

A macroeconomic perspective on the rise of second-tier cities in the national and globalizing context of China



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by

Fabien CADEZ

Bachelor Project Advisor:

Dr. Philippe Régnier, HEG Professor

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Haute école de gestion de Genève (HEG-GE)

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Declaration

This Bachelor Project is submitted as part of the final examination requirements of the Geneva School of Business Administration, for obtaining the Bachelor of Science HES-SO in Business Administration, with major in International Management.

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Fabien Cadez

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Executive Summary

Since China's economic reforms in the late 1970s, foreign investments have initially flooded the so-called "first-tier cities" including Shanghai, Beijing, or even Shenzhen or Guangzhou. Due to rising labour costs, growing constraints over natural resources, long-term inflation and environmental issues among others (Zhuang et al. 2012; Zuojun, 2012), they have been undertaking structural economic adjustments in order to shift from a "late-developing advantage" to a "first-mover advantage" model. This requires concentrating resources on modern services industry, strategic emerging industries and entrepreneurship rather than relying on foreign investments for technology, management skills and know-how (Liu, 2015).

This process of economic restructuring and upgrading has initiated industrial relocation into the hinterland. As a consequence, several cities have emerged as new engines of economic growth in the past decade: Many second-tier cities have several millions inhabitants, the most performing achieved above 15% economic growth over the past decade, and many of them have been benefiting from massive public investments and preferential policies in order to accelerate their development path (China Briefing, 2010). Yet, the definition of a second-tier city is highly contextual and rather depends on the geographical scale we look at it. Therefore, this innovative research paper proposes to study the rise of second-tier cities in the national and globalizing context of China. In the national context, we undertake a comparative macroeconomic analysis between first-tier and second-tier cities in order to understand if the general environment is conducive to business investments. In the globalizing context, we focus our attention on the rise of secondary cities in Yangtze River Delta, a large emerging global city-region. More precisely, we study how Shanghai has become an urban vector for FDI into secondary cities, and thus stimulating their economic development by promoting industrial restructuring, upgrading and relocation.

Ultimately, we conclude that the socio-economic development of second-tier cities are led by the first-tier city, which together benefit the overall sustainable development of China. In such a fast-changing and highly competitive business environment, second-tier cities shall be fully integrated to the strategic expansion plan of companies operating in China. Whether to achieve competitiveness and cost optimization to better serve international markets or to increase revenue by supplying goods or services to Chinese consumers, decision makers shall take active anticipation and think ahead, so that the company can stand out in the market very rapidly.

Table of Contents

DECLARATION	I
ACKNOWLEDGEMENTS	II
EXECUTIVE SUMMARY	III
TABLE OF CONTENTS	III
LIST OF TABLES	V
LIST OF FIGURES.....	V
1. INTRODUCTION	1
1.1. BACKGROUND	1
1.2. GENERAL DEFINITION OF SECOND-TIER CITIES	2
1.3. THE ROLE OF SECONDARY CITIES IN THE ECONOMY	4
1.4. THE PERFORMANCES OF SECOND-TIER CITIES.....	5
1.5. OBJECTIVES OF THE STUDY	6
1.6. RESEARCH QUESTIONS & METHODOLOGY	7
2. SECOND-TIER CITIES IN THE NATIONAL CONTEXT OF CHINA.....	9
2.1. DEFINITIONS.....	9
2.1.1. ADMINISTRATIVE DEFINITIONS	9
2.1.2. MARKETING DEFINITIONS.....	11
2.2. COMPARATIVE MACRO-ECONOMIC ANALYSIS BETWEEN FIRST-TIER AND SECOND-TIER CITIES.....	13
2.2.1. INTRODUCTORY REMARKS	13
2.2.2. COMPARATIVE ANALYSIS	14
3. SHANGHAI AS AN URBAN VECTOR FOR FDI INTO SECONDARY CITIES IN THE YANGTZE RIVER DELTA UNDER THE CONTEXT OF GLOBALIZATION	25
3.1. CONCEPTUAL FRAMEWORK & LITERATURE REVIEW	25
3.1.1. FOREIGN DIRECT INVESTMENTS (FDI).....	25
3.1.2. GLOBALIZATION & GLOBAL CITIES	26
3.1.3. GLOBAL AND MEGA CITY-REGION	28
3.1.4. THE YANGTZE RIVER DELTA	32
3.2. HISTORY, ECONOMIC REFORMS AND INTEGRATION OF SHANGHAI IN THE GLOBAL ECONOMY	32
3.2.1. HISTORICAL BACKGROUND OF SHANGHAI AS A WORLD CITY	32
3.2.2. SHANGHAI IN THE BEGINNING OF ECONOMIC REFORMS.....	33
3.2.3. THE WEAKENED STATUS OF SHANGHAI IMPEDES REGIONAL DEVELOPMENT	34
3.2.4. OPENING-UP OF PUDONG, ACCESSION TO THE WORLD TRADE ORGANIZATION AND RESURGING POWER OF SHANGHAI IN THE YRD	36
3.3. MASSIVE INVESTMENTS AND COORDINATION OF THE REGIONAL TRANSPORTATION NETWORK.....	37
3.4. THE ECONOMIC PROCESS OF RISING TERRITORIAL LINKAGES IN THE YANGTZE RIVER DELTA.....	40
3.5. THE RISE OF SHANGHAI AND RESTRUCTURING OF THE INDUSTRIAL TERRITORY.....	43
4. CONTRIBUTION TO THEORETICAL & EMPIRICAL KNOWLEDGE	47
4.1. SECOND-TIER CITIES IN THE NATIONAL CONTEXT OF CHINA.....	47
4.2. SECONDARY CITIES IN THE GLOBALIZING CONTEXT OF CHINA.....	49
5. CONCLUSION	50
BIBLIOGRAPHY AND OTHER REFERENCES.....	51

List of Tables

Table 1: Example of a tier-city system for the province of Jiangsu.....	9
Table 2: Example of administrative tier-city system based on size of cities	10
Table 3: GDP growth for FTC and STC from 2002 to 2007	15
Table 4: GDP growth for FTC and STC from 2008 to 2012	16
Table 5: Average growth in fixed assets investments from 2002 to 2012.....	18
Table 6: Average growth in retail sales from 2002 to 2012	23
Table 7: Sector contribution to GDP in 202, 2007 and 2012	24
Table 8: Empirical evidences of industrial upgrading and restructuring for some cities in the Yangtze River Delta Region in 1996 and 2005	41
Table 9: Sector contribution to GDP for major cities in the YRD	45
Table 10: Key Industries in Shanghai and secondary cities	46

List of Figures

Figure 1: Framework for Defining Systems of Secondary Cities	4
Figure 2: Location of various tier cities according to JLL	12
Figure 3: Total GDP for some FTC and STC from 2002 to 2012	14
Figure 4: Fixed Assets investments for selected cities for 2002-12.....	17
Figure 5: Utilization of FDI from 2002 to 2008 and 2013.....	20
Figure 6: Urban disposable income per capita from 2002 to 2012	21
Figure 7: Retail sales for our selected cities from 2002 to 2012.....	22
Figure 8: The outlook of emerging cities' global influence	28
Figure 9: The location of regional plans in China.....	30
Figure 10: The YRD as a key region for the overall development of China	35
Figure 12: The complete transporation network of the Yangtze River Delta	38
Figure 13: Strength of enterprises linkages in the YRD in 2001 and 2009	42

1. Introduction

1.1. Background

China has been developing at a very strong pace and occurred drastic societal changes in the last decades. Among other facts, the country achieved at least 10% economic growth on average over the past 35 years, more than 680 millions people were lifted out of poverty (The Economist, 2013) and it became the world's largest economy in 2014, outstripping the USA at purchasing power parity (Business Insider, 2014). China's transition from a centrally-planned to a market-oriented economy has caught the attention of economic and business spheres for two main reasons. Firstly, resources availability and low labour wage represented a great opportunity to achieve competitiveness and economy of scale for multinational companies. And secondly, China had a huge potential of becoming the largest consumer market worldwide. Consequently, we understand why entrepreneurs and investors took the risk to put their money into the so-called "first-tier cities" such as Shanghai, Beijing, or even Shenzhen or Guangzhou. Initially, foreign investments have flooded into those areas because they actually benefited from investments preferential policies since the early years of economic reforms.

While the economic growth has mainly benefited to the cities along Coastal China driving huge social and economic inequalities with the other geographic regions, the Chinese government decided to implement a rebalancing policy under the leadership of Jiang Zemin. Back in 1999, they launched the "Go West Policy" to reduce the socio-economic gap between Coastal China and the hinterland. Today, those efforts are coming to climax: The transportation network and public facilities have drastically improved across the country, and hence, the development of new infrastructures are setting the ground for a friendly-investment environment, not only for domestic companies but also for foreign enterprises.

Consequently, several cities have emerged as new engines of economic growth in recent years. In fact, many of them have some millions inhabitants, the most performing achieve over 15% economic growth on average over the past decade, and most of them are now benefiting from investments preferential policies in order to accelerate their development path (China Briefing, 2010). While we tend to call Indonesia and Malaysia the "forgotten countries", secondary cities in China could be nicknamed the "forgotten metropolises" due to the rare coverage in business media.

In such a challenging, fast-changing and highly competitive business environment like China, decisions-makers shall already have a step in the future, because the lack of anticipation and forward thinking can drive a company out of the market very rapidly. Therefore, secondary cities are not an option anymore, but rather a must: Whether it is to achieve competitiveness and cost optimization to better serve international markets or to increase revenue by supplying goods or services to Chinese consumers, second-tier cities shall be fully integrated to the strategic expansion plan of companies operating in China.

1.2. General definition of second-tier cities

Foremost, it is important to say that there is no commonly agreed definition related to the term “second-tier cities”. Here, the challenge is to proceed to a careful selection of relevant studies. Therefore, the general definition is composed of experts from various backgrounds, especially in the fields of urban studies and business consulting.

Initially, the most standardized definition related to “second-tier cities” refers to a classification of cities based on the population size (Davis, 1955). In this regard, a secondary city can be described as an urban settlement from 100'000 to 500'000 inhabitants (UNCHS, 1996). However, we rapidly notice that this definition fails to take into account the complexity of different territorial realities. For example, the above description would not fit on the scale of Switzerland: As the largest city in the country, Zurich barely has more than 390'000 inhabitants whereas Lugano has less than 80'000 urban-dwellers. It could neither be applied to other neighbouring countries such as Germany. For instance, there are approximately 680'000 inhabitants in Frankfurt, which is much more than the definition recommended by the UN-Habitat. Needless to say that this difference of population size can be even greater across continents, and especially with emerging countries in Asia such as China or India, where there can be several millions of inhabitants living in those secondary cities.

Over time, this term has become more complex and some authors and organizations have started to incorporate other economic or social parameters in the definition. This is for example the case of the European Spatial Planning Observation Network (2013), which considers secondary cities in Europe as “those outside the capital city whose economic and social performance is sufficiently important to affect the potential performance of the national economy”. The socio-economic status of Manchester is definitely lower than London, but the city still registers high economic performances, and provides a broad range of social services as well as a sophisticated culture.

We have discussed so far about the meaning of a second-tier city based on a national standpoint. However, does it still make sense to do so in a globalising world? Today, the competition is fierce between modern metropolises to appeal capital, labour and technology (eg: Brenner and Keil, 2006; Sassen, 2001). Accordingly, the process of globalization requires from cities to strengthen their competitiveness and increase their overall attractiveness (eg: Sinkiene and Kromalcas, 2010). From this viewpoint, a second-tier city may have a position according to the global urban hierarchy (Roberts and Hohmann, 2014). For instance, London, Tokyo and New-York are leading metropolitan hub providing with modern financial services, high level of business activities, sophisticated network of infrastructures, cultural appeal as well as engagement for global politics and diplomacy (Wu, 2006; Fridemann, 1995; Sassen, 1991). On the other hand, Shanghai and Mumbai, which are emerging cities with a current secondary order in the world urban hierarchy, may have a huge potential of becoming global first-tier cities.

That being said, governments increasingly endorse regional cooperation among clusters of cities under the globalization process (Xu and Yeh, 2010; Scott, 2001). The city cluster often includes a global (emerging) city, which collaborates with secondary cities from the hinterland. In a case of regional integration, the meaning of a second-tier city can be different again. Let us take a very local example: The canton of Geneva is trying to establish a cross-border conurbation in collaboration with the district of Nyon and French provinces of Ain and Haute-Savoie. On account of its economic, demographic and political predominance in the region, Geneva would certainly play the role of a first-tier city. Aside, Annemasse and Saint-Julien-en-Genevois would potentially undertake the function of some second-tier cities providing cheaper qualified workforce and price competitiveness for real estate, retailers and some lower-added value manufacturing activities, among others. Ultimately, Geneva would focus on advanced producer services and high-end manufacturing activities while downward pressure on wages and outsourcing of low-added value activities would potentially enhance the competitiveness of domestic enterprises on local and international markets. In the end, this would be eventually stimulating economic activities for the whole region. In this context, the role of surrounding cities is enhanced. But in the national context of France, those aforementioned cities are unquestionably considered as low-tier cities, though it may be true for Geneva to be considered as a first-tier city in the context of Switzerland. Therefore, we can draw some preliminary conclusions related to the general meaning of a second-tier city: Firstly, It mainly refers to some demographic, economic and political criteria; secondly, It is fair to say that this term is

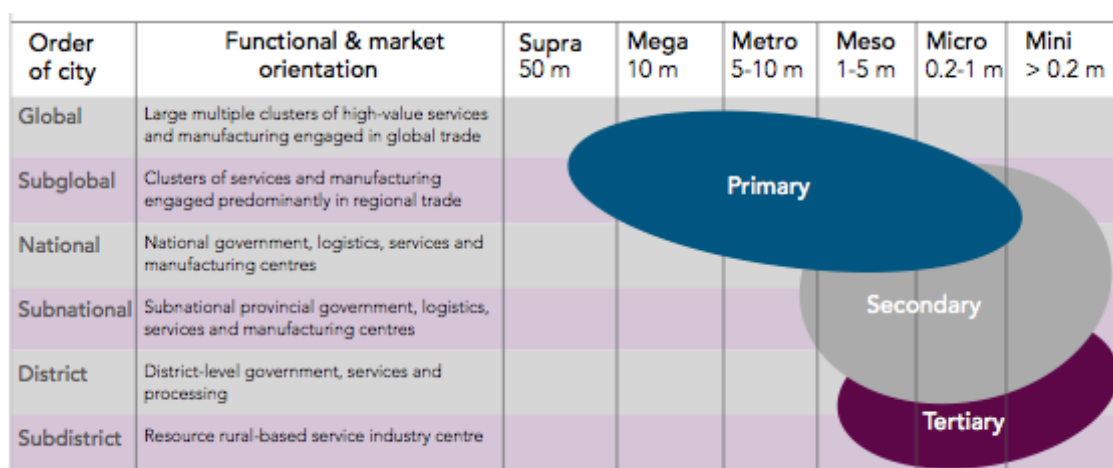
essentially contextual and circumstantial; and thirdly, secondary cities may play a much more prominent role at sub-national or sub-metropolitan region level in the context of globalization.

1.3. The role of secondary cities in the economy

The best way to grasp and delimit the scope of the various tier cities' functioning is based on Roberts' framework (Figure 1). He designed a diagram based on the city order, the function & market orientation as well as the city size. From a personal viewpoint, both overlapping areas mean that the distinction between each city tier is often very complex. Consequently, there are unquestionably some linkages among different tier cities due to this intricate relationship. This relationship will be deepened further during the analysis in chapter 3.

Overall, the purpose of secondary cities in the economy may be highly heterogeneous, depending on countries, political and administrative functions, population size, and position in the global economy. Generally speaking, a second-tier city with a sub-global order will be involved in regional trade through clusters of services and manufacturing activities, while secondary cities with national and sub-national order are more likely to rely on logistics, services and manufacturing centres. Sometimes, they may be also district-level governments engaging in services & processing activities.

Figure 1: Framework for Defining Systems of Secondary Cities



Source: Roberts (2014)

Among others, the role of a secondary city is more likely to vary according to its geographical location or function (Roberts, 2014). In this regard, cities are more likely to be classified according to three different typologies.

The first typology refers to “Subnational Secondary Cities”, which is the most common type. Those are generally constituted of a population over 200'000 people and are more likely to be “subnational administrative capital, transport hub or large manufacturing or natural resource industry centre”, or sometimes important cultural centres. Additionally, they tend to contribute greatly to the economic activities of a country, and sometimes to a larger geographical scale. As such, Roberts gives the examples of Belo Horizonte, Brazil as a major secondary city engaged in export trading of metals and minerals; Bangalore, India as a pillar for Information Technology and Communication (ITC); and Cusco, Peru or Mecca, Saudi Arabia as significant cultural and historical heritages.

This second is associated to “Metropolitan Secondary City”, which is related to the expansion of the urbanization process. In so far as increasing costs impact the competitiveness of the core city, enterprises are inclined to relocate manufacturing activities to the surroundings. As a consequence, this leads to “a process of deindustrialization and decentralization” from the primary city to the periphery. Ultimately, the relocation of low value-added activities and the migration of low-skilled workers foster the development of new urban settlements including economic enterprises zones, business parks, regional shopping facilities and housing.

The third and last typology is called “Corridor Secondary Cities”. The improvement of transportation network across or between countries offers a unique chance to develop new engine of growth. Better accessibility gives an incentive for firms to delocalize their lower value-added activities in order to benefit from cheap labour and be closer to the source of raw materials. Undoubtedly, this is much easier to build new infrastructures to connect remote cities.

1.4. The performances of second-tier cities

First of all, we need to distinguish second-tier cities from developed versus developing countries. In Europe, the majority of countries can be seen as mature economies. Common characteristics for such economy are the following: Diversified economic activities, slow economic growth, advanced level of public infrastructure and a sophisticated consumption market. In that situation, the performance of second-tier cities is important for the corresponding national economy. As a matter of fact, secondary cities can contribute up to 33% of Europe’s total GDP compared to 23% for capital-cities (ESPON, 2013).

In recent times, the economic and financial crisis has led to an economic slowdown all around the world, but especially in European countries, whose recovery is still very slow today. In such a case, second-tier cities can be a source of opportunities to partly overcome the deadlock. In fact, the spread of investments and resources across cities and the decentralization of power and duties can improve cities performance, and thus, the national economy as a whole (ESPON, 2013). As a result, investments in secondary cities could release performance pressure from first-tier cities (being often capital-cities) and redistribute more evenly the economic activity across a country. This could eventually drive sustainable development and reduce regional inequalities.

In the developing countries, the situation is often very different. Indeed, most of second-tier cities are facing many challenges on the road of development, and more particularly in Africa, in the Middle East and in Latin America. Actually, the majority of them can barely rely on an efficient economy and the tax system is often ineffective. Consequently, those cities are not attractive enough to retain capital and investments and the level of unemployment is often high (Roberts and Hohemann, 2014).

Generally speaking, the least performing are metropolitan secondary cities, which are often poorly managed and lack fundamental infrastructures such as proper transportation, appropriate water and electricity facilities, and housing. As a result, this may lead the development of social insecurity. In practice, a lot of slums located in Latin America, and especially in Brazil and in Colombia, are part of this category. Under this configuration, the potential of secondary cities is spoiled, and contrariwise, government and society bear the burden of such uncontrolled urban development.

Nevertheless, some secondary cities provide unique opportunities for economic growth and welfare improvement in developing countries: There is an increasing tendency for governments to foster the development of corridor secondary cities at regional level in order to reinforce economic cooperation and integration (Roberts and Hohemann, 2014). As a result, such region becomes much more competitive in the global economy. For instance, China is now investing much time and money to promote cooperation among cities in order to develop and integrate them into regional economic zones such as the areas of Yangtze River Delta and Pearl River Delta.

