The hidden gems of China in the age of globalization

An analysis of the degree of internationalization of Chinese second-tier cities and how this relates to their local economic model.

Master thesis Economic Geography, University of Utrecht

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Abstract

Since the introduction of the open-door policy in 1978, China is increasingly internationalizing. This internationalization was initially focused on specific cities, especially the so-called first-tier cities. In more recent years also the second-tier cities endeavor to become internationalized and are stimulated by the central government to do so. This thesis aims to develop an accurate instrument to compare the degrees of internationalization of Chinese second-tier cities and to investigate whether the economic model employed by local governments contributes to explaining the differences in the degree of internationalization between Chinese second-tier cities. The instrument developed to measure these differences in degree of internationalization has been based on a wide scope of literature on the internationalization of cities. The analysis of internationalization literature results in a wide definition of internationalization, which goes beyond economic internationalization. A framework to classify economic models of Chinese second-tier cities has been constructed and the cities regarded second-tier cities have been classified according to this framework. Comparing the degree of internationalization and the type of economic model applied by the local governments of the second-tier cities, leads to an indication that the economic model might contribute to explaining the differences in the degree of internationalization between Chinese second-tier cities. It appears that cities with a laissez-faire local government which focuses on stimulating small firms (SFLF) and cities with an interventionist local government which focuses on stimulating large firms (LFIG) are more internationalized than cities with an interventionist local government which focuses on stimulating small firms (SFIG) and cities with a laissez-faire local government which focuses on stimulating large firms (LFLF).

Contents

1. Introduction

1.1 Context

Under pressure of increasing globalization and boosted by the work of Sassen (1991; 2001; 2011), the internationalization of cities has been researched extensively in the previous decades and is still seasonable. Besides from major works about the internationalization of cities in the Western World (e.g. Sassen, 2011; Jouve, 2007), a lot of literature is available about the internationalization of major Chinese cities such as Shanghai and Beijing (e.g. Chubarov & Brooker, 2013; Ma & Timberlake, 2008; Cai & Sit, 2003; Yulong & Hamnett, 2002).

However, about the internationalization of second-tier cities, a solid base of literature is missing. These cities are all aiming to become internationalized and are stimulated by the central government to do so (Björner, 2014). Besides, China's second-tier cities play an increasingly important role in both the national and world economy (Wang *et al.*, 2015; JLL, 2015; McMillan, 2011).

In 1978 China introduced its open-door policy (e.g. Shen & Kee, 2017; Boisot & Meyer, 2008; Du *et al.*, 2008). This open door was only open for foreign companies to come to China, but recently the Chinese government has also opened the door for Chinese companies and actively encourages them to operate abroad (Gonzales-Vicente, 2011; Luo *et al.*, 2010; Boisot & Meyer, 2008). Related to this policy of the national government, city governments are increasingly trying to get more connected with the global economy (Björner, 2014). Nowadays, most Chinese cities aim to become an international city and the national government encourages cities to internationalize (Björner, 2014).

Beijing and Shanghai, and sometimes Guangzhou and Shenzhen are often considered to be emerging Global Cities (e.g. Björner, 2014; Chubarov & Brooker, 2013; Wei & Leung, 2005), but also other Chinese cities are becoming more internationalized, such as Chengdu (Taylor *et al.*, 2016) and Tianjin (Wei & Jia, 2003). Therefore, it is interesting to go beyond China's most developed cities and study the internationalization of other Chinese cities.

Anybody who has visited a couple of Chinese cities, knows there are huge differences between Chinese cities and the cosmopolitan atmosphere in these cities. To the experience of the author, people outside China do usually not know much about cities such as Chengdu, Wuhan, or Shenyang, and have often never heard of Shijiazhuang, Changzhou, or Wuxi. An internship in a business in second-tier China, taught the author that even people (Chinese and foreigners) who live and work in first-tier cities, such as Beijing and Shanghai have very limited knowledge about China's second-tier cities. This can perhaps be explained by the scale of the country.

The obvious differences between Chinese cities and expected differences in degree of internationalization between those cities, raise the question how these differences have arisen and what can be done by less internationalized cities to bridge the gaps with more internationalized cities. Some factors which have been suggested to contribute to the existence of differences in internationalization between cities are market/population size (JLL, 2016; Björner, 2014 Ni *et al.*, 2014; Pournarakis & Varsakelis, 2004), history (GaWC, 2013; Ma & Timberlake, 2008; Chung, 2003), geographical location (GaWC, 2013; Jacobs *et al.*, 2010; Lee *et al.*, 2008), environment (GaWC, 2013), cultural assets (Ni *et al.*, 2014; Kong, 2012; Van der Borg & Russo, 2005), political status (Su *et al.*, 2014; Ma & Timberlake, 2008), and central government decisions, such as the development of Special Economic Zones (Alder *et al.*, 2015; Wang, 2013) and development zones (Wei & Leung, 2005), and the height of infrastructure investments (Cai & Sit, 2003). In this thesis, the role of local governments in the differences in internationalization between cities will be examined.

1.2 Relevance

1.2.1 Scientific relevance

In academic literature on the internationalization of cities, the focus is usually on Global Cities or world cities (e.g. Chubarov & Brooker, 2013; Cai & Sit, 2003). About the internationalization of cities which can clearly not be qualified as Global Cities, less literature can be found. Nevertheless, smaller European cities have been subjects of some internationalization studies (Cattan, 1995; Bonneville, 1994). Furthermore, Hodos (2007) introduces the concept of second cities. About Chinese cities, other than (potential) Global Cities, the existing literature is very limited. Some studies have been carried out among a wider range of Chinese cities, but none of them focuses on internationalization, instead they focus for example on competitiveness (Ni *et al.*, 2014) or overall development (JLL, 2015). In this thesis, an attempt is made to contribute to the literature on the internationalization of non-Global Cities, in specific, Chinese second-tier cities.

About local economic strategies and models, literature is available ranging from specific economic policies, incentives, and special economic zones, to analyses of the types of local governments and their involvement in businesses (e.g. Leigh & Blakely, 2013; Thun, 2006; Jin *et al.*, 2005; Segal, 2003; Bartik, 2003; Segal & Thun, 2001; Bartik, 1991; Pelissero & Fasenfest, 1989). In the literature about Chinese local governments there is especially a large base of literature on special economic zones (e.g. Alder *et al.*, 2015; Wang, 2013) and privatization and the economic reforms (e.g. Zeng, 2013; Morris *et al.*, 2002; Lin *et al.*, 2001). However, concerning local economic models in China, Zhang & Peck (2016) have made a significant contribution to knowledge by applying the Variety of Capitalism (VoC) approach to Chinese regions. Thun (2006), Segal (2003), and Segal & Thun (2001) also contributed to the knowledge of local economic models in China. Their work focuses on Beijing, Shanghai, Guangzhou, and a limited number of second-tier cities. Other studies provide us with similar information about individual cities (e.g. about Shenyang: Kidwai, 2017; Wang & Li, 2008; Zhang, 2003; or about Nanjing: Wang; 2015; Shieh, 2011; Zeng & Bathelt, 2011; Chung, 2003). This thesis builds upon the frameworks provided by Thun (2006), Segal (2003), Segal & Thun (2001) and combines these frameworks with information about the whole range of second-tier cities available in other literature.

1.2.2 Societal relevance

As Björner (2014) argues, since the central government stimulates cities to internationalize, most Chinese cities aim to become an international city and many even pursue a Global City status (which is unrealistic in most cases). To achieve such goals, local governments adjust their economic models. This thesis aims to contribute to the evaluation of economic models in their aim to contribute to the internationalization of second-tier cities in China.

On the other hand, the findings of this thesis can be used as an overview of the degree of internationalization (on multiple aspects, such as economic internationalization, political internationalization, and cultural internationalization) of Chinese second-tier cities. This is useful for managers looking for expanding or starting-up businesses in second-tier China, as well as government officials who want to know how internationalized their city is compared to other Chinese second-tier cities and in which aspects of internationalization they excel. This is particularly useful because of the lack of knowledge about second-tier cities among both Chinese and foreign people with interests in China.

1.3 Research Problem

The aim of this thesis is two-fold. Firstly, its aim is to develop an accurate instrument to compare the degree of internationalization of Chinese second-tier cities. It attempts to go beyond existing single-

indicator approaches (e.g. Derudder *et al.*, 2013) and approaches which are limited to first-tier cities or potential Global Cities (e.g. Chubarov & Brooker, 2013; Ma & Timberlake, 2008; Cai & Sit, 2003; Yulong & Hamnett, 2002). Secondly, its aim is to investigate whether the economic model employed by local governments contributes to explaining the differences in the degree of internationalization between Chinese second-tier cities.

The following research questions have been posed to achieve the aims stated above:

To what extent do local economic models contribute to explaining the degree of internationalization of Chinese second-tier cities?

- How can the degree of internationalization of Chinese cities be quantified?
- Which Chinese cities qualify as second-tier cities?
- Which local economic models can be identified among the second-tier cities?
- To what extent do these models contribute to explaining differences in internationalization?

1.4 Structure of the thesis

After this introduction, the relevant literature about the topics examined in this thesis, is discussed. Firstly, literature about the internationalization of cities is discussed, with a focus on how the internationalization of cities can be measured and of which aspects the internationalization of cities consists. Thereafter, literature about economic models of local governments is discussed with a focus on the Chinese context. In section 2.2.4 a connection between internationalization and local economic models is made, based on which a hypothesis is formulated. This section also contains a conceptual model. The Theoretical Framework concludes with an overview of the literature about the tier system of cities in China. This section functions as a foundation for the city selection, discussed in the Methodology chapter. The Methodology chapter is divided in two parts, the first part explains the methodology of measuring internationalization. The instrument constructed to measure internationalization is explained. The second part focuses on the classification of the cities based on their local economic models. Chapter 4 contains the findings and presents the outcomes of measuring the internationalization of the cities. Subsequently, the cities which are regarded second-tier cities in this thesis are presented. In section 4.3 the findings of a literature study about the local economic models of the cities are presented and the cities are classified based on their local economic model. The chapter concludes with a comparison between the degree of internationalization of the cities and the local economic models. In chapter 5 conclusions are drawn from the findings and in the Discussion section the effects of the research methods on the outcomes are discussed and recommendations for future research are made.

2. Theoretical Framework

2.1 Internationalization

2.1.1 Measuring internationalization of cities

Bonneville (1994) defines the internationalization of cities as a progressive process which opens local actors, urban economies and societies, to the international arena. This definition underlines that internationalization is a process, but the characterisation of this process remains vague. The definition Zweig (2002) adheres to, is more specific. He regards internationalization as a process in which the share of transnational exchanges relative to domestic ones, increases. With these transnational exchanges, he means the flows of goods, services, and people across state boundaries. Still, a more specific definition is desirable for operationalization. Huang *et al.* (2007) do not focus on the process of internationalization, but the result; the international city. They consider international cities as cities that have many transnational links in terms of investment, trade, business, services, information, migration, and culture. This definition offers a better framework for constructing an instrument to measure the internationalization of cities. The definition Huang *et al.* (2007) use, focuses on economic internationalization (investment, trade, business, services, information) and cultural internationalization. To come to a more complete view on internationalization, literature about different aspects of internationalization will be reviewed to formulate to an operational definition.

Internationalization research about cities, mainly focuses on Global Cities as defined by Sassen (1991). She states that global cities have a particular component in their economic base which makes them have a specific role in the current phase of the world economy, namely a role as business service centres which have a key enabling role in economic globalization (Sassen, 1991). Sassen (2001) linked producer services to the Global City. Many researchers used the framework provided by Sassen (1991; 2001) when researching the internationalization of cities (e.g. Derudder *et al.*, 2013; Huang *et al.*, 2007). Therefore, these studies often use APS firms as main or only criterion to identify Global Cities and measure internationalization of cities. Other authors argue that a Global City is more than just a city with many APS firms. For example, Kong (2007; 2012) argues the importance of culture and arts to become a true Global City. Kourtit *et al.* (2014) come to a list which includes many important characteristics of Global Cities. These studies on Global Cities can be useful for the internationalization of non-Global Cities, but it should be kept in mind that the cities studied are a different type of cities.

As an alternative for Global Cities, Hodos (2007) introduces the term Second City, which take a less prominent role in the global network than Global Cities, but are (on some aspects) internationally connected. Bonneville (1994) also studied the internationalization of non-Global Cities, he focused on non-capital cities in Europe. Huang *et al.* (2007) use the framework of Global Cities, but argue that the term international city is more appropriate than the term Global City, because only a handful cities truly qualify as Global Cities.

2.1.2 Different aspects of the internationalization of cities

As internationalization is a lot more than economic internationalization, in this thesis an attempt is made to include all characteristics of a city proven to contribute to internationalization. Like in the study carried out by Kourtit *et al.* (2014), an extensive list of indicators will be used. Cai & Sit (2003) also use an instrument based on several characteristics of cities to analyse potential world cities. They classify those indicators as belonging to categories. Cai & Sit (2003) use six categories; Politico-economic circumstances, population and skills, economic vitality, enabling infrastructure, and overall urban image. Those categories are selected with respect to potential world cities and may not always fit the situation of Chinese second-tier cities. Thereby, in this thesis, different categories are formulated based on a wide

scope of literature. Nevertheless, both the indicators used by Kourtit *et al.* (2014) and Cai & Sit (2003) are used as reference points in constructing a suitable instrument.

To come to an accurate instrument to measure internationalization of Chinese second-tier cities, existing literature is examined to find those characteristics which contribute to internationalization. Categorized around seven themes, all characteristics found to contribute to the internationalization of cities are discussed.

2.1.2.1 Global Economic Strength

As mentioned above, the number of APS firms is frequently used to identify Global Cities or measure their internationalization. Derudder *et al.* (2013) consider APS firms, firms which are active in financial services, accountancy, advertising, law, or management consultancy and offer customized knowledge, expertise and skills to their corporate clients. Derudder *et al.* (2013) select top ranking firms in these sectors to measure the number of APS firms. Researchers tend to use the GaWC database when using APS firms in their research (e.g. Taylor & Derudder, 2016; Derudder *et al.*, 2013; Huang *et al.*, 2007).

Whereas APS firms are usually used to research Global Cities, there are cases in which they are used in the context of Chinese non-Global Cities. Pan *et al.* (2017) researches relationships between APS firms within China and Derudder *et al.* (2013) uses APS firms to identify the positions of Chinese cities in the global network.

Not only the presence of major APS firms indicate internationalization, also the presence of big companies in other sectors contribute to international economic environment. Alderson *et al.* (2010) analyse the global network of cities using the headquarter and branch locations of Fortune 500 companies. Cai & Sit (2003) also include the presence of Fortune 500 companies in their economic vitality category, but only include the headquarters of Fortune 500 companies. This is an understandable choice for research about world cities, but does not seem reasonable when Chinese second-tier cities are subject of study. Since barely any headquarters of Fortune 500 companies are located in Chinese second-tier cities, it is more suitable to include all offices of Fortune 500 companies in research about Chinese second-tier cities.

Furthermore, Foreign Direct Investment (FDI) is a key element of economic internationalization. It demonstrates capital flows across borders and thereby the economic international connectedness. According to Ni *et al.* (2014) a city's openness to FDI reflect its connection and openness. In their study concerning Chinese cities, a positive effect of FDI on urban competitiveness is found. Some other studies also highlight the role of FDI in internationalization of Chinese cities. Wei & Leung (2005) argue that FDI inflow has been crucial for the internationalization of Shanghai. Zhao & Zhang (2007) state that FDI inflow has been a requisite for the formation of all Global City-regions in China. They also emphasize the importance of an increasingly closer link with the global economy in the formation of a Global City-Region. Pournarakis & Varsakelis (2004) also identify a connection between FDI and internationalization, but argue that the degree of internationalization of a country influences the amount of FDI they receive.

Apart from the amount of FDI received, the number of foreign companies can be relevant for internationalization, because the presence of a large number of foreign companies can influence the economic climate in a city (e.g. more foreign entrepreneurs and workers, create a more international business climate). Furthermore, the presence of a large number of foreign enterprises greatly supports economic development, through mobilizing domestic competition (Dorozynski & Kuna-Marszałek, 2016).

