, Hong Kong University of Science and Technology, February.

Coughlin, C. C., Terza, J. V., & Arromdee, V. (1991). State Characteristics and the Location of Foreign Direct Investment within the United States. *Review Of Economics And Statistics*, 73(4), 675-683.

Coughlin, C. C., & Segev, E. (1999). Foreign direct investment in China: a spatial econometric study.

Du, J., Lu, Y., & Tao, Z. (2012). Institutions and FDI Location Choice: The Role of Cultural Distances. *Journal Of Asian Economics*, 23(3), 210-223. doi:http://dx.doi.org.ezproxy.ub.gu.se/10.1016/j.asieco.2010.11.008

Dunning, J. H. (2002). Trade, Location of Economic Activity and the Multinational Enterprise: A Search for an Eclectic Approach. In J. H. Dunning (Ed.), *The selected essays of John H. Dunning. Volume 1. Theories and paradigms of international business activity* (pp. 52-76). Cheltenham, U.K. and Northampton, Mass.:.

European Chamber of Commerce in China. (2013). *European Business in China - Business Confidence Survey* 2013. Retrieved from website: http://www.europeanchamber.com.cn/en/publications-business-confidence-survey

Gilboy, G. J. (2004). The myth behind China's miracle. *Foreign affairs*, 33-48. Globerman, S., & Shapiro, D. (2002). Global foreign direct investment flows: The role of governance infrastructure. *World development*, *30*(11), 1899-1919.

Habib, M., & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of international business studies*, 291-307.

Haltmaier, J. (2013). Challenges for the future of Chinese economic growth.

Head, C., Ries, J. C., & Swenson, D. L. (1999). Attracting Foreign Manufacturing: Investment Promotion and Agglomeration. *Regional Science And Urban Economics*, 29(2), 197-218.

Hongyi, H. L. (2002). China's Western Development Program: Its Rationale, Implementation, and Prospects. *Modern China*, *28*(4), 432-466

Hymer, S. (1976). The international operations of national firms: A study of direct foreign investment. *Cambridge, MA: MIT press. 14*, 139-155.

Ke, S. (2010). Determinants of Economic Growth and Spread-Backwash Effects in Western and Eastern China. *Asian Economic Journal*, 24(2), 179-202.

KPMG. (2012). Investment in the People's Republic of China.

KPMG. (2012). SAT clarifies implementation issues with Corporate Income Tax incentives for China's western regions. *China alert*, 2012(8), 1-5.

Krugman, P. (1990). Increasing returns and economic geography (No. w3275). National Bureau of Economic Research.

Ljungwall, C., & Linde-Rahr, M. (2005). Environmental policy and the location of foreign direct investment in China (No. 22020). East Asian Bureau of Economic Research.

Lu, Z. & Deng, X. (2011) China's Western Development Strategy: Policies, Effects and Prospects. MPRA Paper 35201. University Library of Munich, Germany.

Luo, L., Brennan, L., Liu, C., & Luo, Y. (2008). Factors Influencing FDI Location Choice in China's Inland Areas. *China And World Economy*, *16*(2), 93-108.

Madariaga, N., & Poncet, S. (2007). FDI in Chinese Cities: Spillovers and Impact on Growth. *World Economy*, *30*(5), 837-862.

Mellinger, A. D., Sachs, J. D., & Gallup, J. L. (2000). Climate, Coastal Proximity, and Development. In G. L. Clark, M. P. Feldman, M. S. Gertler (Eds.), *The Oxford handbook of economic geography* (pp. 169-194). New York and Oxford:.

Myles Shaver, J., & Flyer, F. (2000). Agglomeration economies, firm heterogeneity, and foreign direct investment in the United States. *Strategic Management Journal*, *21*(12), 1175-1193.

Noorbakhsh, F., Paloni, A., & Youssef, A. (2001). Human capital and FDI inflows to developing countries: New empirical evidence. *World development*, *29*(9), 1593-1610.

OECD. (2000). Main Determinants and Impacts of Foreign Direct Investment on China's Economy.

OECD. (2007). *Tax effects on foreign direct investment* (No. 17). Retrieved from website: http://www.oecd.org/tax/tax-policy/39866155.pdf

Rawski, T. G. (1994). Chinese Industrial Reform: Accomplishments, Prospects, and Implications. *American Economic Review*, 84(2), 271-275.

Rodrik, D. (2006). What's So Special about China's Exports?. China And World Economy, 14(5), 1-19.

Shang, Q., Poon, J. H., & Yue, Q. (2012). The Role of Regional Knowledge Spillovers on China's Innovation. *China Economic Review*, 23(4), 1164-1175.

Wang, J. (2012). The economic impact of special economic zones: evidence from Chinese municipalities. *Journal of Development Economics*.

Wei, S. (1995). The Open Door Policy and China's Rapid Growth: Evidence from City-Level Data. In T. Ito, A. O. Krueger (Eds.), *Growth theories in light of the East Asian experience* (pp. 73-98). National Bureau of Economic Research-East Asia Seminar on Economics series, vol. 4.

Wei, S. J. (2000). How taxing is corruption on international investors?. *Review of economics and statistics*, 82(1), 1-11.

