From city branding to urban transformation: How do Chinese cities implement city branding strategies?

Ma, W.

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From City Branding to Urban Transformation

How do Chinese cities implement city branding strategies ?

Wenting MA

From city branding to urban transformation: How do Chinese cities implement city branding strategies?

From city branding to urban transformation: How do Chinese cities implement city branding strategies?

Dissertation

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by

Wenting MA

Master of Science in Administrative Management
At Harbin Institute of Technology,
Born in Qiqihar, Heilongjiang, China

This dissertation has been approved by the promotors.

Composition of the doctoral committee:

Rector Magnificus	chairman
Dr. W.W. Veeneman	Delft University of Technology, promotor
Prof. dr. W.M. de Jong	Erasmus University Rotterdam, promotor
Dr. M.L.C. de Bruijne	Delft University of Technology, copromotor

Independent members:

Prof. dr. ir. M.G. Elsinga	Delft University of Technology
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Dr. A. V. Anttiroiko	University of Tampere, Finland

Reserve member:

Prof. mr. dr. J.A. de Bruijn	Delft University of Technology

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To my family.

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Acronyms

BA	Broadcasting Activities
CASS	Chinese Academy of Social Sciences
CAV	China's Agricultural Valley
CSBPP	Bureau of Culture, Sports, Broadcasting, Press and Publication
fsQCA	fuzzy set Qualitative Comparative Analysis
FYP	Five Year Plans
GANT	General Aviation New Town
GBA	the Greater Bay Area
GDP	Gross Domestic Product
JDMG	Jingmen Daily Media Group
JDRC	Jingmen Development and Reform Commission
JIDRI	Jingmen Investigation, Design & Research Institute
JUT	Jingchu University of Technology
JMCoRO	Jingmen Municipal Committee of Rural Office
LCC	Low Carbon City
LT	Location Types
NBoS	National Bureau of Statistics
NDRC	the National Development and Reform Committee
OECD	The Organization for Economic Co-operation and Development
PGoJM	The People's Government of Jingmen Municipality
SAR	Special Administrative Region
SC	State Council
UMP	the Urban Master Plan

1

Introduction

1.1 Research Background

In China, the urbanization rate has increased from less than 20% in 1978 to more than 60% in 2019 (NBoS, 2019a). The quality of life of most people living in cities has improved. However, environmental pollution and energy consumption caused by urban population expansion put pressure on urban governance. For example, China has become the world's largest CO_2 emitter (Crippa et al., 2019). Other social problems associated with urbanization have become increasingly poignant, such as the emergence of regional disparity and environmental problems related to climate change, resource waste, and traffic congestion (Chien & Wu, 2011; Logan & Molotch, 2007; Shao et al., 2006; Yeh et al., 2015). As a response to these challenges, China's national government altered its policy strategy from a traditional pattern of "pollute first, control later" to a more sustainable developmental pathway. China's national government has proposed a variety of solutions to substantiate the claim that it is on its way to sustainable development. For example, the concept "Scientific Outlook on Development" was proposed in 2003 to promote the harmonious development between humanity and nature. In 2007, a new philosophy entitled "Ecological Civilization" was launched to advocate harmonious coexistence between nature, individuals and society at large (China Daily, 2007). The term "Beautiful China" was first put forward as a governing concept at the 18th National Congress of the Communist Party of China (CPC). In 2017, the report of the 19th National Congress of the CPC emphasized the importance of developing an ecological civilization, and building a beautiful China (Xinhua, 2017). "Lucid waters and lush mountains are invaluable assets" is also under implementation as a basic state policy

since 2017. Corresponding with this national trend a series of sustainable development projects were proposed by China's State Council and ministerial departments, ranging from the Low-Carbon Eco City programme in 2010 to the most recent Zero Waste Cities Pilot programme in 2019. More than 250 cities in China have introduced eco or green pilot projects (Wu, 2015).

Urban transformation is an important pathway to achieve the sustainable development goals and respond to policies initiated by the central government. Many local governments hope to experience urban transformation to maintain economic growth and deal with environmental pollution by eliminating backward production modes and introducing cleaner industries. City branding is widely adopted by local policy makers as a popular strategy to realize urban transformation. Many cities actively apply clean labels to communicate their new image, and try to erase their old image and become more sustainable, eco, low-carbon, or smart. Other cities apply city branding to attract visitors, investors, well-endowed residents or talents, or companies (Vanolo, 2008) and improve their competitiveness vis-à-vis other cities. For example, Hong Kong positions itself as 'Asia's World City' aiming to become a world class city like New York and London (Dinnie, 2010). And then, some cities want to use city branding to achieve ambitious policy goals, such as industrial transformation and sustainable development. Many cities adopt different brands to transform their cities in different ways. For instance, Xiong'an brands itself as a "1,000 Year Plan of National Significance". This branding effort, which is completely led by the government seeks to become a national demonstration project of sustainable urban transformation without relying on traditional land finance (Liu et al., 2020). The city of Wenzhou on the other hand largely focuses on its private-sector economy to transform itself away from a traditional clothing manufacturing city and embark on a transformation into the world of international fashion and luxury brands.

Some scholars believe city branding is an important urban development strategy to achieve the goals of in-depth transformation and eventually change the core identity of a city (Braun, 2012; Kavaratzis & Ashworth, 2005; Zenker & Martin, 2011). They point to cities that seem to practice their city

branding strategies in earnest. For example, Shenzhen is striving to build an "innovative city" and implements lots of policies to encourage and support the development of local innovative industries and enterprises. Critics on the other hand claim that city branding is merely a policy tool that is employed by local governments to greenwash their industrial traces (de Jong, 2019). The critics argue that cities simply copy branding labels from neighbouring cities or prosperous mega cities, or simply copy branding labels from policy documents issued by the national government. What part of a city's image is actually developed and turned into real policies often remains unclear. Too many cities promise too much and do not seem to live up to the images and claims in their brands. As for the effectiveness of the implementation, it is not exceedingly difficult to argue that most city branding activities and practices have not been particularly successful in guiding urban governments towards deep transformation. For example, the city of Daqing has been trying to rebrand itself as a tourism city for ten years; however it is still famous for its large petroleum industry (Li, Lo, & Wang, 2015). Besides, critics also argue that, in reality, city branding policies and implementation happen in complex settings (Lu et al., 2018). For example, when the central government attempts to develop 'eco-cities' all around in China, cities in the region have no choice but to brand themselves as such even though this may not be in line with their practical environment and policy interests. In addition, over-convergence of city labels makes it increasingly difficult to distinguish one city from another. Another complicating aspect is that cities use multiple labels to brand themselves in their policy documents. This leads to difficulties in identifying which labels local governments are actually implementing and which not. For example, one city may brand itself as an eco-city in the beginning. Then, it may change its focus and the brand can be changed to low carbon city in responding to new national policies. These examples highlight some of the complexity in realizing city branding on the ground through effective implementation. However, this is still a requirement for 'true' urban transformation if an ecological civilization or beautiful China are to become more than just a dream.

Little information is available about the existence of inconsistencies or gaps between the ambitious visions regarding urban transformation and the

actions to deploy city branding. Nor do we know much about the application of policy instruments to effectuate brands and visions adopted by Chinese cities. Therefore, this PhD project is aimed at exploring how cities translate city branding plans and policies into practice, how and to what extent these practices are embraced by other stakeholders and how city branding connects with other (city) policy instruments to achieve urban transformation.

1.2 Theoretical Framework

In this study, we examine how local governments implement city branding to trigger urban transformation. This part reviews the key concepts and theories in this study presented. These theories complement each other in that they help understand what role city branding plays in the implementation of urban transformation. An analytical framework is presented after the explanation of key concepts and theories.

1.2.1 Urban transformation in China

Urban transformation focuses on the urban structures and environmental changes which take place in cities (Geels & Schot, 2007). It is a societal process of fundamental transition in culture, structure and practices (Frantzeskaki & De Haan, 2009). The transformation of cities includes economic, social, cultural, organizational, governmental and physical change in cities (Mccormick et al., 2013). A set of factors result in these changes, such as political and economic ones, as well as the influence of regional competition (Li, 2011). Coordination among different stakeholders and integration of resources promote the transformation in a certain direction (Smith & Stirling, 2010). In the last ten years, urban transformation has been more amply studied in terms of the sustainable development and ecological modernization of cities (Berkhout, Angel, & Wieczorek, 2009; Stripple & Bulkeley, 2019).

Over the past four decades, Chinese cities have experienced rapid economic development, which has largely relied on cheap labour and the consumption of natural resources (Lin et al., 2018). However, currently, these traditional comparative advantages are not so effective any more as the costs of a labour force and environmental pollution are growing (Cao, 2020). Although

updated technologies are adopted, the existing pattern of development still causes serious environmental problems (Li & Lu, 2020). Many Chinese cities expect to explore new development pathways to maintain economic growth while reducing resource depletion. Chinese cities are in need of high-quality development with higher value-added and less environmental damage (Lin et al., 2018). In short, this implies the need for profound urban transformation to face these challenges (Wu et al., 2006).

In China, the goal of urban transformation is to make cities more sustainable, eco-friendly, innovation-driven and green (Zhang et al., 2018). Cities tend to prefer to host industries which can offer high value-added and cause low levels resource consumption and pollution, such as information technology, high-end equipment manufacturing and other emerging industries (Cao, 2020; Han et al., 2019). This is a perspective much aligned with the concepts of sustainable development and ecological modernization. Urban transformation is currently primarily attempted by having industrial- and resource-based cities focus on gradually restraining or moving out heavy and heavily polluting manufacturing industries. In their place, the development and lighter and cleaner branches of advanced manufacturing, knowledge, and service-oriented industries are actively stimulated (Ernst et al., 2016; Mccormick et al., 2013). This requires that urban transformation considers such aspects as industrial structure (cleaner technologies and production processes) and demographic composition (more talented residents and more members of the creative class). According to previous studies, some industries in China are not attractive due to their unfriendly environmental image, such as the mining industry. Cities prefer industries that provide high levels of economic contribution and high employment numbers, such as trade, transport and logistics. Besides, some industries generate high economic contributions but also produce high amounts of carbon emission, such as distributive services (Han et al., 2019). In this study, urban transformation refers to a reshuffling of urban industries and an adjustment of the industrial structure.

1.2.2 City branding as a tool to trigger urban transformation

City branding has been intensely studied in both the academic and professional domains in the last ten years, particularly in urban planning and governance. Different scholars in different academic fields have a different understanding of city branding. In this research, we understand city branding as "a whole set of actions to build the positive image of the city and communicate it among various target groups via visuals, narratives, and events locally and internationally to gain a competitive advantage over other cities" (Vanolo, 2008, p.371). We believe city branding has the function to communicate a city's image. City branding communication can integrate physical elements, such as landscape, infrastructure (Kavaratzis, 2004) and non-physical elements, such as cultural, economic, social aspects and activities (Kavaratzis, 2004; Rehan, 2014). It is not only visual, tactual and olfactory, but is also relevant to policymaking. Actually, in recent years, city branding has been broadly adopted by local governments as an urban governance tool to improve the reputation of cities and achieve a variety of urban development goals, such as foster economic (re-)development of the city and to improve the well-being of its residents (Prilenska, 2012), ecological modernization (de Jong et al., 2018) and urban regeneration (Eshuis & Edwards, 2013; Lak, Gheitasi, & Timothy, 2019).

City branding is a policy instrument to implement policies and urban governance (Ye & Björner, 2018). Therefore, many city decision makers introduce city brands into their urban transformation process because they believe a successful city branding strategy can bring about positive transformation and an improvement of their reputation (Herstein, Jaffe, & Berger, 2014). They believe city branding is an innovative way to govern their city. City branding connects with local economic development (Anttiroiko, 2014; Cleave et al., 2016) and is used to engage in global intercity competition (Anttiroiko, 2015). It will deliver a sustainable image of cities in various ways and includes the conversion of visual information (Rehan, 2014). In many Chinese cities, local governments have adopted the concepts of city branding and urban transformation in various urban development plans, such as the Urban Master Plans and Five-Year Plans for National Economic and Social Development, all with the purpose to trigger urban transformation. Some

cities use popular city brand labels in their plans to express the vision of urban transformation or industrial transformation, such as eco-city, green city and sustainable city. Meanwhile, a variety of plans from the national and provincial governments point in the same direction. Although policymakers are certainly tempted to use the city branding tactics to get rid of or hide any bad impressions of their urban environment caused by industrial pollution, evidence suggests that the harder part of urban transformation – to achieve significantly improved urban sustainability performance– is yet to be realized (de Jong at al., 2018).