Related to FDI, international trade, or import and export, is a key element of economic internationalization. Ni *et al.* (2014) mention besides from the openness to FDI, the openness to international trade as a city's connection and openness. Pournarakis & Varsakelis (2004) even regard

the share of exports in GDP and the ratio of international trade to GDP as the core measures of internationalization. Zweig (2002) poses a definition of internationalization as a process in which the share of transnational exchanges relative to domestic ones increases. With these transnational exchanges, he means the flows of goods, services, and people across state boundaries. The import and export levels reflect the flows of goods and services across state boundaries, so also following his definition, import and export form the core of internationalization.

Next to the presence of major APS firms, which play a big role in the global economic network, FDI and import and export can together be regarded the core of economic internationalization, because FDI and import and export represent international flows of money and economic activity.

The instruments used by Kourtit *et al.* (2014) and Cai & Sit (2003) both include GDP per capita of the researched cities in their economic categories (with relatively low weightings). This might also be useful for Chinese second-tier cities, as it indicates the general strength of their economies.

2.1.2.2 International Commerce

Second-tier cities in China are regarded important growth markets in international retail. According to CBRE (2013), especially Chengdu (ranked 10th) and Shenyang (ranked 16th) are important growth markets in international retail. CBRE's more recent report (2016) does not focus on the role of second-tier cities in China, but it highlights the global importance of those cities which play a significant role in cross-border retail expansion. JLL Destination Report (2016) shows that international retailers are concentrated in global cities. International retailers are currently searching for growth in emerging cities. Whether major international retailers are locating in a city can thereby indicate whether a city is on the way of becoming a more global city. Furthermore JLL (2016) presents a ranking of the most attractive cities for cross-border retailers. 8 mainland Chinese cities can be found in the top 50, of which 5 are considered second-tier cities (Chengdu, Tianjin, Shenyang, Chongqing, and Hangzhou).

Restaurants which serve foreign cuisine also contribute to internationalization in multiple ways. Eating foreign dishes contributes to the international experience of people and to becoming more cosmopolitan (Möhring, 2008). In the Asian context (Farrer, 2010) finds that investments and increased wealth are conditions for the development of an international restaurant scene. Moreover, a well-developed international restaurant scene contributes to the attractivity of a city and its culinary reputation (Farrer, 2010). Besides, restaurants which serve foreign cuisine contribute to an expatriate-friendly environment. According to Karsaklian (2012) expatriates tend to value brands with which they have a cultural connection and as Farrer (2010) points out, restaurants which serve foreign cuisine contribute to a culinary reputation which can attract expatriates and foreign visitors.

The instrument used by Cai & Sit (2003) does not include indicators about international retailers or restaurants which serve foreign cuisine. Perhaps this is less relevant for the world cities in their study, than for Chinese second-tier cities. Kourtit *et al.* (2014) include indicators about the variety of retailers and the variety of restaurants, which are strongly related to the presence of foreign retailers and restaurants.

2.1.2.3 Education

The instrument used by Kourtit *et al.* (2014) includes a subcategory named Human Capital, whereas Cai & Sit include a category called population and skills, comprising indicators such as the number of college students per 10,000 inhabitants. Multiple academic sources confirm the importance of education for internationalization. For example, Majeed & Ahmad (2008) argue that developing countries with more Human Capital receive more FDI than countries with less Human Capital. This has also been researched at the city level for the case of China. Multiple studies claim that Chinese cities with a highly-educated

population attract more FDI than other Chinese cities (e.g. Liu *et al.*, 2012; Yang, 2002). As argued above, FDI both stimulate and indicate internationalization. Besides a high level of education, the ability to speak English is important for internationalization. English is widely recognized as a global language (e.g. Crystal, 2012; Bamgbose, 2001). English is crucial to attract FDI and stimulate innovation (EF, 2012). English has become the most important language in international politics, scholarship, and business (Yang, 2001). Because of its status as global language English is necessary to establish international connections, and the importance of English as a global language is widely recognized in China (Pan & Block, 2011; Yang, 2001).

To achieve a highly-educated population, universities are needed. Furthermore, most universities see the development of international links as an important part of their missions (Gray *et al.*, 2003). Altbach (2008) identifies different major roles universities have these days. He names one of those roles "Universities as International Institutions". Universities attract international staff and students who exchange knowledge and ideas (Altbach, 2008; Gray *et al.*, 2003). Besides personal contact, most universities enjoy a wide range of international links in the form of agreements and projects (Taylor, 2004). Moreover, universities take central positions in networks of international exchange of knowledge, ideas, and data (Altbach, 2008). However, Taylor (2004) states that some agreements exist on paper only and mean very little in practice.

2.1.2.4 International Community

The international community of a city can be described as people who live in a city, but do not have the nationality of the country they live in. In the definition Zweig (2002) uses to explain what internationalization means, cross-border flows of people are included. These flows of people consist of as well tourists (see section 2.1.2.7 about Culture and Tourism) as expatriates and other foreigners living in a city. Bonneville (1994) also reckons that foreigners which permanently or temporarily reside in a city form an ambiguous measure of the internationality of a city. In the specific case of international students, they do not only contribute to internationalization by their presence, but also by the international knowledge exchange (Altbach, 2008; Gray *et al.*, 2003). In the case of expatriates, cities benefit from their specific knowledge and connections to a cosmopolitan network (Beaverstock, 2002). Besides from the international community itself, international facilities can be used to indicate the internationalization of a city. Kourtit *et al.* (2014) use the number of international schools to do so.

2.1.2.5 Infrastructural Connectivity

Cai & Sit (2003) claim that infrastructure is often used to measure world city formation, especially transport capacity (air and sea) and airline linkages. This is on the one hand because infrastructure connections can be seen as an indication of internationalization, on the other hand infrastructure connections are needed to establish international connections. Several studies use airline connections and passenger movements to measure a city's position in the global network (e.g. Otiso *et al.*, 2011; Cattan, 1995). Ma & Timberlake (2008) used air passenger flows to identify Chinese world cities. If air passenger flows are the only indicator, it is often used as indication of global connectedness or internationalization. Like Ma & Timberlake (2008) argue, their data are not as fundamental to global economic processes as firms' headquarters and branch locations, but form a reasonably good indicator of cities' relative centrality within networks of cities. Besides air connectivity, connectivity over sea is relevant to internationalization. Cities which have an important port evolve in a way that is different from cities which are not port cities. The main difference is that they are more connected to the world system (Lee *et al*., 2008). However, there are differences between port cities. Some port cities develop a strong position in the global network, while other cities stay less connected (Jacobs *et al*., 2010). Rail connectivity can contribute to internationalization as well, but like the presence of a port this should be contemplated with caution. High speed rail links can make cities more attractive locations for companies. Foreign companies which want to access a large market might be interested in a location in a well-

connected city. On the other hand, this fast connection might make a location in this well-connected city unnecessary, since that city can be reached easily from offices in other cities (Yin *et al.*, 2015). Chen & Haynes (2015) argue the highspeed railway in China also stimulates international tourism. Which, as argued in the Culture and Tourism section (2.1.2.7), contributes to internationalization (e.g. Fereidouni & Al-Mulali, 2014; Brahmbhatt & Menezs, 2013; Santana-Gallego *et al.*, 2011; Shan & Wilson, 2001; Kulendran & Wilson, 2000). Kourtit *et al.* (2014) also included a wide range of indicators about the infrastructural connectivity of the cities in their sample. But apart from indicators about the cities' position in the international transportation network, Kourtit *et al.* (2014) include indicators about the infrastructure within the cities. Overall, a well-connected infrastructure can be regarded as a facilitator and a boost of internationalization (Cai & Sit, 2003).

2.1.2.6 Government and Political Engagement

The presence of consulates and business organizations such as chambers of commerce in a city, is often a sign of existing international relations, which can be either political or economic relations or a combination of those. On the other hand, consulates and chambers of commerce can also contribute to attracting foreign companies and thereby enhance existing international relations (Su *et al.*, 2014). Furthermore, formal friendships between cities can lead to more cross-border interaction and can enhance the city's international profile of co-operation and competitiveness (Jayne *et al.*, 2013). Such relationships are also highly useful for provincial cities which aspire to be world cities (Jayne *et al.*, 2011). However, not all sister city relationships prove to be beneficial (Mascitelli & Chung, 2008; Jayne *et al.*, 2011). According to a study among European cities with sister cities, if some conditions are met (such as good former relations and high quality and quantity of joint activities before the agreement) sister city agreements lead to an increase of visitors, students, cultural activities, and economic cooperation (Baycan-Levent *et al.*, 2008). In a study concerning the knowledge-base of European cities, Lever (2002) argues that international exhibitions and trade fairs stimulate cultural and knowledge exchange. GaWC (2013) also considers exhibitions important for international cities, but regards exhibitions as APS firms. Bonneville (1994) sees exhibitions as one of the two indicators of the way in which cities are involved in international exchange networks, the other indicator is import-export ratio. Kourtit *et al.* (2014) include the number of international conferences held, and the number of large world-class cultural events held in their list of indicators.

2.1.2.7 Culture and tourism

In the definition of internationalization used by Zweig (2002), flows of people across state boundaries, play a central role. One part of the flows of people consists of international tourists. Several studies find a correlation between international travel and international trade (e.g. Brahmbhatt & Menezs, 2013; Santana-Gallego *et al.*, 2011; Kulendran & Wilson, 2000). Shan & Wilson (2001) find that also specifically in the case of China international travel between places can lead to international trade between places. Furthermore, Fereidouni & Al-mulali (2014) find a correlation between the number of tourists and FDI in real estate. In short, international tourism contributes to economic internationalization. Tourism can also lead to cultural exchange and (mutual) better understanding and goodwill between nations (e.g. Archer *et al.*, 2005). Strict visa regulations can limit tourism and thereby internationalization, but strict visa regulations can also limit business visits and thereby be negative for international trade. Especially in China negative effects of a visa barrier are present (Liu, 2007).

Tourism is also related to cultural facilities, because facilities such as museums and theatres make a city more attractive for tourists (Heidenreich & Plaza, 2015; Iovitu, 2013). Besides, cultural facilities are attractive for expatriates (Plattner, 2012). In more general, Kong (2007) notes that cultural facilities are often part of Global Cities, since they help to attract and sustain global human and economic flows. For example, in the case of Singapore can be observed how Singapore aims for a lively culture scene to be a truly global city (Kong, 2012). Van der Borg & Russo (2005) identify several ways in which cities benefit

from cultural facilities. They argue that such facilities can function as urban landmarks, which influence the image and attractiveness of the city for private investments, for the creative class, and stimulates social integration. Furthermore, they argue a focus on such cultural elements results in a higher level of interaction between localised individuals and social knowledge and globalising markets.

Sports stadiums can also be regarded as such cultural facilities (Van der Borg & Russo, 2005) and can thereby contribute to internationalization as described above. There is more discussion about the contribution of sports events. Rose & Spiegel (2011) find a permanent increase in trade flows after a country hosts a mega-event such as the Olympics. The authors only examine countries which have placed a bid for the Summer Olympics. It is hard to use this effect when examining Chinese second-tier cities, since none of them has ever placed a bid for the Summer Olympics. Besides, they found the same effect for countries which place a bid, but are not chosen to be the host, as for countries which host the event. There are several researchers who doubt economic benefits from such events (e.g. Whitson & Horne, 2006; Matheson & Baade, 2004).

Whether a city is well-known and talked about can also contribute to its internationalization. A way to research this is, might be an analysis of online presence of the cities, since Vaughan & Romera-Frias (2012) find that the number of web pages in which the name of a company appears, correlates with the company's business measures (revenue, profit and assets). They suggest that this method of Web Keyword Analysis can also be used for other organisations, such as academic, political and government organisations. For example, on academic organisations Marais et al. (2016) use this method with Google Scholar results. Analysing online sources is also a method to get information about place brands (Költringer & Dickinger, 2015).

2.1.2.8 Operational definition of internationalization

Based on the aspects found to be relevant for the internationalization of cities, a definition which is useful for constructing an instrument to measure the internationalization of Chinese second-tier cities can be formulated: Internationalization is a process in which the economic strength, retail environment, education, local community, infrastructure, political ties, and cultural setting of a city become more internationally connected.

2.2 Local economic models

2.2.1 Local economic models

Economic models refer to how the economy is regulated in a way which usually aims for economic growth. Or as Eisinger (1988) states, economic models usually aim for development by generating jobs or attracting private investment.

Making adaptions to the economic model can cause growth accelerations. Relatively small reforms can cause important growth accelerations. Examples of such reforms are mild liberalization, more private sector-friendly policies, or supporting entrepreneurship (Rodrick, 2003).

Growth strategies within economic models are often two-pronged and consist of a short-term and a long-term strategy. The short-term strategy intends to stimulate growth, whereas the long-term strategy is meant to sustain growth. The former is usually a strategy to attract investment, whereas in the long-term strategy institution-building usually plays a central role. These institutions often cause the dilemma of finding balance between offering flexibility and stability (Rodrick, 2003).

In developed countries, adjusting the economic model usually results in a process of making the capitalist system more productive by supplying the institutional ingredients of a self-sustaining market

economy. To achieve economic convergence, developing countries need to apply such institutions eventually, however these institutions are not prerequisites of economic growth (Rodrick, 2003).

The varieties of neo-liberalism are hard to translate into specific models, because every country is a case in itself (Peck, 2004). However, the Variety of Capitalism (VoC) approach aims to do so. In VoC it is assumed that different forms of capitalism exist in different countries with the liberal market economy (LME), which is modelled on the United States of America and the coordinated market economy (CME), which is modelled on Germany as extremes. Countries can be placed on an axis between these extremes to classify their economic model (Zhang & Peck, 2016). Some authors claim there are different varieties of capitalism, with specific features which cannot be placed on the axis between LME and CME, such as the French variety (Schmidt, 2003) and the BRIC-variety (Nölke, 2010).

These economic models are usually researched on the national scale. Zhang & Peck (2016) have translated such economic models to Chinese regions, which will be elaborated on in the following sections. In the context of local models in other countries, available literature mostly focuses on sets of economic policies. For example, Leigh & Blakely (2013), Reese (2006), Bartik (1991), and Pelissero & Fasenfest (1989) have developed typologies to distinguish different types of local governments based on their economic policies. These typologies range from typologies based on specific instruments used by local governments (Bartik, 1991), to typologies based on the extent to which local (suburban) governments apply a strategy to stimulate economic growth (Pelissero & Fasenfest, 1989).

2.2.2 Local economic models in China

Since the privatization and liberalization of the Chinese economy in the late the 1970s it could be argued that the Chinese economy can now be referred to as a form of capitalism (Peck & Zhang, 2013). However, Zhang & Peck (2016) argue that positioning China on a horizontal axis between LME and CME is problematic and has led to contradictory results. This is caused by the differences between regions in historical legacies, resource endowments, leadership capacities, local politics, and the experimental development strategy of Deng Xiaoping, which resulted in regional disparities between the experimental regions and other regions (Zhang & Peck, 2016). Therefore Zhang & Peck (2016) have analysed several Chinese regions and their subspecies of capitalism.

Zhang & Peck (2016) identify several distinctive models in China. The first model they discuss is the model of Hong Kong and Taiwan. Secondly, they describe the Guangdong Model. This is an export-oriented model and characterized by the province's Special Economic Zones. Local governments in Guangdong enjoy a high degree of local policy-making autonomy. The Guangdong Model has developed on the basis of low-skill, labour-intensive activities and although labour-productivity has increased, low-technology, labour-intensive, export-orientation still defines the model.

Sunan (the southern part of Jiangsu province) has a history of predominant collective enterprises which receive loans and other types of preferential treatment, from the powerful and proactive local governments. The private sector used to be underdeveloped, but this changed in the 1990s when Beijing shifted its focus of economic reform efforts from the Pearl River Delta (PRD) to the Yangtze River Delta (YRD). Sunan rapidly privatized its collective enterprises and opened up to foreign investors. Especially, the city of Suzhou strongly internationalized. The Sunan model is characterized by a business-friendly environment, internationalization, and a massive inflow of foreign investors. However, supply linkages between foreign-owned and local firms are generally weak.

Wenzhou struggled during the Maoist era. The city did not have the resources or capacity to develop strong collectively owned enterprises. Wenzhou's entrepreneurs filled this gap and used the advantages of the laissez-faire local government to seize the domestic market opportunities. Therefore, entrepreneurship and business associations characterize the Wenzhou Model. However, the exclusivity

of the region's inter-firm networks and the increasingly tightness of the state-firm relations have reduced the attractiveness of Wenzhou as a foreign direct investment destination.