1.5. Objectives of the study

For more than a decade, China has offered unique business opportunities, and many foreign enterprises, including Swiss SMEs, have been expanding their activities in this

country. Initially, this study proposes to undertake some research to attain the following objectives:

- Grasp the meaning of “second-tier cities” in China for small and medium enterprises (SME);
- Sensitize such enterprises to the socio-economic emergence and the growing role of second-tier cities in China;
- Understand the complex mechanisms of regional interactions between primary and secondary cities in a context of globalization.

1.6. Research questions & methodology

There are currently a lot of debates about the meaning of second-tier cities. Our preliminary researches have led us to conclude that this definition highly depends on the geographic context of study. Therefore, we divide our research paper into two parts.

The first part of the analysis focus on second-tier cities in the national context of China. As such, we need first to understand what is a second-tier city within the national border, before understanding the growing economic role of second-tier cities in the national economy of China. Ultimately chapter 2 suggests answering to the following questions:

1. What is a second-tier city in the national context of China?
2. What kinds of characteristics distinguish a second-tier city from a first-tier city?
3. Is the macro-economic environment of second-tier cities conducive to business investments?

To answer to those questions, we undertake a macroeconomic analysis of identified second-tier cities in comparison with some first-tier cities. In this regard, we select a random sample of 7 cities, including 2 first-tier cities (Beijing and Guangzhou) and 5 second-tier cities (Chengdu, Chongqing, Changsha, Dalian and Zhengzhou). We proceed in that way because there are at least 20 second-tier cities that would correspond to our synthesis. Otherwise, it would have been impossible to perform a comparative analysis with all of them.

Subsequently, the second part of the analysis pays attention to the economic role of secondary cities in the context of globalization in China. Rather than debating on the meaning, it is much more interesting to understand how globalization effects structure

the industrial territory. As a result, we try to understand how the socio-economic development of a global (emerging) city can stimulate in turn the development of secondary cities¹. To simplify the research, we focus on analysing how Shanghai is used as an urban vector of FDI into secondary cities of the Yangtze River Delta (YRD). We mainly use qualitative and quantitative information from secondary sources. In this regard, we initially construct a conceptual framework about FDI, globalization, global cities and mega-city region before undertaking an historical approach in order to understand the current development of the YRD.

¹ Because the purpose of chapter 3 is not to focus on the definition of a second-tier city in the globalizing context of China, I voluntarily use the term « secondary city ». Aside Shanghai, this implies that cities all have an equal significance regardless of administrative status and economic performances or any other related factors.

2. Second-tier cities in the national context of China

2.1. Definitions

2.1.1. Administrative definitions

The most basic, but official definition yet, could refer to an administrative classification from political authorities. In fact, the territorial organization of China could be divided into administrative functions with typically a four tier-system of cities (China Org, 2014). In such organization, each city is held responsible to report to higher hierarchical level city, except if those benefit from an autonomous or independent status.

In that case, first-tier cities would mainly refer to municipalities and special administrative regions such as Beijing, Shanghai, Tianjin and Chongqing. Second-tier cities could be considered as provincial, sub-provincial or autonomous regional capital cities such as Xi'an, Dalian or Hohhot. Finally, third-tier and forth-tier cities would respectively be constituted of prefectural-level and county-level cities.

Table 1: Example of a tier-city system for the province of Jiangsu

Tier-level	Administrative function	Corresponding city
First-tier	Municipality or special administrative regions	None; the closest city is the municipality of Shanghai
Second-tier	Provincial capital city, sub-provincial or autonomous regions capitals	Nanjing
Third-tier	Prefectural-level cities	Changzhou, Huai'an, Lianyungang, Nantong, Suqian, Suzhou, Taizhou, Wuxi, Xuzhou, Yancheng, Yangzhou, Zhenjiang
Fourth-tier	County-level cities	Changsu, Dafeng, Danyang, Dongtai, Gaoyou, Haimen, Jiangyin, Jingjiang, Jitan, Jurong, Liyang, Kunshan, Pizhou,

Source: Google Map (2015); China Org (2014)

The above administrative organization is closely linked to another official classification based on the size of cities. Given the fact that China is facing new urbanization challenges, the government decided to establish a five-tier cities system to “improve population management and city planning” (China Gov., 2014). Here, first-tier cities are referenced by “super large-sized cities” with a population over 10 millions inhabitants whereas “very large-sized cities” are second-tier cities with a population from 5 to 10 millions. “Large cities” are third-tier cities with a population between 1 and 5 millions, “Medium-sized cities” is regarded as the fourth-tier with a population varying from 500’000 to 1 million inhabitants and under a population of 500’000 inhabitants, fifth-tier cities are considered as “small-sized cities”.

Table 2: Example of administrative tier-city system based on size of cities

Tier-level	Characteristics	Corresponding city
First-tier	Super large-sized; >10 millions people	Shanghai, Beijing, Guangzhou, Shenzhen, Tianjin
Second-tier	Very large-sized cities; between 5 and 10 millions	Wuhan, Dongguan, Chengdu, Chongqing, Nanjing, Xi’an, Shenyang, Hangzhou, Suzhou
Third-tier	Large cities; between 1 and 5 millions	Qingdao, Harbin Jinan, Zhengzhou, Dalian, Kunming, Wuxi, Xiamen, Changchun, Ningbo, Nanning, Taiyuan, Hefei, Changzhou, Tangshan
Fouth-tier	Medium-sized cities; between 500’000 and 1 million	Wuchuan, Feicheng, Xianyang, Linfen, Handan, Henyang, Xinyi, Weihai, Haimen
Fifth-tier	Small-sized cities; <500’000	Lijiang, Altay, Karamay, Lhasa, Tieling, Kashgar, Lishui, Naping, Xuchang

Source: Google Map (2015); China Government (2014)

2.1.2. Marketing definitions

We have to take into consideration that the interests of political figures can be different from those of companies. Therefore, the previous definitions may not be the most appropriate for enterprises looking to expand business activities in China. As a consequence, many unofficial definitions have flourished in recent years to tackle the challenge of business expansion and market segmentation.

When addressing the Chinese market, companies have to take into account that the country is huge and the level of development is often highly heterogeneous from one region to another in terms of purchasing power, brand sensitivity, consumption expenditures, costs of living, and so on. Consequently, it is important for them to internalize those different characteristics before designing a growth strategy for the Chinese market. That is why it is also crucial to look at second tier cities from a business standpoint.

While it is commonly agreed that first-tier cities generally include Beijing, Shanghai, Guangzhou and Shenzhen, the notion of second-tier cities is more ambiguous. In fact, some tend to incorporate population size, infrastructures and economic indicators such as GDP, disposable income and housing sales in order to define second-tier cities (China Briefing, 2010). Some consulting firms can even include more elaborated criteria such factors of employment, quantity and quality of higher education institutions, transportation linkages as well as business orientation of local administration (Wall Street Journal, 2011). In parallel of establishing major industrial, commercial and financial hubs, second-tier cities have benefited from huge investments in public infrastructures and influx of qualified workforce in the past decade, offering premium opportunities for business activities (Wall Street Journal, 2011). In an international comparative perspective, second-tier cities tend to be compared to prominent cities such as Chicago, USA or Bangalore, India and would offer preferential policies for FDI, cheaper labour costs, better environmental conditions and less traffic congestion (China Org, 2007).

Afterwards, we have another definition from All China Market Research (ACMR), which is consulting firm specialized in business intelligence. They have developed an index based on the city consumption power, which includes total urban population, GDP, total consumption, disposable income per capita, savings and other consumer spending indicators. As result, they came up with a five-tier city system, resulting in the

identification of 52 cities by consumption power² (U.S. Department of Commerce, 2013).

Last but not least, we have a similar classification from Jones Lang LaSalle (JLL), which is a company specialized in commercial real estate services and investment management. Back in 2009, they started to launch a yearly series of reports on real estate opportunities in China. The city tier system was based on based on economic, demographic, political and financial factors. Over time, the methodology has evolved and has been improved. Nowadays, they distinguished between three different tiers.

Figure 2: Location of various tier cities according to JLL



Source: Jones Lang LaSalle (2014)

Tier I “Core” cities refer to the most advanced cities such as Beijing, Shanghai, Guangzhou and Shenzhen, where there is high level of modern manufacturing and services activities, including a strong presence of corporate headquarters and advanced financial services, and strong linkages with the global business network. In those cities, the market of real estate may be already maturing or overheating due to speculative investments. Markets being the most liquid and transparent across China, Tier I cities provide fairly secure source of investments for foreign investors.

² The link for the document with the name of second-tier cities is available in the bibliography.

Tier II is divided into two categories such as “Transitional” and “Growth”. The former grouping may include cities such as Chengdu, Chongqing, Shenyang, Tianjin and Hangzhou. Over the past decade, those have received massive policy support from the central government and significant amount of investment in public infrastructure. Consequently, Tier II Transitional cities have succeeded in attracting foreign direct investments (FDI) and developing strong degree of economic activities. On the other hand, Tier II “Growth” cities may consist of Xi’an, Qingdao, Ningbo and Wuxi. Those may be sharing common characteristics with some previous transitional cities. Besides, favourable demographics factors should strongly support the development of retail sales markets and industry diversification in the near future.

Again, JLL characterizes Tier III Cities in two different categories, so-called “Emerging” and “Early adopter” cities. Emerging cities are still lagging behind in terms of economic development, but they are currently in a phase of take-off, which make them particularly attractive for some commercial activities and the real estate market. Some examples include cities such as Kunming, Harbin and Nanning. On the other side, “Early adopter” cities have recently started to establish economic conditions to attract foreign investments. This is the case of Guiyang, Taiyuan and Urumqi. Despite being risky, some foreign companies are looking for the “first-mover” advantage. Figure 2 provides a map with the location of those various tier cities across China.

2.2. Comparative macro-economic analysis between first-tier and second-tier cities

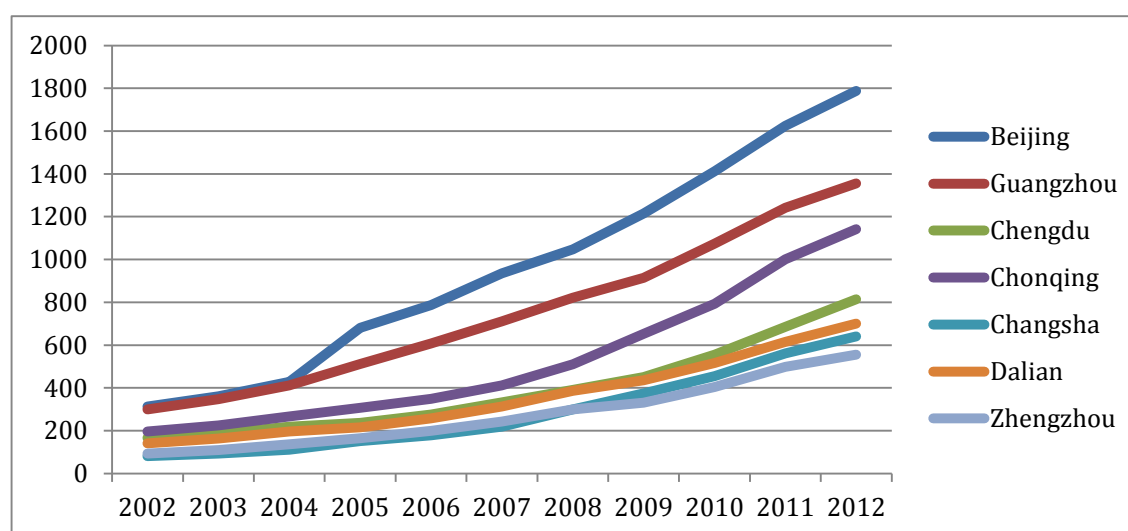
2.2.1. Introductory remarks

Now that we have a common understanding of what is a second-tier city in China from a national perspective, it would be interesting to undertake an economic trend analysis between some first-tier and second-tier cities in order to understand if the business climate is conducive to investments. Before doing so, it is necessary to say that data is not always accurate in China. This is mainly due to the fact that provincial government officials may be subject to political pressure to achieve high economic performances. Thus, statistics are sometimes skewed. Despite the fact that there is still room for improvement, there has been huge progress in recent years to polish the way data is statistically collected and computed. Besides, many credible studies providing analysis and recommendations rely on the statistics from the National Bureau of Statistics of China. As a result, the upcoming comparative analysis is still worth doing it.

2.2.2. Comparative analysis

As per Figure 3, our starting point for this analysis is going to be the nominal GDP in absolute values for our selected first-tier and second-tier cities. Here, I am using the nominal GDP for the sake of simplicity. However, It is true that it would have been more accurate to consider the real GDP: The latter gives a more realistic picture of the economy, given that it take into consideration the inflation rate as well as the currency appreciation (or depreciation). At first sight, we can assert that the boom of the Chinese economy has rather spread out across the whole country. Indeed, we can see that all the cities demonstrated strong momentum from 2002 to 2012.

Figure 3: Total GDP for some FTC and STC from 2002 to 2012 (RMB bio)



Source: National bureau of statistics of China (2002-2012)

Given the fact that Beijing and Guangzhou were some of the first to enjoy the benefits of economic reforms, they naturally had a larger GDP in 2002 with regards to the second-tier cities. For the first two years, both were following the same trajectory. But suddenly, the GDP of Beijing dramatically accelerated from RMB 428 billions in 2004 to RMB 681 billions the year after. In 2012, the total GDP reached RMB 1'788 billions. After 2004, Guangzhou was not able to catch up again, and simply followed a parallel development to that of the national capital city.

Then, the economy of second-tier cities rose gradually from 2002 to 2007. Overall, we notice a much sharper increase after that year, and especially for Chongqing. In fact, we can observe two trends for this city: I) it will considerably reduce the growing gap that occurred with Guangzhou from 2004 to 2009, and II) it will distance itself from other secondary cities. On the other hand, the economic development of Changsha, Chengdu, Dalian and Zhengzhou remained pretty homogenous over the years, but we

notice that the pattern was slowly changing as of 2009.

Nonetheless, we have to be cautious because the graph can be confusing. Indeed, we could believe that the gap between the richest and the poorest city, respectively Beijing and Zhengzhou, would be much lower back in 2002 compared to 2012. But after a quick computation, we note that the ratio for the wealth of Beijing was 3.88 times higher than Zhengzhou in 2002, and reached 3.22 in 2012, which corresponds to a decrease of 17%³.

Before pushing the analysis further, we are going to divide our dataset into two periods: The first period is between 2002 and 2007, and the second is from 2008 to 2012. Table 2.1 and Table 2.2 provide some figures related to the economic growth of our cities for both periods.

Table 3: GDP growth for FTC and STC from 2002 to 2007

	GDP % 02-03	GDP % 03-04	GDP % 04-05	GDP % 05-06	GDP % 06-07	Average 03- 07
<i>China</i>	10.0	10.1	11.3	12.7	14.2	11.7
Beijing	16.7	14.3	41.9	29.5	18.8	24.2
Guangzhou	18.6	15.7	23.8	19.2	17.0	18.9
Changsha	19.7	16.5	29.3	22.7	21.7	22.0
Chengdu	15.6	13.5	12.9	11.4	20.9	14.8
Chongqing	17.6	15.0	15.5	13.4	18.1	15.9
Dalian	19.8	16.5	15.5	13.4	21.8	17.4
Zhengzhou	24.2	19.5	23.0	18.7	23.5	21.8

Source: Computed by Fabien Cadez on year-on-year change based on GDP data provided by China's National bureau of statistics from 2002 to 2007; For China, data provided by the World Bank (2015).

During the first five years, the average economic growth of Beijing and Guangzhou combined impressively reached 21.5%. Although it is still very remarkable, the second-tier cities were still behind and achieved on average 18.4%. Therefore, we can logically deduce that the first-tier cities were not only contributing the most to the national economy, but they were also benefiting from the strongest economic growth. Indeed, if we focus on Beijing alone, we notice that the capital city of China had registered striking performances with an average growth of 24.2%. It even reached a peak of 41.9% growth in 2005 and 29.5% in 2006! Despite Changsha and Zhengzhou being the poorest cities of our sample, we can observe that both recorded very high GDP

³ The computation is the following: wealth of Beijing divided by the wealth of Zhengzhou (2002) = 361/93= 3.88; For 2012 = 1788/555 =3.22. Then, I used a « rule of 3 » to compute the percentage using 3.88 as 100% basis.

growth on average from 2002 to 2007, respectively 22% and 21.8%. This was even better than Guangzhou (18.9%). On the other side Chengdu, Chongqing and Dalian were relatively lagging behind in spite of rapid economic development.

During the second period, we can observe a different pattern: Beijing and Guangzhou were still large contributors to the economy of China, but they were no longer leading the economic growth. As a matter of fact, the average growth reached respectively 13.9% and 13.8% for Beijing and Guangzhou. On the other side, the second-tier cities managed to successfully achieve a combined average of 20.3% GDP growth. In comparison to the years 2002-07, Changsha even recorded a better performance up to 24.1%, Chongqing exceeded the 20% threshold, Chengdu reached 19.7%, and Dalian maintained a pretty constant economic growth of 17.5%. The only exception is Zhengzhou, whose growth decelerated down by 4.3 points.

Table 4: GDP growth for FTC and STC from 2008 to 2012

	GDP % 07-08	GDP % 08-09	GDP % 09-10	GDP % 10-11	GDP % 11-12	Average 08- 12
<i>China</i>	9.6	9.2	10.4	9.3	7.7	9.2
Beijing	12.1	15.9	16.1	15.1	10.0	13.9
Guangzhou	15.6	11.2	17.6	15.6	9.1	13.8
Changsha	37.0	24.8	21.4	23.6	13.9	24.1
Chengdu	17.4	15.4	23.3	23.5	18.7	19.7
Chongqing	23.7	28.1	21.4	26.3	14.0	22.7
Dalian	23.2	12.8	18.6	19.3	13.9	17.5
Zhengzhou	20.8	10.1	22.2	23.2	11.4	17.5

Source: For FTC and STC, computed by the author on year-on-year change based on GDP data provided by China's bureau of statistics from 2008 to 2012; For China, data provided by the World Bank (2013).

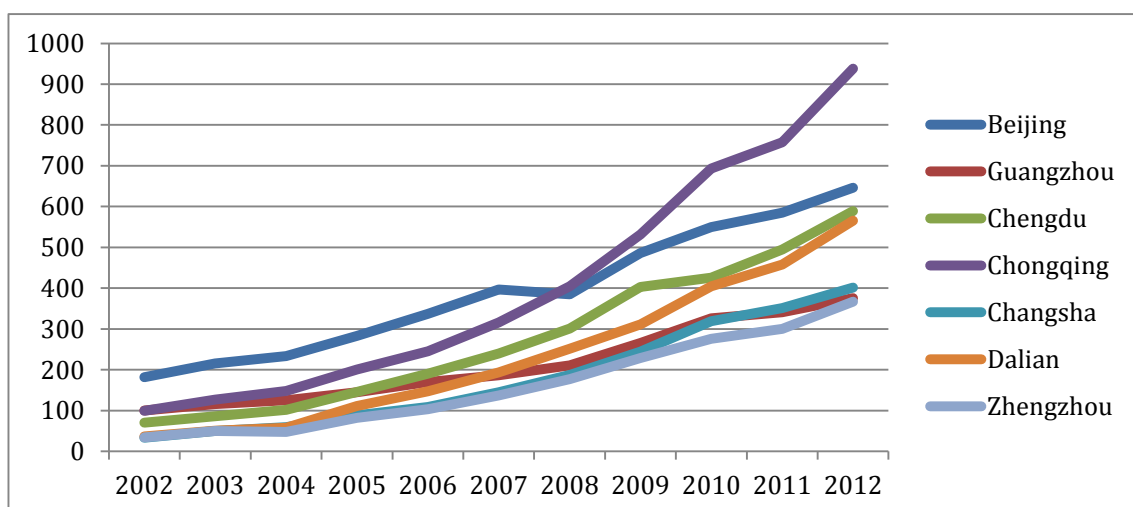
What can eventually explain this changing paradigm? Back in 1999, the central government decided to introduce the “Go West strategy”, in order to reduce the growing gap of wealth between Coastal China and the hinterland. Therefore, one possible argument is that the political priority bound to economic development has shifted from Eastern to Inner China. Accordingly, one important aspect has been to develop the transportation network across the country. In that respect, large public investments have been made to build a modern transportation network, and more specifically, to construct new roads and airports while improving the existing rail network (China Briefing, 2010). Among others, this has included the allocation of financial resources into public facilities such as water resources, energy and telecommunication network. According to China Daily, the government has already

invested 325 billions RMB to develop major infrastructure projects in Western China.