1.2.3 City branding, urban transformation and policy implementation

Cities use city branding strategies to trigger urban transformation. The transformation will happen only when city branding strategies are effectively implemented. This implies a tight link between city branding, urban transformation and policy implementation. However, we found that in existing literature, they are barely if at all connected with each other.

In this research, we understand the policy implementation of city branding as the ability of an urban government to apply some strategies which in themselves are composed of methods and tools to achieve the goals and visions presented in government documents (Braun, 2012; Rainisto, 2003). Active implementation of city branding policy takes place via spatial, functional, financial, organizational changes (Ashworth & Voogd, 1990; Kavaratzis, 2009). There are many analytical perspectives that can be used to study city branding implementation, such as event-oriented city branding (Björner, 2017; Chen, 2012; Zhang & Zhao, 2009), multi-level governances (Ye & Björner, 2018) and policy network analysis (Lu et al., 2018). However, current research on the application of city branding strategies, combinations of policy instruments and stakeholder involvement in the implementation process of city branding is still lacking. It has been claimed that in China, participation in the governance of branding by non-government organizations or citizens in China is generally low and very different from western countries (Kavaratzis, 2018). In this project, we explore city branding implementation from these three perspectives to gain a deeper understanding of city branding implementation in China.

1.2.3.1 City branding strategy application

Although city branding resembles concepts such as city promotion and city marketing, there are marked distinctions in terms of meaning and intentions. They also relate to different governance strategies. The main goal of *city promotion* is to convey a good image and convince people to come and visit. City promotion engages to promote cities by thinking of a distinct slogan or logo, engaging in advertising and media activities, and organizing promotional campaigns (Eisenschitz, 2010). *City marketing* can be understood as applying different marketing strategies and techniques to attract and keep some target groups to a certain city (Hospers, 2009). Compared to city promotion, city marketing is a long-term process. City marketing has a broader scope than city promotion. For instance, applying certain preferential policies to attract investments. Except being eager to attract people to come and visit, and make distinctions among various groups, cities also explore the value-added these target groups have to offer, such as economic gain and talent input (Eshuis et al., 2013; Vuignier, 2014). *City branding* engages to build a positive image of the city and communicate it among various target groups via visuals, narratives, and events locally and internationally to attract potential high-tech companies, talented workforce, and well-endowed residents (Vanolo, 2008). City branding has more comprehensive goals and functions to urban development than city promotion and city marketing.

1.2.3.2 Policy instruments and policy combinations

Policy implementation involves the application of one or more of the basic tools of government, known as policy instruments or measures to solve policy problems in the form of a policy mix or blend of different instruments (Bressers & Klok, 1988; Elmore, 1978; Howlett et al., 2009; McDonnell & Elmore, 1987; Schneider & Ingram, 1990). The application of policy instruments is a very crucial step in the policy implementation process (Howlett, Ramesh, & Perl, 2009). Some scholars have classified the types of policy tools. For example, regulation, subsidies and information programs are traditionally identified by scholars (Bemelmans-Videc, Rist, & Vedung,

1998). Howlett et al. (2009) proposed to use Nodality (information or knowledge), Authority, Treasure and Organization (NATO) as a typology of government tools. Actually, policy instruments can be combined as a policy package or policy configuration. Policy packages aim to use a set of policy measures in a combination way designed to address one or more policy objectives (Givoni et al., 2013). Policy packages are implemented to improve the effectiveness of individual policy measures and minimize unintended effects. At the same time, policymakers use a policy package to stimulate and drive other city governance activities, to improve the reputation and attract new resources such as private investments or potential residents.

City branding as a policy instrument is applied by policymakers in an attempt to achieve different urban governance goals. City branding, city marketing and city promotion belong to communicative or information instruments. They need to be complemented by other types of instruments to become effective. For example, complex problems, such as influencing private corporations to make their industrial production more sustainable, requires policy packages that include instruments, such as regulations, subsidies, public information campaigns and public-private partnerships (de Noronha, Coca-Stefaniak, & Morrison, 2017). Many combinations between city branding and other policy instruments are conceivable. The adoption and combination of policy instruments should consider urban development goals and urban characteristics, such urban size and economic development level.

1.2.3.3 Stakeholder involvement

Most scholars have also focused on the role of stakeholders in the implementation of brands and claim it is a necessity to involve a broad range of stakeholders to realize successful city branding (Baker, 2012; Kavaratzis, 2012). Freeman defined a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 2010). It is the consideration of a broader array of people, groups or organizations as stakeholders, including the nominally powerless (Bryson, 2004). Stakeholder engagement enriches and deepens the concepts of city branding, introducing new opinions, ideas, and perspectives (Dinnie, 2010). Hankinson (2004) claims that place branding relates to a set of relationships

with stakeholders. Stakeholders' attitudes and roles are also considered essential factors in the process of city branding implementation (Stubbs & Warnaby, 2015). Stakeholders can help policy makers to formulate and deliver the image of a place (Dinnie, 2010; Kavaratzis & Kalandides, 2015). Baker (2012) claims that a brand that has been developed with stakeholders is more time-tested because it has obtained more acceptance and recognition during the brand design and selection phases. Stakeholder analysis is adopted as a policy analysis approach, in particular, to understand the dynamic coordination within and outside organizations (Bryson, 2004; Freeman, 2010).

In China, various layers of government, because of their role in society, are in control of many resources and wield enormous administrative powers, which makes them the key stakeholders in urban governance (Chen et al., 2011). Compared to Western societies, these public authorities undertake most efforts in urban development (Xu & Yeh, 2005). Besides, politicians occupy the key positions within governmental organizations, non-profitable organizations, and large-scale state-owned companies who operate at the national level (Li & Zhou, 2005) but also extend to a wide variety of regional and local organizations.

Above all, to the focus of the research lies on the link between city branding, urban transformation and policy implementation. The research seeks to explore the key concepts in use in the field of city branding to better understand the actions that are performed by the practitioners engaged in urban governance. As a particular focal point, this study focuses on the question what policy instruments and policy instrument configurations are applied and to what extent stakeholders are involved in the city branding process. This PhD project will be geared towards these abovementioned elements. The theoretical framework of this research can now be presented as follows:

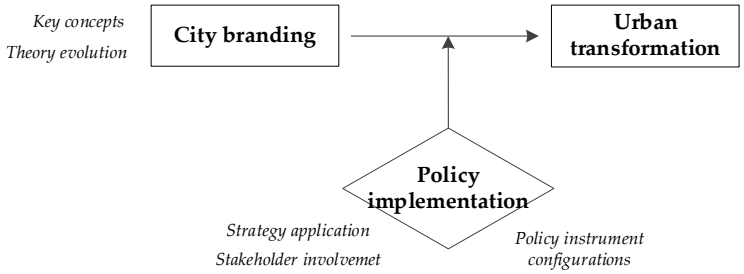

Figure 1.1 The Theoretical Framework

1.3 Research Questions

Although some scholars have conducted research on city branding from the perspectives of communication and tourism, very limited effort has been spent on the analysis of policy implementation of city branding from urban studies and public administration perspectives. This research sets out to fill this gap. Therefore, the main research question is "how do Chinese cities implement city branding strategies to achieve urban transformation?" Specifically, four sub-questions are formulated to obtain a deeper understanding of city branding and its implementation in Chinese cities:

(1) How do we distinguish and understand the various concepts in use in place branding research?
(2) How do a selection of Chinese cities implement (city) branding strategies and how can they be classified as either city promotion, marketing or branding?
(3) How do policy instruments complement and strengthen city branding implementation?
(4) How do medium-sized Chinese cities engage stakeholders in city branding strategies to trigger industrial transformation?

1.4 Mixed Research Methods

In this study, various methods are employed to reach different research targets which have been identified in the previous section. Table 1.1 shows the specific application of the research methods during data collection.

Table 1.1 Mixed research methods

Research Questions	Research strategies	Data collection types	Data sources
RQ1	Quantitative analysis of literature database	Bibliometric methods; Literature review;	Scopus platform
RQ2	Mixed research	Desk research; Document study;	Statistical Yearbook; Government plans and policies; Government official reports; Official government website;
RQ3	Qualitative comparative analysis	Desk research; Document study;	Official government policies;
RQ4	Case study	Document study; Interviews; Expert panels.	Government plans and policies; Interviews.

Specifically, desk research and interviews were applied to collect data in this study. Desktop research obtained the information of sample cities from sources in the literature, relevant planning texts, official policies and reports as issued by the local governments. Software was used to summarize, process and analyze data, including Pajek, SPSS 25.0, and fsQCA 3.0. In addition, extensive fieldwork was conducted to collect information on city branding practices in a specific Chinese city (Jingmen) from November 2018 to January 2019. Eighteen people who participated in Jingmen's brand implementation were interviewed in this period.

1.5 Dissertation Structure

Figure 1.2 shows the structure of this research. Part 1 consists of the introduction and theory research. Chapter 1 provides the research background and theoretical framework of this dissertation. Chapter 2 explores place branding research by developing an understanding and distinction of the concepts in use and discussing the evolution of key concepts in the place branding field.

Part 2 explores the implementation of city branding in Chinese cities from different perspectives. These perspectives are the application of city branding strategies (Chapter 3), configurations of policy instruments (Chapter 4) and stakeholder involvement (Chapter 5). In Chapter 3, it is argued that city branding strategy plays a vital role in the urban development and transformation processes of cities. Meanwhile, city branding strategies can be applied in different forms, including city promotion, city marketing and city branding. In this chapter the application of city promotion, city marketing and city branding in 23 Chinese cities is explored and compared: 21 cities in Guangdong province and in the two Special Administrative Regions Hong Kong and Macao. Furthermore, a proposition is formulated which holds that city promotion, city marketing and city branding represent three stages in city branding development. This proposition is subsequently tested by means of a correlation analysis. Since, it is impossible to study the research question for all potential policy instrument combinations for all brands, it was decided to explore in-depth one specific city brand (low carbon city) in Chapter 4 and study how different policy instruments are adopted and configured to realize urban development goals. There are two reasons to select the policy instruments application of the low carbon city brand. First, low carbon city construction is an important policy strategy for many cities to achieve sustainable development and urban transformation. Second, the low carbon city brand allows for an evaluation of the effectivenes of low carbon city construction efforts and thus allows for a rather straightforward operationalization and subsequent observation of the application of low carbon policy instruments. In Chapter 4, a structure for the deployment of low carbon instruments is derived from literature. This framework is then used to map the application of policy instruments in China's low carbon pilot cities. In total, 35 low carbon pilot cities are checked. This study uses a fuzzy set qualitative comparative analysis (fsQCA) to examine the relationship between configurations of low carbon policy instruments and the effectiveness of low carbon city construction. And finally, Chapter 5 explains city branding implementation from the perspective of stakeholder involvement. A detailed investigation in a medium-sized Chinese city is conducted to explain how local governments introduce city branding

strategies to achieve sustainable urban transformation and to understand to what extent and how stakeholders interact with city policymakers to select and implement city brands.

Part 3 answers the research questions, discusses the various findings from the research in city branding implementation and draws the conclusions from this thesis. And, the theoretical and practical implications, research limitations and subsequent research topics are discussed.

Figure 1.2 The structure of the dissertation

2

Tracing the Origins of Place Branding Research: A Bibliometric Study of Concepts in Use (1980–2018)

This chapter is mainly based on the following peer-reviewed article:

- Ma, W., Schraven, D., de Bruijne, M., de Jong, M., & Lu, H. (2019). Tracing the Origins of Place Branding Research: A Bibliometric Study of Concepts in Use (1980–2018). *Sustainability*, *11*(11), 2999.