Zhongguancun, located in the northern suburbs of Beijing, is nicknamed the Silicon Valley of China. The region has advantages in the human capital and guanxi networks. Zhongguancun functions as an incubator of nongovernmental high-technology companies. Returnee entrepreneurs have built robust and highly profitable technological and venture capital links between Beijing and other innovative regions in the world.

Chongqing experienced a 'state-dominated model' of development during the Mao era. In the post-1978 reform era, export sectors along the coast were favoured and Chongqing was left with giant old-economy SOEs. The city had little scope to promote the development of the non-state, market-oriented sector. In 1997 Chongqing was granted a direct-controlled municipality status. Thereby, Chongqing gained more priority from the central government and the city became a role-model for development of inland areas. The Chongqing Model is characterized by heavy reliance on SOEs and property developers in large infrastructural projects and industrial expansion and attracting large brand-name enterprises. Furthermore, the Chongqing Model stands for revival of socialism and inclusive development. However, this left the municipality with high debts.

Some other authors have also identified local economic models in China. Especially the Chongqing, Guangdong, and Wenzhou Models are extensively studied. For example, Mulvad (2015) compares the Chongqing Model with the Guangdong Model. He describes the Guangdong model as a model with a withdrawn state which allows market forces to prosper. The Guangdong local government cautiously liberalized its decision-making. Economically, it transitioned from planning and controlling the market economy to perfecting the workings of its mechanisms from the outside. The local government aims for separation of the state from the economy and for easing market entry for private businesses.

Mulvad (2015) describes the Chongqing Model as a model in which the state has a comprehensive role in social life. The economic model can be characterized as a state-led variant of capitalism. From 2000 onwards, the local government has been an active player in managing capitalist development and did not privatise its core of large SOEs. The local government used the capitalist accumulation to fund its large infrastructural and welfare operations.

The Wenzhou Model is a private enterprise-driven model (Wang, 2015; Wei *et al.*, 2009; Wei *et al.*, 2007). Furthermore, the model is characterized by family enterprises and entrepreneurs which played a major role in transforming Wenzhou to a market economy. However, the economic model of Wenzhou has transformed into a model with renewed institutional support, emerging large firms and industrial groups. Strong local institutions and relations have been essential in the Wenzhou Model, however they now form a threat for Wenzhou's economy, because they seem to cause a regional lock-in (Wei *et al.*, 2007).

Segal & Thun (2001) have another approach to examine different economic models in China. They investigate the relationship between economic performance and institutions. They argue that the unit of analysis should increasingly be the sub-national economy and, other than the authors cited above, they argue that the understanding of economic outcomes should increasingly be sector-specific. They focus on the differences between Beijing and Shanghai and find that the local government of Shanghai has more close control over the firms in Shanghai, stimulates large state-owned enterprises and actively intervenes in vertical relations between units. The local government of Beijing on the other hand, does usually not have bureaucratic authority or capital to support large conglomerates and promotes horizontal links between production and research units. These differences lead to three important differences in the market, whether the markets consist of large or small enterprises, whether vertical or horizontal relationships are dominant, and whether there are interventionist or more flexible

government regulations. Segal &Thun (2001) argue that the development needs of firms are sector-specific and the institutional structures required to meet those needs are local institutions.

Thun (2006) builds on the argument that economic performance depends on local governments and illustrates this by analysing the local institutions and economic performance in the automobile sector in five Chinese cities. Thun (2006) divides the local institutions into four types based on the either unified or fragmented methods of coordination within local governments, and the either hierarchical or market coordinated mode of coordination in interfirm relations between manufacturers and suppliers. Shanghai is classified as a "local development state" (unified bureaucracy and hierarchical interfirm relations), Beijing and Guangzhou are classified as "laissez-faire local states" (fragmented bureaucracy and market-type interfirm relations), Wuhan and Changchun are classified as "central firm-dominated localities" (fragmented bureaucracy and hierarchical inter-firm relations).

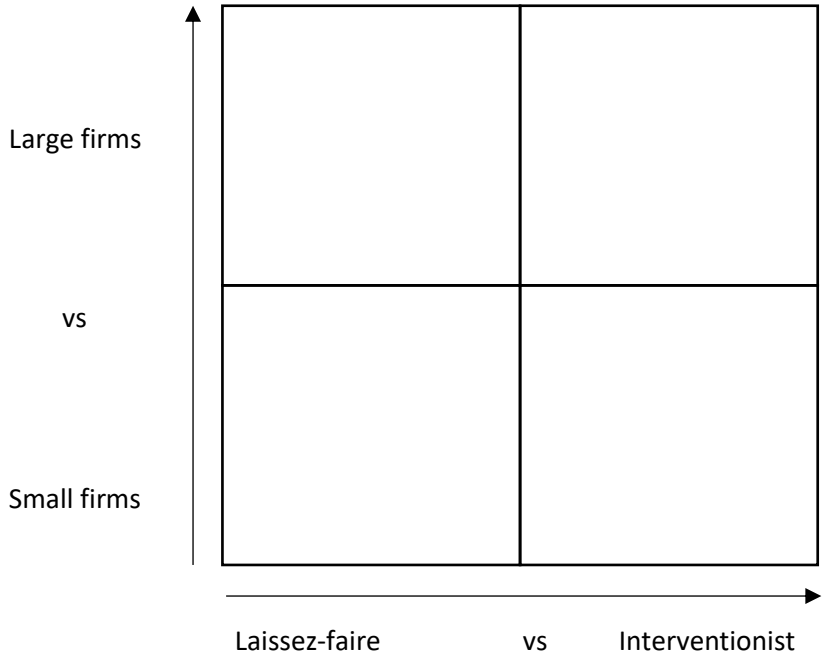
Segal (2003) also follows the argument made that local governments hold the key to economic success of firms in China, but focuses on the IT sector instead. He finds that in Beijing enterprises are usually small and enjoy relative autonomy. In Shanghai enterprises are usually big and are more government-dependent. These findings resemble the findings of Segal & Thun (2001). According to Segal (2003) IT firms in China benefit most from a local government which acts like a good mother-in-law, supportive when necessary, but not interfering in the internal workings of the firm. This description suits Beijing.

Unified or fragmented bureaucracy (as used by Thun, 2006) overlaps with flexible or interventionist government (as used by Segal & Thun, 2001) and autonomy or government dependent (as used by Segal, 2003). Whereas the fragmented bureaucracies are unable to extensively support firms, flexible governments also do not heavily interfere with firms, although not necessarily out of inability to do so. Both fragmented bureaucracy and flexible governments result in autonomy for firms. So, although the cause of autonomy might differ in the three frameworks, the result is similar; governments do not interfere much with the firms and they enjoy a lot of autonomy.

In researching the connection between local economic models and internationalization of cities it is not possible to focus on a specific sector as Segal & Thun (2001) propagate. In internationalization of specific firms this is possible (and perhaps desirable), but considering the degree of internationalization of a city, the whole economy should be taken into account rather than a single sector. Firstly, this is the case because internationalization might be influenced by different sectors. Secondly, in different cities, different sectors are important for internationalization. Therefore, the frameworks provided by Segal & Thun (2001), Segal (2003), and Thun (2006) cannot be employed for this thesis exactly the way they are. However, components of the frameworks are very suitable for this thesis. The horizontal and vertical relationships in a sector as studied by Segal & Thun (2001) cannot be used in this thesis concerning the entire economy, just as the either hierarchical or market coordinated coordination in interfirm relations between manufacturers and suppliers, as used by Thun (2006). The firm size the local governments focus on, as mentioned by both Segal & Thun (2001) and Segal (2003), is directly transferable to this thesis and can be used to construct a typology of local governments of Chinese second-tier cities. As described above, the either unified or fragmented bureaucracy, the either flexible of interventionist government, and the either autonomous or government-dependent firms, overlap and are thereby not suitable to use in one study. Therefore, in this thesis they are combined under the terms laissez-faire government and interventionist government. In which the laissez-faire government does not interfere much with firms (either because of the inability to do so or the choice not to do so). These governments show similarities with the Guangdong Model and the Wenzhou Model. The interventionist government clearly does interfere with firms. How this interference can be identified will be discussed in the next section. Interventionist governments are more like the Chongqing Model than the Guangzhou and Wenzhou Model. Of course, laissez-faire governments also influence firms and their economic performance, but not through direct intervention.

This brings us to a schedule to classify local governments of Chinese second-tier cities (figure 1). The lower left quadrant contains cities in which small firms are stimulated and the government does not interfere much with the firms. According to Segal & Thun (2001) and Segal (2003) Beijing would be placed in this quadrant. The upper left quadrant contains cities in which large firms are stimulated by the government, but the government does not interfere much with them. The lower right quadrant contains cities in which small firms are stimulated and the government does interfere with the firms. Lastly, the upper right quadrant contains cities in which large firms are stimulated and the government does interfere with the firms. According to Segal & Thun (2001) and Segal (2003) Shanghai would be placed in this quadrant.

Figure 1 *The framework for the classification of cities based on their local economic model. Source: author, based on Segal & Thun (2001), Segal (2003), and Thun (2006).*



2.2.3 The use of Variety of Capitalism in identifying interventionist governments

As mentioned above, Zhang & Peck (2016) argue that it is problematic to position China on a horizontal axis between LME and CME and attempting to do so has led to contradictory results. Therefore, they have analysed several Chinese regions and their subspecies of capitalism. As derived from previous works regarding VoC, Zhang & Peck (2016) reduce the differences between LME and CME to five political-economic spheres: corporate structure; financial system; education and training regime; industrial relations; and inter-firm relation. Since in this thesis the aim is not to identify subspecies of capitalism in China, these five spheres cannot be used in classifying the cities, but the form of capitalism is closely related to whether a local government is regarded an interventionist government or not. Therefore, some aspects of an interventionist government can be deducted from Zhang & Peck's (2016) study on subspecies of capitalism in Chinese regions.

While analysing Chinese regions, Zhang & Peck (2016) mention several aspects which are important in as well VoC as identifying interventionist governments. In their analysis of the regions the role of state-owned enterprises (SOEs) and collectively-owned enterprises, and the privatization of enterprises play a large role. For example, Zhang & Peck (2016) highlight that the lack of strong collective enterprises and the opportunities for private entrepreneurs reveal Wenzhou's laissez-faire local government. On

the other hand, Chongqing's economy was dominated by large SOEs (in the last decades of the twentieth century), which illustrated its state-led economy.

Another aspect which is mentioned by Zhang & Peck (2016), is the tightness of state-firm relations. In the context of Wenzhou, they describe the influence of the increasingly tight state-firm relations, which is a sign of an interventionist government. This aspect has been further examined by other authors. For example, Morris *et al.* (2002) identify several forms of such state-firm relations in Chinese enterprises, such as local governments which force enterprises to take over other enterprises and to participate in programmes, and local governments which appoint managers in enterprises. Several authors argue that in some Chinese cities strong state-firm relations result in the appointment of staff by the local government and/or strong influence of the local government in business decisions (e.g. Xie *et al.*, 2016; Murray, 2014; Zhang & Liu, 2010; Gomez, 2003).

Furthermore, Zhang & Peck (2016) mention that some local governments establish a more business-friendly environment than others. In the case of Suzhou, it is pointed out that their more business-friendly environment than the Pearl River Delta has contributed to the inflow of Foreign Direct Investment. The creation of such a business-friendly environment can be regarded a sign of a local government which is not intervening, but constructs an environment in which firms enjoy a lot of autonomy. For example, the case of Chengdu illustrates how creating a business-friendly environment, contributes to an economic model which is based on market development rather than a government-directed economy (GaWC, 2013). Whilst the case of Suzhou illustrates how providing a suitable business environment can be employed as an alternative to direct interventions in enterprises (Chung, 2003).

Lastly, the market economy and the extent to which an open market is present, varies between Chinese cities. As Peck & Zhang (2013) argue that the marketization of China has been conducted unevenly among regions. This can partly be explained by the aforementioned experimental strategy of Deng Xiaoping. In 1992 his tour to the south contributed to the development of market-oriented hotspots, which created differences between regions. Zhou (2012) discusses regional deregulation in China, of which a main component is stimulating free markets. Zhou (2012) argues that the deregulation varies between regions.

2.2.4 Local economic models and internationalization

2.2.4.1 Government interference and internationalization

To the best of the author's knowledge so far there is no literature available which connects the extent of interference of local governments in firms to the internationalization of the city. However, literature which connects the extent of interference of local governments in firms to the internationalization of those firms is available. For example, Child & Rodrigues (2005) argue that governmental support can help firms to internationalize (as has been seen with several large Chinese firms), as long as those firms retain their freedom to pursue their own strategies. Many cases in which outward FDI from China has been governmentally directed under-achieved and currently many successfully internationalizing Chinese firms are either non-state-owned enterprises or enjoy arrangements that help them to avoid bureaucratic interference. Marquis *et al.* (2017) find that the Chinese government actively engages in directing globalization by intervening with the internationalization of firms, but do not research whether this so-called state-mediated globalization is more or less successful than globalization without government interference. Zhang & Peck (2016) state that the privatization of firms (dominance of private firms is an aspect of a laissez-faire government) may lead to a better position in the Global Production Network for those firms.

Besides from literature about internationalization, some literature can be found about government intervention in firms. Nee *et al.* (2007) find that direct intervention at the firm level does not result in

positive economic outcomes for the firm in question. On the other hand, they expect that intervention in the institutional environment which offers conditions favourable to private capital can explain the success of a developmental state in promoting transformative economic growth. Chen *et al.* (2011) distinguish between direct government interventions (measured by politically connectedness of the firm) in SOEs and other companies. They find that direct government interventions in SOEs reduced investment efficiency, but do not find this effect for non-SOEs.

The studies described above, imply that direct government interference is not fruitful for firms and may even be an obstacle to the internationalization of firms. On the other hand, government support and funding are regarded beneficial for the internationalization of firms. This corresponds with the picture painted by Segal (2003) that firms mostly benefit from a (local) government which behaves as a good mother-in-law. Based on this, it is expected that a local government which does not heavily intervene with firms is most beneficial for internationalization. Regarding incoming foreign investment and associated internationalization of the city, Zhang & Peck (2016) state that increasingly tight state-firm relations (which is regarded an aspect of government interference) reduced the attractiveness of Wenzhou as an FDI destination. Therefore, the cities classified as cities with laissez-faire governments (the two left quadrants) are expected to be more internationalized than cities classified as cities with interventionist governments (the two right quadrants). However, most of the literature addressing government interference and internationalization only report the relation between government interference in firms and their outgoing internationalization, rather than the whole process of internationalization of a city. Therefore, the theoretical foundation of this hypothesis is limited, because of the limited availability of relevant literature.

2.2.4.2 Firm size and internationalization

Several studies have shown that larger companies are more likely to internationalize and to engage in exporting (e.g. Mehran & Moini, 1999; Bloodgood *et al.*, 1996; Aaby & Slater, 1989). However, SMEs are increasingly engaging in international trade (Muhammad *et al.*, 2010), but also within the group of SMEs larger firms are more likely to internationalize than smaller firms. Ruzzier & Ruzzier (2012) argue that internationalized SMEs are usually bigger than not internationalized SMEs. This only accounts for the internationalization at the firm level. Large firms are more likely to internationalize and export. Though this is likely to contribute to the internationalization of the city, it does not necessarily influence inward FDI or the international character of the city. Although no evidence can be found for the presence of large firms as a location determinant for FDI, large domestic firms, can be beneficial for foreign enterprises. As Kim & Zhang (2008) argue in the case of Qingdao foreign enterprises entered the market to become suppliers for the large domestic firms in Qingdao.

SMEs are important for innovation (e.g. Giaoutzi *et al.*, 2016; Agrawal *et al.*, 2014;), which might make a city more interesting for foreign companies. Also, governments around the world are more focusing on SMEs these days, mainly due to the importance of technological development and the rising importance of the service sector (Giaoutzi *et al.*, 2016). So, small firms definitely bring a city or region, advantages, but since no evidence for small firms rather than large firms has been found in internationalization of a city, it is assumed that large firms contribute more to internationalization, because of their higher likeliness of internationalizing. However, because only their higher likeliness of outward internationalization can be confirmed, the theoretical foundation of this hypothesis is limited.