Given that Coastal China is now looking to move up the value chain by producing higher-added value activities, another essential part of this strategy has been to provide incentives for both domestic and foreign enterprises to relocate labour-intensive and natural resources activities from Eastern to Inner China. As a result, the government has promoted investments in some encouraged industries through a broad range of policies such as fiscal deductions or exemptions, land and resources concessions and financial support (HKTDC, 2000). Consequently, both investments in public infrastructure and relocation of business activities are possibly the main factors explaining the accelerating growth of second-tier cities in China as of 2008. Although it is difficult to estimate the correlation between policy effectiveness and economic development without a statistical method, our argument is conceivably confirmed by looking at the investments made in fixed assets, which includes investments in capital construction, innovation, real estates development and other related investments.

As we can see on Figure 4, both first-tier and second-tier cities had a steady growth in fixed assets investments from 2002 to 2006. As of 2007, we notice a drastic acceleration for several second-tier cities, and especially Chongqing. In fact, this city had registered an impressive boost in fixed assets: Over the whole period, the investments went from RMB 99 billions at the beginning of the period to almost RMB 938 billions in 2012, which represents an increase of 1000% in only ten years! Ultimately, the investments made in Chongqing even exceeded those of Beijing as of 2008.

Figure 4: Fixed Assets investments from 2002 to 2012 (RMB bio)



Source: China Briefing (2002-03); China's bureau of statistics (2004-12)

Aside, both Chengdu and Dalian were also gradually catching up with Beijing at the end of 2012. With respect to Changsha and Zhengzhou, the trend had steadily increased from 2002 to 2012. Although investments in fixed assets were relatively lagging behind, investments made in Changsha were higher than Guangzhou as of 2011 and Zhengzhou was almost overtaking in 2012.

From a growth perspective (Table 5), we notice that the expansion of fixed assets investments was overall striking between 2002 and 2007. While Beijing and Guangzhou were respectively around 13.3% and 17% on average, the performances of second-tier cities were varying from 26% to 42%! However, we observe a radical slowdown in the average growth of fixed investments from 2008 to 2012, except for Guangzhou. Actually, this shall not be a surprise if we take into consideration the economic and financial crisis, which partially overlapped this period.

During the global downturn, China launched a huge economic stimulus package of RMB 4 trillions to contain the negative consequences. This amount was mainly invested in transport & power infrastructure, rural village infrastructure, environmental investments, affordable housing, technological innovation & structural adjustment, and health & education (Naughton, 2009). Now, if we acknowledge that the first-tier cities on Coastal China already benefited from advanced infrastructures, there are reasons to believe that the stimulus program was mainly attributed to lower-tier cities in other regions. This may be explaining why the average growth of fixed assets investments was still above 20% for the second-tier cities from 2008 to 2012.

Table 5: Average growth in fixed assets investments from 2002 to 2012

	<i>Average FIA 03-07</i>	<i>Average FIA 08-12</i>	<i>Average FIA 02-12</i>
Beijing	17.0	10.7	13.8
Guangzhou	13.3	15.3	14.3
Changsha	34.7	23.0	24.1
Chengdu	28.1	20.1	25.4
Chongqing	26.2	25.6	28.9
Dalian	41.5	24.1	32.8
Zhengzhou	34.5	22.1	29.0

Source: Computed by the author on y-o-y change based on FIA data provided by China Briefing for 2002-03 and China's bureau of statistics from 2004 to 2012.

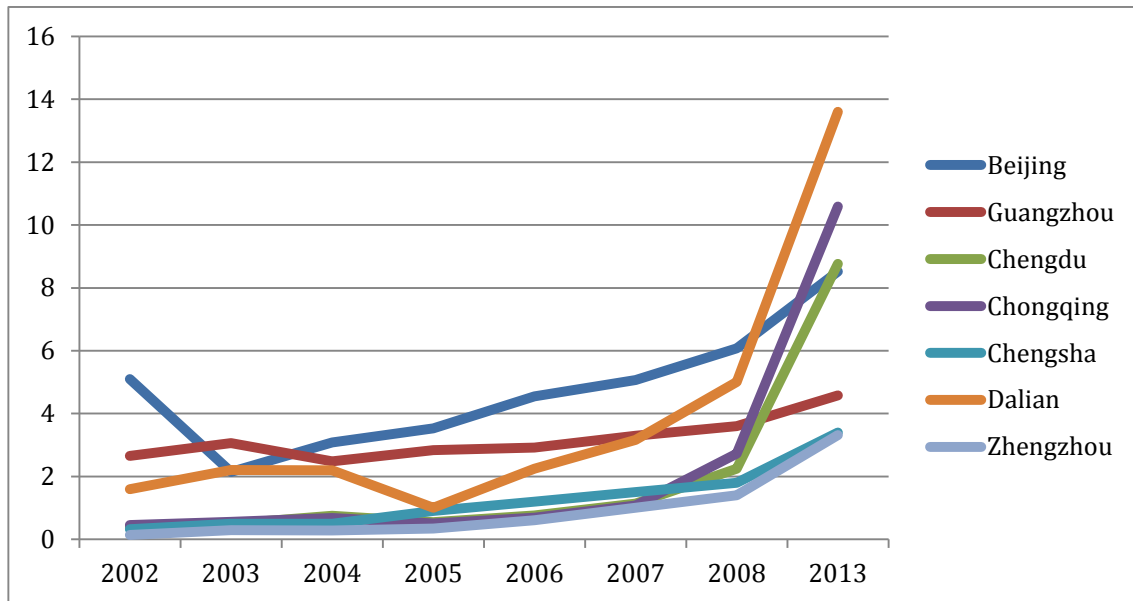
Although the share of FDI as percentage of total investments in fixed assets has seriously declined from 9% in 1996 to approximately 3.5% on average in the 2000s, statistics demonstrate that FDI inflows contributed to 33% of manufacturing

employment and almost 60% share of total exports by the end of 2008 (Chen, 2011). Therefore, it is worth spending some time on this aspect. Figure 5 provides the utilization of FDI from 2002 to 2008. Unfortunately, data was not available from 2009 to 2012, but it was still possible to obtain the figures for 2013.

The utilization of FDI in first-tier cities is somewhat ambiguous from 2002 to 2008. The utilized FDI fell sharply for Beijing from US\$ 5.1 billions to 2.15 billions between 2002 and 2003 but started again to rise progressively from 2004 before reaching US\$ 8.5 billions at the end of 2013. In parallel, Guangzhou had fluctuated around US\$ 3 billions and only used US\$4.6 billions in 2013. In the second-tier cities, the utilization of FDI had been pretty constant from 2002 to 2008. The only outlier is Dalian, whose data was overall closer to our first-tier cities and had experienced much more fluctuations. But we have to keep in mind that Dalian became a Special Economic Zone (SEZ) in 1984, and therefore, benefited earlier from favourable treatments and policies related to FDI. While the curves had remained quiet homogenous until 2008, we suddenly observe a steep increase in realized FDI for Dalian, Chongqing and Chengdu. Unexpectedly, those cities respectively registered US\$ 13.6 billions, US\$ 10.6 billions and US\$ 8.8 billions, exceeding Beijing (US\$ 8.5 billions).

Strategically located along the coast in the Northeast, Dalian is trying to boost economic development by adjusting the industrial structure and pursue the open policy further. It was designated not only as a strong industrial base for light and heavy industries such as textiles and garments or metallurgy and construction metals as well as some high tech industries like medicine and petrochemicals, but also as an experimental city for service outsourcing (KPMG, 2015). Aside, the boom in FDI inflows in Western China could be predicted: The Chinese government approved a project for Chongqing and Chengdu to become a National Comprehensive Coordinated Urban-Rural Development Experimental Zone (CURDEZ) in 2007 and the State Council of China launched the Development Plan for Chengdu-Chongqing Economic Zones in 2011. Through those initiatives, it is clear that the central administration wants to elevate those cities as an important regional hub in Western China. Accordingly, the only way for them to achieve fast economic growth and catch up with the wealthy cities along Coastal China is to “open to the world and attract FDI” (Yu, 2015). Nowadays, both are becoming key areas for business investments in the region. For example, they have already succeeded in attracting important multinationals in modern manufacturing and services, consumer goods and retailers such as Samsung, HSBC, Procter & Gamble and Carrefour and have successfully established high-tech development zones for both domestic and foreign firms.

Figure 5: Utilization of FDI from 2002 to 2008 and 2013⁴ (RMB Bio)



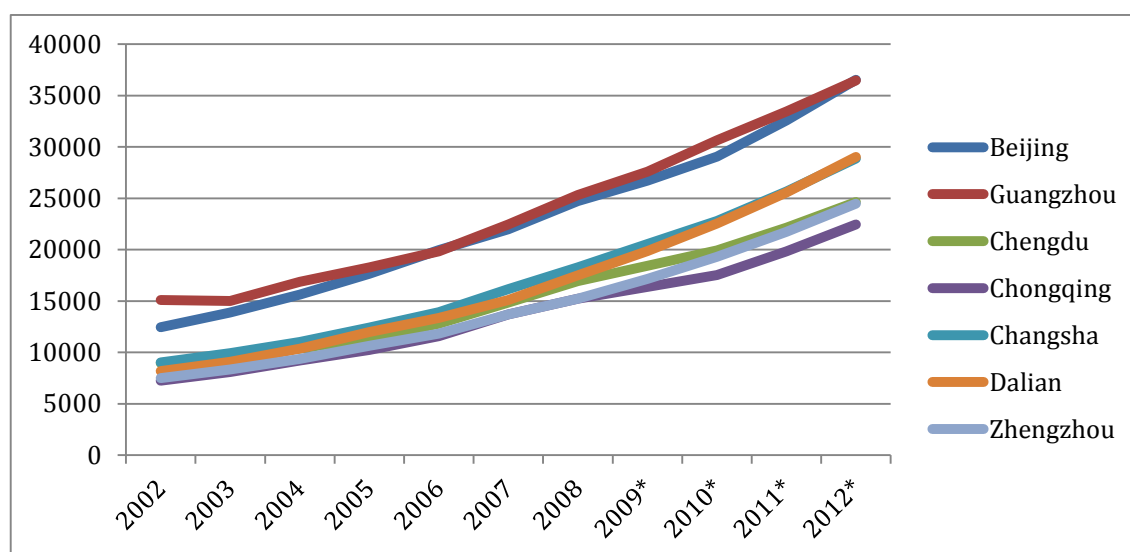
Source: China Briefing (2002-08); China Knowledge (2013)

Eventually, growing urbanization rate, better transportation network and public facilities have attracted influx of new talents and industries into second-tier cities, which in turn, has provided employment for the population. Subsequently, higher productivity of workers has raised the wages up, and has successively led the rapid increase in the overall standards of living. This can be reflected in the urban disposable income per capita, which more than doubled in a decade for our sample of cities.

As we can see on Figure 6, the disposable income in both first-tier and second-tier cities is following a linear pattern. However, we notice that there is still a gap between both categories of cities: While the urban disposable income for Beijing and Guangzhou is converging, roughly RMB 7'500 separates those cities from Dalian and Changsha, and twice more from Chongqing. In general, this means that the purchasing power is still lower in second-tier cities, but in contrast, this could imply that labour costs are considerably cheaper compared to first-tier cities. This is an important remark to flag because such discrepancy can be interpreted differently depending on the type of company, and thus, have different implication with respect to commercial and strategic interests.

⁴ China distinguishes between contracted and utilized FDI. This difference lies in the fact that some contracted FDI “may never materialized” or be a “one-off action” whereas utilized FDI takes into account projects realization at the end of the time period (Wei and Liu, 2001). In that case, I decided to opt for the latter.

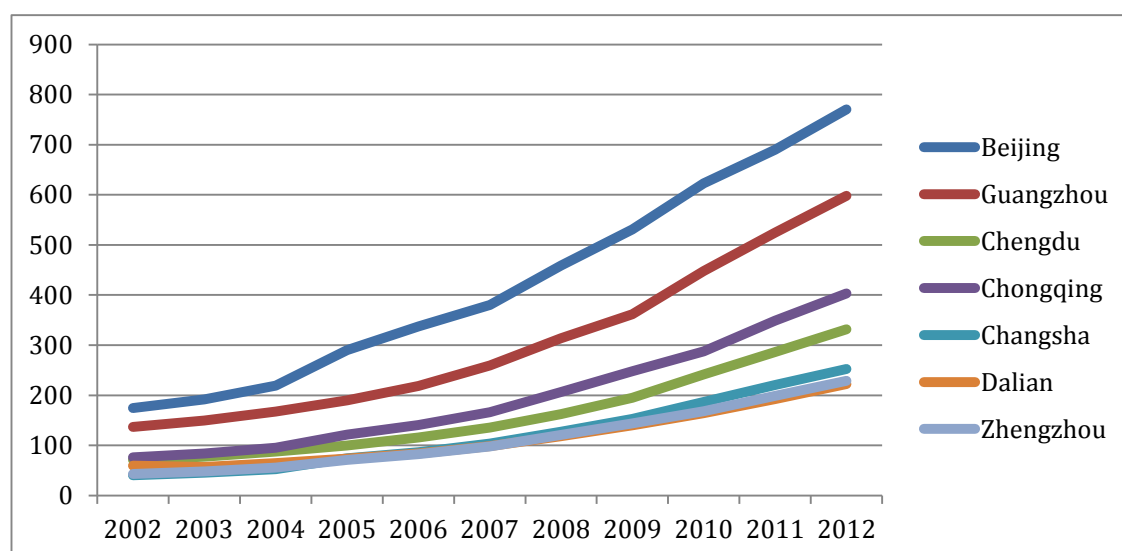
Figure 6: Urban disposable income per capita from 2002 to 2012 (RMB)



Source: China Briefing (2008); *Information for 2011-12 for FTC and 2009-12 for STC was not available. Use of the average growth from 2002 to 2008 to estimate the data.

However, the urban disposable income per capita is a flawed measure because it does not take into account wealth discrepancy. Therefore, it may be important to take into account the corresponding distribution of wealth across our cities in order to understand the true allocation of urban disposable income. But again, the lack of available information does not help us to answer precisely to this question. As a consequence, we can only take the aggregate Gini index for China, which actually reached 0.474 in 2012 (Forbes, 2013). Of course, this reflects especially the high divergence of wealth between urban and rural areas, but there are still reasons to believe that income discrepancy may be fairly high, due to the massive migration flow of rural workers into cities. As a result, those low-skilled and uneducated labour forces often constitute the lowest income bracket among cities (Wu, 2007; Gu and Feng, 2003). In such case, this is again an important point to emphasize, because it may have some implications related to customer segmentations. Sometimes, the use of innovative business model, so-called “reverse innovation”, may be required to reach group of consumers from lower strata. Having said that, the lack of data does not provide enough clarity on how households allocate the disposable income. From an aggregate perspective, it is often said that China has a very high saving rate. Hence, if we apply this hypothesis to our sample of cities, the remaining money for consumption should be pretty low. Nevertheless, the rise of second-tier cities seems to increasingly promote the emergence of large developing consumer and industrial markets (WSJ, 2011). Here, the total retail sales rather appear to confirm this latter assumption.

Figure 7: Retail sales for our selected cities from 2002 to 2012 (RMB bio)



Source: China Briefing (2002-05); China's bureau of statistics (2006-12)

As per Figure 7, total retail sales of consumer goods show a heterogeneous pattern among categories, and to less extent, within our second-tier cities. While the retail sales had risen steadily for Beijing and Guangzhou from 2002 to 2012, both Chengdu and Chongqing had demonstrated a more gradual trend, whereas Dalian, Changsha and Zhengzhou had somewhat increased at a constant pace.

From 2002 to 2007, the average growth of retail sales is pretty high for both first-tier and second-tier cities, being clearly above 10%. Beijing, Chongqing and Zhengzhou even registered more than 17% average growth while Changsha reached the highest peak with 21.3% during those years. On the other side, the performances of Guangzhou, Chengdu and Dalian are a bit lower, respectively achieving 13.7%, 13.9% and 11%. That being said, we can observe an accelerating trend for most of the cities after 2007, aside from Beijing and Changsha. Although the effects of the global economic and financial crisis slackened the development of retail sales in 2009, the aggregate growth sales of consumer goods had increased up to 19% on average for our second-tier cities from 2008 to 2012.

In the end, the total retail sales of consumer goods are obviously booming all around China, whether it is in first-tier or second-tier cities. Wall Street Journal reported from a report of Business Monitor International that "Chinese retailers are expanding their activities into the booming secondary and tertiary cities". This implies that we should see a more prominent share of domestic consumption in the economy of China in the long run.

Table 6: Average growth in retail sales from 2002 to 2012

	<i>Average RS 03-07</i>	<i>Average RS 08-12</i>	<i>Average RS 02-12</i>
Beijing	17.1	15.2	16.2
Guangzhou	13.7	18.2	15.9
Changsha	21.3	19.5	20.4
Chengdu	13.9	19.6	16.7
Chongqing	17.0	19.5	18.2
Dalian	11.0	17.7	14.3
Zhengzhou	17.9	18.6	18.2

Source: Computed by the author on y-o-y change based on RS data provided by China Briefing for 2002-03 and China's bureau of statistics from 2004 to 2012.

Despite the fact that the economic model of China is still largely relying on an export-driven strategy, we are not going to spend time on export data series because our data set does not contain large trading cities. The only exception may be Beijing, but available data shows a trade deficit (China Briefing, 2011). Whilst the national capital city had registered strong exports performances, the imports of goods actually had exceeded the outflow, at least for the past decade. Surprisingly, Guangzhou and Dalian only plays a marginal role compared to major trading hubs such as Shenzhen, Shanghai, Suzhou and Dongguan.

Lastly, it is worth taking a look at the sectors contribution to GDP in order to understand the economic structure of both first-tier and second-tier cities (Table 7). Overall, we note a declining trend in the agricultural sector for both categories. In the case of Beijing and Guangzhou, we can see that both have been experiencing deindustrialization in the past decade; the economy of such cities is now predominantly service-oriented. Aside, we observe that most of our second-tier cities are currently in an advanced stage of industrialization. Although the tertiary sector marginally increases for Changsha and Chongqing in the middle of the period, we note a decreasing trend for all our second-tier cities between 2002 and 2012. Actually, rising costs of production and preferential policies may promote industrial relocation from first-tier cities into second-tier cities located in the hinterland. However, the only exception may be Chengdu: While the secondary sector tends to fluctuate, the tertiary sector shows a rising trend. Since Chengdu should become an important city for the economic development of Western China in the upcoming years, the current policies increasingly aims at promoting the tertiary sector and turning the city into a service-oriented economy.

Table 7: Sector contribution to GDP in 202, 2007 and 2012

	2002			2007			2012		
	P%	S%	T%	P%	S%	T%	P%	S%	T%
Beijing	3.1	35.6	61.3	1.1	26.8	72.1	0.8	22.7	76.5
Guangzhou	3.4	41.0	55.5	2.1	39.5	58.4	1.6	34.8	63.6
Changsha	9.9	41.5	48.6	6.3	45.0	48.7	4.3	56.1	39.6
Chengdu	8.4	45.6	46	7.1	45.2	47.7	4.3	46.3	49.5
Chongqing	16	41.9	42.1	11.7	45.9	42.4	8.2	52.4	39.4
Dalian	8.4	47.0	44.6	8.0	49.0	43.0	6.4	51.9	41.6
Zhengzhou	5.0	48.9	46.1	3.2	52.9	43.9	2.6	56.5	41.0

Source: Data provided directly by China Briefing for 2002. For 2007 and 2012, data provided by China's bureau of statistics and computed by the author on percentage basis from the absolute added value per sector.