2.1 Introduction

In recent decades, global economic development and rapid urbanization have intensified the competition between countries, regions, and cities to attract public resources, policy support, a talented workforce, and private investment (Acharya & Rahman, 2016). This phenomenon contributed to and stimulated the development of a discipline, which is currently known under the terms city branding or place branding. Place branding and its meaning have evolved considerably over the last 40 years (Braun et al., 2014; de Noronha, Coca-Stefaniak, & Morrison, 2017; Zenker, Braun, & Petersen, 2017) expanding in both breadth and focus. Sub-concepts such as regional branding, city branding, and to a less extent, town branding developed, each focusing on a different spatial scale (Oguztimur & Akturan, 2016). Place branding is currently a broad, multi-disciplinary research domain which covers a large variety of topics and disciplines, including urban planning, marketing, public policy and sociology (Lucarelli & Berg, 2011). State-of-the-art knowledge

about place branding as a concept is still fragmented and poorly understood (Hankinson, 2001; Lucarelli & Berg, 2011; Vuignier, 2017).

Apart from its scientific development, place branding has also become a particularly popular governance strategy for local governments who seek to create better environmental, social and economic conditions (De Jong et al., 2015; Viitanen & Kingston, 2014; Yigitcanlar, Velibeyoglu, & Martinez-Fernandez, 2008). Branding is considered as a key instrument to overcome challenges that many cities face from pollution, regional disparity, and a vulnerable economy. This requires that sustainable transformation considers such aspects as industrial structure, demographic composition, and infrastructure systems (de Jong et al., 2018). As a result, many local decision makers try to introduce place branding concepts into their sustainable transformation process. Consequently, place branding is considered an essential tool to respond to sustainability challenges, to maintain a good reputation and to maintain their attractiveness to investors, companies, and a talented workforce. Place branding combines with other policy instruments to both achieve sustainable development goals and increase economic growth. Specifically, a successful place branding strategy can bring about the transformation from a negative reputation to a positive one from a sustainable development perspective (de Jong et al., 2018; Herstein, Jaffe, & Berger, 2014). However, cities also employ place branding in different ways. Nowadays, many cities brand themselves with attractive labels, such as eco city, smart city and so on. Some use these brands simply try to greenwash their image, rather than engage in substantial changes (Lu, de Jong, & ten Heuvelhof, 2018). Others simply use advertising and events to promote their name, focusing on city marketing rather than engaging in the development and implementation of potentially disruptive and far-reaching policies in pursuit of the alluring goals of city branding. As a result of these developments, both scholars and practitioners face difficulties, having to cope with concepts and terms that have overlapping meanings. Few all-encompassing literature reviews of place branding exist (Acharya & Rahman, 2016; Cotîrlea, 2014; Ramli & Salleh, 2018), although some scholars offer descriptions of concepts in place branding (Hanna & Rowley, 2008; Van Ham, 2008). Within these overviews important insights with regard to the

explanation of place branding research and its evolution can be found. For example, the difference between the definitions of city marketing and city branding is explained (Anholt, 2010; Cotîrlea, 2014; Vuignier, 2017) and so is the development from place marketing to place branding from a marketing perspective (Boisen et al., 2018). However, the majority of reviews are embedded within specific scientific disciplines. Consequently, studies which make use of these overviews seldom comprehensively explain the conceptual distinction between various strands of place branding research, nor do they fully address its conceptual evolution (Vuignier, 2017). A systematic relational analysis which traces the theoretical development of the place branding research domain is currently lacking (Dinnie, 2004; Oguztimur & Akturan, 2014). This knowledge gap presents the starting point for this research which aims to explain the (evolution of) concepts in the place branding research domain. Understanding and distinguishing the various concepts in use in place branding research provides academic researchers a fuller perspective on the evolution of place branding as a research discipline. Policy-makers will gain clarity and understand better which governance mechanisms match which goals.

This study presents a systematic review of the place branding literature from 1980 until 2018 to obtain an in-depth understanding of its evolution, its various concepts and their relationships. The review is based upon quantitative and qualitative analysis and summarize the various research topics which featured in place branding research. Throughout this period various concepts and terms were used interchangeably, such as urban branding, city marketing and place branding (Boisen et al., 2018; Lucarelli & Berg, 2011). Similarly, urban areas were called cities, towns or conurbations (Oguztimur & Akturan, 2016).

An initial survey of the place branding literature identifies popular and, thus, frequently used key terms to identify their conceptual focus, such as place branding (Boisen et al., 2018; Cleave et al., 2016; Cotîrlea, 2014; Dinnie, 2004; Hankinson, 2010; Kavaratzis, 2005, 2018; Kavaratzis & Hatch, 2013; Oliveira, 2015; Stubbs & Warnaby, 2015), city branding (Björner, 2013; Braun, 2012; de Jong et al., 2018; Dinnie, 2010; Eshuis & Edwards, 2013; Kavaratzis &

Ashworth, 2005; Kavaratzis, 2009; Kavaratzis, 2004; Lucarelli, 2018; Padigala, 2017; Prilenska, 2012; Ye & Björner, 2018; Zenker, 2011; Zhang & Zhao, 2009), city marketing (Ashworth & Voogd, 1988; Kavaratzis, 2008; Kavaratzis, 2004; Sevin, 2014), destination marketing (Crouch, 2005; Goodall & Ashworth, 1988; Pike, 2012; Woodside, 1990), destination promotion (Crouch, 2005; Goodall & Ashworth, 1988), and urban branding (Vanolo, 2008, 2015). These referencing terms distinguish a part that refers to a location type (destination, place, city and urban) and a broadcasting activity (branding, marketing, promotion). This study counts and systematically analyzes the application of different key terms and their subsequent conceptual focus in the place-branding literature as a combination of 'location type and broadcasting activity' (or LT–BA). The analysis reflects on the use of multiple concepts in the place branding field ranging from practice-oriented research towards more systematic theory building and worldwide practical implementation.

The Chapter 2 is organized as follows: Section 2.2 explains the bibliometric method that was used to analyze the literature dataset in more detail, and describes the data collection methods and research tools that were applied. Section 2.3 describes the results of various bibliometric analyses and shows the evolution of place branding research over time, in terms of numbers of publications, subject categories, and the relationship between different concepts. Section 2.4 explains the conceptual evolution over time based on section 2.3 and classifies and analyzes the keywords based on the dimensions location-type and broadcasting-activity. Section 2.5 wraps up this chapter with key insights that can be derived from this chapter, as well as the implications of the findings.

2.2 Research Design, Methodology and Data Collection

To obtain insight into the place branding literature, a desk literature study was conducted as the primary method to collect data. We derived key lessons from De Jong et al. (2015) for this chapter's methodology. Figure 2.1 shows the specific research framework in this chapter. In order to capture systematically all research on place branding, we searched for articles in the database with varying combinations of location type and broadcasting activity. Location types (LT) typically refer to a spatial label as the first word

in the key conceptual terms that are used in place branding research, for example to city, urban, destination or place. Broadcasting activities (BA) typically refer to a verb which specifies a particular type of communicating or broadcasting of a message, like branding, marketing or promotion. We consistently refer to these combinations as location type and broadcasting activity reference pairs, or LT–BA reference pairs.

One could argue and criticize the selection and focus of our meta-review based on LT–BA reference pairs. Surely an analysis based on another classification of pairs and in particular a larger number of pairs would have provided a more complete perspective on the place branding body of research? However, we selected the most frequently used terms combinations of location type and broadcasting activity to identify the literature in the place branding research domain. We assume these to be recognized terms in academic literature. In total, we identified 12 LT–BA reference pairs. This approach enables us to investigate any possible combination of pairs of the selected location types and broadcasting activities. We collected the data with the following search query:

TITLE-ABS-KEY ("*place branding*" OR "*place brand*" OR "*place marketing*" OR "*place promoting*" OR "*place promotion*" OR "*city branding*" OR "*city brand*" OR "*city marketing*" OR "*city promoting*" OR "*city promotion*" OR "*urban branding*" OR "*urban brand*" OR "*urban marketing*" OR "*urban promoting*" OR "*urban promotion*" OR "*destination branding*" OR "*destination brand*" OR "*destination marketing*" OR "*destination promoting*" OR "*destination promotion*") AND DOCTYPE (ar OR re) AND PUBYEAR < 2019.

The search query for each reference pair can be checked in Appendix A. In this chapter, we used Scopus to compile our literature dataset. We are aware that our selection of the database Scopus restricts the bibliography, thus, limits our sample of place branding research. However, Scopus is one of the most comprehensive and standardized literature databases for the exporting of data (Falagas et al., 2008). Consequently, we chose the more complete, but less extensive database, rather than for example Web of Science, which would have probably increased our dataset. We collected academic journal articles

and reviews in the English language from the Scopus database from 1980 to 2018. We decided only to include English articles and reviews, which unfortunately leaves out valuable international scientific contributions in other languages such as Spanish or French. We chose 1980 as the starting date since the reference pair ('urban promotion') was first used in an article. The year 2018 was chosen as this was the last complete publication year. The longitudinal scale of the data sample allows us to explore the evolution of concepts used in the place branding domain. Three bibliographic locations (title, abstract, keywords) describe the essence of a study and basically summarize and represent the main academic information of a publication. Therefore, we assume that when the term features in these bibliographic locations, it is a key conceptual focus of the underlying study. Consequently, our selection of place branding literature contains all scientific publications in English in Scopus which make use of any of the 12 LT–BA reference pairs in one of the bibliographic locations (title, abstract, keywords). As a result of this filtering process, we ended up with a database of 2665 articles containing the reference pairs, which provides the full place branding research dataset.

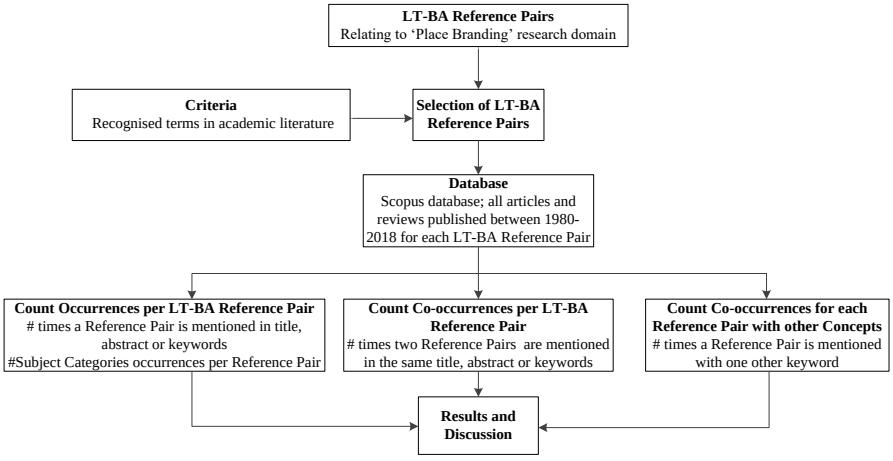

Figure 2.1 Research framework was inspired by De Jong et al. (2015)

2.2.1 Occurrences per Location Type–Broadcasting Activities (LT–BA) Reference pair

To explore the popularity of each of the 12 LT–BA reference pairs in place branding research, we counted the frequency of occurrence of the reference

pairs in titles, keywords, and abstracts in databases containing academic literature over time. The results are shown in Figure 2.2. The distribution of different discipline categories are presented in Figure 2.3. The dataset was subjected to subsequent bibliometric analyses, which will be reported in Section 2.3 (see Figure 2.4 and Figure 2.5).

2.2.2 Co-occurrences per LT–BA reference pair

As a second step, we analyzed whether articles cover one or more reference pairs, mapped the connections among different reference pairs, and identified which key reference pairs co-occurred the most in articles. Finally, we mapped the instances of co-occurrence between the reference pairs to visualize the relationships between the 12 LT–BA reference pairs. The results can be seen in Figure 2.6 in Section 2.3. The more central the position of a reference pair the more co-occurrences were identified, and the more closely connected the pair is with other reference pairs.