Weil, D. N. (2013). Economic growth. (3rd ed.). Essex, London: Pearson Education.

Wren, C., & Jones, J. (2009). Grants and the Location of Foreign Direct Investment: Evidence from the UK Regions. In M. A. Farshchi, O. M. Janne, P. McCann (Eds.), *Technological Change and Mature Industrial Regions: Firms, Knowledge and Policy* (pp. 299-320). New Horizons in Regional Science. Cheltenham, U.K. and Northampton, Mass.: Elgar.

Zhang, K. H. (2006). Foreign Direct Investment and Economic Growth in China: A Panel Data Study for 1992-2004. TWO, China and Asian Economies. Beijing, China: University of International Business and Economic (UIBE).

#### **Internet resources**

- Chan Kim, W. & Mauborgne, R. 10 key points about blue ocean strategy. Retrieved from http://www.blueoceanstrategy.com/10-key-points-about-blue-ocean-strategy/
- Invest Chengdu. *Chengdu national economic and technological development zone*. Retrieved from http://www.chengduinvest.gov.cn/EN/htm/detail.asp?id=405
- European Business & Innovation Centre Network. (n.d.). *Guide to invest in the automobile industry of chengdu*. Retrieved from http://www.ebn.be/assets/assets/pdf/events/chengdu automobile industry.pdf
- Ericsson. (2012, October 23). *Global service center in china inaugurated new site in xi'an*. Retrieved from http://www.ericsson.com/news/1651367

Chongqing Municipal Government. (2012, August 24). *Chongqing invests rmb 1.5 trillion to launch three-year promotion plan of industrial economy*.. Retrieved from http://en.cq.gov.cn/ChongqingToday/Headlines/3657.htm

#### Official data

OECD. (2001, September 25). *Foreign direct investment*. Retrieved from http://stats.oecd.org/glossary/detail.asp?ID=1028

World Bank. (2013) *GDP (current US\$)*. Retrieved from http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?order=wbapi\_data\_value\_2012+wbapi\_data\_value-last&sort=desc

China, National Bureau of Statics (1998-2012). China statistical yearbook, 1997 – 2011

# Appendix 1 - Descriptive statistics

Table 1 Descriptive statistics 1997-2012

Variable		Mean	Std. Dev.	Min	Мах	Observations	Expected sign
FDI	overall between within		833.4151 4.133742 -1347.04	2.3882 2950.15 3689.879	5728.508	N = 465 T = 15	J
GRP	overall between within	17320.98	15021.61 6252.4 -10022.15	2250 47963.2 65059.25	85213	N = 465 T = 15	Pos
Education	overall between within	.112757	.0424349 .0303856 .0535109	.0093413 .1897101 .1720031	0.2264593	N = 465 T = 15	Pos
Wage	overall between within	19462.14	12768.67 14698.2 -6257.398	4889 37144.53 60185	77031	N = 465 T = 15	Neg
Agglomeration	overall between within	43.2526	16.54433 21.31266 29.67691	12.85 88.1977 57.68691	92.94	N = 465 T = 15	Pos
Expressways	overall between within	12.02066	17.6187 .0006697 -42.87945	0 64.99474 74.15526	127.1293	N = 465 T = 15	Pos
Highways	overall between within	.4300865	.3699262 .0134224 1999976	.005858 1.253428 1.082652	1.905994	N = 465 T = 15	Pos
Railways	overall between within	.0168265	.0154752 .0001745 .0037066	0 .0695038 .0425843	.0748548	N = 465 T = 15	Pos
SEZ	overall between within	.0645161	.2459347 0 .0645161	0 1 .0645161	1	N = 465 T=15	Pos

# Appendix 2 – Respondents

Organisation	Respondent	Date Pl	Place	Method
Business Sweden	Charlotte Rylme	20-jun Beijing Meeting	eijing	Meeting
Astrazenica	David Snow, John Xu	02-jul Shanghai Meeting	nanghai	Meeting
Oriflame	Pierre Mårtensson	29-maj Shanghai Meeting	nanghai	Meeting
Tetrapak	John Strömblad, Peter Zhang, Shuanghu Zhou	31-maj Shanghai Meeting	nanghai	Meeting
Invest Chengdu	Yan Huang	16-jun Chengdu Meeting	nengdu	Meeting
Volvo Cars	Christer Wikström	18-jun Chengdu Meeting	nengdu	Meeting
Volvo Cars	Lars Danielsson	25-jun		Phone
Nordic City of Living & Learning	PerJenster	18-jun Chegndu Meeting	negndu	Meeting
SEB	Fredrik Ektander	05-jun Beijing Meeting	eijing	Meeting
Business Sweden	Songhong Li	02-jul Shanghai Meeting	nanghai	Meeting
Finnair	Robert Gustafsson	29-maj		Phone
Business Horsens/VIA University College	Jian Li	17-jun Chengdu Meeting	nengdu	Meeting
Leshan Nordic Commercial Consultancy Co. Ltd	Leif Ness	22-maj		Survey
Ruby Rocket Consultancy Co Ltd	Karsten Duch Lynggaard	20-maj		Survey