2.2.4.3 Conceptual model and hypothesis

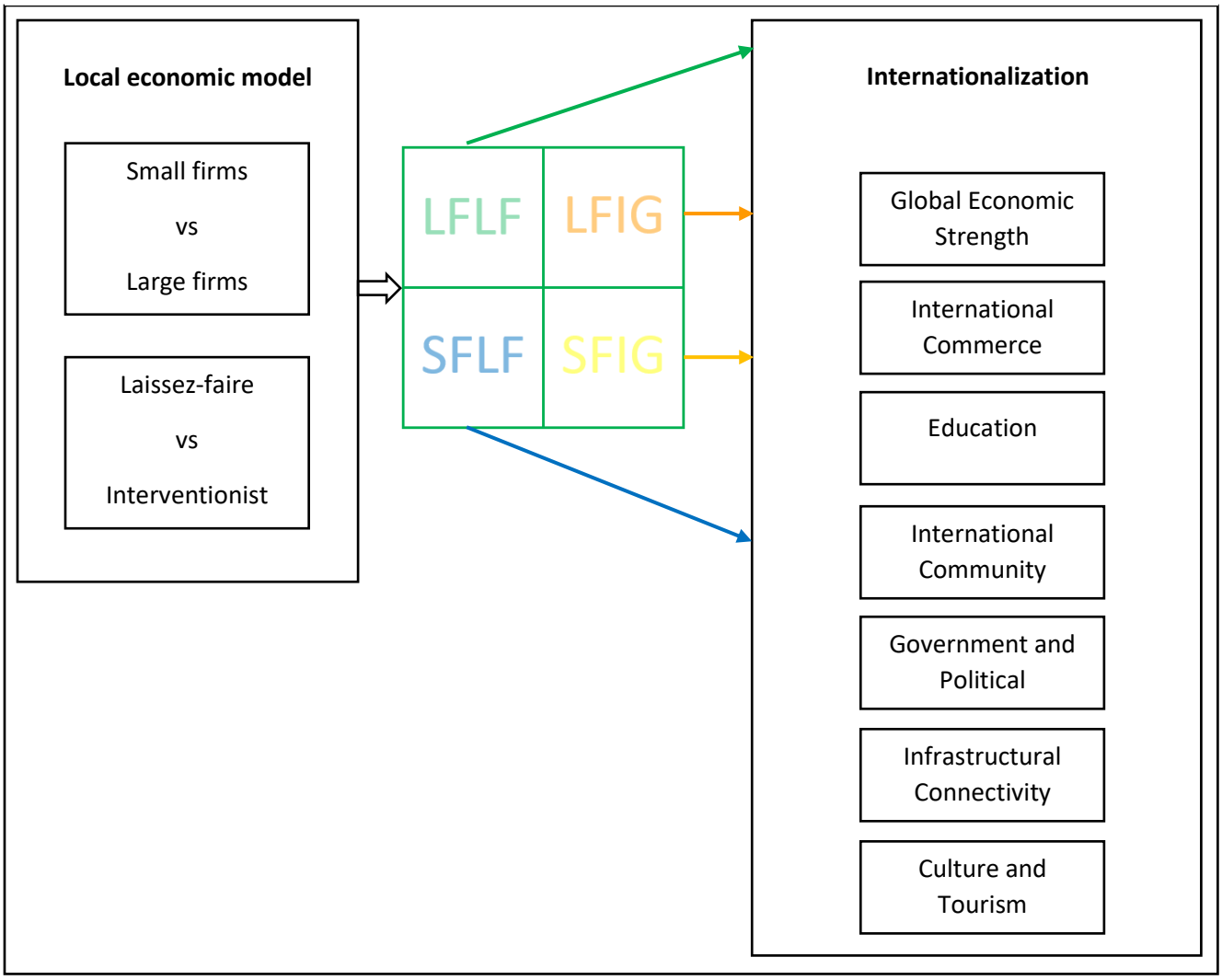
Based on the theoretical framework above, the conceptual model in figure 2 has been constructed. Section 2.1.2 results in the right side of the framework which contains the internationalization of cities and the aspects it consists of. Section 2.2.2 results in the left side of the conceptual model. It contains the local economic model and the aspects of the local economic model analysed in this thesis based on

the findings of Segal & Thun (2001), Segal (2003), and Thun (2006). This results in the four categories of cities depicted in the centre of the model. The cities which stimulate large firms and have a laissez-faire local government (LFLF) will be placed in the upper left quadrant. The cities which stimulate large firms and have an interventionist local government (LFIG) will be placed in the upper right quadrant. The cities which stimulate small firms and have a laissez-faire local government (SFLF) will be placed in the lower left quadrant. The cities which stimulate small firms and have an interventionist local government (SFIG) will be placed in the lower right quadrant. The arrows from the quadrants to the internationalization are the connections that will be examined.

Based on the hypothesis posed in section 2.2.4.1 and 2.2.4.2 (which should be employed with caution because of its limited theoretical foundation, due to the limited availability of relevant literature) it is expected that cities with a laissez-faire local government are more internationalized than cities with an interventionist local government. Therefore, cities classified as LFLF and SFLF are expected to be more internationalized than cities classified as LFIG and SFIG. Based on the hypothesis it is also expected that cities with large firms are more internationalized than cities with small firms. Therefore, cities classified as LFLF and LFIG are expected to be more internationalized than cities classified as SFLF and SFIG. Combining these expectations, the cities classified as LFLF are expected to be most internationalized (represented by the green arrow) and the cities classified as SFIG are expected to be least internationalized (represented by the yellow arrow). The cities classified as LFIG and SFLF are expected to be less internationalized than the cities classified as LFLF, but more internationalized than the cities classified as SFIG.

This leads to the following hypothesis: cities which are placed in the upper left quadrant, with laissez-faire governments which stimulate large firms, are most internationalized and cities which are placed in the lower right quadrant, with interventionist governments which stimulate small firms are least internationalized.

Figure 2 Conceptual model which connects the classification based on local economic model to internationalization. Source: author.



2.3 Tier system

The city tier classification is used by companies as well as the Chinese government, but neither of them poses a clear definition of first-tier or second-tier cities. Therefore, there is no consensus about which cities belong to the second tier. On the other hand, Beijing, Shanghai, Guangzhou, and Shenzhen are widely recognized to be the four first-tier cities (Fung *et al.*, 2014; McMillan, 2011). Although some argue Beijing, Shanghai, Tianjin, and Chongqing (sometimes together with Guangzhou and Shenzhen) are the first-tier cities because of their political administration (e.g. Chiang, 2014; Sinclair, 2010).

Many organizations and scholars which use the term second-tier city, do not quantify the specifications of a second-tier city (e.g. Wang, 2015, Wang *et al.*, 2015; GaWC, 2013). However, in 2009 the online property trading website Rightsite, identified six criteria to define second-tier cities. They state a city does not have to meet all criteria (The China Sourcing Blog, 2011). The six criteria Rightsite identified are:

- A population of more than five million people
- A provincial GDP of at least RMB 250 billion, or RMB 350 billion in more prosperous provinces
- Strong economic growth (no threshold published by Rightsite)
- A central position in the region
- An advanced transportation infrastructure
- Historical and cultural significance

So Rightsite starts with population and GDP, two criteria which are often included when defining second-tier cities. For example, South China Morning Post (2016) argues population, GDP, and political administration are the main factors which determine a city's tier. So, South China Morning Post (2016) combines the idea that city tiers should be based on political administration (which would make Beijing, Shanghai, Tianjin, and Chongqing first-tier cities), with the often-used population and GDP. Including political administration, causes Chongqing and Tianjin to be classified as first-tier cities, whilst these cities are usually not considered first-tier cities (e.g. Wang *et al.*, 2015; JLL, 2015).

Another company which classified Chinese cities is Jones Lang Lasalle (JLL). JLL (2015) categorizes Chinese cities as Tier 1, Tier 1.5, Tier 2, and Tier 3. JLL (2015) bases its classification on economic size and growth, population, wealth, infrastructure, exports, FDI and fixed investment, education, business environment, real estate investment volumes, office, retail and logistics stock, developer activity, corporate presence, retailer presence, and internationally-branded hotels.

In this thesis three indicators are regarded important for the tier classification: population size, GDP, and internationalization. Population and GDP are often used when identifying second-tier cities (e.g. South China Morning Post, 2016; JLL, 2015; The China Sourcing Blog, 2011). Internationalization is included, because it shows how connected, developed, and modern a city is and includes most of the criteria used by JLL (2015) and Rightsite, such as infrastructure, cultural significance, exports, FDI, education, corporate presence, retailer presence, and internationally-branded hotels. Besides, how international or cosmopolitan a city is, is often regarded an important distinction between the different tiers (e.g. Wang, 2015; JLL, 2015; The China Sourcing Blog, 2011).

Because of the plurality of views on the tier system in China, it is not expected that the method of assigning cities to city tiers used in this thesis will be a template for future research. However, this method is introduced, because a solid method of assigning Chinese cities to city tiers does, to the best of the author's knowledge, not exist. Introducing a method to do so, enables the author to come to a substantiated city selection, rather than a randomly selected set of cities.

3. Methodology

3.1 Measuring internationalization

3.1.1 City selection

This thesis focuses on second-tier cities, because the internationalization of first-tier cities has already often been studied. Second-tier cities are rapidly internationalizing, but there is research gap concerning the internationalization of Chinese second-tier cities.

As argued in the Theoretical Framework, a clear definition of second-tier cities is lacking and there is no consensus among academics, practitioners, and government officials about which Chinese cities are second-tier cities. To select a basket of cities which might be classified as second-tier cities in this thesis the often-used indicators of population and GDP are used (e.g. South China Morning Post, 2016; JLL, 2015; The China Sourcing Blog, 2011). In this thesis, all Chinese cities with at least 3 million people and a GDP of at least $50 billion have been selected.

For the cities' GDP, the China Statistical Yearbook 2016 has been consulted. Although this is the most reliable source for these data, it cannot be guaranteed that it is flawless, since Chinese local governments are suspected of manipulating data to show the national government their good performance.

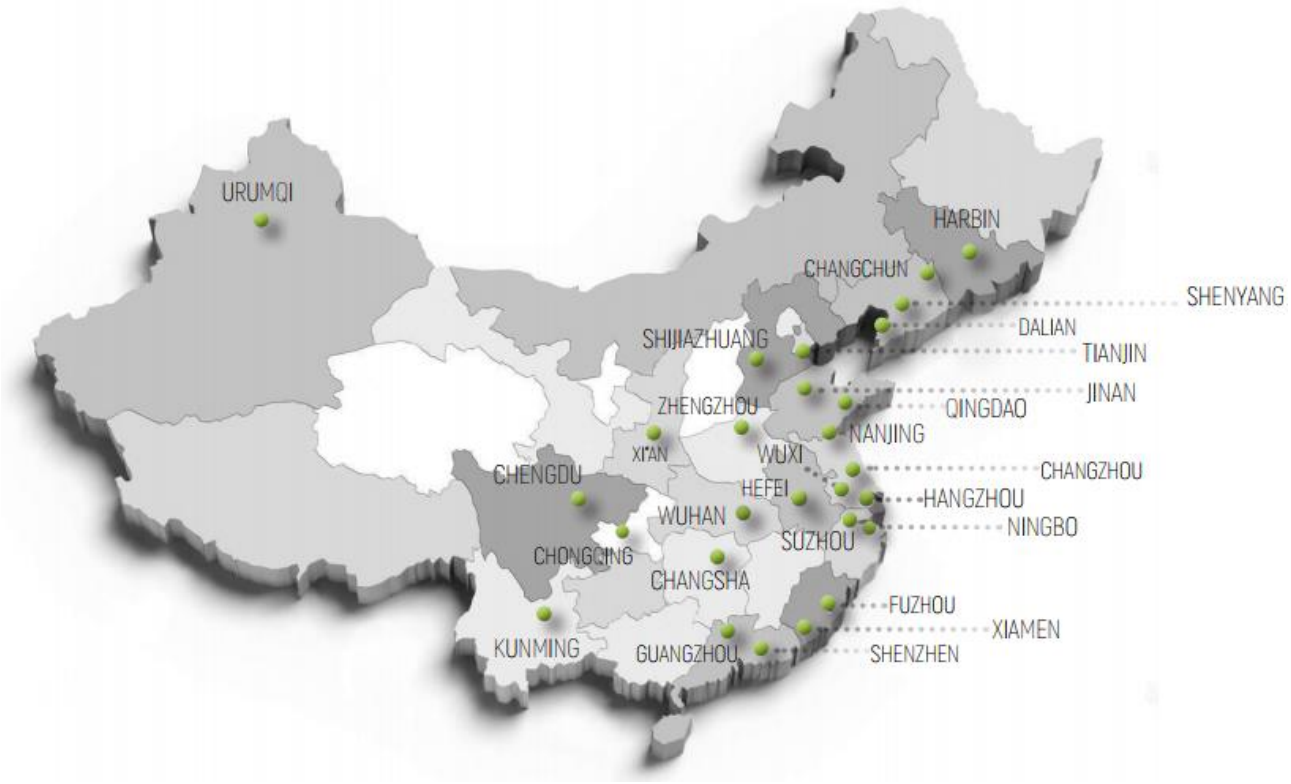
Gathering data about city populations in China also causes problems, because Chinese cities often contain a lot of rural counties, which distorts population numbers. The China Statistical Yearbook 2016 contains data about city populations, but does not define what is included. It seems like all people residing in the entire area under jurisdiction are included. Since the size of this area strongly varies per city, it is difficult to compare cities. In the most extreme case, Chongqing is stated to have 33.72 million inhabitants, whereas the urban area houses only 7.44 million inhabitants (The Guardian, 2017). Therefore, data published by The Guardian (2017) have been used to select cities. These data comprise the urban areas of the cities. This definition causes another problem; some cities have grown into another city, which raises the question whether this should now be counted as one urban area or not (The Guardian, 2017). However, this problem is less problematic than the problem with the data published in the Statistical Yearbook.

These two selection criteria result in a list of 25 cities which have the potential to be second-tier cities based on the size of their population and economy, and 4 cities regarded first-tier cities (see table 1). As described in the Theoretical Framework, the degree of internationalization will be used to select which cities are considered second-tier cities in this thesis. Shanghai and Beijing are not included in the analysis, because of the consensus that those two cities are first-tier cities. Guangzhou and Shenzhen are included to examine whether they are considered first-tier or second-tier cities according to the classification in this thesis. Figure 3 depicts the geographical locations of the 25 cities which have the potential to be second-tier cities based on the size of their population and economy, and Guangzhou and Shenzhen.

City	Tier
Beijing	First-tier cities
Shanghai	
Guangzhou	
Shenzhen	
Changchun	Potential second-tier cities
Changsha	
Changzhou	
Chengdu	
Chongqing	
Dalian	
Fuzhou	
Hangzhou	
Harbin	
Hefei	
Jinan	
Kunming	
Nanjing	
Ningbo	
Qingdao	
Shenyang	
Shijiazhuang	
Suzhou	
Tianjin	
Urumqi	
Wuhan	
Wuxi	
Xiamen	
Xi'an	
Zhengzhou	

***Table 1** China's first-tier and potential second-tier cities based on the size of their population and economy. Source: author.*

Figure 3 The locations of the selected cities.



3.1.2 Constructing the instrument

To measure internationalization, an instrument has been developed based on the literature available about the internationalization of cities. All aspects found to contribute to internationalization have been translated into measurable indicators. As shown in table 2, those 44 indicators have been grouped into seven categories; Global Economic Strength, International Community, International Commerce, Education, Culture and Tourism, Infrastructural Connectivity, Government and Political Engagement, and Infrastructural Connectivity. Based on the literature the indicators have been distracted from, not every indicator seems to make the same contribution to internationalization. Therefore, both the categories and the indicators have been assigned weightings.