2.2.3 Co-occurrences for each LT–BA reference pair with other concepts

As a third and final step, we explored how the 12 LT–BA reference pairs are connected with other keywords and concepts in place branding research. We mapped the co-occurrences of articles key words and obtained outcomes of each LT–BA reference pair and their links to other concepts. Developments in bibliometric research and analytical tools develop relatively quickly and so different options for visualization can be used, for example Bibliometrix, VOSviewer or CiteSpace (Tang et al., 2018; Zhu & Hua, 2017). Based on our earlier work (De Jong et al., 2015), we decided to use the software program PAJEK (Alhajj & Rokne, 2014) to calculate the links between the concepts and visualize the results. The resulting network is shown in Figure 2.7 in section 2.3. This figure presents the most related concepts in the center and the more loosely connected ones on the outside of the figure. To increase the visibility, only connections with at least three co-occurrences within different concepts are displayed here. As a result all weak connections were excluded from the figure. It should be noted here, however, that the use of other visualization software tools might have yielded different insights.

2.3 Research Findings

The following sub-sections summarize the results for the various analyses we conducted: the analysis of the occurrence and co-occurrence of the selected LT–BA reference pairs, and the co-occurrence of the LT–BA reference pairs with other concepts.

2.3.1 Occurrences per LT–BA reference pair in articles

Figure 2.2 shows the number of articles in our dataset representing the scientific place branding research in Scopus during the period of 1980-2018. Based on the figure we can conclude that the quantity of articles has proliferated dramatically since 2004, especially in the past 10 years.

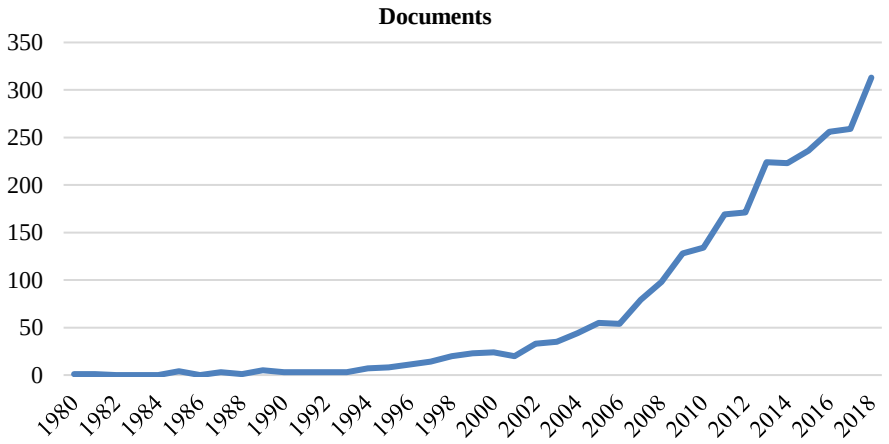

Figure 2.2 The number of articles about place branding research (1980–2018).

The 12 LT–BA reference pairs show distinctive patterns of occurrence in our dataset of place branding research. Table 2.1 (below) presents the number of articles for each LT–BA reference pair. The 'destination marketing' reference pair is by far the most frequently used in place branding research, followed by 'place branding', 'place marketing', 'city branding' and 'destination branding'. Each of these reference pairs were used more than 300 times in our place branding literature database. 'City marketing' and 'place promotion' end up in the middle, and 'city promotion', 'urban branding', 'urban

marketing', and 'urban promotion' were arguably far less used in place branding research. From a broadcasting-activity perspective, branding and marketing dominate the place branding research domain. Location-wise, the concepts destination, place and city are far more frequently used than urban.

Table 2.1 Total number of articles per location type–broadcasting activities (LT–BA) reference pair.

	Branding	**Marketing**	**Promotion**	**Total (Locality Type)**
Place	514	341	159	926
City	324	177	52	518
Urban	57	63	8	123
Destination	468	925	51	1333
Total (Broadcasting Activity)	1210	1466	269	2665

To investigate the relationship between the 12 LT–BA reference pairs and the different disciplines, we analyzed the distribution of the different subject categories in place branding literature. From Figure 2.3, we can conclude that articles in the place branding research domain mainly come from the social sciences and business management. More specifically, the majority of 'destination marketing' and 'destination branding' studies come from business management. The combinations of 'city/urban BA (broadcasting activity)' are primarily identified in the social sciences. Research articles featuring 'place marketing' and 'place branding' concepts seem to originate in both business management and the social sciences.

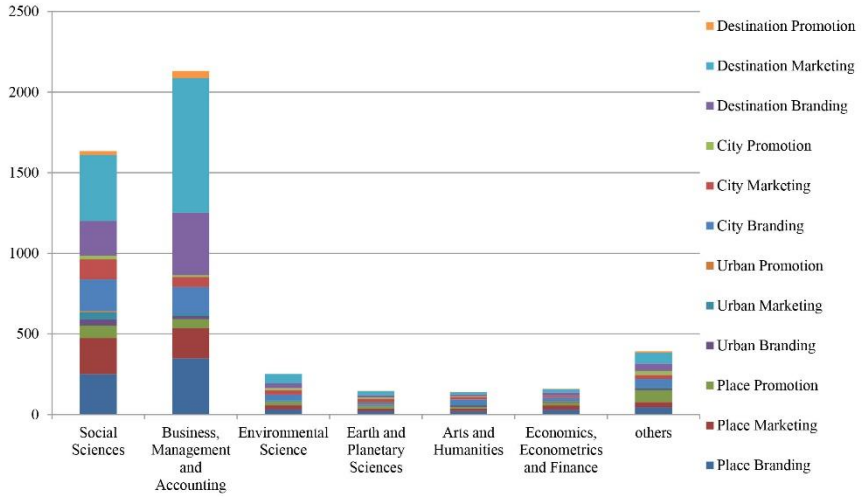

Figure 2.3 Discipline categories of articles in the place branding research domain.

Figure 2.4 and Figure 2.5 describe annual volumes of publications from 1980 to 2018 which feature the conceptual 'broadcasting-activity' and 'location-type' combinations (in either title, abstract and keywords).

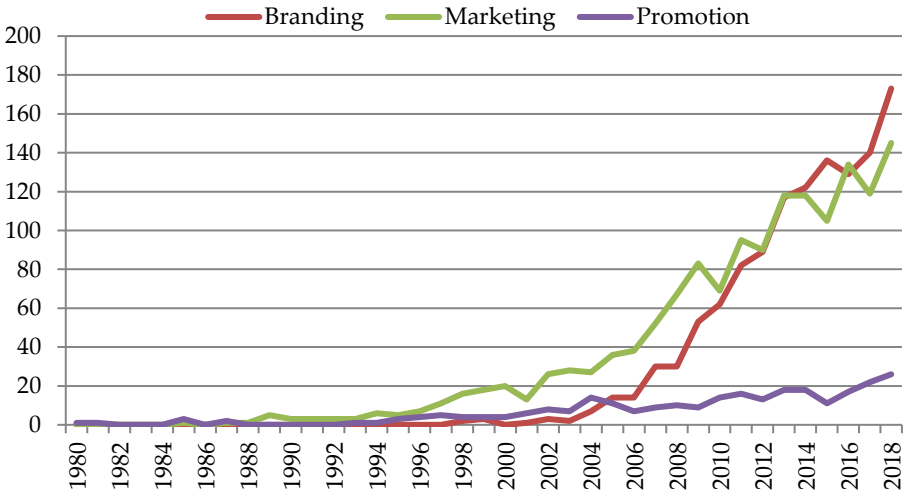

Figure 2.4 Development in number of publications per year for concepts in use, grouped by broadcasting activity.

Figure 2.4 shows the results of the changes over time in the volumes of publications and their focus on different broadcasting activities in our dataset of the place branding research domain. We can observe that the research articles which combine the reference pairs 'LT marketing' and 'LT promotion' first appeared around 1980. Research containing 'LT branding' as conceptual focus appeared much later from 1998 and onwards. However, the volume of articles covering these reference pairs increases quickly.

The combinations 'LT branding' and 'LT marketing' achieved the same value around 2012. Prior to 2012, the number of articles in 'LT marketing' was higher than that of 'LT branding' and 'LT promotion'. After 2012, the reference pairs 'LT branding' attracted more attention in place branding research. Figure 2.4 also illustrates the dominant research trend changing from 'marketing' to 'branding' in the place branding research domain. In contrast, the combination of 'LT promotion' shows a longitudinally far more consistent and relatively small annual publication volume throughout the observed period.

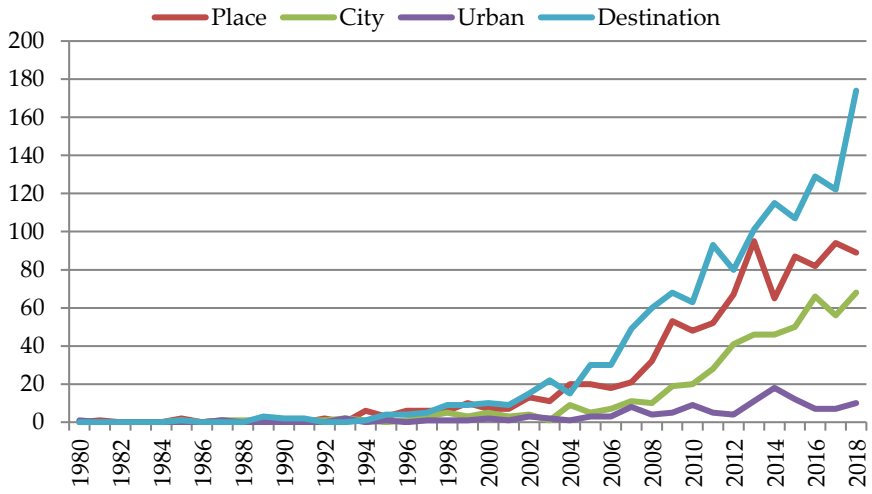

Figure 2.5 Development in number of publications per year for concepts in use, grouped by location type.

Figure 2.5 shows the results of the different location types combined with the broadcasting activities in the place branding research domain. Over time the

volume of articles with reference pairs containing 'destination BA' remain dominant in place branding research (with the exception of some years in the 1990s). This trend has continued since the early 1980. The reference pair 'place BA' contains the second largest group of annual publications. The second largest group of annual publications in place branding research covers a broader range of topics due to the more generic term 'place'. This reference term includes concepts such as regional branding, national branding, rural branding and so on (Oguztimur & Akturan, 2016). The annual publication volume of place branding publications focusing on the city level ('City BA') occupies a solid third position, indicating that this unit of analysis seems well-established in the place branding research domain. The annual volume of articles which combine the reference pairs of 'urban BA' in the place branding research dataset is the smallest. One potential explanation for this more or less consistent lowest score might be that the term 'urban' is adopted only narrowly in one or a few (sub) disciplines, such as urban planning or human geography.

2.3.2 Co-occurrences per LT–BA reference pair in articles

Figure 2.6 shows how the 12 LT–BA reference pairs are interconnected. The larger the number of co-occurrences between reference pairs, the more central position the LT–BA reference pair takes within the overall network which represents place branding research. Figure 2.6 also displays different circle sizes for the different LT–BA reference pairs, which indicates the relative occurrences of each LT–BA reference pair.