3. Shanghai as an urban vector for FDI into secondary cities in the Yangtze River Delta under the context of globalization

3.1. Conceptual framework & Literature review

3.1.1. Foreign direct investments (FDI)

FDI is a form of cross-border investments from a domestic company into a foreign market, thereof holding a significant share of influence, control and ownership (Investopedia, 2015). Actually, we may distinguish between two types of FDI, namely “greenfield” and “brownfield” investments (de Rooij, 2007). While the former is related to investing and building new assets from the scratch, the latter consists of accessing a foreign market through mergers and acquisitions. For China, we can further classify foreign investments into export-oriented and market-oriented FDI (Strohldreier, 2009; OECD, 2000). On one hand, export-oriented FDI implies investing in activities downstream the value chain. The purpose of such investments is often to relocate labour-intensive or low-added value activities to achieve cost competitiveness. In that case, the main determinants may include labour costs and productivity; natural resources and land endowments; physical, financial and technological infrastructures; and openness to trade and access to international markets (OECD, 2000). On the other side, market-oriented FDI means investing in similar operational structures for business expansion and market penetration (Stohldreier, 2009). Here, GDP size and economic growth are some of the most important factors for such investments (OECD, 2000).

While the impact of FDI on developing countries is often debatable, FDI can generate pushing effects or negative spillover mainly through demonstration effects, competition, labour mobility and input-output relationship (e.g.: Mühlen, 2012; Harris, 2009; Gorodnichenko et al., 2007). Demonstration effects should bring a positive outcome when domestic firms imitate or adapt products, processes and technologies from FDI, but only if those have enough capacities to absorb such resources. Inflow of foreign firms should stimulate better allocation of resources and enhance dynamic and productive efficiency, but competition can be detrimental to domestic enterprises if they do not have the capacities and the means to compete. When foreign companies hire locally and provide training in management, technology and skills, labour mobility can

subsequently help the diffusion of knowledge and capabilities to domestic firms or through entrepreneurship. But inversely, foreign firms may offer higher salaries and benefits, thus “stealing” local talents from domestic firms. And backward-forward linkages refer to the relationship between FDI, and respectively, domestic suppliers or distributors. In one way or the other, foreign companies can boost the productivity of domestic firms by providing technical and managerial assistance (Tanaka & Hashiguchi, 2012), again only if absorptive capacities of domestic firms are strong enough.

The literature review rather provides mixed empirical evidences about FDI spillover in China. Overall, the results can significantly vary across provinces and industries (Argarwal & Milner, 2011). More specific to the YRD, Tanaka and Hashiguchi (2012) find that the average productivity of local enterprises rises by 1.5% with an increase of 10% in FDI. However, Zheng and Huang (2015) demonstrate that positive spillover of FDI has recently weakened with economic development and industrialization progress. Tang and Zhan (2011) find a pretty linear relationship between the flow of information and linkages of corporate headquarters and subsidiaries, thus stimulating regional innovation capacities.

3.1.2. Globalization & Global cities

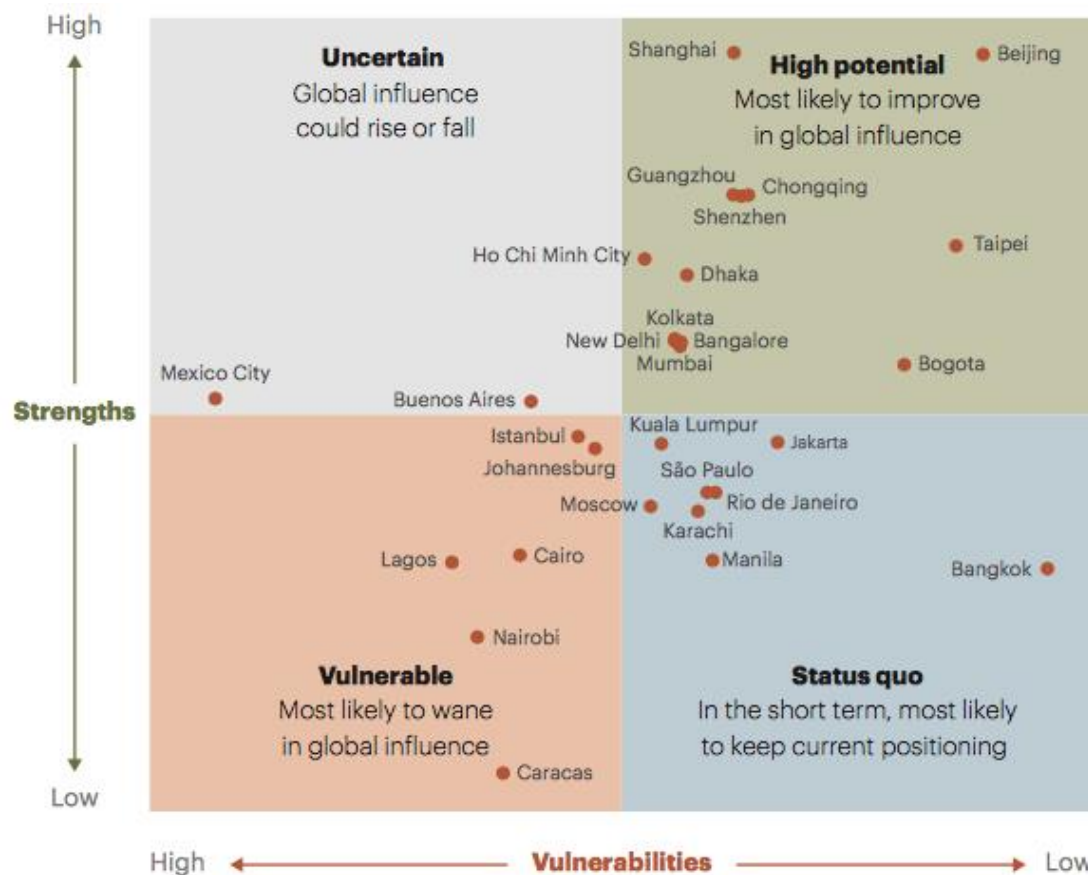
While the spread of market capitalism has almost become a universal standard (Comaroff, 2001), the progress of information technology and the lowering costs of transportation have drastically reduced the barriers between countries, and have given the opportunity to capital, people, products, and technology to move more freely from one area to another (Rodrigue et al., 2006). Initially, the flux of FDI from transnational corporations has strongly contributed to the global economic integration and restructuring (Chan, 2006), along with a growing demand to handle and manage complex advanced producer services (Codrington, 2005). Hall reintroduced the concept of “world city” in 1966⁵, and characterizes them as leading metropolitan hub with a strong concentration of advanced financial and producer services and corporate headquarters, sophisticated transportation network with global and local connectivity, engagement for international politics and diplomacy as well as higher degree of consumption and cultural appeal. Although Hall’s legacy has been somewhat influential, it corresponds to a *déjà-vu* historical form of urbanization without taking into

⁵ During times of colonialism and European empires, some scholars argue that some cities actually shared some characteristics of a world city such as Singapore or Shanghai in the 19th century (Mulich, 2014).

account the effects of globalization (Taylor, 2013; Soja, 2002; Sassen, 1991). While still referring to the concept of “world city”, Friedmann and Wolff (1982) subsequently acknowledge the role of a transnational network of cities in the emerging global economy, and suppose that their level of integration is actually based on social, economic and spatial factors, resulting in a new urban hierarchy and division of labour. Thereafter, Sassen (1991) incorporates the notion of integration among world cities, and thus argues about the forming processes of “global cities”, whose generated wealth is increasingly disconnected from the real economy. Overall, she claims that cross-border expansion of large corporate firms result in higher operational complexity, and therefore, some functions tend to be outsourced to some advanced and specialized services firms along with geographic diversification. Under this process occurs the spread of corporate affiliates and subsidiaries leading to a global network of interconnected metropolises, while concentrating wealth, information and decision-making power in a few global cities such as New-York, London and Tokyo. That being said, there are some evidences of emerging global cities, more particularly in developing countries, that have a huge potential of “rising in power and influence” due to technological advancement, communication progress as well as mobility of human and financial capital (A.T. Kearney, 2012).

From theories, scholars have gradually responded to the need of measuring and evaluating the level of globalization of a city. Among others, we note two majors methodologies: Taylor et al. (2011) evaluate connectivity of worldwide cities based on the number of advanced producer services in a city, including finance, law, advertising, accountancy and management consultancy, and classify them into a tier system; and A.T. Kearney (2014), proposing the most comprehensive methodology based on the level of business activities, human capital, information exchange, cultural experience and political engagement. It may be important to precise that the methodology of A.T. Kearney benefited from the consultation of influential scholars such as Sassen and Taylor.

Figure 8: The outlook of emerging cities' global influence



Sources: A.T. Kearney, 2012

3.1.3. Global and mega city-region

During the agricultural and industrial revolution of Europe and the USA in the 19th century, higher productivity through mechanization techniques have considerably increased the overall standards of living, and have helped liberating people from arduous and difficult agricultural work. Aside, the introduction of railway networks has significantly contributed to increasing the flow of resources, goods and people through better connectivity between urban and rural areas (Drancourt, 2002). Of course, such local and regional dynamics have deeply contributed to urbanization processes and expansion of cities. Although contemporary challenges remain such as urban poverty, environmental deterioration and crimes, cities have always attracted massive influx of people, because they provide work opportunities, a strong concentration of goods and services, and ultimately a better life in comparison to rural areas.

In Asia, we can assume that a similar urbanization process has been occurring for a majority of countries as of the second half of the 20th century. In spite of acknowledging uneven urban development pattern across Asian countries, the size of metropolitan

areas has progressively expanded, resulting in the emergence of some large cities, or even mega cities in some places including China. In addition to growing connectivity between cross-national borders cities, we shall not forget that modern transportation network and information technology have also facilitated interactions between mega city and surrounding cities located in the hinterland. In very simplistic terms, this partly explains why we notice the emergence of so-called “mega-city regions” in our contemporary world. In this regards, Xu and Yeh (2011) refers a mega-city region to “a cluster of contagious cities or metropolitan areas that are administratively separate but intensively networked, and clustered around one or more larger central cities”. Here we note a certain convergence over this term among scholars (Xu & Yeh, 2011; Hall & Pain, 2006; Scott, 2001). Along with the intensification of global linkages and associated challenges, Scott (2001) observes an economic restructuring of spatial territory together with preliminary stages of integration between local political units. In other words, the influences of global economic forces have led to a process of “regionalization” and to “the development of global city-regions” (Scott, 2001).

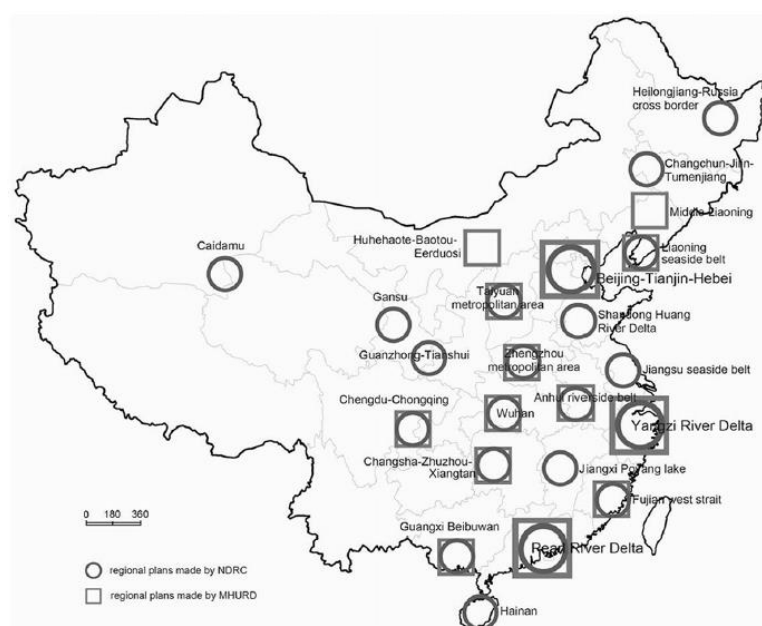
What triggers this willingness from the central government to create large global-city regions, and more specifically in China? Some scholars argue that this process of regional urban development help enhancing competitiveness in global markets (Ohmae, 2004; Scott, 2001). In contrast, some others claim that there may be actually political economic reasons behind this approach, such as reasserting the functionality and power of central and provincial governments over local governments in economic matters after political fragmentation; enabling provincial governments to reposition their competitive edges in the national and global economic context; and facilitating provincial governments for policy support from the central government (Li & Wu, 2012; Xu & Yeh, 2010).

Large global-city regions do not have a common organizational structure (Yeung, 2007). Thus, their development requires cooperation mechanisms and regional strategic planning. It generally involves common economic development plan based on division of labour and comparative advantage, protection of the environment as well as development of shared infrastructures and urban settlements (Feng et al., 2008). However, the challenge is to coordinate some various complementary and often conflicting socio-economic and environmental interests, and action plans between multi-level governance actors (Yeh & Xu, 2010; Feng et al, 2008). In an effort to reduce this administrative complexity, the central government enforces a regulative framework, coordinates the regional development and bundles local governments for cooperation

plans (Li & Wu, 2012; Yeung, 2007).

Currently, there would be 10 mega-city regions in China, including 3 large emerging global city-regions such as Beijing-Tianjin-Hebei, the Yangtze River Delta, and the Pearl River Delta. However, the central government recently announced the creation of 10 additional city clusters as part of a socio-economic rebalancing strategy, mainly in Central and Western China. Although those city clusters are still in an embryonic stage, some of them would certainly have the potential of becoming prominent mega-city regions in the upcoming decades, and more particularly Chengdu-Chongqing.

Figure 9: The location of regional plans in China



Source: Li & Wu (2012)

Nevertheless, political authorities in China are facing huge challenges in the implementation of such mega-scale projects. In reality, fierce competition and institutional barriers are still preventing cities from achieving strong integration in the short and middle-run (Yu, 2010). Although power decentralization incentivizes local governments to promote economic growth and development (Yin, 2004), they are likely to take advantage of the situation to engage in highly competitive practices and foster their own individual economic interests above all. More precisely, local governments tend to adopt protectionist measures through implementing administrative and economic roadblocks to “restrict or even suppress” the non-local flow of production factors such as capital, labour and technology (Li et al, 2015; Luo and Chen, 2008; Yu, 2010).

Furthermore, competing cities may potentially give priority to the development of similar industries in some regional clusters, because of geographical proximity and similar stages of economic development (Wu, 2015) or similar factor endowments (Xu, 2008). Although a middle-ground competition is necessary to generate productive and dynamic efficiencies for enterprises (Motta, 2004), cooperation may suffer from excessive industrial isomorphism: As the regional composition of the industrial structure is likely to be similar across cities, it supports a ferocious competition among domestic and foreign firms with negative externalities for regional integration (Wu, 2015, Xu, 2010, Ngo and Chen, 2009). Additionally, the lack of cooperative mechanisms and compromises over FDI generate detrimental rivalry between local governments to be attractive for overseas companies, and push them into a “policy dilemma”⁶: A city must provide better incentives to attract investments from foreign firms such as fiscal deductions and land concessions. In return, it obliges competing cities to cede greater concessions, should they want to remain attractive. In the end, this “spiral model”⁶ induces pressure and downward pricing for local governments (Yu, 2010; Liu and Zhen, 2010). Last but not least, given that prefectural-level government are granted the jurisdiction over the construction of public infrastructures, the competitive framework in which cities are evolving cause the duplication of infrastructures and adds another constraint to regional integration (Yu, 2010; Yeh, 2010), not to mention the inefficiency and the waste of allocated resources (Ngo and Chen, 2008). On one side, this is a rational behaviour under the current administrative configuration of large global-city region, since public infrastructures are an important criterion in the decision-making process for FDI (McGowan and Moeller, 2006) and another source of competitiveness for a city (WEF, 2014; Begg, 1998). On the other side, this seriously affects regional integration of cities.

Yet, Luo and Chen (2008) evoke two main reasons behind the realistic approach of local governments. Firstly, miscommunication and distrust between prefecture-level administrations provoke the fear that one or the other will not follow the regulations and take advantage of “free” infrastructures such as natural gas and water supply. And secondly, this is highly profitable for local governments to build their own public infrastructure while investing little capital. Both arguments can potentially explain why local governments are ferociously eager to protect their economic interests.

^{6, 6} In international relations, realist scholars may refer to the “security dilemma” or “spiral model”: The anarchic structure of world affairs engenders competition and general mistrust between countries, forcing them to initiate an arms race. Here, I reapply the principles of this concept in a purely economic sense while acknowledging the differences between both situations.

3.1.4. The Yangtze River Delta

There are currently some debates about the physical and economic boundaries of the Yangtze River Delta. However, it is commonly accepted that the region encompasses the municipality of Shanghai as well as the provinces of Jiangsu and Zhejiang (Xian, 2012): This is the most generalized definition in economic geography while being adopted for the YRD regional planning. More specifically, Jiangsu and Zhejiang are each constituted of 14 and 11 prefectural-level cities. Overall, roughly 160 millions inhabitants reside in an area of 210'700 square kilometres: This represents 2.2% of China's territory and 11.6% of its total population. In comparative perspective, the YRD is 20 times larger than the population size of Switzerland and more than five times its territorial size. With respect to the national total, the YRD is one of the most dynamic regions in China with over 40% of patents, 30% of scientists and engineers and 45.5% of high-tech products (Hu & Du, 2011), as well as the largest economic engine for the country with a third of the country GDP.

Since 2014, the YRD is predominantly a service-based economy with an aggregate sector contribution to GDP of 51.2%. Aside, the manufacturing sector constitutes a share of 45.8% while the remaining 3% is allocated to the primary sector (CCTV, 2014). As one of the leading emerging global city-region, the Yangtze River Delta must upgrade its capabilities to lead the socio-economic growth of China. According to the strategic regional plan, the YRD should embrace economic transformation and industrial upgrading, with Shanghai as the head of the dragon and Jiangsu and Zhejiang as both wings. Ultimately, the YRD should become a wealthy and modern region by 2020.

3.2. History, economic reforms and integration of Shanghai in the global economy

3.2.1. Historical background of Shanghai as a world city

Since the 15th century, Shanghai benefits from the embryonic status of a world city, and starts to become a major international shipping centre. Throughout the 19th century, the United Kingdom imports a lot of products from China, especially tea, silk and porcelain. As being self-sufficient, China does not allow commodity exchange and requires to be paid with silver ingots, resulting in a trade deficit for the UK. Although the opium trade is forbidden in China, the British still find some ways to sell the merchandise to

Chinese intermediaries, which in turn request to be paid with silver. As a consequence, the trade balance suddenly reverses. Seeing the damage of opium consumption on Chinese people, the successive dynasties alternately take some drastic measures to ban the opium trade in China. But the prohibition has very negative impact on the profitability of opium trade and threatens the economic stability of the UK. In 1840, the British finally invades China and inflicts a woeful defeat to the country. Although the treaty of Nanking subsequently provides new opportunities for European countries, the Chinese does not respect some clauses: Another war bursts between the UK and its French allies against China. After losing the second Opium War in the 1860s, Shanghai soon becomes a concession to American, British and French colonial powers and is forced to open its market to foreign trade. The city becomes a prominent international financial and trading centre until the World War II. But when Mao and the Communist party come to power in 1949, the new government nationalizes most private firms and emphasizes on industrial production. In contrast, most of tertiary activities are closed down, because the Communists perceive this sector as unproductive and associate it to the capitalist ideology. As a matter of fact, the tertiary sector falls down to 17.3% of Shanghai's contribution to GDP in 1972, while the secondary sector rises up to 70% (Fung et al., 1992).