Indicator	Unit	Weighting
Global Economic Strength		20
GDP per capita	RMB / head	5
Foreign Direct Investment	$USD billion	20
Total import and export	$USD billion	20
Number of Fortune 500 companies	Integer	10
Number of major APS firms	Integer	25
Number of foreign companies	Integer	10
Number of completed foreign development projects	Integer	10
International Commerce		15
Number of international luxury fashion retailers	Integer	15
Number of international luxury non-fashion retailers	Integer	15

Number of international fast-fashion retailers	Integer	15
Number of other international retailers	Integer	15
Number of large multinational food/drink chains	Integer	15
Number of restaurants selling foreign cuisine	Integer	10
Number of foreign operated hotels	Integer	7,5
Number of foreign serviced apartments	Integer	7,5
Education		**15**
Level of education	%	25
English speaking population	Index	25
Number of top universities	Integer	35
Number of international intern recruitment agencies	Integer	15
International community		**17,5**
Number of international schools	Integer	15
Number of international university students	Integer	20
Expatriate population	Integer	20
Expatriate population percentage	%	30
Number of foreign clinics	Integer	15
Infrastructural Connectivity		**10**
Number of direct international flights to Asian destinations	Integer	15
Number of direct international flights to non-Asian destinations	Integer	15
Annual passenger capacity of airports	Integer	10
International rail links	Integer	10
High speed rail links	Integer	10
Number of international tourists entering per year	Millions	20
Having an international seaport	Binary	15
Development of Metro system	Integer	5
Government and Political Engagement		**10**
Number of foreign consulates	Integer	35
Number of sister cities	Integer	20
Foreign Chambers of Commerce	Integer	30
Number of exhibitions	Integer	15
Culture and Tourism		**12,5**
Number of tourist attractions	Integer	17,5
Is there a 72hr visa option?	Binary	15
Number of Top and Major theatres	Integer	10
Number of Major Museums	Integer	10
Online content	Integer	12,5
Top tourist attraction review count	Integer	20
Sports online content	Integer	7,5

Number of large sports stadiums	Integer	7,5

Table 2 *The whole range of indicators included in the instrument to measure the internationalization of Chinese second-tier cities, divided in seven categories and with their appointed weightings. Source: author.*

Appointing weightings to indicators of an index is a subjective matter and is therefore a cautious practice. As argued by Cai & Sit (2003) assigning weights is always arbitrary. To still achieve the most suitable composition of weightings among the indicators used, they used a mixture of common sense, references to other studies, and peer discussions. For this thesis, a similar approach has been followed. Firstly, existing literature has been studied to identify the importance of different aspects of internationalization. Some aspects are more frequently mentioned than others, prove to have stronger effects than others, or are more widely recognized to contribute to internationalization. Those aspects were appointed higher weightings. Thereafter a proposal of the distribution of weightings has been presented to several experts in business in second-tier China. Their experience with the context of second-tier China and common sense were employed to improve the appointed weightings.

This way, weightings were assigned to the categories and the indicators to transform raw data into an index to compare the cities. But to compare the data among cities it needs to be normalized. The indicator scores were normalized using the following equation:

Normalized x = Max (x) - x / Range (x) * - 100 + 100

Where x is the city's score on the indicator, Max (x) is the highest value acquired by a city on the indicator and Range (x) is the difference between the lowest value acquired by a city and the highest value acquired by a city for the indicator.

Using this formula, on every indicator the lowest scoring city is assigned a normalized score of 0 and the highest scoring city is assigned a normalized score of 100. All other cities get a normalized score between 0 and 100 based on their position between the lowest and highest scoring city.

Normalizing the scores is necessary to come to scores from 0 to 100 which can easily be compared. Without normalizing the scores, it would not be possible to compare the scores among the seven different categories. A disadvantage of normalizing the scores as described above, is the influence of outliers. If there is one city with a very high or very low score, the differences between the others will be less visible. On the other hand, if there is not much variation in the scores, small differences will appear to be large differences.

After normalizing the scores, they have been multiplied by the weighting assigned to the indicator. All weighted indicator scores within each category have been added up to come to a category score. These scores have been multiplied by the weighting assigned to the category. After that, the weighted category scores have been added up to come to a final score between 0 and 100 for each city. Based on these scores the cities have been ranked.

A short note is needed, to reassure awareness that the instrument constructed can only be used to compare the degree of internationalization of the selected cities. An index like this, cannot provide a degree of internationalization which is informative on its own, or enables comparisons with cities not included in the index.

3.1.3 Data collection

Because no data base comprising an extensive set of indicators on internationalization of Chinese second-tier cities was available, data has been collected from numerous sources. Where possible on every indicator the same source has been used for all cities. The attempt has been made to use the most recent and reliable sources. Sources such as forums and other websites on which anybody can post have been avoided, and official sources have been used where possible. For example, 'The China Statistical Yearbook 2016' is regarded an official source since it is an official publication by the Chinese government. For the number of shops, hotels, and chains, official websites of the chains have been consulted. However, not for every indicator an official source has been found. The author has attempted to retrieve the most reliable data available, but cannot guarantee that all data included is completely reliable.

3.2 Local economic models

3.2.1 The four quadrants

As described in the Theoretical Framework, based on the work of Segal & Thun (2001), Segal (2003), and Thun (2006), a framework has been constructed to analyse the local economic models of Chinese second-tier cities. This framework consists of four quadrants based on two variables; the firm size stimulated by the local government (large or small), and the extent of interference of the local governments (laissez-faire or interventionist). All cities included will be classified as SFLF (small firms, laissez-faire), SFIG (small firms, interventionist government), LFLF (large firms, laissez-faire), or LFIG (large firms, interventionist government).

3.2.2 Literature study on the cities

The most suitable quadrant is selected by studying literature available about the cities. For each city literature has been examined to decide whether the local government of the city mostly stimulates large or small firms and whether the local government heavily interferes with the firms in its city or not. Of course, most local governments welcome both small and large enterprises, but an attempt has been made to identify whether local governments focus their policies on small or large enterprises.

Identifying whether a local government can be classified as an interventionist government or a laissez-faire government, is done by examining four aspects described in the Theoretical Framework (see section 2.2.3). These four aspects are:

- The role of SOEs (1)
- The tightness of state-firm relations (2)
- The creation of a Business-friendly environment (3)
- The role of the market economy (4)

The cases of Chengdu (see section 4.3.1) and Shenyang (see section 4.3.2) are described more comprehensively than the other seventeen cities to exemplify the process of classifying the cities. For these two cities, a paragraph is dedicated to every aspect. The extent of interference by the local government of the other cities is described more briefly and due to a lack of literature available not every aspect is included. However, for each city at least two aspects are included. These aspects are marked by a number between brackets as in the list above.

3.2.3 Connecting local economic models to internationalization

In order to investigate the possible connection between internationalization and local economic models, the findings of these two components of this thesis are compared. The cities are ordered by the height of their scores on internationalization. The type of their local economic models are listed next to the

internationalization scores and patterns will be looked for. According to the hypothesis posed in the Theoretical Framework, the top of the list is expected to consist of cities with a local economic model which has been classified as LFLF (large firms, laissez-faire) and the bottom of the list is expected to consist of cities with a local economic model which has been classified as SFIG (small firms, interventionist government). Listing the outcomes concerning internationalization and local economic models together will make it possible to check whether this pattern is visible or not.

4. Findings

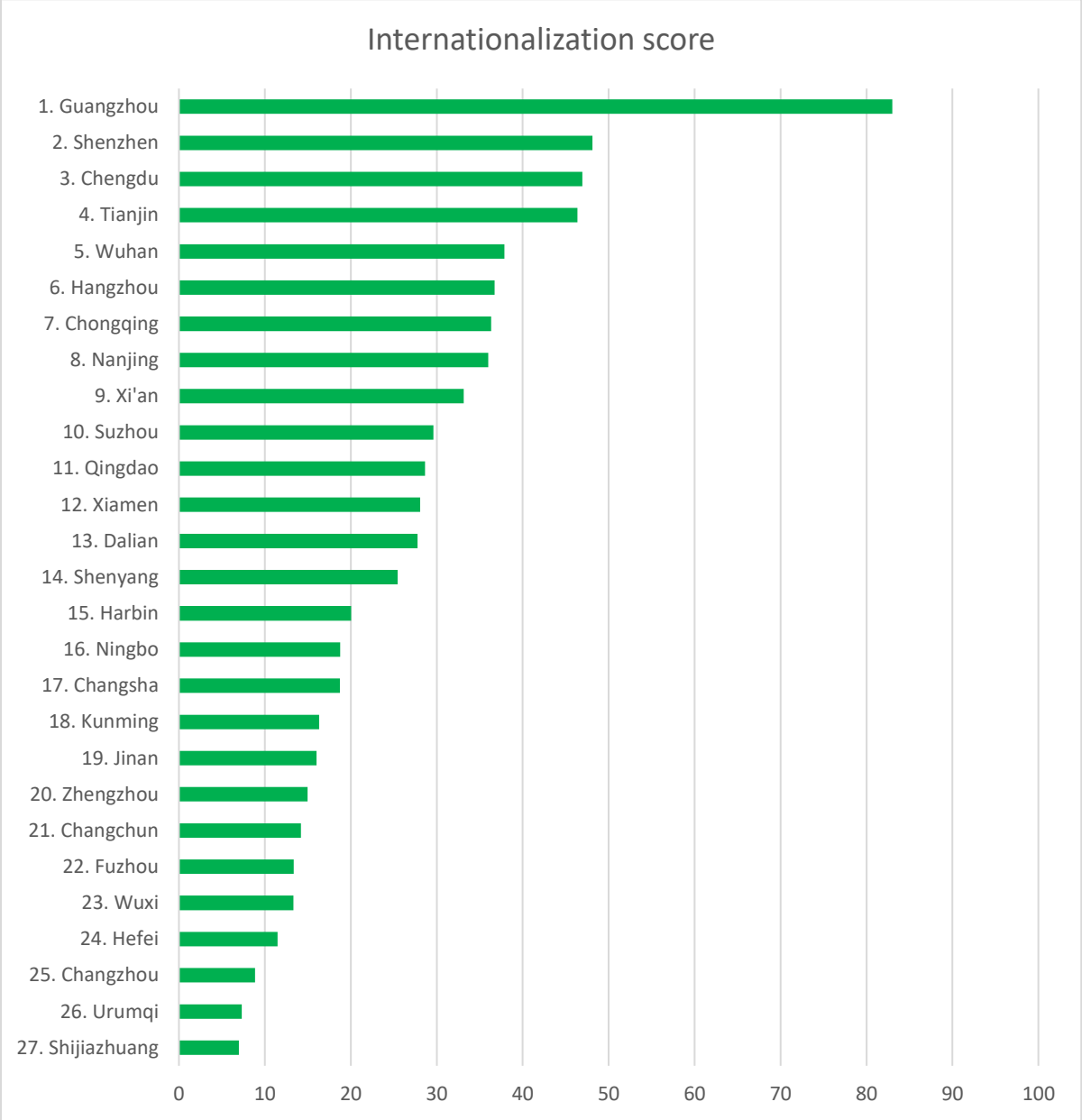
4.1 Internationalization

4.1.1 Overall internationalization

Based on the instrument described in the Methodology section, for every city a score has been calculated. Figure 4 shows the total scores of the cities and the ranking this results in. As expected, the first-tier cities Guangzhou and Shenzhen make up the top of the list, but surprisingly the gap between Shenzhen and Chengdu is small. This result could raise the question whether Chengdu (and perhaps Tianjin) should be considered a first-tier city or whether Shenzhen should be considered a second-tier city. However, Shenzhen's surprisingly low score is likely to be caused by its geographical location adjacent to Guangzhou. Shenzhen lacks certain facilities which lowers its score, but although Shenzhen does not have those facilities within its city boundaries, these facilities contribute to Shenzhen's international character. Shenzhen has only one top university, whereas neighbouring Guangzhou has six top universities. Moreover, no consulates established in Shenzhen, whereas fifty-one consulates are present in Guangzhou. These and other international facilities in Guangzhou are not located within the boundaries of Shenzhen, but influence Shenzhen's international development. The same issue occurs when the internationalization of cities nearby Shanghai is measured. Especially Suzhou's score is lower than expected, because of lacking an airport, while both Shanghai's airports are only a drive away. The proximity of first-tier cities contributes to explaining the differences in degree of internationalization.

So regardless of the (generally accepted) first-tier cities, Chengdu and Tianjin are the most internationalized cities. Wuhan, Hangzhou, Chongqing, Nanjing, and Xi'an form the sub-top. Suzhou, Qingdao, Xiamen Dalian, and Shenyang make up the middle of the list and have internationalization scores close to the average score (26.82). It is striking that this middle group contains three cities in northeast China (Qingdao, Dalian, and Shenyang). After a small gap with Shenyang, the group from Harbin to Shijiazhuang perform below average and bring up the rear. In this group, a line will be drawn to separate the least internationalized second-tier cities and the non-internationalized third-tier cities (see section 4.2).

Figure 4 Internationalization score per city. Source: author.



4.1.2 Internationalization per category

The overall scores discussed above consist of scores on seven categories. Although the overall scores of two cities can be similar, the scores on different categories may be diverse and thereby reflect the different internationalization. For example, Chongqing and Nanjing show a similar level of internationalization (with scores of 36.34 and 35.99 respectively), but the composition of their internationalization is different. Chongqing scores well over the whole range of categories, except for its Education and International Community. Nanjing on the other hand, has outstanding Education, but lower scores than Chongqing on most of the other categories. Table 3 gives an overview of the scores per category. The colours give an indication of the performance compared to the other cities. Yellow scores are around average. The greener a score is, the higher above average and the more red a score is, the lower below average.

City	Global Economic Strength	International Commerce	Education	International community	Infrastructural Connectivity	Government and Political Engagement	Culture and Tourism	Total
Guangzhou	77.56	83.99	67.86	100.00	88.00	91.25	74.20	**82.99**
Shenzhen	73.22	64.27	28.33	39.48	39.74	33.99	42.30	**48.10**
Chengdu	46.69	73.56	50.39	21.55	54.20	45.64	41.88	**46.92**
Tianjin	52.35	54.05	56.75	34.62	46.66	33.00	42.10	**46.38**
Wuhan	37.35	41.16	75.36	20.53	37.03	16.94	31.37	**37.86**
Hangzhou	30.92	50.32	52.91	27.08	30.36	10.94	49.65	**36.74**
Chongqing	42.84	39.42	38.74	13.77	46.59	40.48	39.44	**36.34**
Nanjing	21.21	35.34	83.61	30.63	23.46	10.68	41.09	**35.99**
Xi'an	23.28	36.20	58.54	15.31	27.54	9.87	62.67	**33.12**
Suzhou	55.44	37.07	22.27	15.53	17.16	25.09	21.33	**29.60**
Qingdao	31.94	24.16	43.51	17.55	27.77	26.13	29.01	**28.63**
Xiamen	32.09	17.88	38.41	23.44	45.43	8.04	29.99	**28.06**
Dalian	29.78	26.68	41.12	19.40	29.63	16.29	29.12	**27.75**
Shenyang	14.97	42.48	35.58	17.52	19.53	24.94	25.69	**25.43**
Harbin	10.97	18.39	45.74	13.09	19.27	7.81	25.84	**20.04**
Ningbo	23.70	23.34	22.12	18.61	28.27	4.20	5.57	**18.76**
Changsha	22.15	21.05	29.28	4.22	29.73	4.15	20.96	**18.73**
Kunming	9.63	17.12	15.38	14.86	20.36	14.18	27.57	**16.30**
Jinan	9.60	15.41	47.20	7.84	11.64	7.46	11.23	**16.00**
Zhengzhou	16.67	16.93	31.51	2.60	28.13	3.44	6.03	**14.97**
Changchun	8.97	11.44	43.73	9.72	10.34	6.88	5.69	**14.20**
Fuzhou	10.32	13.25	28.81	7.25	28.38	2.46	5.02	**13.35**
Wuxi	20.99	18.25	21.96	3.30	9.30	10.31	4.35	**13.31**
Hefei	6.94	13.96	32.06	2.93	20.08	3.13	2.80	**11.47**
Changzhou	10.26	7.52	27.69	4.08	3.73	0.00	3.52	**8.86**
Urumqi	4.76	2.06	14.59	6.18	22.86	1.88	2.56	**7.32**
Shijiazhuang	3.76	7.81	23.31	2.07	7.24	2.81	1.38	**6.96**
Total	**26.98**	**30.12**	**39.88**	**18.27**	**28.61**	**17.11**	**25.27**	**26.82**

Table 3 *Internationalization scores per city per category (in order of total score, highest to lowest). Source: author.*

Some notable outcomes of the analysis per category will be discussed. Firstly, Shenzhen's low score on Education catches attention. All of Shenzhen's scores are green, except for Education on which Shenzhen scores clearly below average. This is mainly caused by only having one top university. As explained above this is compensated by the high number of universities in neighbouring Guangzhou, but this is not reflected in the score. In contrast, Wuhan and Nanjing score well on Education and due to their performance in this category they can be considered sub-top second-tier cities. Suzhou scores very well on Global Economic Strength regarding its ranking as tenth city. This is balanced by Suzhou's low scores on Education and Infrastructural Connectivity, which can (partly) be explained by its proximity to Shanghai. Jinan ends up with a very reasonable score on Education, while other scores do not show Jinan's potential to be an international city. The same accounts for Changchun. Zhengzhou and Fuzhou score average scores on Infrastructural Connectivity, which is striking because of their rankings as twentieth and twenty-second city. In the case of Zhengzhou this can be explained by its central location and function as a railway hub. Fuzhou's Infrastructural Connectivity score is mainly boosted by its seaport.