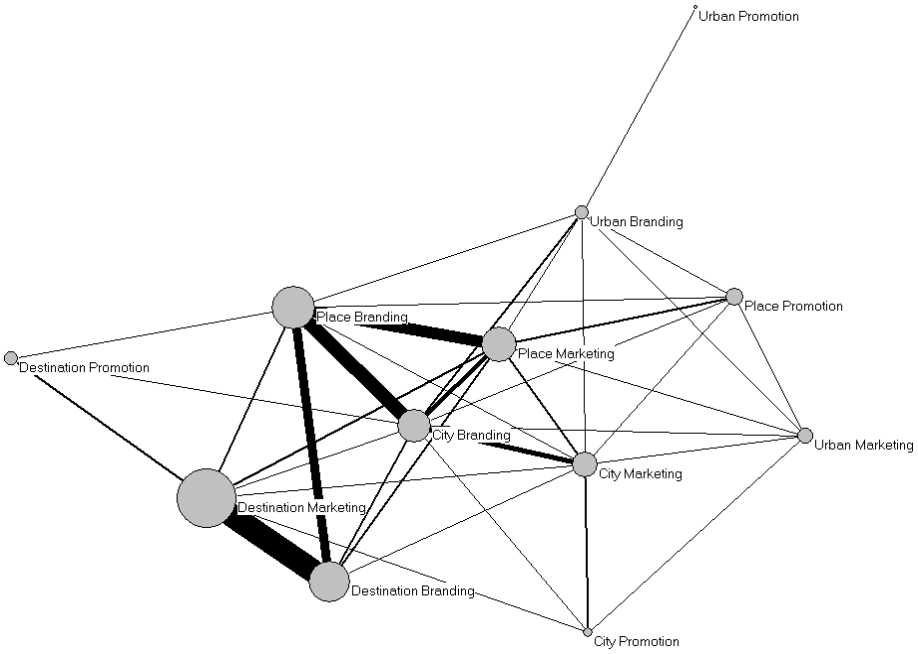

Figure 2.6 Co-occurrence of 12 LT–BA reference pairs in titles, abstracts, and keywords.

Based upon this analysis, 'destination marketing' appears to be the most commonly used reference pair (the biggest circle), but it does not occupy the most central position in the place branding research domain. 'Destination marketing' has a close connection with 'destination branding' and a more distant connection to 'destination promotion' on the left hand side of the figure. However, all of these reference pairs seem positioned on the 'fringes' of the place branding research domain. In fact, they seem to almost constitute their own independent conceptual cluster. In contrast, 'city branding', 'place branding', 'city marketing', and 'place marketing' – although not that frequently used in terms of volume (size of circles) are relatively more centrally placed in the place branding research, with relatively denser links to each other and direct connections to (almost) all other LT–BA reference pairs.

'City branding' occupies a central position with links to other key LT–BA reference pairs in the place branding literature, albeit with a lower frequency

than ‘destination marketing’ and ‘destination branding’. ‘Place branding’ has a higher frequency (bigger circle) than ‘city branding’ and has a similar centrality as the previous two (but misses connections with ‘urban marketing’ and ‘city promotion’). Based on the analysis and the figure, we can see the relative centrality of the reference pair ‘place branding’ and the size of the ‘links’ which connect to other major reference pairs. These suggest that research publications which use these reference pairs are rather interdisciplinary in nature and, thus, cover a broader research scope.

The reference term ‘promotion’ (‘destination promotion’, ‘urban promotion’, ‘place promotion’ and ‘city promotion’) clearly fulfils a peripheral position in place branding research. All reference terms have a loose connection with other key LT–BA reference pairs, and are less important in place branding research.

2.3.3 Co-occurrences for each LT–BA reference pair with other concepts

Figure 2.7 visualizes how the article keywords connect to the 12 different LT–BA reference pairs. The reference pairs, ‘urban branding’, ‘urban marketing’, ‘urban promotion’, ‘destination promotion’, ‘city promotion’ do not appear in this network graph because these reference pairs are mentioned less than three times in the title, abstract, and keywords of the articles in our database. The reference pair ‘place promotion’ appears quite peripheral. Scholars rarely use the reference pairs ‘LT promotion’ and ‘urban BA’.

Based upon Figure 2.7 and our analysis, we offer a number of observations about the place branding research domain. We observe that there are two core areas, designated as clusters, in this picture, which include the reference pairs ‘destination branding’ and ‘place branding’. On the one hand, ‘destination branding’ and ‘destination marketing’ can be found closely linked in a significant cluster of its own, which demonstrates it occupies a large proportion and central position in current place branding literature. Keywords such as destination image, tourism, branding, and marketing feature in the core of keyword clusters around the destination domain. On the other hand, ‘place branding’, ‘place marketing’, ‘city branding’, and ‘city

marketing' connect closely as well, and remain a crucial topic in current research.

Around the reference pair 'place branding', the core elements of branding theories appear, such as 'brand equity', 'brand image' and 'brand identity'. The place branding reference pairs are also related to 'social media' and 'economic development', which illustrates a changing focus from the traditional communication to social media, as well as to more environmental, ecological, and economic aspects. Researchers seem to combine 'place marketing' reference pairs more with keywords such as 'urban regeneration', 'marketing strategy', and 'advertising'. 'Place promotion' connects more closely with 'place marketing' than with 'place branding'.

What further caught our eye is that topics related to tourism seem to have connections with the marketing literature. As for 'tourism' and 'destination marketing', most of the related keywords are from tourism management, covering all kinds and means of tourism, for example, food tourism, sustainable tourism and rural tourism. Keywords destination marketing organization, customer behavior, heritage, and cultural aspects can be found around the reference pairs of 'destination marketing' and 'destination branding' forming clusters.

Specific countries also feature prominently in the keyword co-occurrence graph, such as Australia, China, Singapore, Portugal, New Zealand, Brazil, Italy, and Germany. Furthermore, some cities and regions such as Barcelona, London, Hong Kong and Ontario also appear in this graph. We find that cities receiving attention from scholars are often those with strong tourism markets, or capital cities and famous historical or cultural cities.

As for the different branding channels, the graph provides strong evidence that media use (e.g. Facebook, Twitter) and events (e.g. Olympic Games and other mega-events) have emerged as new and important tools in brand promotion and thus feature in our place branding research database. Besides, case study, content analysis, and text mining are presented in this picture, all referring to methods that are or can be applied in academic research.

Figure 2.7 provides evidence that in their work, scholars tend to focus primarily on the marketing and branding of cities rather than on regions and nations, and only rarely on towns. A potential explanation could be that cities still dominate in (spatial) policymaking processes and urban research across the world compared to regions and countries (Sukhdev, 2009).

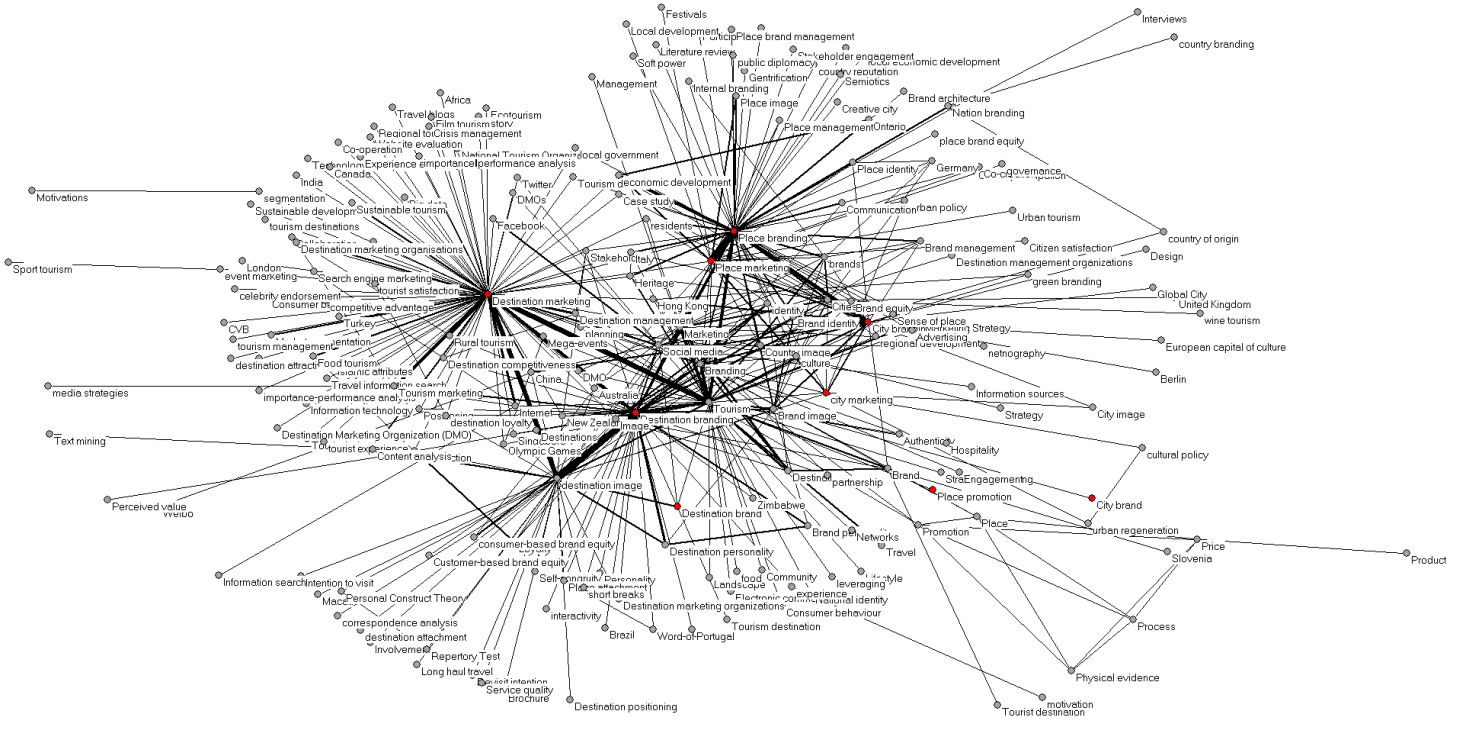

Figure 2.7 The network structure of article keywords associated with 12 LT–BA reference pairs (minimum of 3 co-occurrences).

2.4 Discussion and Analysis

2.4.1 Conceptual distinction and development of place branding research in BA

We use Figure 2.8 to describe and explain the evolution of the use of reference pairs 'LT promotion', 'LT marketing', and 'LT branding'. We distinguish and explain the development and evolution of place branding research based upon the frequency of occurrence of these three reference pairs, the changing keywords, the intended goals behind the concepts and the types and the number of locations featuring in the research.

Initially, place branding research dealt with 'LT promotion'. Since then, many marketing theories and key concepts were developed (Cotîrlea, 2012; Muñiz Martinez, 2012). From the late 1980s, place branding research moved on to the second stage and became more marketing oriented, and later evolved to also include research about branding (Zenker, 2011). On most occasions, the three different reference pairs appear side by side in academic research which makes their difference unclear (Boisen et al., 2018; Cotîrlea, 2012). There is extensive overlap in research which uses the concepts in the reference pairs 'LT branding', 'LT marketing', and 'LT promotion' (Boisen et al., 2018). However, mainstream opinion changes as research evolves from 'LT promotion' to 'LT marketing' and the overall development in the direction of 'LT branding' seems to be the latest step in this process of conceptual development (see Figure 2.8). In the figure we highlight the influence of the various scientific disciplines to the development process of place branding research.

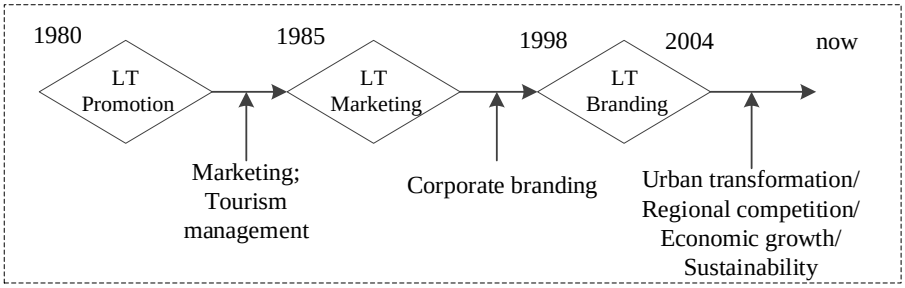

Figure 2.8 The evolution of place branding and the changing of key reference pairs.