3.2.2. Shanghai in the beginning of economic reforms

After taking over the power from Mao's death in 1979, Deng Xiaoping undertakes some economic reforms and establishes key priorities to promote the development of China through agricultural reforms, price system reforms and power decentralization for State-Owned Enterprises. As the country does not have enough financial and technological capital to launch economic development alone, another important part of these reforms is to initiate trade liberalization with the establishment of four special economic zones (SEZs). Based on the export-oriented strategy, the central government strategically designated Shenzhen, Zhuhai, Shantou and Xiamen, essentially for their proximity with Hong-Kong and Macao; both city-states benefit from modern port facilities and excellent access to the global shipping network at that time.

By providing tax incentives and greater autonomy in the use of market-oriented practices, SEZ are able to attract FDI and technology from multinational companies, provide employment, and support capital formation. On the other side, overseas companies take advantage of preferential policies, unlimited labour supply and low wages, land availability, and geographic location, which provide a unique opportunity for them to enhance competitiveness and economy of scale. As per the success of this

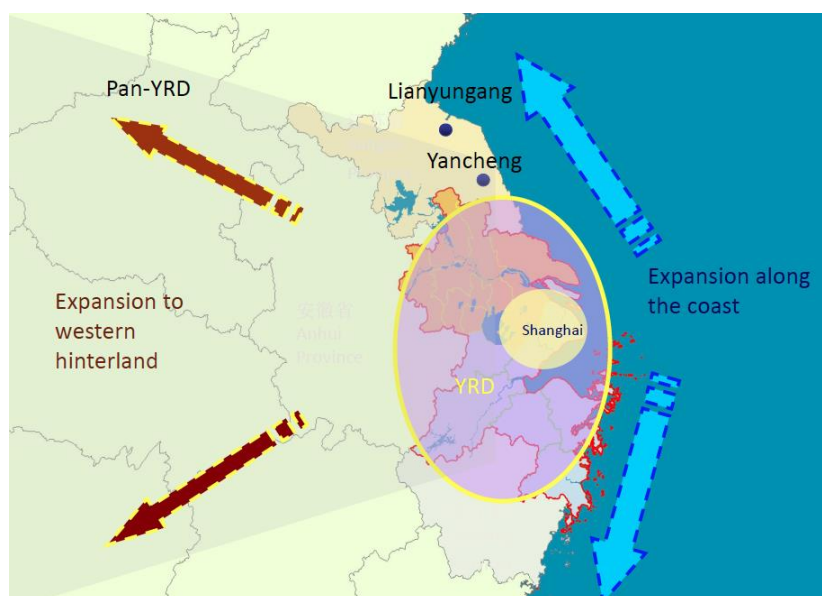
strategy, the central government extends thereafter the opening up of 14 additional coastal cities in 1984, including Shanghai. During this period, the Chinese government mainly promotes foreign investments in labour-intensive, assembly and processing activities, which accounts for 49% of total industries. With respect to the share of capital-intensive and technologic-intensive industries, each registers 34% and 17% (Fung et al., 1992). As a result, some multinational corporations relocate some of their low value-added activities in the municipality of Shanghai before exporting finished manufactured products on global markets (Zheng & Huang, 2015).

3.2.3. The weakened status of Shanghai impedes regional development

Only one year later, the government recognizes the importance of developing economic clusters and cooperation mechanisms between cities. Among others, the central government enlarges the scope of SEZ to the whole YRD and select Shanghai as the primary city of the region (Fung et al., 1992). Behind this strategy, policy-makers estimate that the YRD is a key economic zone for the overall development of China (Figure 10): The socio-economic progress of Shanghai could subsequently benefit to the development of the YRD before further spreading backward the country. More precisely, there is a common belief that certain traditional industries initiated in Shanghai could be then relocated to the hinterland after achieving a stage of maturity and benefiting from economic upgrading (Feng, et al., 2008).

But in the mid-1980s, foreign investments in Shanghai do not really promote the expected agglomeration effects and spillover for the regional economic development, partly because the city's vibrant financial status and tertiary sector has been seriously weakened since the ascendancy to power of the communist party. Contrariwise, the economic development in neighbouring provinces is rather supported by endogenous growth: The economic progresses of Jiangsu, especially in the South, are mainly based on dynamic township and villages enterprises while Zhejiang province is reputed to be very entrepreneurial and relies mostly on private family-run businesses. From 1978 to 1991, the economic growth of Shanghai reaches on average 7.4% whereas Zhejiang and Jiangsu respectively grows at 12.15% and 10.8%. Despite having a relatively large GDP, this clearly demonstrates that Shanghai is lagging behind in terms of economic development during this period (Suwee-Hock & Wong, 2009).

Figure 10: The YRD as a key region for the overall development of China



Source: Hu, 2011

Although the introduction of the Hukou system aims to restrict the free flow of internal migration, the city of Shanghai is still expanding rapidly. Between 1982 and 1990 we estimate that the population grows at 1.4% on average yearly change. As result, the population expands from 11'859'000 to 13'341'900 inhabitants during this period (NBS, 2000). In parallel, the non-existence of coordination for public infrastructures among foreign powers and the lack of urban planning during the Cultural Revolution (1966-1976) induce some important challenges for the transformation of Shanghai: The transportation system, including road, railway lines, civil aviation and port facilities, is not able to handle the growing flows of people, materials and goods across the region; the telecommunication network is not appropriate and telephone ownership is far below the world average (3.2% of total population versus 12%); and public utilities often face supply shortage of water and electricity (Fung et al., 1992). Consequently, the development capacities of Shanghai are seriously limited, unless the municipality upgrades its public infrastructures and confronts the overconcentration of people and industries in the centre⁷. Although the municipality undertakes some infrastructural projects with the inner ring of Shanghai, namely with peripheral county-level cities, this is not enough to overcome the situation. Increasingly, there is an absolute necessity of upgrading regional infrastructures in the outer ring and using a broader geographical space, particularly with Nanjing and Hangzhou.

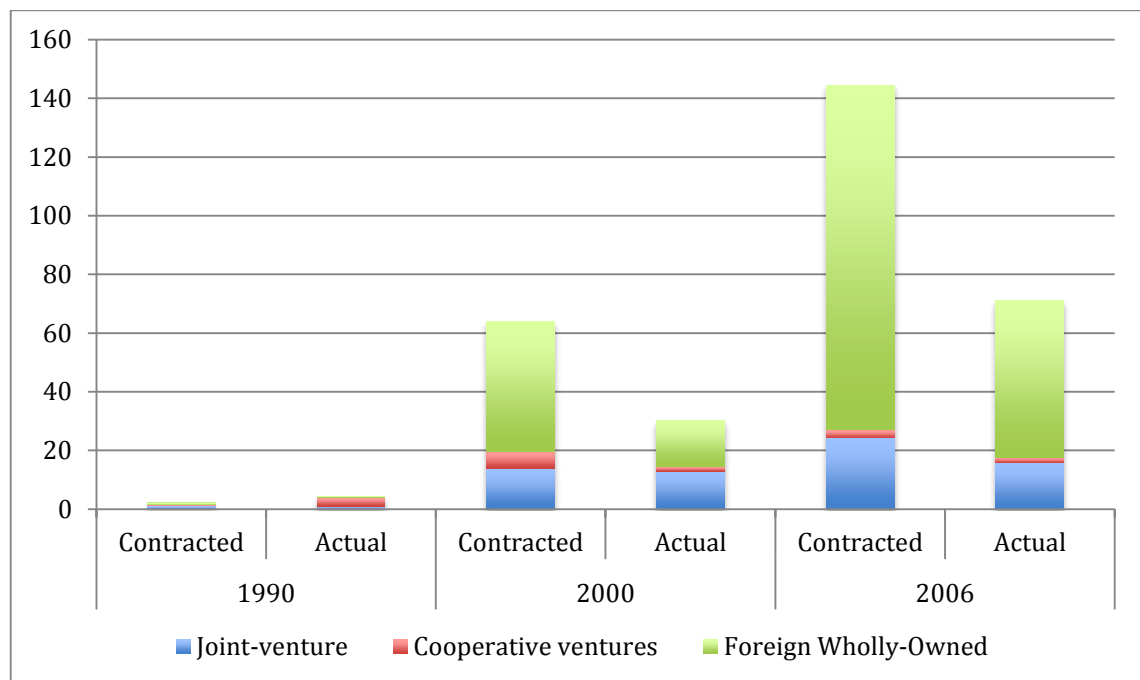
⁷ Already In the 1950s, the municipality tries to launch satellite towns development projects to fluidize the city, but this program is a failure (Fung et al., 1992).

3.2.4. Opening-up of Pudong, accession to the World Trade Organization and resurging power of Shanghai in the YRD

In the 1990s, the municipal government believes that the modernization of Shanghai is crucial to embrace the globalizing world economy and promotes the overall development of China. Hence, the local administration pressures the central administration to revitalize the city, and comes up with an ambitious plan of becoming again an international economic, financial, trading and logistics centre. While there are still restrictions for foreign investments in the services sector for the other SEZs, the State Council approves further reforms and grants special policies authorizing the opening-up of Pudong district in Shanghai to FDI in banking, trade, real estate, tourism and telecommunications, in conjunction with huge investments in urban housing, public infrastructures and utilities in order to support the expansion of the tertiary sector (Sang, 1993). After being closed for more than 40 years, the Shanghai's stock exchange is reopened. These new reforms finally give a new dynamic to the city and enable the municipality to regain progressively its regional dominance. As part of major changes in the FDI pattern, we note a substantial rise in the number of wholly foreign-owned enterprises, at least in Shanghai (Figure 11).

Despite some concerns about drastic reforms and sudden liberalization of many industries, China still joins the World Trade Organization (WTO) in 2001, and agrees to undertake economic and structural adjustments in order to fulfill the admission requirements (Cheng, 1999). Inversely, the WTO accession delivers positive spillover on the Chinese economy by increasing the general institutional framework and providing greater economic and trade stability between China and foreign countries. Based on the rule of origins, foreign export-oriented enterprises in Shanghai and surrounding cities benefit from reduced quotas and lowered tariffs barriers, which stimulates exportation on foreign markets. Among others, China commits to provide greater access to its domestic market and further releases restrictions in capital-, technologic- and knowledge-intensive industries to foreign investments (Blanchard, 2011), providing accordingly new business opportunities for both domestic and export-oriented strategies. Hence, the YRD attracts new inflows of FDI and reinforces its status as an emerging global city-region. From 2001, foreign investments in the region exceed those in the Pearl River Delta. As early as 2006, FDI in the YRD accounts for 47.8% of national total (Liang et al., 2006).

Figure 11: Contracted and actual FDI in Shanghai in 1990, 2000 and 2006



Source: Xiong, 2009

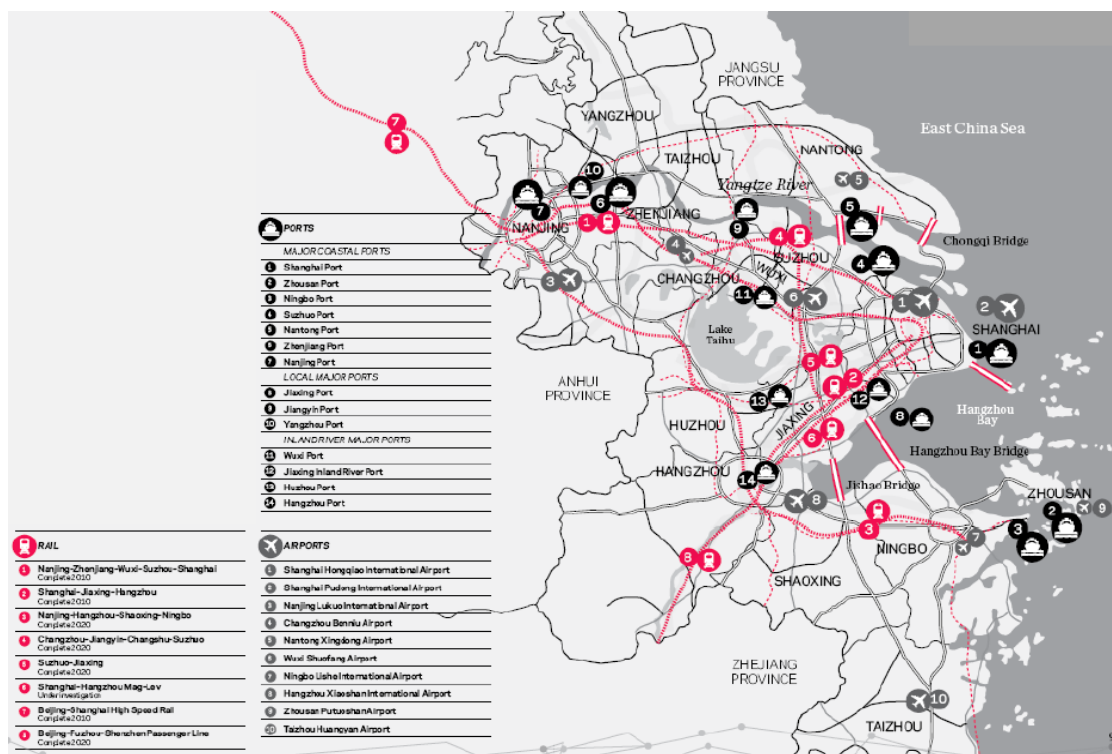
3.3. Massive investments and coordination of the regional transportation network

Following the reforms of the Pudong district and the accession to the WTO, the socio-economic development of Shanghai encourages the municipality to invest huge amount of money in building new public infrastructures and upgrading existing ones, in conjunction with intercity cooperation to improve the convergence of the regional transportation network. It is commonly agreed that improved infrastructures lead to better connectivity and accessibility among cities, therefore enhancing regional competitiveness and FDI spillover (Sloboda & Haliemun, 2011). While we provide a spatial overview of the transportation network in the YRD (Figure 12), we are mainly going to focus on airports, ports system and railway network for the sake of simplicity.

Since Hongqiao International Airport is not able to handle the fast-growing demand of passengers and freight, the municipality decides to construct a new site in 1999, and relocates all international flights to the newly-built Pudong International Airport in 2002. In recent years, Shanghai is becoming a large international transportation center. In terms of passenger traffic, the number of people has almost doubled from 23 millions in 2004 to nearly 52 millions in 2014 (CAAC, 2004, 2014). Along with airport upgrading to

handle larger flows of merchandises, Shanghai's virtual monopoly in the YRD over air cargo movements have drastically increased from 1.1 million metric tons to more than 3.1 millions in the last ten years (CAAC, 2004, 2014). The current development of Shanghai pushes the municipality to continue investing enormous amount of money to support the expanding operations of Pudong International Airport (So, 2011). Nowadays, the competitive position of Shanghai in air transportation services help to legitimize its global-local functions. On the other hand, the capacity of local airports in the YRD for both passengers and freight is limited and rather focus on providing domestic flights as well as some regional flights in South-East Asia. The latter is particularly true for the airports in Nanjing and Hangzhou.

Figure 12: The complete transporation network of the Yangtze River Delta



Source: Hu (2011)

However, the unilateral decision of Shanghai to relocate international flights generates negative spillover for surrounding cities: Before 2002, the proximity of Suzhou with Hongqiao airport made it an attractive location for FDI. But soon after, the commuting time by bus increases of 2 hours between Shanghai and Suzhou (Xian, 2012; Sun & Zhao, 2005). Consequently, the latter experiences a slowdown in FDI inflows, and more particularly in the industry of information technology (Xian, 2012; Sun & Zhao, 2005). In response, the provincial government of Jiangsu undertakes the construction

of a new airport in Wuxi (Xian, 2012). As a result, we can currently find three airports within an area of only 200km. The lack of common agreements and coordination among cities over airports in the YRD seems to be the most problematic issue, and is inclined to cause a useless infrastructural duplication and resources allocation inefficiency (Jiang et al., 2013).

In parallel, the development of the port system along the Yangtze River is of high strategic priority for the overall development of China. Early on, the government recognizes the geostrategic position of Shanghai and the importance of using the Yangtze River as an important development belt, because the waterway provides a direct access to major cities in Western, Central and Eastern China, namely Chongqing, Wuhan and Nanjing. In order to become an international logistics center and manage growing trading flows, the municipality of Shanghai has heavily invested to upgrade the current port system capacities. The most obvious investment is definitely the Yangshan Deepwater Port construction off the coast of Shanghai. The project development starts in 2002 and is scheduled into 4 phases to be completed by 2020. For the time being, the Port of Shanghai handles the largest container volume worldwide: The port capabilities have doubled from 15 millions to 33 millions Twenty-foot Equivalent Units (TEU) between 2004 and 2014, overtaking Hong-Kong in 2007 and Singapore in 2010 (WSC, 2015). Eventually, the handling potential should add 25 millions TEU per year to the current capacities (Li, 2003). Furthermore, the port of Shanghai strongly contributes to the development of advanced logistics services in the YRD. Since 2006, it has opened several subsidiaries to serve secondary cities along the lower reach of the Yangtze River such as Suzhou and Nanjing, and even a regional office in Ningbo (SIPG, 2015). Aside, the port of Ningbo is the second most important trading centre in the YRD and the 6th worldwide, with a container traffic of 17.33 millions TEU in 2013 (WSC, 2015). Just as Shanghai, the port system has benefited from infrastructural upgrade including storage, deep-water port, line port for international container, port logistics information platform as well as transshipment bases for commodities and large terminals. While the port oscillates between competition and cooperation with Shanghai, it recently announces its willingness to “serve as an outer deep-water port for Shanghai International Shipping Centre” (Ningbo Port, 2007).

Back on land, Shanghai has conventional railway connections with Hangzhou and Nanjing since the beginning of the 20th century. But in 2006, the State Council approved a project to modernize the railway network throughout the YRD Region:

From a Shanghai-centred approach, the priority is now to build a polycentric high-speed railway (HSR) network with speed capacity of 300-350 km/h. This innovative transportation mode should allow reaching any destination in 2 hours within a radius of 400 km (Chen, 2013). The Shanghai-Nanjing and the Shanghai-Hangzhou HSR corridor have already been completed since 2010. In parallel, both traditional lines will be progressively transformed into freight lines and separated from passenger lines to optimize their respective overall capacities (Chen, 2013). The Nanjing-Ningbo line via Hangzhou is currently under work-in-progress and should be accomplished in the next upcoming years. Aside, Shanghai and Hangzhou are currently collaborating to implement the Maglev train line, whose speed could potentially go up to 400 km/h. By 2020, a multi-centred transportation network should form a strong “Z-shape” including Nanjing, Shanghai, Hangzhou and Ningbo. Consequently, better accessibility, increased mobility as well as reduced transportation costs and travel time should significantly accelerate the socio-economic development of the YRD, and will undoubtedly provide new business opportunities in secondary cities for foreign enterprises (Zhao, 2010).