4.2 Tier classification

Drawing a line between second-tier and third-tier cities (as well as between first-tier and second-tier cities) is by definition an arbitrary practice. However, to operationalize the term second-tier city it is necessary to draw a line and in this thesis the line between second-tier and third-tier cities will be drawn based on two criteria:

1. A city must have at least one yellow (or green) score in table 3, or in other words, at least on one category a score which is (around or above) average, to be classified as a second-tier city.
2. A city must have an overall score of at least 13.41, which is half the average score.

The first criterion aims to make a division between cities which are not internationalized at all (score low on every category) and cities which have a certain strength on which they are to some extend internationalized. The second criterion aims to avoid classifying cities with one strength, but no potential on any other category as second-tier city. One strength can be an opening to internationalization, but if there is no internationalization on any other category the potential to become internationalized is very limited.

Due to the first criterion, Shijiazhuang, Urumqi, Changzhou, Hefei, and Wuxi (the bottom five) disqualify as second-tier city. None of those cities has a yellow or green score on either of the seven categories. Their scores are either red (such as Changzhou's 0.00 on Government and Political Engagement) or orange (such as Hefei's and Urumqi's scores on Infrastructural Connectivity). Of those five cities, Urumqi and Wuxi get closest to a yellow score, with a 22.86 on Infrastructural Connectivity and a 20.99 on Global Economic Strength respectively.

Due to the second criterion, also Fuzhou does not make the selection of second-tier cities. Although it has a yellow (average) score on Infrastructural Connectivity, it shorts a mere 0.06 points to score an overall score of 13.41.

According to their population, GDP, and internationalization the following nineteen cities can be classified as second-tier cities (in order of degree of internationalization): Chengdu, Tianjin, Wuhan, Hangzhou, Chongqing, Nanjing, Xi'an, Suzhou, Qingdao, Xiamen, Dalian, Shenyang, Harbin, Ningbo, Changsha, Kunming, Jinan, Zhengzhou, Changchun. The local economic models of these nineteen cities will be examined. Shenzhen has been left out. Although its score indicates Shenzhen is a second-tier city, the influence of the proximity of Guangzhou is regarded too big to ignore in this specific case, so Shenzhen is classified as a first-tier city.

4.3 Local economic models

First of all, Chengdu and Shenyang will be examined to illustrate how the cities are classified. After these relatively thorough analyses, the other seventeen second-tier cities are discussed more briefly using the same method to classify them.

4.3.1 Chengdu

4.3.1.1 Overview

Chengdu is the capital city of Sichuan province and is located at the western edge of the fertile Sichuan basin. This location did not only provide the city with the opportunity to evolve as an important agricultural centre, but also to become an important economic, political, industrial, cultural, logistics, and technology centre in Southwest China (Qin, 2015). GaWC (2013) argues that Chengdu is meeting the conditions for becoming a world city and is one of the most competitive cities in central and western China.

In the previous century, Chengdu has developed a strong industrial base, which prospered from 1978, when China started reforming and opening up, onwards. In the following decades, Chengdu formed an industrial system led by electronic information, machinery (including automobiles), pharmaceuticals, and food (including tobacco). Local enterprises in Chengdu started to expand their businesses nationwide (GaWC, 2013). In one of these successful industries, electronics, Chengdu has applied the strategy of coupling with investing firms from outside, therefore large foreign companies play a key role in Chengdu's electronics industry. Furthermore, it is noteworthy that the electronics industry does not only comprise manufacturing, but entire production chains (Grunsven & Wang, 2014). Also in other industries Chengdu has attracted a large number of large multinationals (GaWC, 2013). Furthermore, Chengdu has developed a strong (producer) service sector (Qin, 2015; Grunsven & Wang, 2014).

4.3.1.2 Size of firms

Chengdu has the reputation to be open to new experiences. That said, it is no surprise that the local government of Chengdu focuses on new technologies and premature, but promising technologies. Therefore, the city tries to attract small and innovative firms (Murray, 2014). On the other hand, many large (foreign) companies have settled in Chengdu and it is often mentioned the city has a high number of Fortune 500 companies (e.g. EMN, 2015; Yu & Li, 2014; GaWC, 2013). One of Chengdu's main industries, electronics, has been characterized by a predominance of large (either state-owned or not) firms since the 1960s (Grunsven & Wang, 2014). Of course, Chengdu values large enterprises, but the city distinguishes itself from other cities with many large enterprises, by having eye for start-ups and small enterprises. At the end of the previous millennium, the city has set up start-up parks and an incubator which target facilitating successful start-ups (Walcott, 2007). Walcott (2007) argues universities in Chengdu are involved with entrepreneurship and stimulate the commercial success of new technologies. The city also pays attention to the financing problems of SMEs. In 1999 the local government supported the establishment of the Chengdu SME Credit Guarantee, a state-owned, non-profit company which supports SMEs and eases their difficulties of financing (GaWC, 2013).

4.3.1.3 Role of SOEs

As early as 1979, Sichuan province was selected for a pilot with enhanced autonomy in SOEs. This has resulted in SOEs which are relatively autonomous (Xue, 2012). Furthermore, the economy of Chengdu is much less reliant on large SOEs than other cities in the region, such as Chongqing. Compared to Chongqing, Chengdu's economy has a stronger focus on new, relatively small, private companies (Walcott, 2007). The large role of these newer companies is related to the business-friendly environment in Chengdu. This distinctive structure of Chengdu's economy is also due to an effective

SOE-reform. Especially at the beginning of the millennium, a remarkable drop in the percentage of investment from state-owned enterprises compared to the total investment could be observed and private companies became increasingly important in Chengdu (Qin, 2015).

4.3.1.4 State-firm relations

As mentioned above, Sichuan province and its capital city started experimenting with enhanced autonomy in SOEs as early as 1979. As a result, the municipal government of Chengdu has been providing SOEs with relatively much autonomy and state-firm relations were not as tight as in other cities (Xue, 2012). This is related to the decision of Chengdu's local government to limit interventions in individual firms, which results in state-firm relations which are not so tight (Yumin & Legates, 2013).

4.3.1.5 Business-friendly environment

Yumin & Legates (2013) argue that the local government of Chengdu decided to limit interventions on the firm level and instead focused on the conditions for a business-friendly environment. Chengdu decided to take the role of an overall supervisor and service provider. Besides from giving way to market mechanisms, this limited corruption. Furthermore, the local government is supportive to entrepreneurship and aims to create a business environment suitable for starting up enterprises. This corresponds with Chengdu's aspirations for market development (rather than a government-directed economy) (GaWC, 2013).

4.3.1.6 Market economy

Since the early 2000s Chengdu has focused on stimulating market autonomy. Therefore, the local government provided enterprises with autonomy (Yumin & Legates, 2013). To establish a market economy, the local government also supported entrepreneurship and private enterprises (GaWC). In this period, the local government of Chengdu set goals to transform its planned economy to a market-oriented economy. This included stimulating foreign investment, and restructuring the industrial system. The plans were successful and a dynamic market economy characterized by rapid growth and increasing openness has emerged during the first decade of the millennium (Qin, 2015).

4.3.1.7 Classification of Chengdu

Chengdu's economy benefits from investments from large foreign multinationals. These multinationals play a large role in the city's pillar industries (Grunsven & Wang, 2014; GaWC, 2013). Although still benefitting from the presence of these enterprises and still attracting some international giants (Qin, 2015; GaWC, 2013), in the late 1990s a trend of aiming for small, innovative enterprises and start-ups has commenced. This shift was marked by the establishment of start-up parks and an incubator (Walcott, 2007) and the Chengdu SME Credit Guarantee (GaWC, 2013). In the new millennium Chengdu actively supports new and small enterprises (Murray, 2014). Therefore, Chengdu is classified as a city which stimulates small firms. Of course, the city still welcomes large firms and the city highly benefits from foreign investment from large MNEs as well.

Concerning intervention in the local economy, Chengdu has also transformed around the beginning of the new millennium. Although (some) SOEs gained more autonomy as early as 1979, the early 2000s were marked by privatization and an increasing importance of private enterprises. In this time, the local government of Chengdu started to create a business-friendly environment and set goals to transform its planned economy to a market-oriented economy. On all four aspects to identify an interventionist or laissez-faire government, Chengdu shows signs of a more laissez-faire local government.

This makes Chengdu an SFLF (Small Firms, Laissez-Faire) city; a city with a laissez-faire government which stimulates small firms.

4.3.2 Shenyang

4.3.2.1 Overview

Shenyang is the capital city of Liaoning province in northeast China. Historically, the city economically relied on heavy industry, which is still an important pillar of Shenyang's economy. Shenyang had a very comprehensive industrial sector of manufacturing machine tools, transmit and transform electricity equipment, aircraft, automobile, medicine, metalwork, textile, construction materials and more (Zhang, 2003). Since the 1970s the central government has been commanding municipal governments to reform its SOEs. This started with giving SOEs more autonomy in order to restore their underperformance (Lin *et al.*, 2001). The range of reforms that followed in the last decades of the twentieth century, were not enough to cure the ailing state sector of all its ills. Therefore, in the late 1990s the central government decided SOEs had to be privatized (Zeng, 2013).

As capital city of the province with the largest number of SOEs in China, these reforms heavily influenced Shenyang. Due to the reforms, many SOEs which were not efficient enough to operate as private enterprises have been shut down. Besides from the high-tech districts and districts with a significant number of foreign-funded firms, the whole city suffered from the reforms (Wang & Li, 2008).

In response to the SOE-reforms Shenyang has been putting efforts in building up and expanding its high-tech industries (Zhang, 2003). In its attempt to transform from an old industrial city to a modern and diversified economy, the local government of Shenyang has been strongly promoting high-tech companies and new industries, such as robotics (Shenyang Municipal Bureau of News, 2016).

4.3.2.2 Size of firms

The new industries, such as high-tech industries, are more suitable for relatively small firms than the heavy industries Shenyang used to rely on. However, also in new industries Shenyang focuses on attracting large firms, such as Siasun Robot and Automation (Shenyang Municipal Bureau of News, 2016). On the other hand, Shenyang tries to revitalize its heavy industry, with a focus on the automotive industries. Also in this industry Shenyang focuses on attracting big players, such as GM, BMW, and Michelin (Kidwai, 2017).

4.3.2.3 Role of SOEs

As mentioned above, Shenyang played a key role in the SOE-reforms in China. The capital city of the province with the largest number of SOEs, was one of the priorities of the national government (Wang & Li, 2008). Therefore, the city was earlier than other cities with giving more management autonomy to SOEs (Zhang, 2003). Shenyang's status as exemplar city in the SOE-reforms did not only cause the city to start the reforms earlier than other major cities in the region, but also went much further in privatizing SOEs than cities like Harbin (Xie *et al.*, 2016) and Dalian (Murray, 2014).

4.3.2.4 State-firm relations

As a key city in the process of reforming and privatizing SOEs, Shenyang has strongly handed over autonomy to SOEs. Handing over decision rights to enterprises was an important step in the reforms and Shenyang separated the government function from enterprises management and from competitive economic activities. During the reforms, a tradition of autonomous operating enterprises has born in Shenyang (Zhang, 2003). In the early 2000s Kernen (2004) stated that despite increased autonomy, the state kept the right of supervision of management processes and still controlled many enterprises. However, in the years following these statements the central government started a programme to

revive the Northeast. In that programme, the market economy has been further implemented and SOEs gained further autonomy (Hu & Lin, 2013; Chung *et al.*, 2009; Dong, 2005).

4.3.2.5 Business-friendly environment

Because of the reforms and liberalization, entrepreneurs in Shenyang got an increased margin of manoeuvre and autonomy. However, this autonomy was often abused by corrupt bureaucrats who became entrepreneurs in enterprises and privatized the successful branches of SOEs in favour of their own wealth and let the less successful branches go bankrupt (Kernen, 2004). In the programme to revive the Northeast mentioned above, these problems were limited and Beijing urged the cities in Northeast China to improve their business environments to make the cities more attractive for (international) private firms (Chung *et al.*, 2009).

4.3.2.6 Market economy

Like other Chinese cities, Shenyang had to reform its economy. However, due to its industrial history, Shenyang had a large number of large SOEs and therefore the reform was heavier. On the one hand, the transition went relatively fast, because the city was prioritized and seen as an exemplar city by the central government (Zhang, 2003). These rapid reforms were more painful for Shenyang than for other cities (Wang & Li, 2008). Many SOEs went bankrupt, people lost their jobs, and corrupt bureaucrats abused the transition to enrich themselves (Fan, 2011; Wang & Li, 2008; Kernen, 2004). Hu & Lin (2013) argue that the market liberalization lead to the emergence of non-state enterprises which were much more cost effective than the SOEs. Many SOEs could have successfully used these private companies as subcontractors, but failed to do so. However, in the early 2000s the central government started a programme to revive the Northeast (Chung *et al.*, 2009; Dong, 2005). In this programme Beijing stimulated the cities in the Northeast (among which Shenyang) to attract more FDI (Chung *et al.*, 2009) and to revive through further implementing of the market economy (Dong, 2005). For Shenyang, the programme worked out well and the local economy, which was highly damaged by the reforms, started to flourish again from 2004 onward. The market economy brought Shenyang economic revival, but compared to other regions, the system of market economy is still not popular among the people in Shenyang (Fan, 2011).

4.3.2.7 Classification of Shenyang

Shenyang has a tradition of large firms in heavy industries. Although the city is aiming for a more diversified economy, the focus is still on attracting large firms. They focus on large firms in new and high-tech industries, as well as large firms in the automotive industry (Kidwai, 2017; Shenyang Municipal Bureau of News, 2016). Therefore, Shenyang is classified as a city which stimulates large firms, more than small firms.

The classification of the government interference is a bit more complicated. Because of the large dependence on large SOEs, the local government of Shenyang used to be heavily intervening. Especially compared to cities such as Xiamen, which have a tradition of foreign invested and private enterprises (Yu, 2017). However, due to its prioritized and exemplar status, Shenyang has experienced rapid and heavy SOE-reforms (Wang & Li, 2008; Zhang, 2003). The state-firm relations have become less tight in the reform-era and also during the programme of the central government to revive the Northeast enterprises gained more autonomy. During this same period, a more business-friendly environment has been created (Chung *et al.*, 2009; Dong, 2005). The market economy is a system which is not widely embraced in Shenyang (Fan, 2011), but the implementation of the system has helped the city to overcome the economic problems the city experienced in the late 1990s and early 2000s (Fan, 2011; Chung *et al.*, 2009; Dong, 2005). All in all, the local government of Shenyang can be classified as a laissez-faire government, because of the changes it has undergone in the reform-era and the 2000s. The city has more strongly reformed than other city in the industrial northeast, such as Dalian and Harbin (see

section 4.3.3 and section 4.3.4). However, the state-directed era with dominance of large SOEs still leaves strong marks.

This makes Shenyang an LFLF (Large firms, Laissez-Faire) city; a city with a laissez-faire government which stimulates large firms.

4.3.3 Dalian

Dalian is the second city of Liaoning province and plays an important role as port city. Just like Shenyang, Dalian used to strongly rely on heavy industry. However, Dalian suffered much less from the SOE reforms than Shenyang, because by the time it had to privatize and close SOEs, the city had, mainly due to its sea port, already attracted many foreign-funded firms, which were located throughout the city (Wang & Li, 2008). According to Rithmire (2015) Dalian has transformed from a heavy industry base, dominated by large SOEs, into a wealthy and liveable business city. Dalian intentionally waited with carrying out the reforms until the city enjoyed a new and vibrant foreign-dominated economic base (Rithmire, 2015). Thereby the two cities largest cities of Liaoning, which used to have a similar economy grew in to very different directions. Nowadays, Dalian enjoys a more developed base of modern industries. Especially its software industry is significant. Software companies are often small compared to traditional industries. With preferential taxes in the Dalian Software Park, the local government stimulates small enterprises and start-ups in the software industry (Zhao *et al.*, 2009). Also Dalian's Economic Zone hosts predominantly small and medium sized enterprises (Riley, 2012).