2.4.1.1. Broadcasting activity: Promotion

In the first phase, much of the place branding literature contributed to knowledge development about 'LT promotion'. The research of 'LT promotion' started in 1980, a bit earlier than other reference pairs according to our earlier analyses. Currently (2019), 'LT promotion' research takes place in the periphery of place branding research and is not nearly as important is it once was. Key concepts in use in LT promotion research were concepts such as place promotion (Gold & Ward, 1994; Young & Lever, 1997), destination promotion (Goodall & Ashworth, 1988), city promotion (Dadgostar & Isotalo, 1992), selling places (Ashworth & Voogd, 1990; Burgess, 1982), urban promotion (Gospodini, 2001), the urban image (Pocock & Hudson, 1978). The origin of this body of research can be found in tourism management and focused on the governance of the city image and used promotion as an instrument to advertise cities as popular travel destinations (Pike, 2002). Many authors in this phase approached LT promotion research from the angle of tourism. LT promotion research aimed to attract different visitor segments to a city via pragmatic tactics, such as advertising activities or urban image design (Boisen et al., 2018). In this first phase of the development of place branding literature, only cities which were highly dependent on tourism and holiday resorts were engaged in the development of place promotion and destination promotion activities to advertise the city and to attract tourists (Goodall & Ashworth, 1988). 'LT promotion' employed promotion instruments that were designed to "beautify the city", and included focused, short-term advertising campaigns to draw specific visitors at specific times. Compared to 'LT marketing', 'LT promotion' is largely

limited to incidental, promotional activities, and focused on a limited set of visitors as well as city departments (e.g. only tourism departments) to implement LT promotion activities. LT promotion research pays less attention to the actual development of cities or regions (Boisen et al., 2018).

2.4.1.2. Broadcasting activity: Marketing

'LT Marketing' succeeded 'LT promotion' as a dominating concept in place branding research in the late 1980s. Madsen (1992) studied the concept of 'place marketing' and the concept of "selling cities" started to appear along with 'city marketing' (Ashworth & Voogd, 1990; Chevrant-Breton, 1997). From 1988 to 2005, place branding research was influenced by new disciplines such as business management which paid attention to the application of marketing strategies on cities (Ashworth & Voogd, 1990; Kavaratzis, 2007; Kavaratzis, 2004). Place branding research is primarily 'LT marketing' oriented and includes concepts such as city marketing (Ashworth & Voogd, 1988), place marketing (Anholt, 2010; Moilanen & Rainisto, 2009; Stubbs et al., 2002), destination marketing (Woodside, 1990), and metropolitan marketing (Andersen & Matthiessen, 1995). Two main drivers promoted the transition from 'LT promotion' to 'LT marketing'. On the one hand, the transition of the notion of government from a managerial to an entrepreneurial position (Boisen et al., 2018; Harvey, 1989). On the other hand, globalization and continuous urbanization intensified the competition among countries, regions, and cities to attract various target audiences (Boisen, Terlouw, & van Gorp, 2011; Sevin, 2014). Consequently, places need different marketing strategies to gain a competitive advantage and reputation (Acharya & Rahman, 2016). In this period, more and more cities begin to market themselves with a variety of aims, but primarily focus on increasing their competitiveness (Van den Berg & Braun, 1999). Compared with earlier 'LT promotion' concepts in place branding literature, 'LT marketing' stresses the application of a coherent, visible, attractive and unique set of marketing strategies and tactics designed to make cities more attractive. In this way, 'LT marketing' substantially influenced actual urban development (Boisen et al., 2018).

2.4.1.3. Broadcasting activity: Branding

As a final development we identify a third phase in which the concept 'LT branding' matures and evolves yet again. 'City branding' as a concept was identified by Kavaratzis in 2004 (Kavaratzis, 2004). Since then, the concepts of 'place branding' and 'city branding' became popular. Merging new insights from brand research, key concepts about city brands are developed such as brand identity and brand image (Anholt, 2008; Govers & Go, 2009; Keller, 1993), destination branding (Baker, 2012), brand equity (Anholt, 2008; Keller, 1993), place positioning (Go & Govers, 2010), brand identity (Govers & Go, 2009) and brand personality (Aaker, 1997). Insights from public administration or urban planning are used to further develop city branding as an instrument for (strategic) spatial planning (Boland, 2013; Kavaratzis, & Ashworth, 2005; Oliveira, 2015; Van Assche & Lo, 2011). One of the reasons for the continued popularity of this research field is that cities are expected to play a dominant role in global production and consumption (Sukhdev, 2009). The pressures from urban transformation and economic growth help to push the transition from 'LT marketing' to 'LT branding'. Compared with 'LT promotion' and 'LT marketing', 'LT branding' goes much further and aims to integrate the efforts of local governments aimed at making long-term and in-depth changes (Boisen et al., 2018). 'LT branding' not only "sells cities or places", but aims to align cities' visions, missions, and strategies using a more systematic perspective (Hankinson, 2010; Miličević et al., 2017). The goals of branding activities are not just to obtain current resources but to manage and influence the long-term reputation of the location and focuses on attitudes within (city) organizations and target groups (Boisen et al., 2018). In addition to making the place more attractive, 'LT branding' thus also helps cities to experience a transition (Ye & Björner, 2018). In this phase many places try to acquire a strong reputation and become attractive through branding activities (Dinnie, 2010; Hospers, 2010), contributing significantly to the volume of research in this domain.

Figure 2.8 shows that research from different disciplines promotes and influences the development and application of branding in urban governance (Kavaratzis & Ashworth, 2005; Knox & Bickerton, 2003; Prilenska, 2012; Wu,

2000). At first, scholars addressed 'LT promotion' and 'LT marketing' from a tourism management perspective. With unprecedented rapid urbanization and a need for continuous economic development, intense competition between cities has become an important driver for 'LT branding' in urban planning. Research identifies that corporate branding and corporate-level marketing provide potentially valuable lessons for implementation of branding within cities (Ashworth & Voogd, 1990; Kavaratzis & Ashworth, 2005; Kavaratzis, 2008). Marketing mix strategies (Booms & Bitner, 1982; McCarthy & Perreault, 1960), and rebranding theory (Muzellec & Lambkin, 2006) once seen only in the corporate world are now widely used in city branding, urban renewal, and urban redevelopment activities (Boisen et al., 2018).

2.4.2 Conceptual distinction and development of place branding research in LT

2.4.2.1 Location type: Destination

Based on our analysis of the place branding research literature database, research which featured the reference pair 'destination BA' appeared first, compared to the other reference pair combinations. To this day, the largest proportion of research in our place branding research database is identified with this reference pair. According to the analysis which identifies the conceptual connection with other concepts, we can conclude that 'destination BA' has established its own independent conceptual terminology in tourism management (Hanna & Rowley, 2008; Lucarelli & Berg, 2011). These feature alongside the goals of 'destination marketing' and 'destination branding'. They have continued to develop the local tourism industry and generate additional resources based on direct economic stimulation (Ashworth & Voogd, 1990; Goodall & Ashworth, 1988) through some advertising and sport events (Baker, 2012; Getz, 1997). Many cities set up professional destination marketing organizations (DMO) to develop tourism and attract increasing numbers of visitors (Pike, 2012). Destination has a broad spatial scope similar to place. The destination can be a nation, a city, a town or rural community (Moilanen & Rainisto, 2009; Morgan, Pritchard, & Pride, 2007). The

experiences in destination branding and marketing provide lots of branding lessons for city and regional government departments and officials.

2.4.2.2 Location type: Place

'Place branding' has a broader scope than its predecessors, such as the branding and research activities in cities, towns or conurbations, national and regional, city branding and town centre marketing and so on (Oguztimur & Akturan, 2016). Apart from an economic motive, local policymakers who apply this concept pay more attention to reputation management in a place (Anholt, 2010; Boisen et al., 2018). Some key concepts used in 'place BA' research are put forward, include 'place marketing' (Madsen, 1992), and 'place branding' (Keith Dinnie, 2004). To be specific, place branding can broaden the concept to the whole process of collective strategy making by government managers (Pasquinelli, 2014). This process covers several steps from policy design to decision making about different types of activities and their implementation. The management of place and the effects of place branding can be analyzed at different levels, including the intentions of political leaders, urban elites and the experiences of the general public (Zhang & Zhao, 2009; Zhou & Wang, 2014). The popularity of place branding is visible in two ways, namely place governance and increased academic attention. At the same time, two different opinions about place branding appear. On the one hand, some scholars believe that 'place branding' is a precious and meaningful tool for (local) governments (Dinnie, 2010; Lucarelli, 2018; Prilenska, 2012). Place branding can support government efforts to achieve a variety of aims, including attracting investments, potential residents, a talented workforce and so forth which contribute to urban transformation (Dinnie, 2010). On the other hand, critics have claimed that place branding is but a vague term. Some voices doubt the consequences and effectiveness of place branding activities. They claim that place branding is merely a tool that is employed by local governments to beautify their place image. They doubt whether place branding achieves its stated aim of in-depth redevelopment and will be eventually able to change the core identity of the place (Braun, 2012; Kavaratzis & Ashworth, 2005; Zenker & Martin, 2011).

2.4.2.3 Location type: City

Although research into 'city BA' started late compared with the other conceptual combinations, it experienced a significant increase since 2004. By 2005, 'city branding' publications emerged in scientific fields such as urban studies, public policy and environmental science as scholars from various disciplinary backgrounds evaluated (the effects of) empirical urban policies (Lucarelli & Berg, 2011). City branding can be defined as "a set of actions to build the positive image of the city and communicate it among various target groups via visuals, narratives, and events locally and internationally to gain a competitive advantage over other cities" (Vanolo, 2008, p. 371). This research connects the disciplines of urban planning and public policy more closely. At a higher level, the concept of 'city branding' also relates to regionalization and the promotion of regional development (Lucarelli, 2018) even though it is safe to conclude that city branding forms the core element of the place branding research field. City branding has attracted much practical attention from city policy makers and has been applied to achieve in-depth changes to realize multiple goals for cities, such as sustainability, urban transformation, redevelopment and so on. 'Place branding' as such, however, has seen its spatial scope broaden and come to include research on town branding, city branding, regional branding, and national branding (Govers & Go, 2009).

2.4.2.4 Location type: Urban

The combination of 'urban BA' is underexplored in the place branding research domain and attracts little attention. It is minimally mentioned in the keywords section among all 2265 articles in our database. According to our statistical results and literature review, scholars prefer to use 'urban planning' or 'urban studies' rather than the combination of 'urban BA'. Actually, 'urban BA' has a similar meaning as 'city BA'. Urban branding is a well-known concept in urban studies. Urban branding also is mixed with city branding and city marketing by some authors (Vanolo, 2015). Both of them focus on branding activities on a city-scale. However, the combination of 'urban BA' remains comparatively unusual. Compared with the more generic concepts in place branding research, urban branding partly overlaps with the

highly complex issue of politics of representation (Eshuis & Edwards, 2013; Vanolo, 2008, 2017).

2.5 Conclusions

Place branding is a popular policy tool that is often used by (local) policymakers aiming to redevelop their city or region and simultaneously attract companies and a talented workforce. Place branding research also generates attention from urban studies, environmental studies and the policy sciences. However, can place branding research achieve the goal of sustainable urban development? How have the various concepts in place branding research evolved? In this chapter, we have analyzed English publications on the Scopus platform, from 1980 up to 2018 based on 12 different location type and broadcasting activity (LT–BA) reference pairs in place branding research. More in-depth knowledge of the reference pairs helps to identify place branding's conceptual origins, and distinguishes their underlying application logic.

First, place branding is a growing academic field, and the number of studies in which place branding has proliferated in the literature in recent years. Both in our occurrences analysis as well as in our analysis of co-occurrences of concepts within the place branding literature, 'destination BA', 'place BA', and 'city BA' are the key combinations. They represent the core of the research in the place branding literature both in terms of absolute numbers and conceptual centrality. In contrast, 'urban BA' and 'LT promotion' are more sparsely connected to other concepts within the place branding literature and take up a more peripheral position.