3.4. The economic process of rising territorial linkages in the Yangtze River Delta

Based upon my accumulated historical and economic knowledge, the rapid transformation of Shanghai increasingly restructures territorial linkages in the YRD and promotes industrial upgrading and corporate linkages as per the following economic process. Initially, favourable policies encourage foreign companies to relocate labour-intensive activities in Shanghai. By providing better work opportunities and higher wages for both agricultural and urban workers, foreign enterprises subsequently promote internal migration and massive inflow of rural-urban workers. Since there is massive supply of low-qualified workforce on the market, labour costs remain pretty low for foreign companies. Although the local government attempts to restrict the free movement of people across cities, it still needs to invest massively in large-scale urban settlements in order to absorb and accommodate the substantial inflow of households and migrant workers. As a result of rapid urbanization and metropolitan expansion, there is an upward pressure on the “market price of land use rights” (Li, 2003) because the demand of land from both people and foreign enterprises is still growing but the supply becomes increasingly limited. Therefore, we take note of two sub-economic effects arising from this process. On one side, housing prices tend to rise upward while

reduced cultivated land for agricultural purposes is likely to increase food prices: Both factors cause an overall increase in the costs of living and imply higher labour costs. Aside, growing customers' demand for manufactured goods from China stimulates the need of raw materials in production, causing respectively currency appreciation and higher production. Hence, all of this is likely to squeeze profit margins of foreign companies. But meanwhile, domestic and regional market conditions have improved and the municipality of Shanghai provides new preferential policies for foreign companies to invest in higher added-value activities. In turn, local governments perceive an opportunity to stimulate their own economy and propose preferential policies to attract traditional industries from Shanghai. With such incentives, foreign companies tend to upgrade their initial investments, and relocate labour-intensive activities and some capital-intensive industries in surrounding secondary cities, mainly because factors of productions and fiscal benefits are more attractive. In the end, this economic process tends to promote industrial upgrading and relocation, hence spreading enterprises linkages in the YRD.

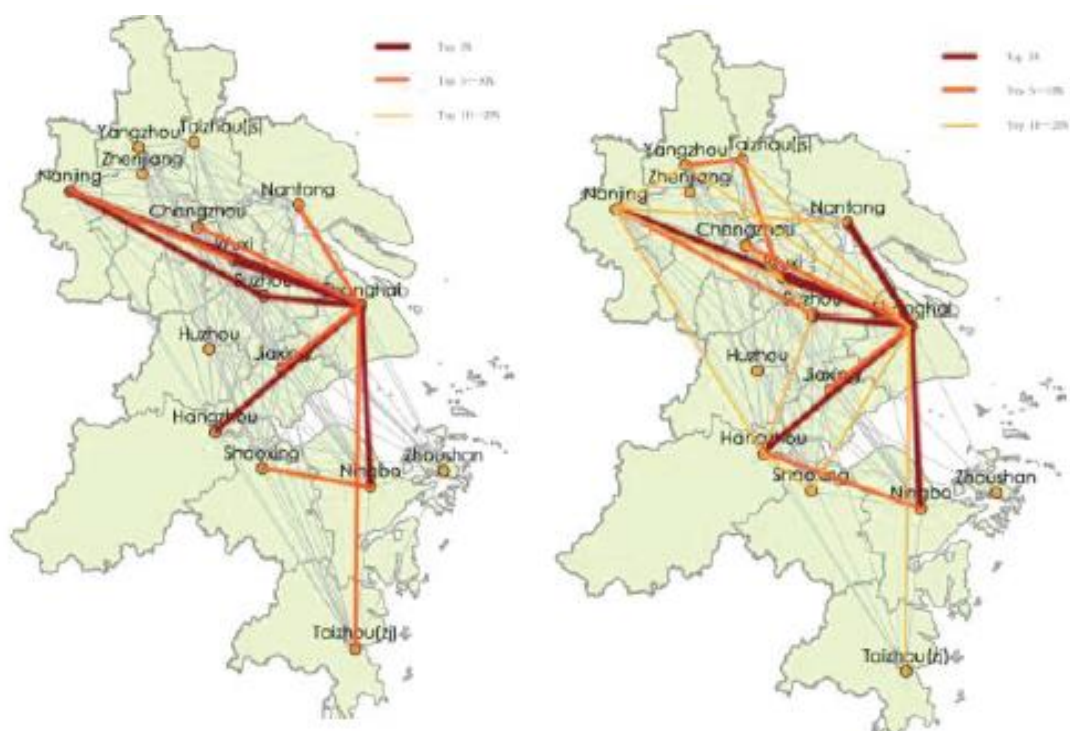
Table 8: Empirical evidences of industrial upgrading and restructuring for some cities in the Yangzte River Delta Region in 1996 and 2005

1996		2005	
Type of activities	Cities	Type of activities	Cities
Producer services, technology-intensive manufacturing, capital-intensive manufacturing and other services	Shanghai, Nanjing	Producer services and other services, technology-intensive manufacturing	Shanghai, Nanjing, Hangzhou
Capital-intensive manufacturing	Suzhou, Wuxi, Changzhou, Hangzhou, Ningbo, Zhenjiang, Shaoxing	Technology-intensive manufacturing	Suzhou
Labor-intensive manufacturing, primary industry	Nantong, Jiaxing, Huzhou	Capital-intensive manufacturing	Wuxi, Changzhou, Zhenjiang, Yangzhou, Taizhou, Ningbo
Primary industry	Yangzhou, Taizhou	Labor-intensive manufacturing, primary industry	Nantong, Jiaxing, Huzhou, Shaoxing
Primary industry and other services	Zhoushan	Primary industry and other services	Zhoushan

Source: Tang, 2004

After studying various industries to understand the change in the added-value hierarchy in the YRD, Tang (2004; Table 8) statistically demonstrated the transformation of Shanghai and peripheral cities in the context of economic globalization. Therefore, empirical evidences are likely to support my argument about industrial upgrading and restructuring of the YRD Region. On the other side, Miaoxi and Chen (2011) tend to confirm my second argument about the process of industrial relocation and enterprises network. Both have studied the change in the companies' linkages in the YRD in 2001 and 2009 and arrange them into four levels of strengths (top 5%; 5%-10%; 10%-20%; and >20%). In the former year, the strongest linkages are undoubtedly between Shanghai and prominent secondary cities, namely Suzhou, Hangzhou, Nanjing and Ningbo. While empirical evidences shows reduced connectivity between Nanjing and Suzhou in the latter year, we clearly notice an increased proportion in enterprises linkages among secondary cities. Today, the spread of FDI may eventually occur between secondary cities themselves as per the same economic process described above. In other words, the YRD may be transforming from Shanghai-centred development to a polycentric approach.

Figure 13: Strength of enterprises linkages in the YRD in 2001 and 2009



Source: Miaoxi and Chen, 2011

3.5. The rise of Shanghai and restructuring of the industrial territory

The resurgence of Shanghai in the YRD and the convergence of the regional transportation network drastically accelerate the annual economic growth of Shanghai and transform gradually the city into a service-oriented economy (Yang, 2002). Although FDI in Shanghai fails to provide regional economic development in the 1980s, the resurgence of its dominant position in the YRD and massive investments in regional public infrastructures promote industrial upgrading and relocation, and at the same time, the economic development of surrounding areas. In turn, some cities experience a rapid shift from an agricultural-based economy to an industrial-oriented economy (Leman, 1995).

Subsequently, the restructuring of the industrial territory can initiate the relocation of traditional industries into the hinterland. However, uncontrolled industrial relocation could profoundly deplete farming land and affect the air and water quality of Shanghai (Leman, 1995). Therefore, the central government tends to redirect FDI into industrial parks; those are basically industrial areas for the sole use of industrial development and production. In that respect, industrial parks are likely to be a win-win situation for both public authorities and foreign enterprises. For the former, those concentrate public infrastructures, namely transportation facilities, public utilities and telecommunication network in order to achieve economy of scale and improve the overall return on investments of invested public resources; maintain control over urban development and industrial territory; and protect public health and monitor industrial impact over the environment by isolating industrial production and development. For the latter, industrial parks generally provide greater political independence and economic freedom, various attractive resources and tax incentives, and enhance competitiveness by providing an integrated supply chain network. Ultimately, it is important to note that industrial parks strongly contribute to increasing the spread of FDI across the YRD Region and intensify intercity linkages.

Industrial parks can be found at all administrative levels: While local industrial zones may be the most problematic in terms of competitive practices, regulations and infrastructures, those at state and provincial-level or municipal-level are usually aligned with the strategic regional plan (Sahling, 2008). Accordingly, the central and provincial governments promote division of labour and agglomeration effects for six different industries, including advanced modern services, electronic information, equipment

manufacturing, biomedicine, as well as new material and energy (Mortenson, 2013). In this regard, we may argue that there are three major types of industrial zones in the YRD, including Industrial Parks, Export Processing Zones (EPZ) and Free-Trade Zone (FTA).

For practical reasons, industrial parks could actually cover the scope of National Economic and Technological Development Zones (ETDZ) and High-Technological Development Park (HTDP). Theoretically, ETDZ should focus on labor-intensive manufacturing whereas HTDP should be involved in capital-intensive and technological-intensive industries. But in reality, the industrial structure is likely to be similar between ETDZ and HTDP, since the YRD is more likely to promote medium-to-high technology manufacturing. Therefore, we note a certain convergence between both types of industrial parks (Mortenson, 2013; Sahling, 2008). EPZ is another form of industrial area but rather target export-oriented companies or trading companies. In this regard, export-oriented companies must intend to manufacture products in China and export them overseas, should it want to benefit from tax packages and related advantages. A similar policy applies for trading companies; while they can buy commodities or goods domestically, they must sell them on global markets thereafter. In both cases, EPZ provides a rather limited access to sell on the domestic market. More recently, the launch of FTZ in Shanghai in 2013 gives some insights on the new nationwide strategy to upgrade the current economic structure and attract new FDI inflows in some advanced producer services and high-technology industries. More specifically, the aim is to facilitate foreign investments in a broad range of areas, including the establishment of corporate headquarters, dispute settlement and flexible policy for foreign exchange and currency convertibility (Zito, 2014). That being said, some industries may be still restricted or prohibited such as manufacturing, transportation, warehousing and postal services, among others (Zito, 2014).

Based on the evolution of the economic structure in the YRD, we can observe that the economic restructuring has been rather stagnant between 2002 and 2008. In Shanghai, the tertiary sector only increased by 0.7%; even Hangzhou and Nanjing registered a faster growth with respectively 3.3% and 2.1%. In-between, Suzhou, Wuxi, Changzhou, and to less extent, Ningbo largely experience an increase in the contribution to the manufacturing sector before subsequently falling around 50% between 2008 and 2013. That being said, the dataset clearly indicates a new urban hierarchy at the end of 2013: Shanghai has predominantly become a service-oriented economy, together with Nanjing and Hangzhou. Alongside, the four remaining cities still mainly rely on industrial production. Therefore, we can deduce that the future

socio-economic development in the YRD will occur within this triangular area: Shanghai will pursue its objective of becoming a prominent global city and a strong magnet for corporate headquarters and high-technology industries; Hangzhou and Nanjing will serve as the backdoors of Shanghai for the YRD development; and Changzhou, Wuxi, Suzhou and Ningbo should continue being industrial peripheries and low-end R&D centres, at least in the next upcoming years. As such, Table 10 provides an overview of the key industries in Shanghai and major secondary cities in the YRD in 2010.

Table 9: Sector contribution to GDP for major cities in the YRD

	2002			2008			2013		
	P%	S%	T%	P%	S%	T%	P%	S%	T%
Shanghai	1.4	45.7	52.9	0.8	45.5	53.6	0.6	37.2	62.2
Hangzhou	6.3	50.7	43.0	3.7	50.0	46.3	3.2	43.9	52.9
Nanjing	4.8	47.3	47.9	2.5	47.5	50.0	2.3	43.3	54.4
Suzhou	4.5	58.1	37.4	1.6	62.0	36.4	1.7	52.6	45.7
Wuxi	3.6	54.9	41.5	1.6	57.7	40.7	1.8	52.2	46.0
Changzhou	6.5	56.7	36.8	3.1	58.9	39.6	3.2	51.6	45.2
Ningbo	7.0	55.2	37.8	4.2	55.4	40.4	3.9	52.5	43.6

Source: China briefing (2011); HKTDC (2013)

Despite rising costs of production and shaky external economic conditions, productivity gains in automation process should maintain the YRD's competitive edge in the production of export-oriented goods (Musy, 2012). Along with the rising performance of industrial firms, the urban disposable income per capita will continue to increase steadily and consumer spending should become a major engine of growth in the future in both primary and secondary cities. At the same time, further economic liberalization as well as improvement in both domestic market conditions and institutional framework should gradually attract new FDI inflows with a domestic-oriented strategy in the YRD.

Table 10: Key Industries in Shanghai and main surrounding cities in 2010

Cities	Key industries
Shanghai	Retail and wholesales, financial services, real estate, electronics, automotive, petrochemicals and chemical processing, biomedecine
Hangzhou	Information technology, software development, telecommunication equipment and electronics
Nanjing	Electronics, automotive, petrochemicals, iron, steel, power, pharma
Suzhou	IT and precision machinery manufacturing, financial services, tourism, services outsourcing, logistics, nanotech, optical energy, biomedican, communciation, software, ecological protection
Wuxi	IT and electronics, fine chemicals, precision machinery, metallury, high-grade garments, textile and clothing, equipment manufacturing
Changzhou	High tech, advanced equipment manufacturing, electronic and information technology, renewable energy and environmental protection, advanced materials, biotechnology and pharmacuetical industries
Ningbo	Petrochemicals, steel, shipbuilding, equipment manufacturing, automobile and parts, textiles, non-ferrous metals, electronics and telecommunication

Source: China briefing (2011)

4. Contribution to theoretical & empirical knowledge

4.1. Second-tier cities in the national context of China

What is a second-tier city in the national context of China?

This research paper claimed to clarify the meaning of a second-tier city in China. Nevertheless, we have to admit that defining a second-tier city is very complex and is still subject to debate. As we could have seen, the tier city system is mostly a method of urban classification including various qualitative and quantitative measures. The usage of this definition is rather multifunctional. Among official definitions, it can refer to the administrative level or the size of a city. But since political interests may differ from economic interests, foreign companies have begun to incorporate a larger set of parameters, including financial and economic factors. As a result, a second-tier city is the outcome of a discretionary methodology that strongly depends on the strategic goals a company want to achieve on the Chinese market. As such, JLL provides a great example of a tier-city system for the real estate industry.

What kinds of characteristics distinguish a second-tier city from a first-tier city?

Although the methodology to define a second-tier city is rather discretionary, there are still some fundamental indicative factors to identify a second-tier city in China. From our comparative socio-economic analysis of chapter 2, the reference point is typically provincial, sub-provincial or autonomous regional capitals with a population of at least 1 million inhabitants, over 12% economic growth in the past 5-10 years, strong investments in public infrastructures, preferential policies for both domestic and foreign enterprises, a predominant contribution of the manufacturing sector to GDP, fast-growing consumer markets and much lower labour costs in comparison to first-tier cities. This definition is likely to apply pretty well to second-tier cities in Central and Western China. On the other side, we shall keep in mind that those cities are still in a developing process. Therefore, the implied risks of doing business may be higher compared to maturing cities such as Beijing or Shanghai. For example, they may be less experienced to deal with foreign investors, the institutional framework may be dysfunctional, consumer markets are not always very sophisticated and transportation costs may not be always appropriate for an export-oriented strategy. That is why it is important to acquire experience in first-tier cities and establish a strong network before considering the expansion of business activities into second-tier cities.

Is the macro-economic environment of second-tier cities conducive to business investments?

From this macroeconomic analysis, we could see that China has been changing very rapidly since the late 1970s. Initially, business investments have been mainly focused on first-tier cities such as Beijing or Guangzhou. Emanating from a strategic choice of policy-makers in the early years of economic reforms, those are still clearly the engines of growth for the socio-economic development of China. As such, the continuous progress of the services sector and the promotion of industrial upgrading have initiated the relocation of traditional industries into the hinterland. Despite a slowing GDP growth rate, there are reasons to believe that the contribution of first-tier cities to the aggregate GDP is mainly based on high value-added activities. However, foreign companies should expect to face fierce competition and rising production costs in the first-tier cities.

That being said, we could observe through our sample that many second-tier cities in China have been arising as strong economic players. From 2008 to 2012, we noted a shifting paradigm: the economic development of first-tier cities has slowed down whereas economic growth in second-tier cities has accelerated. Therefore, we argued that investments in public infrastructures and industrial relocation have been the major factors of economic development in second-tier cities, along with fast-growing sales in consumption goods. Although economic development has increased the urban disposable income per capita in both categories, there is still a large gap between both first-tier and second-tier cities. This could have several implications for foreign companies. On one side, this indicates that production costs may be substantially lower in the manufacturing industries. On the other side, the purchasing power may be a concern in some tertiary industries. Nowadays, we should emphasize that the delimitation between first-tier and second-tier cities is becoming thinner: Even though the total GDP, urban disposable income and retail sales of Chengdu and Chongqing are still lower compared to Beijing and Guangzhou, we should definitely consider them as emerging first-tier cities.

Overall, the macro-economic analysis tends to indicate that the business environment in second-tier cities is conducive to foreign investments. However, I shall precise that the list of second-tier cities analysed in this research paper is not exhaustive. It is therefore recommended to investigate further cities, which could provide some unique business opportunities. Moreover, a deeper analysis is required to evaluate the attractiveness of a particular industry in those second-tier cities.

4.2. Secondary cities in the globalizing context of China

As we could have seen in the conceptual framework, the progress of information technology, the lowering costs of transportation and trade liberalization initiated a drastic acceleration of FDI flows and cross-border investments. While the living standard had drastically increased in the West, the communist ideology severely impeded on the socio-economic development of China. As the country was seriously lagging behind international standards, Deng Xiaoping gradually initiated economic reforms in order to attract FDI and take advantage of foreign technology, management skills and know-how. From 1984, multinational companies came to Shanghai in order to take advantage of low costs of production factors and preferential policies before exporting manufactured goods abroad. This has been a way for them to reduce internal costs and enhance competitiveness on global markets. Although FDI did not really promote spillover for the YRD region because of the weakened status of Shanghai, the city has been expanding rapidly leading to an overconcentration of people and industries. This partly explains why cooperation mechanism and regional integration have been increasingly important for Shanghai. In response to the dynamics of globalization, the municipality of Shanghai proposed a plan to take advantage of the historical status of Shanghai as world city to promote the creation of a large global city-region and boost the socio-economic development of China as a whole. As such, the opening of the Pudong district and later the accession to the WTO has helped attracting new FDI inflows in the tertiary sector, and more recently, in advanced technology-intensive industries. Alongside, the improvement of regional public infrastructures, rising costs of productions and preferential policies have stimulated industrial upgrading and relocation of traditional industries from Shanghai to the hinterland. In other words, those factors have provided an incentive for foreign firms to upgrade their initial investments while relocating lower value-added manufacturing activities in the surrounding cities of the YRD. Nowadays, Shanghai is clearly the leader of the YRD and relies on both Hangzhou and Nanjing, respectively the provincial capital cities of Zhejiang and Jiangsu, for the socio-economic development of the YRD. Therefore, the YRD region is obviously transforming to a polycentric development. In the upcoming years, those cities will be responsible to promote further the economic restructuring and upgrading, which will undoubtedly provide new business opportunities in the secondary cities of the YRD.

5. Conclusion

China is definitely becoming a key player in the international relations and its influence is increasingly important in the global economic and political affairs (Foreign Affairs, 2008). The country is now seeking to play a prominent role in the context of globalization, and want to be more competitive on the international scene. However, the current economic model of China is facing serious challenges caused by numerous factors such as rising labour costs, growing constraints over natural resources, long-term inflation, rising income discrepancies and environmental issues, among others (Zhuang et al. 2012; Zuojun, 2012). Hence, the country must rapidly undertake structural economic adjustments and shift from a “late-developing advantage” to a “first-mover advantage” model by concentrating resources on modern services industry, strategic emerging industries and entrepreneurship while reducing its heavy dependence on export and investments (Liu, 2015). Time-wise speaking, this is the only way for China to drive sustainable economic development, avoid the middle-income trap, and ultimately climb up the global value chain (OECD; 2013; Zhuang et al., 2012). As a consequence, there has been a growing interest in the development of global mega-city region in China, which should subsequently benefit to the overall development of China. Throughout this research paper, it has become clear that the role of first-tier cities with their global-local linkages is to lead the socio-economic development of China. As a result, we can conclude that the rise of second-tier cities is a direct consequence of their economic restructuring and upgrading. In turn, we have studied the rise of second-tier cities in China under the national and the globalizing context. In such a challenging, fast-changing and highly competitive business environment like China, decisions-makers shall already have a step in the future, because the lack of anticipation and forward thinking can drive a company out of the market very rapidly. Ultimately, we conclude that secondary cities are not an option anymore: Whether it is to achieve competitiveness and cost optimization to better serve international markets or to increase revenue by supplying goods or services to Chinese consumers, second-tier cities shall be fully integrated to the strategic expansion plan of companies operating in China. Further research should pay attention to analyse second-tier cities in relation to their respective context of globalization.