However, large firms in Dalian still experience a lot of government interference. Major firms, such as Dalian Shipyard, Dalian Steel Works, and Dalian Locomotive Plant, cry for more autonomy and decision rights in their production and management (2) (Murray, 2014). This illustrates that Dalian did not only start later than Shenyang with its SOE reforms, but also went not as far in providing SOEs with autonomy as Shenyang did (1).

4.3.4 Harbin

Harbin is the capital city of Heilongjiang, another province in China's industrial northeast. Just like the other cities in the northeast of China, Harbin has a large base of heavy industry. The SOE reforms got Harbin into a situation comparable to Shenyang. However, Harbin saw less economic restructuring than other major cities in the region (Shenyang, Dalian, and Changchun). Heavy industry and food processing still dominate the city's economy. The business landscape is dominated by large SOEs which still highly depend on the municipal government (Xie *et al.*, 2016). Xie *et al.* (2016) also emphasize that although the economy is still dominated by large SOEs, small and medium enterprises have been growing rapidly in recent years and continue to play a larger role in employment and generating tax revenue. The government local government starts paying more attention and offering more support to small and medium enterprises. This is illustrated by the release of the *Circular on Further Supporting the Development of Small and Medium-sized Enterprises in 2014 and providing subsidies (EuroBiz, 2015).*

Since Harbin has not gone through the reforms like its counterparts in northeast China, it is no surprise that the large firms in the city still experience a lot of government interference (1). Xie *et al.* (2016) report a strong intervention of the government in business management in Harbin. Even when SOEs are restructured, some CEOs still criticize their limited decision power (2). This is caused by senior managers within the enterprises which are appointed by the local government or have a close relationship with the local government and can block decisions (Xie *et al.*, 2016).

4.3.5 Changchun

Changchun is the capital city of Jilin province in northeast China. As the northeast is the centre of heavy industry, Changchun is important in China's automotive industry. Furthermore, the city plays a central role in China's movie industry. However, the economy of Changchun has been dominated by the automotive industry for decades due to the presence of China First Automotive Work Group Corporation (FAW). This is the first automobile factory of China and Changchun is their most important manufacturing location. There are also many car component manufacturers in the city, which mainly supply FAW. The local government of Changchun employs its reputation as automobile city for marketing purposes and aims to attract diverse businesses related to the automotive industry (Yu & Zhu, 2009).

Thun (2006) emphasizes that the local government of Changchun did not have the capital and power to intervene a lot in its automotive industry. In contrast to Shanghai's municipal government, which uses its financial means and power to strongly intervene in its automobile industry (2). Yu & Zhu (2009) state that the municipal government of Changchun attempted to create a business-friendly environment with flexible policies and encouraged private businesses (3).

4.3.6 Tianjin

Tianjin is located nearby Beijing and enjoys a status as direct-controlled municipality, which means it does not belong to any province. Furthermore, the city has an important seaport. Tianjin is known for the large amounts of FDI it attracted. For several decades Tianjin has been focusing on attracting large foreign companies. The city especially has strong roots in the electronics and telecom industries (e.g. Motorola, Samsung), but at the end of the previous century the city also established a strong base of large foreign companies in the pharmaceutical and automotive industries (Enright, 2016). However, the domestic firms of Tianjin were strongly dominated by large SOEs. Although large multinationals, such as Motorola, Heinz, and Toyota settled in Tianjin, the integration in the domestic economy was either poor or absent. The municipal government kept loss-making SOEs in business and promoted foreign investment (Hendrischke, 2013). In the early twenty-first century Tianjin started promoting diversification and alternatives for the large and medium enterprises they heavily relied on (Chung, 2005). For example, in TEDA (Tianjin's main free market zone) the goals have slightly changed by putting more emphasis on Chinese firms and creating efficient small and medium enterprises (Zhungde, 2009). In 2012 a set of regulations for facilitating and promoting small and medium sized enterprises in Tianjin have been announced, with a focus on small and medium sized enterprises in technical sectors (Tianjin Port Free Trade Zone, 2012). So although Tianjin has been focusing on attracting large firms for decades, the last couple of year its focus shifted towards small and medium sized enterprises.

Based on the national reforms, the municipal government of Tianjin started promoting the transfer of autonomy to enterprises in the 1990s (1,2). And the city aimed for a "small government". For example, enterprises did not need the approval anymore to make personnel changes (2) (Duckett, 2006). In its Economic-technologic Development Area (TEDA) Tianjin even went a step further. Although the government played a major role in setting up TEDA and in creating an attractive environment in TEDA (3), it does not interfere in any way with business operations of the firms located in TEDA (2). These firms are empowered with full autonomy in operation without interference in legal business activities (Zeng, 2010).

4.3.7 Jinan

Jinan is the capital city of Shandong Province, a province on the east coast of China. The local governments in Shandong province focus on the development of large companies and neglect small and medium-sized enterprises. Although small and medium-sized enterprises are emerging in Shandong Province, the development of small and medium-sized enterprises is constrained by the lack of government support and the unfair competition with supported large enterprises (Zhang, 2008). The

heavy industry of Jinan mainly consisted of large companies, but also in its newer industries, such as IT, Jinan attracted large multinationals (SICAS, 2011). The same accounts for the outsourcing sector in Jinan. In its aims for the outsourcing sector, Jinan states to aim for attracting large companies and in 2010 introduced incentives are offered to companies with high revenues (China Sourcing, 2011).

Liu (2012) states that in Shandong's commercial service industry, an acceleration of the reform of state-owned enterprises is needed. This implies that in 2012 there was still a significant number of state-owned enterprises in (the commercial service sector of) Shandong (1,2). This is confirmed by Yue *et al.* (2011) who state about their selection of cities in Shandong (of which Jinan is the major city), that the market mechanism is weak and government's interference with the economy is strong (4).

4.3.8 Qingdao

Qingdao is a coastal city in Shandong Province. Originally, the city is a textile cluster, but since the opening up of China, Qingdao has become an important manufacturing base (Yu *et al.*, 2016; Murray, 2014). As mentioned above local governments in Shandong Province focused their policies on large enterprises rather than small and medium-sized enterprises. The government's supportive policies neglect small and medium-sized enterprises (Zhang, 2008). In the specific case of Qingdao, the municipal government extensively supports a limited number of well-known brands present in the city, with the aim to attract and inspire other companies. These are as well domestic well-known brands, such as Haier and Qingdao Beer, as foreign companies, such as Mitsubishi and HP (Yu *et al.*, 2016).

Before and in the reform period, enterprises in Qingdao suffered from a lack of autonomy. For example, the government bureaus they were owned or supervised by, had full authority over wages, bonuses, and personnel (Gomez, 2003). Although more autonomy was granted to the enterprises during the reforms (1,2), in recent years, the local government still interferes in the market (4). Especially in the modern service sector large problems caused by government interference are identified. There is a relatively low level of marketization, enterprises enjoy monopolies (4), enjoy limited operation autonomy (2), and there is no fair competition in the market (4). The service sector of Qingdao would greatly benefit from a clear separation of enterprise operations and the government (Zhang & Liu, 2010).

4.3.9 Zhengzhou

Zhengzhou is the capital city of Henan province. Traditionally the city mainly housed large SOEs. Its central and landlocked location made Zhengzhou mostly attractive for companies which aimed for serving the domestic market. However, in recent years the local government of Zhengzhou has been focusing on attracting large investments of both domestic and foreign companies. According to Dinh *et al.* (2013) the government puts a lot of effort into attracting large companies, but lacks attention for small and medium sized enterprises. Zhengzhou successfully attracted Foxconn, the manufacturer of the iPhone, which established a huge factory in the city in 2010. Nowadays, at peak days 500,000 iPhones are manufactured in the factory in Zhengzhou (Thomson, 2016).

In the late 1990s the national government decided to open a national economic zone in Zhengzhou. Companies in this zone were provided with more autonomy than other companies (2). Zhengzhou also received more support and preferential policies from the central government in the plans to accelerate development in central and western regions of China. Based on the central government's wish to create a better business environment in those regions, Zhengzhou's municipal and Henan's provincial government decided to reduce government intervention and enhance financial support to firms in Zhengzhou (2,3) (Dinh *et al.*, 2013).

4.3.10 Nanjing

Nanjing is the capital city of Jiangsu province, the prosperous province in the Yangtze River Delta (YRD). Along with Hangzhou, Nanjing has been designated a sub centre of the YRD. The city aims to spread development along its hinterland and to expand the influence of the YRD and function as a gateway to central China. For its internal economy, Nanjing aims to upgrade its economy by attracting modern services and high-tech manufacturing. To stimulate growth in Nanjing, the local government supports the development of private enterprises, with a focus on small and medium sized enterprises (Shen & Kee, 2017).

Historically, Nanjing's economy is dominated by large SOEs. This shaped Nanjing's economic development (Chung, 2003). During the first half of the 2000s Nanjing's economic base continued to be dominated by state-owned enterprises (1) (Shieh, 2011). This corresponds with the difference between the Jiangsu province and the Zhejiang province (which together with Shanghai make up the YRD). Jiangsu has a state-driven economy (1,4), whereas Zhejiang's economy is private enterprise-driven (Wang, 2015). Zeng & Bathelt (2011) examine the chemical industries of three cities in the YRD and conclude that in Nanjing (unlike in Shanghai and Ningbo) close ties exist between the city government and chemical SOEs in Nanjing (2).

4.3.11 Suzhou

Suzhou, another city in Jiangsu province, is located nearby Shanghai. Suzhou is mostly a manufacturing city. Its business service sector is much less developed than other cities' in the region, especially Nanjing's and Hangzhou's business service sectors are much more advanced (Wei *et al.*, 2009). In the electronics sector, one of the key sectors in Suzhou's economy (HKTDC, 2016; China Daily, 2014), the local government of Suzhou prioritizes a selective group of large, global leading multinational enterprises. This caused the local firms in Suzhou to end up in the bottom of the value chain, where they could employ the advantage of cheap labour. This resulted in a top-down government approach in which they stimulate large foreign enterprises to pull local firms up the value chain (Chen, 2014). For decades, Suzhou offered favourable policies to large companies, state-owned enterprises, and enterprises with foreign investment. In the 2000s Suzhou shifted its focus towards attracting human capital and high-tech industries, but in this approach Suzhou still focused more on foreign investment and large companies, than smaller and local companies (Shen & Tsai, 2016).

As described above concerning Nanjing, Jiangsu's economy is relatively state-driven (Wang, 2015). However, compared to Nanjing, Suzhou only had a small number of SOEs (1). During the last decades of the twentieth century Suzhou's SOEs performed poorly and therefore Suzhou promoted enterprises autonomy during the reform period (2). The city propagated providing a suitable environment rather than direct inventions in enterprises (3) (Chung, 2003). Whereas in the early 1990s Suzhou's municipal government was deeply involved in the management of public enterprises, in the late 1990s and early 2000s, most of those enterprises have been rapidly privatized (1,2) (Shen & Ma, 2005). Privatization went rapid in southern Jiangsu (Shen & Ma, 2005), in contrast to Nanjing, where many companies remained state-owned (Chung, 2003; Wang, 2015).

4.3.12 Hangzhou

Hangzhou is the capital of Zhejiang province and is the southern centre of the YRD and known for its development of private enterprises. The city is constantly trying to find ways to compete with nearby Shanghai (Wei, 2012). Like Nanjing, Hangzhou focuses on upgrading its modern service sector. The local government identified finance, IT and software services, logistics, and professional services as the major industries within the modern service sector, along with culture and tourism, which is a strength of Hangzhou due to its historical and cultural assets and its popularity among tourists (Shen & Kee, 2017). Also in the secondary sector Hangzhou focuses on modern manufacturing, rather than traditional manufacturing. This modernization of its economy is one of the major ways in which Hangzhou aims to

become a world city. Hangzhou strongly promotes high-end, high-tech, and high value-added investment projects (Shen & Kee, 2017). In some cases, Hangzhou attracts such investments from large multinational enterprises, but the local government focuses on attracting such investments from small high-tech firms (Wei, 2012). This matches the strong base of local small and medium enterprises present in the city. Which is a distinct characteristic of Hangzhou, opposed to most other cities in the YRD. These local small and medium sized enterprises are usually more embedded and have a stronger sense of belonging than large multinational enterprises in other cities (Shen & Kee, 2017).

In the early 1990s the municipal government of Hangzhou has been granted more administrative power in order to further exploit its foreign investments. As a consequence, Hangzhou was able to loosen its investment policies (Shen & Kee, 2017). This fits perfectly in the so-called Zhejiang Model, in which support of private enterprises and minimal government interference are central (1,2) (Zhou, 2012). So cities like Hangzhou have known economic models of limited government interference, for decades. After the reform period, the autonomy of enterprises has even grown (2). At first the local government focused on foreign enterprises. However, in the post-reform period also Chinese enterprises have been given more autonomy in their business decisions (2) (Wei *et al.*, 2008).

4.3.13 Ningbo

Ningbo is a coastal city in Zhejiang province, located in the YRD. Ningbo's sea port is important for China's export, which makes Ningbo interesting as a manufacturing location. Due to its large sea port, Ningbo is mostly attractive to large companies which can produce large quantities for export. To further use this strategic location for economic development, the local government wants to attract foreign companies. Therefore, it offers companies which settle in Ningbo more autonomy than many other cities do (Murray, 2014). Besides from heavy industry, apparel manufacturing is an important industry in Ningbo, however, the local government pays more attention to the automotive and high-tech industries. Within the apparel industry, the government of Ningbo only supports the three largest companies (Zhu & He, 2016).

Like Hangzhou, Ningbo is a city in Zhejiang province and its local government has historically been following the Zhejiang Model. Ningbo has a strong base of private companies and openly supports private enterprises (1) (also in times when other cities in China did not). Also, government interventions in the market and the economy are limited (4) (Zhou, 2012). As mentioned above, Ningbo employs its limited government interference in businesses as advantage to attract (mostly foreign) enterprises (2) (Murray, 2014).

4.3.14 Xiamen

Xiamen is major city in Fujian province and because of its geographical location regarded a gateway to Taiwan. Xiamen was among the first four cities which were assigned a Special Economic Zone (SEZ) status. Because of its early opening up to foreign enterprises, Xiamen's economic development has been export-oriented and an FDI economy for decades. The city has attracted many well-known multinational enterprises, such as Kodak and Dell (Yu, 2017). These large enterprises were beneficial for Xiamen's economy and thereby, the local government has decided to specifically aim for attracting large firms. This selectivity keeps small foreign enterprises from investing in Xiamen (Chen, 2014).

Because of its status as one of the first SEZs and large influx of foreign capital, Xiamen was the first Chinese city which adopted the market economy (4) (Yu, 2017). This makes Xiamen's municipal government one of the least interventionist local governments (2). Moreover, private enterprises are predominant in Xiamen's economy. However, because of this predomination of the private sector, SOE reform was never the highest priority in Xiamen. Therefore, Xiamen started reforming its SOEs later than most other cities (the first serious steps were taken in 2000). Nevertheless, the reforms went

remarkably fast and by 2005 most of the SOEs had been privatized and/or gained more autonomy (1) (Zeng, 2013).

4.3.15 Changsha

Changsha is the capital city of Hunan province. The city used to have a weak industrial base, but is now catching up, specializing in materials, food, engineering machinery, and electronic information. The local government mostly focuses on new industries (Zhang & Dai, 2016). On the other hand, they do not neglect the old industries and try to find a balance between old and new. The government easily lets go of old, uncompetitive industries and does not worry about saving those, but tries to keep some more competitive old industries alive (Kulenovic, 2016). Although the local government does care about large firms and big projects, for example they set quotas for each national-level industrial park they make sure at least one major project with an investment of at least five billion yuan per year will be acquired, they focus on small innovative firms. In recent years, the Changsha municipal government has carried out multiple supportive policies to stimulate innovation and entrepreneurship in new industries and start-ups. In 2015, the city was ranked as one of the 15 model cities for supporting innovative small and micro enterprises (Zhang & Dai, 2016).