Our analysis shows that 'destination BA' appeared earliest compared to other conceptual combinations, and it is proportionally the largest in the place branding research domain. The research and key concepts in 'destination BA' are primarily related to tourism management, developing into a more or less independent conceptual community. Place branding research which uses 'place BA' has a much broader scope, and covers concepts such as town marketing, city branding and national and regional branding, and so on. 'City branding' research forms the core part of the 'place branding' research

domain and continues to attract growing academic attention because of the rapid urbanization and global competition between cities. In contrast, 'urban BA' takes up a relatively peripheral position in place branding research.

Furthermore, we conclude that the conceptual emphasize of place branding research evolved over time, shifting from an initial emphasize on 'LT promotion' to 'LT marketing' and finally to 'LT branding'. However, this shift is relative rather than absolute, meaning we can only say the studies are more 'LT marketing' oriented or 'LT branding' oriented in each stage. This conceptual evolution is tightly related to the growing influence of new more planning- and policy-related disciplines in place branding research. Over time, the place branding research domain has become much more diverse, and multi-disciplinary. Currently, judged by the volume of publications, the social sciences and business management are the key disciplines in place branding research. The knowledge from different disciplines stimulates its evolution and feeds the development of the three key reference pairs in place branding research. Tourism management, marketing, and corporate branding provide lessons to place branding activities undertaken by governments.

Our analysis of the place branding literature and its use of key concepts shows that despite overlap among the various concepts aimed to achieve different goals with different strategies. 'LT promotion' aims to attract outsiders to visit the place, and to achieve direct economic goals. 'LT marketing' focuses on building a place image, seeking to attract outside companies and recruit a talented workforce. Finally, 'LT branding' identifies in-depth and strategic goals for places, for example, achieving urban regeneration, ecological modernization, and improving a city's reputation. Understanding and distinguishing the multiple concepts offers managerial implications to policymakers and academic clarification for researchers in place branding. For instance, designating place promotion essentially as advertising of a location, place marketing as deploying methods and techniques to understand and influence target groups relevant to this location and place branding as a long-term strategy to alter its reputation embedded in a broader economic and ecological policy agenda with a range of policy

instruments helps both policy-makers and academics grasp subtle but important distinctions and understand which term was dominant in which context and era. This, in turn, makes interventions more targeted and well-informed.

Managerial implications for brand managers and policymakers, thus include an increased awareness that the city branding strategies can be quite diverse and need to be aligned to overall policy goals. That is cities can simply employ promotional tools or advertising activities if they only want to make their city well-known. Specific place marketing strategies should be designed to promote the development of the tourism industry. Place branding should be in line with place development strategies and combined with other policy instruments to contribute to broader goals such as urban renewal, sustainable urban transformation, increased regional competitiveness, and so on. Thus, cities, which brand themselves as eco cities should do more than simply claim their brand, but actively implement specific environmental policies to change its industrial base.

With our analysis of place-branding research, we have signalled the need for more in-depth reviews of place branding, place marketing and place promotion bibliometric research and we look forward to literature reviews which will increase our knowledge of these key research strands.

Appendix A

Table 2.2 The search query for each reference pair

	Key Categories	**Query**
12 Reference Pairs	Destination Branding	TITLE-ABS-KEY (*"destination branding"* OR *"destination brand"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Place Branding	TITLE-ABS-KEY (*"place branding"* OR *"place brand"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	City Branding	TITLE-ABS-KEY (*"city branding"* OR *"city brand"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Urban Branding	TITLE-ABS-KEY (*"urban branding"* OR *"urban brand"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Destination Marketing	TITLE-ABS-KEY (*"destination marketing"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Place Marketing	TITLE-ABS-KEY (*"place marketing"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	City Marketing	TITLE-ABS-KEY (*"city marketing"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Urban Marketing	TITLE-ABS-KEY (*"urban marketing"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Destination Promotion	TITLE-ABS-KEY (*"destination promoting"* OR *"destination promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Place Promotion	TITLE-ABS-KEY (*"place promoting"* OR *"place promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	City Promotion	TITLE-ABS-KEY (*"city promoting"* OR *"city promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Urban Promotion	TITLE-ABS-KEY (*"urban promoting"* OR *"urban promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*

Table 2.2 *Cont.*

	Key Categories	**Query**
Different LTs + BA	Destination+ Branding/ Marketing/Promotion	TITLE-ABS-KEY (*"destination branding"* OR *"destination brand"* OR *"destination marketing"* OR *"destination promoting"* OR *"destination promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Place+ Branding/ Marketing/Promotion	TITLE-ABS-KEY (*"place branding"* OR *"place brand"* OR *"place marketing"* OR *"place promoting"* OR *"place promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	City+ Branding/ Marketing/Promotion	TITLE-ABS-KEY (*"city branding"* OR *"city brand"* OR *"city marketing"* OR *"city promoting"* OR *"city promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Urban+ Branding/ Marketing/Promotion	TITLE-ABS-KEY (*"urban branding"* OR *"urban brand"* OR *"urban marketing"* OR *"urban promoting"* OR *"urban promotion"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
LT +different BAs	Destination/Place/City/Urban+ Branding	TITLE-ABS-KEY (*"place branding"* OR *"place brand"* OR *"city branding"* OR *"city brand"* OR *"urban branding"* OR *"urban brand"* OR *"destination branding"* OR *"destination brand"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Destination/Place/City/Urban+ Marketing	TITLE-ABS-KEY (*"place marketing"* OR *"city marketing"* OR *"urban marketing"* OR *"destination marketing"*) AND DOCTYPE (*ar* OR *re*) AND PUBYEAR < *2019*
	Destination/Place/City/Urban+ Promotion	TITLE-ABS-KEY (*"place promoting"* OR *"place promotion"* OR *"city promoting"* OR *"city promotion"* OR *"urban promoting"* OR *"urban promotion"* OR *"destination promoting"* OR *"destination*

3

From City Promotion via City Marketing to City Branding: Examining Urban Strategies in 23 Chinese Cities

This chapter is mainly based on the following peer-reviewed article:

- Ma, W., de Jong, M., Hoppe, T., & de Bruijne, M. From city promotion via city marketing to city branding: Examining urban strategies in 23 Chinese cities. *Cities*, under review.

3.1 Introduction

Worldwide, many cities report on their efforts to generate in-depth urban transformation. As part of these efforts, cities seek to change their old image and become more sustainable, eco, low-carbon, or smart (De Jong et al., 2015; Yigitcanlar et al., 2020). Against this background, city branding is fast becoming a popular public policy instrument, particularly given trends concerning city image-building and image-communication (Dinnie, 2010; Lucarelli, 2018; Oguztimur & Akturan, 2016; Prilenska, 2012). This situation is no different in China, where many cities have started to apply city branding strategies to attract tourism, private investments, public resources, and a talented workforce (Lu et al., 2017; Wong & Liu, 2017; Zhang & Zhao, 2009).

City branding has received a lot of policy and scholarly attention over the last ten years, particularly in urban planning and governance (Lucarelli & Berg, 2011; Ma et al., 2019). Research has addressed the differences between various forms of city branding activities. For example, Boisen et al. (2018) make a distinction between place promotion, place marketing and place branding from a marketing perspective. Cotîrlea (2012) discusses the similarities and

differences between place marketing and place branding. In addition, the connotation 'place' has a wide scope and includes national, regional, cities, towns and even rural areas (Ma et al., 2019). In contrast, cities tend to have a broader range of functions and tasks as units of governance in accommodating and catalyzing modern urbanization processes (Wu, 2016). In our opinion, the combination of cities and their branding activities is the most meaningful to study when it comes to urban transformation.

City branding strategies can be applied in different forms. Some cities employ specific forms of advertising and promotion to improve the exposure and reputation of a city, via an attractive slogan or logo. And yet other cities release highly specific policies to attract specific industries or actively seek to attract specific prospective residents, such as talented people (Lu et al., 2017; Wong & Liu, 2017; Zhang & Zhao, 2009). Other local governments adopt specifically designed urban governance strategies which state their visions and outline developmental pathways (Ye & Björner, 2018). City branding strategies are thus used to fulfil a variety of urban development goals, such as urban transformation, urban renewal, and sustainability (Ma et al., 2019). As we will see below, we propose and examine a progression proposition for three distinct, but related concepts for urban governance: promotion, marketing and branding.

Scholars in the field of media and communication study the use of promotion activities in city branding (Kalandides & Wen, 2013). However, others believe city branding encompasses more than public information campaigns and advertising instruments alone (Ashworth & Kavaratzis, 2009). City branding also consists of functions and tools which are used in other policy domains such as urban governance (Eshuis & Klijn, 2017; Eshuis & Edwards, 2013; Schmiz, 2017; Ye & Björner, 2018). Obviously, there is variety in how the three concepts promotion, marketing and branding are understood in different subject areas and academic disciplines. However, there is little consensus in how to classify different city branding strategies, and how to address the relationships among them. Local governments do not always have a clear perception of the goals they pursue and what strategies they should follow to get there. Current research on city branding implementation is still

fragmented. Little attention is paid to how city branding strategies are applied (Ma et al., 2020).

To help reduce this knowledge gap, this chapter explores *how a selection of Chinese cities implement (city) branding strategies and how they can be classified as either city promotion, marketing or branding.* We identify three distinctive groups of urban governance strategies: city promotion, city marketing and city branding. We subsequently study a sample of 23 Chinese cities at different stages of development to empirically examine which city branding strategies are used.

Section 3.2 presents the state-of-the-art insights on city branding implementation strategies based on a literature review. Important concepts such as city promotion, city marketing, and city branding are distinguished and explained. We build a conceptual framework based on these insights leading to our so-called progression proposition. We subsequently study city branding strategies application in all cities in the Guangdong province plus Hong Kong and Macao. Section 3.3 explains the methodology used in this chapter, and presents the research design, the selection of the cities in our sample, the data collection process and subsequent data analysis. In section 3.4, data from 23 Chinese cities are studied and analyzed in terms of city branding strategy used based on the framework developed at the end of section 3.2. We then examine the proposition whether transition from promotion through marketing to branding can be seen as progress by conducting a statistical analysis. Section 3.5 provides a discussion of the results. Section 3.6 presents the conclusions and implications.

3.2 Theory

To enhance our understanding of the variety in city branding implementation and assess the relation between the city promotion, city marketing and city branding we systematically compare their (1) main characteristics (focus and goals), (2) the strategies and the instruments they use to reach their goals, and finally (3) the activities they employ and their target groups (see Table 1). Furthermore, we present our understanding on the relationship between the three concepts and urban development in section 3.2.4.

3.2.1 City promotion

The first research about city promotion or place promotion appeared in 1980 (Ma et al., 2019). Since then city promotion and similar concepts have appeared, which aim to sell places (Ashworth & Voogd, 1990; Burgess, 1982) such as place promotion (Gold & Ward, 1994; Young & Lever, 1997), and destination promotion (Goodall & Ashworth, 1988). Gold & Ward (Gold & Ward, 1994; p.2) define city promotion as "the conscious use of publicity and marketing to communicate selective images of specific geographical localities or areas to a target market". The main goal of city promotion is to convey an attractive image and convince people to come and visit. Visual tools are often employed to improve a city's exposure and to attract a general public to visit the cities (Ward, 1998). For example, one can think of a distinctive slogan or logo, and the active use of advertising and media activities, and promotional campaigns (Eisenschitz, 2010). In most occasions, city promotion focuses more on traditional information communication (Boisen et al., 2018). City promotion activities have a short-term focus and are mainly implemented by small-scale units in city governments (e.g. only local tourism departments or a media group) (Ma et al., 2019). Local governments who employ city promotion are eager to improve their cities' image to boost tourism but do not further develop or improve their cities in a broader sense (Boisen et al., 2018). City promotion campaigns are mostly addressed via one-way communication in a rather generic fashion aimed at the general public as local governments do not know much of their intended audience in much detail (Ashworth & Kavaratzis, 2009; Greene et al., 2007).