Bibliography and other references

- Agarwal, Natasha and Milner, Chris, 2011, *FDI Spillovers in China* [online]. 1. Nottingham: GEP and School of Economics, University of Nottingham. [Accessed 25 May 2015]. Available from: <http://www.etsg.org/ETSG2011/Papers/Agarwal.pdf>
- A.T. Kearney, 2012, *2012 Global Cities Index and Emerging Cities Outlook* [online]. 1. A.T. Kearney, Inc. [Accessed 14 May 2015]. Available from: <http://www.atkearney.com/documents/10192/dfedfc4c-8a62-4162-90e5-2a3f14f0da3a>
- A.T. Kearney, 2014, *2014 Global Cities Index and Emerging Cities Outlook* [online]. 1. A.T. Kearney, Inc. [Accessed 14 May 2015]. Available from: <http://www.atkearney.com/documents/10192/4461492/Global+Cities+Present+and+Future-GCI+2014.pdf/3628fd7d-70be-41bf-99d6-4c8eaf984cd5>
- Bird, Mike, 2014, China Just Overtook The US As The World's Largest Economy. *Business Insider UK* [online]. 2014. [Accessed 14 May 2015]. Available from: <http://uk.businessinsider.com/china-overtakes-us-as-worlds-largest-economy-2014-10?r=US#ixzz3a7U8R1hs>
- Blanchard, Jean-Marc, 2015, Time to recall China's accession to the WTO. *Asia Times* [online]. 2015. [Accessed 25 May 2015]. Available from: http://www.atimes.com/atimes/China_Business/ML09Cb01.html
- Brenner, Neil and Keil, Roger, 2006, *The global cities reader*. London : Routledge.
- Chan C.K., Roger, 2006, The Creation of Global-local Competitive Advantages in Shanghai. In : *Globalization and the Chinese City*. 1. London : Routledge.
- Chen, Xueming, 2013, Assessing the Impacts of High Speed Rail Development in China's Yangtze River Delta Megaregion. *Journal of Transportation Technologies* [online]. 2013. Vol. 3, p. 113-122. [Accessed 25 May 2015]. Available from: <http://www.scirp.org/journal/PaperDownload.aspx?paperID=30371>. SCIRP
- Cheng, Leonard K., 1999, China's Economic Benefits from Its WTO Membership. <http://www.bm.ust.hk> [online]. 1999. [Accessed 25 May 2015]. Available from: http://www.bm.ust.hk/~ced/nw_benefit.htm
- China Briefing, 2011, *City Guide - Beijing* [online]. 1. Dezan Shira & Associates. [Accessed 14 May 2015]. Available from: <http://www.asiabriefing.com/store/book/city-guide--beijing-252>
- China Briefing, 2011, *City Guide - Guangzhou* [online]. 1. Dezan Shira & Associates. [Accessed 14 May 2015]. Available from: <http://www.asiabriefing.com/store/book/city-guide--guangzhou-250>
- China Briefing, 2010, *Business Guide to China's Emerging Second and Third Tier Cities* [online]. 1. Dezan Shira & Associates. [Accessed 14 May 2015]. Available from: <http://www.asiabriefing.com/store/book/business-guide-to-chinas-emerging-second-third-tier-cities-235>
- China Briefing, 2011, *The Yangtze River Delta: Business Guide to the Shanghai Region* [online]. 1. Dezan Shira & Associates. [Accessed 14 May 2015]. Available from: <http://www.asiabriefing.com/store/book/the-yangtze-river-delta-business-guide-to-shanghai-region-fourth-edition-236#sthash.WEw3Lclh.dpuf>
- China.org.cn, 2014, China's political system. [online]. 2014. [Accessed 14 May 2015]. Available from: <http://www.china.org.cn/english/Political/28842.htm>

- China Knowledge, 2013, Beijing (Beijing) City Information. [online]. 2013. [Accessed 29 May 2015]. Available from: <http://www.chinaknowledge.com/CityInfo/City.aspx?Region=Coastal&City=Beijing>
- China Knowledge, 2013, Guangzhou (Guangdong) City Information. [online]. 2013. [Accessed 29 May 2015]. Available from: <http://www.chinaknowledge.com/CityInfo/City.aspx?Region=Coastal&City=Guangzhou>
- China Knowledge, 2013, Chengdu (Sichuan) City Information. [online]. 2013. [Accessed 29 May 2015]. Available from: <http://www.chinaknowledge.com/CityInfo/City.aspx?Region=Western&City=Chengdu>
- China Knowledge, 2013, Chongqing (Chongqing) City Information. [online]. 2013. [Accessed 29 May 2015]. Available from: <http://www.chinaknowledge.com/CityInfo/City.aspx?Region=Western&City=Chongqing>
- China Knowledge, 2013, Dalian (Liaoning) City Information. [online]. 2013. [Accessed 29 May 2015]. Available from: <http://www.chinaknowledge.com/CityInfo/City.aspx?Region=NorthEast&City=Dalian>
- China Knowledge, 2013, Zhengzhou (Henan) City Information. [online]. 2013. [Accessed 29 May 2015]. Available from: <http://www.chinaknowledge.com/CityInfo/City.aspx?Region=Central&City=Zhengzhou>
- Chunlai, Chen, 2012, Foreign Direct Investment in China: Location Determinants, Investor Differences and Economic Impacts. *Asian-Pacific Economic Literature*. 2012. Vol. 26, no. 2, p. 172-173. DOI 10.1111/j.1467-8411.2012.01356.x. Wiley-Blackwell
- Civil Aviation Administration of China, 2004, *2004 National Airport Throughput Ranking* [online]. Beijing : Civil Aviation Administration of China. [Accessed 25 May 2015]. National Airport Throughput Ranking. Available from: <http://www.chinacivilaviation.com/>
- Civil Aviation Administration of China, 2014, *2014 National Airport Throughput Ranking* [online]. Beijing : Civil Aviation Administration of China. [Accessed 25 May 2015]. National Airport Throughput Ranking. Available from: <http://www.chinacivilaviation.com/>
- Codrington, Stephen B, 2005, *Planet geography*. Sydney : Solid Star Press.
- Comaroff, Jean and Comaroff L., John, 2000, Millennial Capitalism and the Culture of Neoliberalism. *Public Culture* [online]. 2000. Vol. 12, no. 2. [Accessed 14 May 2015]. Available from: <https://www.dukeupress.edu/Millennial-Capitalism-and-the-Culture-of-Neoliberalism>Duke University Press
- Davis, Kingsley, 1955, The origins and growth of urbanization in the world. *American Journal of Sociology* [online]. 1955. Vol. 60, no. 5, p. 429-37. [Accessed 14 May 2015]. Available from: <http://isites.harvard.edu/fs/docs/icb.topic1050993.files/2-15%20-%20Kingsley%20Davis%20-%20The%20Origin%20and%20Growth%20of%20Urbanization%20in%20the%20World.pdf>JSTOR
- de Rooij, Christ, 2007, *When do firms pursue brownfield over greenfield investments? A comparison of wholly owned entry modes in the international market place*. [online]. 1. Rotterdam : Rotterdam School of Management. [Accessed 25 May 2015]. Available from: http://chidero.nl/i/media/publications/2007__christderooij__paper__when_do_firms_pursue_brownfield_over_greenfield_investments.pdf
- Drancourt, Michel, 2002, *Leçon d'histoire sur l'entreprise de l'Antiquité à nos jours*. Paris : Presses universitaires de France.
- European Spatial Planning Observation Network (EPSON), 2013, *Second Tier Cities*

and Territorial Development in Europe: Performance, Policies and Prospects [online]. Luxembourg : ESPON & European Institute of Urban Affairs, Liverpool John Moores University. [Accessed 14 May 2015]. Available from: http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/SGPTD/SGPTD_Final_Report_-_Final_Version_27.09.12.pdf

Feng, Chang-Chun, Wu, Genghis and Zhu, Jiajie, 2008, *Regional Planning in China*. . Presentation. 2008.

Foreign Direct Investments, 2015. , [video]. Investopedia : <http://www.investopedia.com/terms/f/fdi.asp>,

Friedmann, John and Wolff, Goetz, 1982, World city formation: an agenda for research and action. *International Journal of Urban and Regional Research*. 1982. Vol. 6, no. 3, p. 309-344. DOI 10.1111/j.1468-2427.1982.tb00384.x. Wiley-Blackwell

Fung, Ka-iu, Yan, Zong-Min and Ning, Yue-min, 1992, Shanghai: China's World City. In : *China's Coastal Cities: Catalysts for Modernization*. 1. Honolulu : University of Hawaii Press.

Google Maps, 2015, Google Maps. [online]. 2015. [Accessed 14 May 2015]. Available from:

<https://www.google.ch/maps/place/China/@34.0495425,113.7271758,6z/data=!4m2!3m1!1s0x31508e64e5c642c1:0x951daa7c349f366f>

Gorodnichenko, Yuriy, Svejnar, Jan and Terrell, Katherine, 2007, *When Does FDI Have Positive Spillovers? Evidence from 17 Emerging Market Economies* [online]. 1. Bonn : The Institute for the Study of Labor. [Accessed 25 May 2015]. Available from: <http://ftp.iza.org/dp3079.pdf>

GOVERNMENT OF CHINA, 2014, China to apply new city classification standards. [online]. 2014. [Accessed 14 May 2015]. Available from: http://english.gov.cn/policies/latest_releases/2014/11/25/content_281475015213546.htm

Gu, Yikang and Feng, Shao, 2003, Solving the Agricultural Problem in China. *Agricultural Economics*. 2003. No. 4, p. 27.

Hall, Peter and Pain, Kathy, 2015, From Metropolis to Polyopolis. In : *The Polycentric Metropolis: Learning From Mega-City Regions in Europe* [online]. 1. London & Sterling : Earthscan. p. 3. [Accessed 14 May 2015]. Available from: <http://www.strategvest.ro/media/dms/file/Resurse/The%20Polycentric%20Metropolis%202006.pdf>

Harris, Richard, 2009, *Spillover and Backward Linkage Effects of FDI: Empirical Evidence for the UK* [online]. 1. Glasgow : Spatial Economic Research Centre, University of Glasgow. [Accessed 25 May 2015]. Available from: <http://eprints.lse.ac.uk/33206/1/sercdp0016.pdf>

Hong Kong Trade Development Council (HKTDC). *Market profile*. 2015. [online]. 2015. [Accessed 14 May 2015]. Available from: <http://www.hktcdc.com/>

Hu, Xiaohui and Du, Debin, 2011, *Inter-city Innovation Linkage and Its Spatial Structure in Megalopolis: A Case Study of the Yangtze River Delta, China* [online]. 1. Shanghai : Department of Human Geography, East China Normal University. [Accessed 25 May 2015]. Available from: <http://ieeexplore.ieee.org/xpl/abstractAuthors.jsp?arnumber=5981148>

Hu, Richard, 2011, China's Metropolitan Planning: Shanghai [online]. Presentation. 2011. University of Camberra. [Accessed 25 May 2015]. Available from: http://www.globalisationandcities.com/uploads/1/5/7/5/15751464/chinas_metropolitan_planning_-_shanghai.pdf

- Ikenberry G., John, 2015, The Rise of China and the Future of the West: Can the Liberal System Survive?. *Foreign Affairs* [online]. 2015. Vol. 87, no. 1. [Accessed 14 May 2015]. Available from: <https://www.foreignaffairs.com/articles/asia/2008-01-01/rise-china-and-future-west>
- Info.hktdc.com, 2000, Incentives Encouraging Investment in Western China. [online]. 2000. [Accessed 14 May 2015]. Available from: <http://info.hktdc.com/alert/cba-e0007sp.htm>
- Jiang, Yonglei, Wang, Lu, Jiang, Xiaolin and Lu, Jing, 2013, Spatial-temporal Evolution of Multi-airports' Homogenization in China Yangtze River Delta. *Procedia Social and Behavioral Sciences* [online]. 2013. Vol. 96. [Accessed 25 May 2015]. Available from: <http://www.sciencedirect.com/science/article/pii/S1877042813022854> ScienceDirect
- Jones Lang LaSalle, 2012, *China50: Fifty Real Estate Markets that Matter* [online]. 1. Jones Lang LaSalle. [Accessed 14 May 2015]. Available from: <http://www.joneslanglasalle.com.cn/china/en-gb/Research/Research-advance-china-2012-china50.pdf>
- Knox, Paul L and Taylor, Peter J, 1995, *World cities in a world-system*. Cambridge : Cambridge University Press.
- KPMG, 2015, Dalian profile. [online]. 2015. [Accessed 14 May 2015]. Available from: http://www.kpmgglobalfrontiers.com/city_profile?city=Dalian
- Leman, Edward, 1995, *The Changing Face of Shanghai* [online]. Shanghai : Chreod LTD. [Accessed 25 May 2015]. The Urban Age. Available from: <http://www.chreod.com/assets/Uploads/CHANGING-FACE-OF-SHANGHAI.pdf>
- Li, Ling Hin, 2003, *Determination of Land Prices in Shanghai under a Transitional Economy* [online]. 1. Reri. [Accessed 25 May 2015]. Available from: http://www.reri.org/research/abstract_pdf/wp30.pdf.
- Li, Rongzhang, 2015, *The Shanghai Deepwater Port under Construction*. Shanghai : Consulate General of Switzerland in Shanghai.
- Li, Yi and Wu, Fulong, 2013, The emergence of centrally initiated regional plan in China: A case study of Yangtze River Delta Regional Plan. *Habitat International*. 2013. Vol. 39, p. 137-147. DOI 10.1016/j.habitatint.2012.11.002. Elsevier BV
- Li, Yi, Wu, Fulong and Hay, Iain, 2015, City-region integration policies and their incongruous outcomes: The case of Shantou-Chaozhou-Jieyang city-region in east Guangdong Province, China. *Habitat International*. 2015. Vol. 46, p. 214-222. DOI 10.1016/j.habitatint.2014.12.006. Elsevier BV
- Lin, Chen, 2007, China's second-tier cities booming. *China Org* [online]. 2007. [Accessed 14 May 2015]. Available from: http://china.org.cn/china/features/content_1230323.htm
- Liang, Junwei, Dai, Zhongqiang and Wang, Zhonghua, 2008, Foreign Direct Investment Inequality (FDI) and Convergence of Growth: Evidence from Yangtze River Delta. *Business and Public Administration Studies* [online]. 2008. Vol. 3, no. 3. [Accessed 25 May 2015]. Available from: <http://www.bpastudies.org/bpastudies/article/view/74/152><http://www.bpastudies.org>
- Liu, Zhibiao, 2015, Development Strategy, Restructuring and Upgrading, Innovation-Driven Development and Transformation of the Development Mode of Service Industry. In : *Transition of the Yangtze River Delta: From Global Manufacturing Center to Global Innovation Center*. 1. Tokyo : Springer Japan.
- Luo, Xiaolong and Shen, Jianfa, 2008, Why city-region planning does not work well in China: The case of Suzhou–Wuxi–Changzhou. *Cities*. 2008. Vol. 25, no. 4, p. 207-217.

DOI 10.1016/j.cities.2008.04.003. Elsevier BV

McGowan, Carl B. and Moeller, Susan E., 2006, *A Model for Making Foreign Direct Investment Decisions Using Real Variables for Political and Economic Risk Analysis* [online]. 1. [Accessed 14 May 2015]. Available from: http://www.fm-kp.si/zalozba/ISSN/1581-6311/7_027-044.pdf

Motta, Massimo, 2004, *Competition policy*. Cambridge : Cambridge University Press.

Mortenson, 2013, *Key Industrial Parks in the Yangtze River Delta* [online]. Shanghai : Mortenson China. [Accessed 25 May 2015]. Available from: <http://www.mortenson.com/~media/files/pdfs/key-industrial-parks-yangtze-river-delta.ashx>.

Mühlen, Henning, 2012, *Spillovers from FDI: What are the Transmission Channels?* [online]. 1. Bochum : Faculty of Management and Economics, Ruhr-University Bochum. [Accessed 25 May 2015]. Available from: <http://www.etsg.org/ETSG2012/Programme/Papers/366.pdf>

Mulich, Jeppe, 2014, *Global Cities in History, from New Orleans to Shanghai*. . Presentation. 2014.

Mulich, Joe, 2011, China's "Second-Tier" Cities Take Off. *Wall Street Journal* [online]. 2011. [Accessed 14 May 2015]. Available from: <http://online.wsj.com/ad/article/chinaenergy-cities>

Musy, Nicolas, 2012, China's low costs to last for a decade, or more: Automation is taking over from low-skill, low-cost work [online]. 1. China Integrated. [Accessed 29 May 2015]. Available from: http://www.sinoptic.ch/textes/articles/2012/201212_CH-ina_China.s.low.costs.to.stay.for.a.decade-en.pdf

National Bureau of Statistics of China, 2012, *Annual data*. Beijing : National Bureau of Statistics of China.

Naughton, Barry, 2008, Understanding the Chinese Stimulus Package. *China Leadership Monitor* [online]. 2008. No. 28. [Accessed 14 May 2015]. Available from: <http://www.hoover.org/sites/default/files/uploads/documents/CLM28BN.pdf> Hoover

Ningbo Port, 2007, Development Plan. [online]. 2007. [Accessed 25 May 2015]. Available from: <http://www.nbport.com.cn/portal/wps/portal/en>

Ngo, Tak-Wing and Chen, Yilin, 2009, Rent Production and Industrial governance in the auto industry. In : *Rent Seeking in China* [online]. 1. London : Routledge Contemporary China Series. [Accessed 14 May 2015]. Available from: https://books.google.ch/books?id=yUJ9AgAAQBAJ&pg=PA168&lpg=PA168&dq=excessive+industrial+isomorphism+in+china&source=bl&ots=lpJra-Ookx&sig=Y_ewnw5R41P6TYEhDTTcRE6LVg&hl=de&sa=X&ei=Zj1HVfPkKcvSUyR8gOgN&ved=0CDgQ6AEwAg#v=onepage&q=excessive%20industrial%20isomorphism%20in%20china&f=false

OECD, 2000, "Main Determinants and Impacts of Foreign Direct Investment on China's Economy", *OECD Working Papers on International Investment*, 2000/04, OECD Publishing. [Accessed 25 May 2015]. Available from: <http://dx.doi.org/10.1787/321677880185>

OECD, 2013, *The People's Republic of China Avoiding The Middle-Income Trap: Policies For Sustained And Inclusive Growth*. Paris: OCDE Paris.

Rapoza, Kenneth, 2013, The China Miracle: A Rising Wealth Gap. *Forbes* [online]. 2013. [Accessed 14 May 2015]. Available from: <http://www.forbes.com/sites/kenrapoza/2013/01/20/the-china-miracle-a-rising-wealth->

gap/

Roberts, Brian and Hohmann, Rene Peter, 2014, The Systems of Secondary Cities: The neglected drivers of urbanising economies. *CIVIS* [online]. 2014. No. 7. [Accessed 14 May 2014]. Available from: http://www.citiesalliance.org/sites/citiesalliance.org/files/CIVIS%20SECONDARY%20ITIES_Final.pdf

Roberts, Brian H., 2014, *Managing Systems of Secondary Cities: Policy Responses in International Development*. Brussels : Cities Alliances.