Changsha's SOE reforms were relatively successful. They were carried out rapidly and a large share of the SOEs was privatized. Especially the privatization round in the early 2000s was rapid and successful (1) (Coase & Wang, 2015). However, the municipal government is still heavily interfering in the market. In the complete car industry for example, monopoly positions are upheld by the local government (4) (Ding & Liu, 2009). Ding & Liu (2009) argue that Changsha's local government should break the existing institutional barriers to prevent monopolies in the car industry. Coase & Wang (2015) state that monopoly positions for SOEs are supported by the government and other privileges are offered to the SOEs that remained after the reforms (1,4).

4.3.16 Wuhan

Wuhan is the capital city of Hubei province and the main city in central China. The city along the Yangtze is historically a heavy industry city specialized in the automotive and iron and steel industries. The city is also an educational centre with many universities which provide the city with a vast base of human capital. Its industrial character causes the city to predominantly have large firms. However, Wuhan's Optics Valley (a zone mainly for optoelectronic industry, but also other high-tech industries) nowadays offers opportunities for small and medium sized enterprises (Yu *et al.*, 2016; Xu, 2010). Whilst Optics Valley provides opportunities for small and medium sized enterprises, the municipal government of Wuhan does not actively encourage small and medium enterprises to settle here and keeps its focus on large firms (Xu, 2010). Greater Pacific Capital (2014) argues Wuhan needs to focus more on small and medium enterprises and a good environment for innovative start-ups to build a strong environment for growth.

Since Wuhan is an important industrial city with many large manufacturing companies, historically large SOEs play an important role in the city and still some large SOEs remain in Wuhan (1) (Hornby, 2015; Grammaticas, 2013). This does not only account for Wuhan, but for the whole province of Hubei. Private enterprises experience constraints due to competition with the state-owned enterprises, which limits economic development (1,4). Because the aims of the SOE reforms have not been reached by some of the cities of Hubei, some government departments (within either provincial or municipal government) are still in direct management of enterprises (2) (Li, 2015). Severe government interference is experienced by managers in SOEs in Wuhan. For example, Morris *et al.* (2002) report a case of an SOE which experiences a lot of pressure of the local government to make decisions which are not in line with the wishes of its managers, such as participating in programs and hiring people (2).

4.3.17 Chongqing

Chongqing enjoys a direct-controlled municipality status, just like Tianijn. Chongqing can be found in southwest China at the confluence of the Yangtze River and the Jialing River. Historically heavy industry dominates Chongqing's economy, but nowadays the city's economy is more diversified. Large companies dominate the automotive and other industrial sectors. In the more recently emerged, services and technology sectors Chongqing also focuses on attracting large firms and specifically Fortune 500 companies (Enright, 2016). Currently, the municipal government of Chongqing is mainly focusing on further diversifying its economy and developing its high-tech industry and the city has already managed to attract some large multinational enterprises in this sector (Guo *et al.*, 2015).

Overall the policies of the Chongqing municipal government are considered to contain more government interventions than other municipal governments in China (4) (Lim & Horesh, 2017; Mulvad, 2015). Mulvad (2015) compares the Chongqing Model with the Guangdong Model, of which the latter is very liberal and market-oriented. In Chongqing, the state plays a major role in directing economic development (4). Although the economic system is a capitalist system (Chongqing relies on private investment), the state must remain at the head of economic development in Chongqing. Whereas most Chinese cities privatized (most of) their SOEs, Chongqing did not privatize its core of large SOEs during the reform period (1).

4.3.18 Xi'an

Xi'an is the capital city of Shaanxi province and famous for its Terracotta Warriors. The city has a large industrial base and is specialized in electric power equipment, military equipment, airplanes, spaceflight equipment, and machine tools. In these sectors, mostly medium and large enterprises, which are often state-owned, are active. Those enterprises strongly benefit from Xi'an's well-developed education sector, which is especially strong for technical majors (Yu *et al.*, 2016). The business structure in Xi'an is dominated by large SOEs, which is partly due to Xi'an history of the manufacturing of military equipment (Walcott, 2003).

The influence of the local government in the business environment is also visible in the major investments in Xi'an's businesses. These are dominated by key investments made by various layers of the government (Walcott, 2003).

4.3.19 Kunming

Kunming is the capital city of China's southern province Yunnan. Due to its geographical location, Kunming is often considered the gateway to Southeast Asia. Kunming is the core of the Central Yunnan Urban Economic Zone and concentrates on high-technology sectors, the petrochemical industry, modern service industries and the leisure economy. These sectors provide opportunities for small and medium sized enterprises (Su, 2014). Kunming has been working establishing a strong ICT sector, which is also suitable for small and medium sized enterprises (UN, 2004). Small and medium enterprises in Kunming are encouraged to engage regionally agglomerated networks to share technology and cooperate to achieve innovation (Su, 2014).

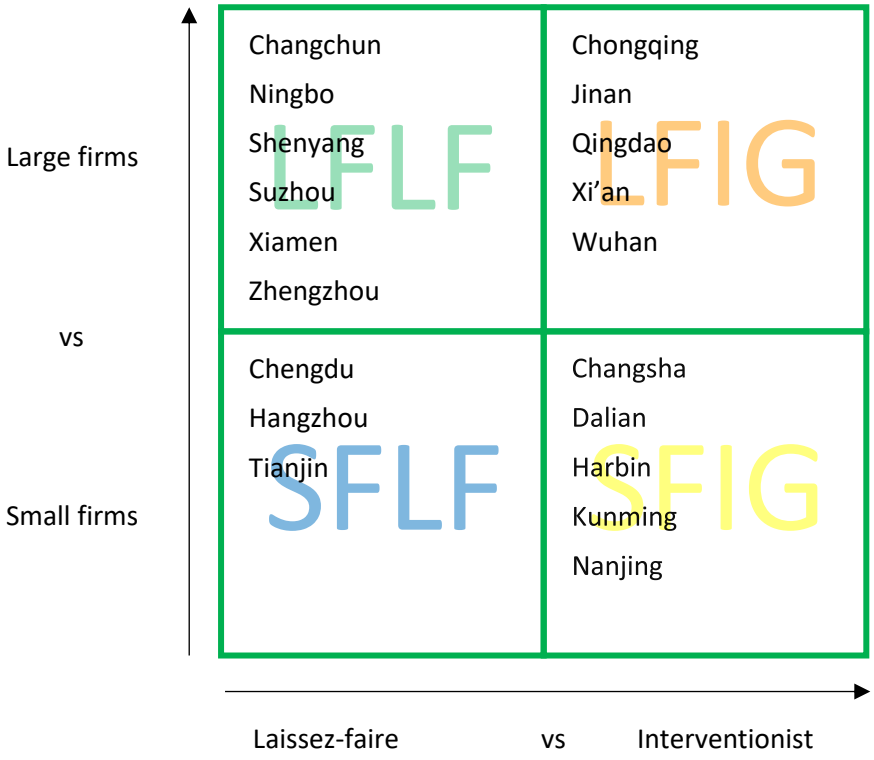
Yunnan's reform and opening up commenced later than especially the coastal provinces', but also other inland provinces'. At the end of the 1990s and the beginning of the 2000s FDI flows started to come in (Ludan & Li, 2014). Because of this late reform, Kunming still has a relatively large number of SOEs. In the 2000s domestic private enterprises started to be more common, but compared to other cities SOEs play a large role in the city (1) (Zhu *et al.*, 2010). Ludan & Li (2014) study foreign investments in Yunnan (of which more than 70% take place in Kunming). They conclude that in order to receive more foreign investments, Yunnan needs to optimize its economic structure and enable fair competition with state-

owned enterprises (4). Furthermore, the province lacks an efficient market which provides companies with opportunities for fair and open trade. This implies, the municipal government of Kunming and the provincial government of Yunnan still have a lot of influence in the local economy and there is not much autonomy for firms (4).

4.3.20 Classification of cities

Based on the descriptions above, the cities have been classified according to the classification method elaborated on in the Theoretical Framework and exemplified for the cases of Chengdu and Shenyang. In figure 5 each of the nineteen cities has been placed in one of the quadrants.

Figure 5 The nineteen second-tier cities placed in the framework for the classification of cities based on their local economic model. Source: author.



4.4 Connection between internationalization and local economic models

Based on the sections above, all nineteen second-tier cities have been assigned an internationalization score and rank, and one of the four local economic models. In this section those findings are compared. Table 4 contains the nineteen cities with their internationalization rank (note this is the rank among the second-tier cities, so Shenzhen and Guangzhou are excluded) and the classification of their local economic model. The latter has been depicted with a different colour for each model in the table to ease distinction.

City	Rank	Classification
Chengdu	1	SFLF
Tianjin	2	SFLF
Wuhan	3	LFIG
Hangzhou	4	SFLF
Chongqing	5	LFIG
Nanjing	6	SFIG
Xi'an	7	LFIG
Suzhou	8	LFLF
Qingdao	9	LFIG
Xiamen	10	LFLF
Dalian	11	SFIG
Shenyang	12	LFLF
Harbin	13	SFIG
Ningbo	14	LFLF
Changsha	15	SFIG
Kunming	16	SFIG
Jinan	17	LFIG
Zhengzhou	18	LFLF
Changchun	19	LFLF

Table 4 *The nineteen cities with their internationalization rank and classification based on local economic model (sorted by internationalization rank). Source: author.*

The local economic models of three cities have been identified as SFLF. Those three cities, Chengdu, Tianjin, and Hangzhou, can all be considered highly internationalized second-tier cities. The cities rank first, second, and fourth respectively. Five cities have been classified as having an LFIG economic model. Out of those five cities, four cities can be regarded sub-top internationalized second-tier cities. Wuhan, Chongqing, Xi'an, and Qingdao have internationalization ranks ranging from third to ninth. However, Jinan which ranks seventeenth out of nineteen has also been identified as having an LFIG economic model. Thereby, Jinan forms an exception to the found pattern that cities with an LFIG policy make up the sub-top of the internationalization ranking. The lower half of the list contains cities with SFIG and LFLF economic models (and, as mentioned before, Jinan). Both the most internationalized SFIG and the least internationalized SFIG cities score higher on internationalization than the most internationalized LFLF and the least internationalized LFLF city. However, since some LFLF cities clearly score higher on internationalization than some SFIG cities, it cannot be stated that SFIG cities are more internationalized.

Although the least internationalized cities are cities with SFIG and LFLF economic models, there are cities with a high degree of internationalization which have SFIG and LFLF policies. Nanjing (ranks sixth on internationalization and has an SFIG economic model) and Suzhou (ranks eighth on internationalization and has an LFLF economic model) score remarkably higher on internationalization than other cities with these economic models and can be found among cities with an LFIG model.

Based on these findings, no conclusions can be drawn about whether focusing on attracting small or large firms leads to internationalization and whether a laissez-faire or an interventionist local government leads to more internationalization. Which is the way it has been hypothesized in the

theoretical framework. Conclusions can only be drawn about the influence of the combination of these two variables on the degree of internationalization.

5. Conclusions

5.1 Conclusions

Based on the findings elaborated on above, the hypothesis can be rejected. The hypothesis formulated in the Theoretical Framework reads: Cities which are placed in the upper left quadrant, with laissez-faire governments which stimulate large firms, are most internationalized and cities which are placed in the lower right quadrant, with interventionist governments which stimulate small firms are least internationalized.

The hypothesis was based on two expectations: cities with a laissez-faire local government are more internationalized than cities with an interventionist local government and cities which focus on attracting large firms are more internationalized than cities which focus on attracting small firms. Based on the findings, neither of these expectations can be confirmed. The hypothesis has been posed with remarks about the theoretical foundation, due to limited availability of relevant literature. Therefore, it is understandable that the hypothesis has been rejected. The hypothesis has been formulated based on those two separate components. Based on the findings, the combination of the focus on either large or small firms and the either laissez-faire or interventionist government, appears to be more relevant. Local governments which combine a focus on attracting small firms with a laissez-faire approach, are most internationalized, followed by cities with a local government which combines a focus on attracting large firms with an interventionist approach.

Although the outcomes suggest that local governments which combine a focus on attracting large firms with a laissez-faire approach (LFLF) and local governments which combine a focus on attracting small firms with an interventionist approach (SFIG), are less internationalized than cities with the other two types of local economic models, cities with these local economic models do not necessarily have a low degree of internationalization. The majority of the cities with these approaches score relatively low on internationalization, but some cities with these approaches have a relatively high degree of internationalization (Nanjing and Suzhou).

The findings do not correspond with the hypothesis, but similarities with the findings of Segal & Thun (2001) in the IT and automotive sectors in China and Segal (2003) in the IT sector in China are present. In these studies, some differences between Shanghai and Beijing are found. Shanghai's local government focuses on attracting large firms and heavily intervenes in firms, whereas small firms are predominant in Beijing and the local government provides its firms with a lot of autonomy. Thereby, if those first-tier cities had been included in this thesis, Shanghai was likely to be placed in the upper left quadrant of figure 5 (LFIG) and Beijing was likely to be placed in the lower right quadrant of figure 5 (SMLF). These are the two quadrants which contain the most internationalized cities. Since Shanghai and Beijing are highly internationalized first-tier cities, this favours the outcome that these local economic models lead to the strongest internationalization.

Due to the methodology of this thesis, no statistically significant, let alone causal relation, can be found. However, the findings provide a strong indication for a contribution of the economic model to explaining the differences in degree of internationalization between Chinese second-tier cities. The combinations of focussing on attracting large firms while intervening strictly in firms, or focussing on attracting small firms while offering the firms a lot of autonomy appear to be most likely to stimulate internationalization. Only further research, comprising a large dataset, can affirm the contribution of economic models in explaining differences in the degree of internationalization between Chinese second-tier cities.

Internationalization is not by definition the path to economic development. Whether internationalization or another development path is more suitable for a city should be examined for

every city separately. However, as Björner (2014) argues, Chinese cities are stimulated to internationalize by the central government.

5.2 Discussion

In the first part of this thesis, the aim was to construct an instrument which can be used to quantify the internationalization of Chinese second-tier cities. The use of this instrument did not result in very surprising or questionable results. Especially if the contribution to explaining the differences in degree of internationalization of geographical location and the different compositions of the cities' overall scores (e.g. a city might score high on Global Economic Strength, but low on Culture and Tourism, whilst another city with a similar overall score can score low on Global Economic Strength and high on Culture and Tourism) are taken into account. However, because of a lack of literature about the internationalization of non-Global Cities, some aspects of the internationalization of Global Cities have been used to construct the instrument. Besides, literature on other parts of the world is used to construct the instrument, because literature about Chinese second-tier cities was sometimes hard to find. An attempt to solve this problem has been made, by including some second-tier China business experts in constructing the instrument. They can assess which indicators are most relevant in the specific context of second-tier China. However, it does not contribute to the objectivity of the instrument. Thereby, the instrument could possibly be improved by collecting a larger base of literature on second-tier China (perhaps literature written in Chinese could improve the instrument).

The classification of local economic models is also based on the available literature about China's second-tier cities. In some cases, literature on the provincial situation has been used to complete the image of the city, although in no case the classification totally relies on information about the province. The classification would be more accurate if only information about the cities had been used. Perhaps this explains the remarkable outcome of Jinan, which is placed in the upper left quadrant (LFIG) among much more internationalized cities. Interviews with enterprises (preferably both SOEs and private enterprises) could have improved the accuracy of the classification of the cities. Pitifully the resources (time, money, connections) were not available to do so in this thesis. Perhaps this would be an interesting expansion for the future.

Finally, to come to a city selection, an attempt has been made to define and select China's second-tier cities. However, this leads to subjective choices of indicators and thresholds. Existing literature about the city tier system does not pose an operational definition of the city tiers and therefore it is difficult to select second-tier cities. The definition used in this thesis builds on the limited (non-academical) literature available and on consulting people with business experience in second-tier China. An operational definition which allows academics to select China's second-tier cities will benefit the reliability of studies concerning China's second-tier cities. Therefore, it would be useful if scholars studying (the economic geography of) China will work towards a consent on how to select second-tier cities.

5.3 Acknowledgements

First of all, I would like to thank my supervisor Mr Leo van Grunsven for his helpful suggestions to improve earlier versions of this thesis and the time he took to guide me in the process of writing this thesis. Furthermore, I would like to thank Maxxelli Consulting, the company in Chengdu which offered me a place to do an internship as well as an inspiring place to work on my thesis, and whose experts shared their knowledge and experience necessary to construct the instrument to measure the degree of internationalization of Chinese second-tier cities, and with whom I gathered data concerning the internationalization of the second-tier cities.

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