Rodrigue, Jean-Paul, Comtois, Claude and Slack, Brian, 2006, *The geography of transport systems*. London : Routledge.

Sahling, Leonard, 2008, China's Special Economic Zones and National Industrial Parks - Door Openers to Economic Reform. *ProLogis Research Bulletin* [online]. 2008. [Accessed 25 May 2015]. Available from: http://www.prologis.com/docs/research/asia/China_-_Special_Economic_Zones_National_Industrial_Parks_-_Door_Openers_to_Economic_Reform.pdf. ProLogis

Sang, Bin Xue, 1993, Pudong: Another Special Economic Zone in China?-An Analysis of the Special Regulations and Policy for Shanghai's Pudong New Area. *Northwestern Journal of International Law & Business* [online]. 1993. Vol. 14, no. 1. [Accessed 25 May 2015]. Available from: <http://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1377&context=njilb> <http://scholarlycommons.law.northwestern.edu>

Shanghai International Port Group (SIPG), 2015, History. [online]. 2015. [Accessed 25 May 2015]. Available from: <http://www.portshanghai.com.cn/en/>

Sassen, Saskia, 1991, *The global city*. Princeton, NJ : Princeton University Press.

Scott, Allen J., 2001, *Global City-Region and The New World System* [online]. 1. Los Angeles : University of California, Los Angeles. [Accessed 14 May 2015]. Available from: <http://www.kas.de/upload/dokumente/megacities/megacities1/allgemein/scott-global-city-regions.pdf>

Scott, Andy, 2010, *Business Guide to China's Emerging Second and Third Tier Cities* [online]. 1. Hong-Kong : Asia Briefing Ltd. [Accessed 14 May 2015]. Available from: <http://www.asiabriefing.com/store/book/business-guide-to-chinas-emerging-second-third-tier-cities-235>

Sinkiene, Jolita and Kromalcas, Saulius, 2010, Concept, Directions and Practice of City Attractiveness Improvement. *Public Policy and Administration* [online]. 2010. Vol. 31, p. 147-154. [Accessed 14 May 2015]. Available from: https://www.mruni.eu/en/mokslo_darbai/vpa/archyvas/dwn.php?id=241406

Sloboda, Brian W. and Haliemun, Cynthia, 2010, The Relationship Between Transportation and Economic Development: The Yangtze Region. *Business and Public Administration Studies* [online]. 2010. Vol. 5, no. 3. [Accessed 25 May 2015]. Available from: http://www.bpastudies.org/bpastudies/article/view/144/280#_ftn7 <http://www.bpastudies.org>

So, Charlotte, 2011, Shanghai airport to double capacity. *South China Morning Post* [online]. 2011. [Accessed 25 May 2015]. Available from: <http://news.newclear.server279.com/?p=2982>

Soja, Edward W., 2002, On The Concept of Global City region. *Artefact* [online]. 2002. [Accessed 14 May 2014]. Available from: http://artefact.mi2.hr/_a04/lang_en/theory_soja_en.htm

Stohldreier, Marie-Theres, 2009, *The Impact of Foreign Direct Investments on Economic Growth in China during the Era 1979-2009*. Bachelor thesis. University of Zurich.

Sun, H. and Zhao, X. (2005), *China Regional Economic Development Report - Regional*

Planning and Coordinated Development of the Yangtze River Delta Region, Shanghai: Shanghai University of Finance and Economics Press. (in Chinese)

Swee-Hock, Saw and Wong, John, 2009, *Regional Economic Development in China* [online]. 1. Singapore : Institute of Southeast Asian Studies. [Accessed 25 May 2015]. Available from: <https://muse.jhu.edu/books/9789812309426>

Tanaka, Kiyoyasu and Hashiguchi, Yoshihiro, 2012, *Spatial Spillovers form FDI Agglomeration: Evidence from the Yangtze River Delta in China* [online]. 1. Chiba : The Institute of Developing Economies, JETRO. [Accessed 25 May 2015]. Available from: <http://www.ide.go.jp/English/Publish/Download/Dp/pdf/354.pdf>

Tang, Zi-Lai, 2010, *Economic Globalization and Transformation of Urban Systems in the Yangtze Delta Region*. . Presentation. 2010.

Taylor, P.J., 2011, *Global Urban Analysis: A Survey of Cities in Globalization*. In : *Global Urban Analysis: A Survey of Cities in Globalization* [online]. 1. London : Earthscan. p. 22-39. [Accessed 14 May 2015]. Available from: <http://www.lboro.ac.uk/gawc/rb/rb349.html>

Taylor, P.J., 2013, *The Remarkable Legacy of Peter Hall's (1966) The World Cities. GaWC Research Bulletin 423* [online]. 2013. [Accessed 14 May 2015]. Available from: <http://www.lboro.ac.uk/gawc/rb/rb423.html>

The Economist, 2013, *Towards the end of poverty*. [online]. 2013. [Accessed 14 May 2015]. Available from: <http://www.economist.com/news/leaders/21578665-nearly-1-billion-people-have-been-taken-out-extreme-poverty-20-years-world-should-aim>

United Nations Center for Human Settlements, 1996, *The Management of Secondary Cities in Southeast Asia* [online]. 1. Nairobi : United Nations Center for Human Settlements. [Accessed 14 May 2015]. Available from: https://books.google.ch/books?id=P-3155j7FLkC&pg=PA13&lpg=PA13&dq=he+management+of+secondary+cities+in+Sout+heast+Asia&source=bl&ots=_mpt_1CWEm&sig=2Uer--sW4FKFNTaEUwmqd9E7P2o&hl=de&sa=X&ei=XapUVf3gDsTtUuS2gNAB&ved=0CCwQ6AEwAA#v=onepage&q=he%20management%20of%20secondary%20cities%20in%20Southeast%20Asia&f=false

United States of America Department of Commerce, 2013, *China Business Handbook 2013*. Beijing : U.S. Commercial Services & Asia Briefing.

Wei, Yingqi and Liu, Xiaming, 2001, *Foreign direct investment in China*. Cheltenham, UK : Edward Elgar Pub.

World Bank, 2015, *China*. The World Bank Group.

World Economic Forum, 2014, *The Competitiveness of Cities*. Geneva : World Economic Forum.

Worldshipping.org, 2015, *Top 50 World Container Ports*, World Shipping Council. [online]. 2015. [Accessed 25 May 2015]. Available from: <http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports>

- Wu, Fulong, 2006, *Globalization and the Chinese city*. London : Routledge.
- Wu, Fuxiang, 2015, Local Government Competition and Industrial Structure Convergence. In : *Transition of the Yangtze River Delta: From Global Manufacturing Center to Innovation Center*. Tokyo : Springer Japan.
- Wu, Michael, 2007, *China's Wealth Disparity Between City and Country and the Government's Policies Toward It* [online]. 1. Ontario : Western University, Department of Economics. [Accessed 14 May 2015]. Available from: <http://economics.uwo.ca/undergraduate/>
- Xian, Shi, 2012, *Urban competitiveness and regional city-to-city cooperation in the Yangtze River Delta Region : A case study of joint development zones*. Ph. D. The University of Hong Kong.
- Xiong, Zhiwei, 2009, Analysis of Utilization of FDI in the Yangtze River Delta. *International Journal of Business and Management* [online]. 2009. Vol. 4, no. 9. [Accessed 29 May 2015]. Available from: <http://www.ccsenet.org/journal/index.php/ijbm/article/view/3790CCSENET>
- Xu, Jiang and Yeh, Anthony G. O, 2011, *Governance and planning of mega-city regions*. Milton Park, Abingdon, Oxon : Routledge.
- Xu, Jiang and Yeh, G.O., Anthony, 2011, Governance and planning of mega-city region: Diverse processes and reconstituted state spaces. In : *Governance and Planning of Mega-City Regions An International Comparative Perspective*. 1. London : Routledge. p. 1.
- Xu, Min, 2008, The Yangtze River Delta (YRD): from current industrial structure to improved regional cooperation. *Shanghai Flash* [online]. 2008. No. 3. [Accessed 14 May 2015]. Available from: http://www.sinoptic.ch/shanghaiflash/texts/pdf/2008/200803_Shanghai.Flash.pdf Sinoptic
- Yang, Guang, 2002, *Shanghai's Economic Development: Its opportunities and Challenges in the 21st Century* [online]. Washington : Global Urban Development. [Accessed 25 May 2015]. Global Urban Development Metropolitan Economic Strategy Report. Available from: <http://www.globalurban.org/GUD%20Shanghai%20MES%20Report.pdf>.
- Yangtze River Delta's services-based economy*, 2015. , [video]. <http://english.cntv.cn/2015/03/03/VIDE1425316438445594.shtml> : CCTV,
- Yeung, Yue-man, 2007, China's Urbanizing Population and Regional Integration Opportunities and Challenges in the Era of Globalization. *Shanghai-Hong Kong Development Institute* [online]. 2007. No. 16. [Accessed 14 May 2015]. Available from: <https://www.cuhk.edu.hk/shkdi/OP/OP16.pdf> The Chinese University of Hong Kong
- Yin, Xiaopeng, 2004, *The Tendency of Regional Integration in China: Incentive, Pattern and Growth* [online]. 1. Ontario : Department of Economics, University of Windsor. [Accessed 14 May 2015]. Available from: <http://faculty.washington.edu/karyiu/confer/beijing06/papers/yin.pdf>
- Yu, Hong, 2015, *Chinese Regions in Change: Industrial upgrading and regional development strategies*. London & New-York : Routledge Taylor and Francis Group.
- Yu, Zhang, 2010, *Yangtze River Delta's System Integration: Institutional Barriers and Countermeasures* [online]. 1. Chiba : Institute of Developing Economies. [Accessed 14 May 2015]. Available from: <http://www.ide.go.jp/English/Publish/Download/Dp/pdf/264.pdf>

- Zhao, Dan, 2010, *The High-Speed Railway Network in Yangtze River Delta: An Analysis of the Accessibility Impact* [online]. 1. Nanjing : Nanjing University. [Accessed 25 May 2015]. Available from: <http://www.regionalstudies.org/uploads/conferences/presentations/european-conference-2012/best-international-paper-early-career/zhao.pdf>.
- Zhao, Miaoqi and Chen, Chen, 2011, Polycentric Network Organization of Mega-City Regions in Yangtze River Delta. *Procedia Earth and Planetary Science*. 2011. Vol. 2, p. 309-314. DOI 10.1016/j.proeps.2011.09.048. Elsevier BV
- Zhao, Z and Tang, M, 2015, Local Network Research of the Yangtze River Delta Based on Economic News. *Lboro.ac.uk* [online]. 2015. [Accessed 25 May 2015]. Available from: <http://www.lboro.ac.uk/gawc/rb/rb312.html>
- Zheng, Jianghuai and Huang, Yongchun, 2015, Industry Selection: Evolution from the Undertaking of Manufacturing Abroad to the Innovation and Entrepreneurship of Emerging Industries in the Yangtze River Delta. In : *Transition of the Yangtze River Delta: From Global Manufacturing to Innovation Centre*. 1. Tokyo : Springer Japan.
- Zhuang, Juzhong, Vandenberg, Paul and Huang, Yiping, 2012, *Growing beyond the Low-Cost Advantage How the People's Republic of China can Avoid the Middle-Income Trap* [online]. 1. Asian Development Bank. [Accessed 14 May 2015]. Available from: <http://www.adb.org/sites/default/files/publication/30036/growing-beyond-prc-avoid-middle-income-trap.pdf>
- Zito, Matthew, 2014, Shanghai FTZ Revised Negative List Introduces Targeted FDI Reforms. *China Briefing* [online]. 2014. [Accessed 25 May 2015]. Available from: <http://www.china-briefing.com/news/2014/07/03/shanghai-ftz-revised-negative-list-introduces-targeted-fdi-reforms.html#sthash.AeRqx59E.dpuf>
- Zuojun, Li, 2012, China's Economy Faces Nine Major Challenges. *China Scope* [online]. 2012. [Accessed 14 May 2015]. Available from: <http://chinascope.org/main/content/blogcategory/20/92/5/30/>

Appendix 1

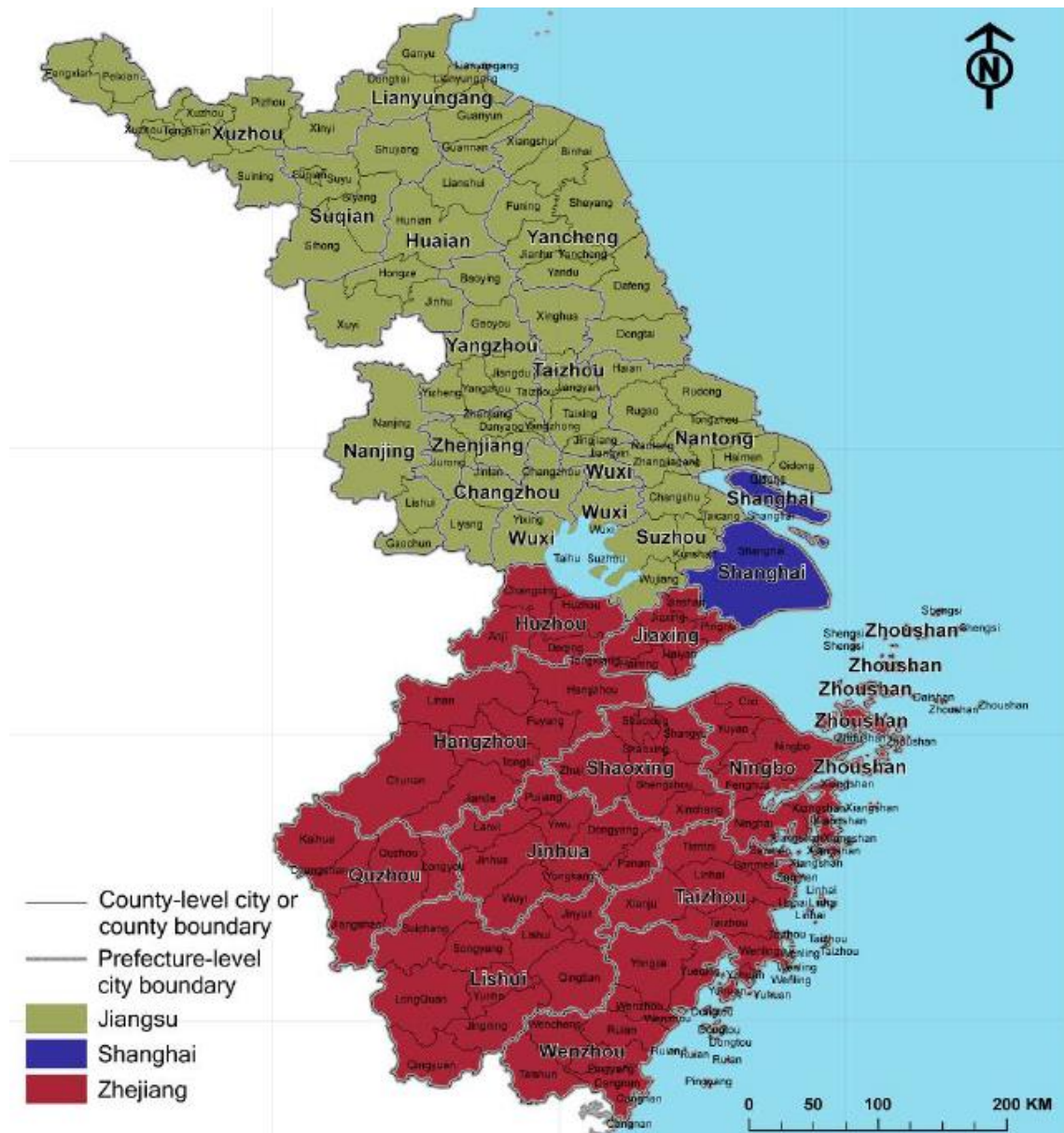
Location of selected cities for the study



Source: Wikipedia (2015)

Appendix 2

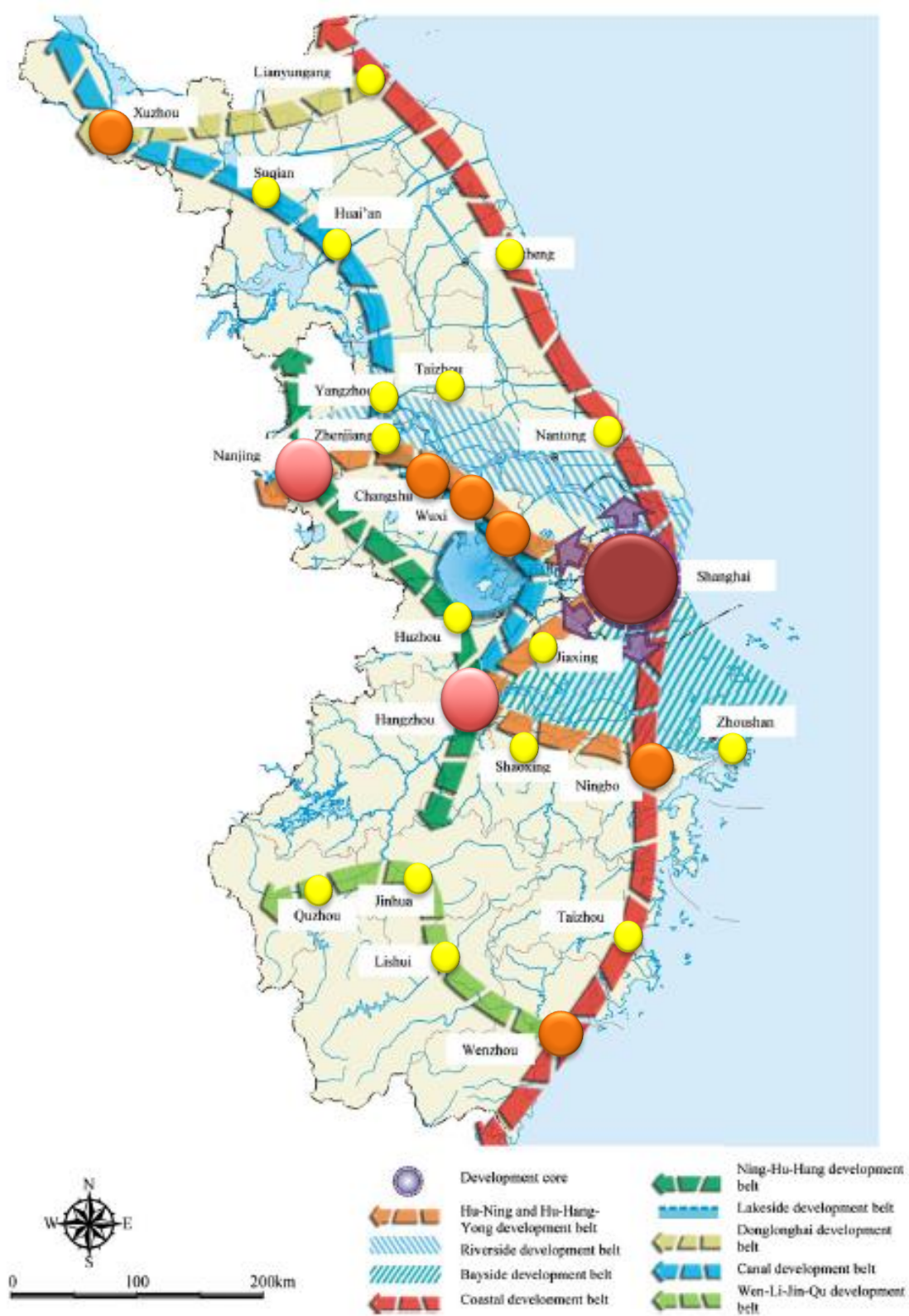
Locational map of the Yangtze River Delta at prefectural and county-level



Source: Xian (2012)

Appendix 3

Strategic development belts and location of major cities in the YRD



Source: Xian (2012)