3.2.2 City marketing

Marketing can be defined as "the management process responsible for identifying, anticipating and satisfying customer requirements profitably" (Powell, Prescott, & Gronow, 1987; p.344). At first, marketing was primarily targeting products, services and corporations (Hunt, 1976) and only later transferred to urban governance (Balmer & Greyser, 2003; Balmer, 2001). City marketing appeared in the late 1980s and has adopted many of the concepts of city promotion, including the 'selling' of cities (Madsen, 1992), place marketing (Anholt, 2010; Kavaratzis, 2007; Moilanen & Rainisto, 2009), and

destination marketing (Woodside, 1990). Scholars from various disciplines have offered definitions of city marketing, such as Ashworth & Voogd (1990), Kotler & Gertner (2002), and Braun (2008). We have adopted the following definition of city marketing: "the long-term process and/or policy instrument consisting of different, yet interrelated activities aimed at keeping or attracting different target groups to a certain city" Hospers (2009; p. 51; translation by the authors).

Whereas promotion primarily focuses on the communication towards an intended recipient, marketing provides a broader, more comprehensive perspective. Marketing focuses on the so-called 4P's: place, price, product and promotion (McCarthy & Perreault, 1960). In addition to seeking to attract the visitors to come to the city, city marketing distinguishes various groups and explores the value-added of these target groups, such as economic gain and talent input (Eshuis et al., 2013; Ma et al., 2019; Vuignier, 2014). The goal of city marketing is to attract, identify and respond to the needs of target groups and satisfy their requirements.

Scholars identify different target groups such as residents, investors and visitors (Avraham, 2004; Goovaerts, Van Biesbroeck, & Van Tilt, 2014; Zenker et al., 2017) as well as a talented workforce and enterprises (de Jong et al., 2018; Vanolo, 2008). City marketing drives city governments to know more about these target-audiences and develop focused and coherent policies to attract these groups who are considered valuable to the city (Braun, 2008; Keller, 2009). Apart from the communicative skills from city promotion, more entrepreneurial and managerial skills are required from governments that employ city marketing. The breadth and content of city marketing policies are thus broader and more comprehensive than city promotion policies and increasingly employed by cities in recent years to increase their profile and overall competitiveness in the process of intense globalization and urbanization (Boisen et al., 2011; Sevin, 2014). Local governments attempt to use distinctive, coherent and attractive marketing strategies to position their cities (Boisen et al., 2011; Sevin, 2014). City marketing includes applying specific marketing tools or approaches tailored to accommodate and attract certain specific pre-defined target groups (Keller, 2009). For example, urban

governments may adopt certain preferential policies to attract particular investments, recruit talents or lure specific companies. High quality urban design, infrastructure provision and flagship projects, such as free economic zones are widely adopted instruments in city marketing practices (Boisen et al., 2018; De Jong, Hoppe, & Noori, 2019).

3.2.3 City branding

In 2004, Kavaratzis proposed the concept of 'city branding' (Kavaratzis, 2004), which has ever since been discussed within various disciplines, such as public policy, urban planning and the environmental sciences (Lucarelli & Berg, 2011; Ma et al., 2019). City branding covers "a whole set of actions to build a positive image of the city and communicate it among various target groups via visuals, narratives, and events locally and internationally to gain a competitive advantage over other cities" (Vanolo, 2008, p.371). Some key concepts in city branding are brand identity (Govers & Go, 2009), brand image (Anholt, 2008; Govers & Go, 2009; Keller, 1993), and brand personality (Aaker, 1997).

Local administrations adopt city branding to improve a city's image and reputation (Boisen et al., 2018). They use city branding strategies to achieve more long-term and complex urban development goals, which includes policy goals that are designed to transform and change the city (Lu et al., 2020; Ma et al., 2020). Consequently, city branding is a strategic and more politically driven process (Anttiroiko, 2014) which actively seeks to change the city, and which requires enduring support from politicians, public officials, key stakeholders and the public (Klijn, Eshuis, & Braun, 2012). City branding plays a central role in urban planning and governance processes (Bonakdar & Audirac, 2020; Eshuis & Klijn, 2017; Ye & Björner, 2018). As a result of its inherent strategic and political importance city branding is developed by high-level professional staff departments which strive to embed and connect the branding policies to existing city policies and organize brand activities (Fan, 2014). An important difference of city branding compared to city promotion and city marketing is the active involvement of audiences. City branding integrates and encourages stakeholder participation which goes far beyond disseminating information

to and collecting information from target groups (Dinnie, 2010; Hankinson, 2004; Kavaratzis & Kalandides, 2015). Target groups in city branding are expected to become actual stakeholders in the creation (co-design) and implementation of branding practices (Ma et al., 2020).

Table 3.1 summarize the goals and relevant features of the different concepts that we identified as relevant for city branding. This table will be used as basis for the selection of indicators for the remainder of the research (See section 3.3.2) in which we seek to assess the city branding practices of 23 Chinese cities.

Table 3.1 Goals, characteristics, strategies, target groups of three key concepts in city branding literature.

Variables	Goals	Features/ characteristics	Focus on
City promotion	• advertising and distinguishing oneself from other cities • conveying a good image • convincing people to visit and stay in the city as tourist	• visual elements (logo, slogan, color scheme, font, etc.) • promotional campaigns (advertising and media activities) • websites, information on social media • tourism-related activities • one-way communication, focus on attractiveness	• the general public • communication of specific information to target groups to persuade them to visit the city
City marketing	• 'selling' the city to specific target groups in tailored ways • collecting and spreading information about the city	• information gathering and information dissemination (two-way communication). • application of marketing methods and techniques (place, promotion, product, and other marketing strategies).	• identifying and classifying specific (previously identified) target groups like visitors, investors, talents • actions that are specifically developed to accommodate specific behavioral determinants, to benefit the needs and wants of specific target groups
City branding	• changing and improving the city	• clear interpretation of history, present and future (ambition) • description of own identity • visibility of policy goals and actions related to identity and future ambition • focus on change and transformation • aimed towards stakeholder participation • use of different forms of communication • the result of a political process	• cooperation with stakeholders inside and outside of the city government • the gathering of support from stakeholders • development of policies with stakeholders

3.2.4 The progression proposition

Based on our assessment and review of the core concepts in the city branding literature the relationship between city promotion, city marketing and city branding is quite complex. Indeed, scholars are anything but united in their assessment of the relation between the various concepts. For example, Lucarelli and Berg (2011) claim that marketing and branding are distinctive approaches to promote cities. However, others believe that there is a big overlap between place marketing and place branding (Boisen et al., 2018). Media and communication scholars argue that city branding is all about communicating a city image to outsiders (Wen, 2013), but scholars from other disciplines rather observe a transition from city marketing to city branding (Cotîrlea, 2014; Kavaratzis, 2004). Kavaratzis (2004) even claims that city marketing actually is the starting point for city branding. Strikingly, few if any studies explore or interpret the essential links between the three key concepts on city branding (i.e. city promotion, city marketing and city branding) from an urban planning or governance perspective, which is our aim in the present chapter.

In Figure 3.1, we present a graphical depiction indicating a gradual progressive relationship between city promotion, city marketing and city branding. The figure identifies two main dimensions which enable us to explain the diversity in the observed city branding strategies and identified concepts. On the vertical axis, we identify the goals that are envisioned in urban development. On the horizontal axis, the strategies and specific instruments that are employed by city governments. We argue that the city promotion concept is rather goal-oriented and one-dimensional and primarily oriented towards attracting visitors to the city. City promotion is therefore quite generic, targeting a general, unspecified audience. City marketing is an overall more comprehensive yet targeted analytical concept, which is oriented towards the identification and development of policies that provide added value to the city and are tailored to reaching and accommodating specific target groups. City marketing is more sophisticated and uses a wider mix of (smart marketing) approaches. City branding is even

more comprehensive than city marketing and is primarily geared towards urban planning and essentially involves target groups as stakeholders in a process of urban transformation through self-reinvention. Compared to city marketing, the variety of goals and instruments of city branding is wider and more advanced (Anttiroiko, 2015).

Based upon our analysis, we propose there exists a progressive relationship between the three key forms of city branding we find in city branding literature. **We argue that city promotion, city marketing and city branding can be seen as sequential stages of urban development. We call this the *progression proposition*.** We claim that each subsequent branding concept comprises more functions and is more meaningful for urban development (e.g. with city branding having more functions and affecting urban transformation more than city marketing).

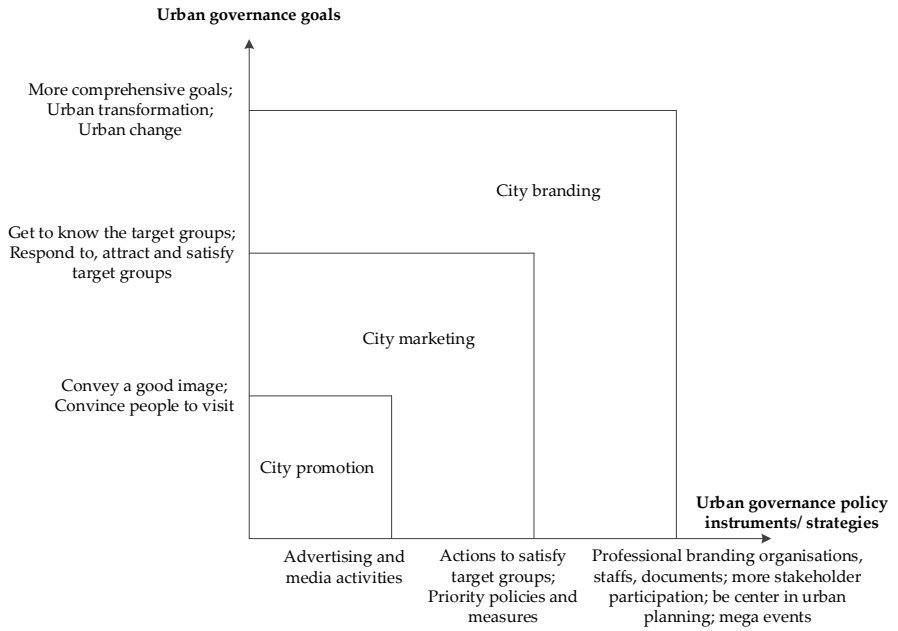

Figure 3.1 The progression proposition regarding city promotion, city marketing and city branding.

Furthermore, we believe that cities have different visions and goals that are related to the urban development stage they are in (De Jong et al., 2018). This

development stage requires cities to adopt different types of city branding strategies to achieve these particular urban development goals. City characteristics, like urban size, economic performance, or industrial structure, influence the urban development stage cities are in (Ibid.), and the way cities are governed. For these reasons, we propose that the practices of city promotion, city marketing and city branding are in fact related to different degrees of urban development. For example, we expect that large-sized and well-developed cities- i.e. 'mega cities' (economically advanced and with an optimized industrial structure) - have a broader gamut of branding activities at their disposal, as derived from city promotion, city marketing as well as city branding. Therefore, we expect that cities with a high level of urban development have a higher likelihood to adopt city branding strategies. On the other hand, cities with a lower level of urban development are more likely to only adopt city promotion strategies (and not the more advanced alternatives like city marketing or city branding). To verify this proposition, we seek to analyze adoption of city branding strategies among a broad set of cities.

3.3 Methodology

3.3.1 Research design and sample cities selection

China has cities at different stages of urban development, which provides us an ideal opportunity to explore practices in city branding and test our proposition. The research design on which this research settled is composed of a medium-sized exploratory analysis of city branding strategies and policy implementation in Chinese cities. In total, 23 cities are selected and studied to analyze their goals and implementation of city branding strategies. All 21 cities from the Guangdong province are in the sample, plus the two Special Administrative Regions Hong Kong and Macao. In contrast to other provinces in China the Guangdong province contains a fairly representative range of city types (called tier cities in China) (2 "First-tier" cities, 2 "New

First-tier [1]" cities, 3 "Second-tier" cities, 7 "Third-tier" cities, 6 "Fourth-tier" cities, and 1 "Fifth tier city") out of the total of 337 listed cities in 2020 (YICAI, 2020). The cities vary in size and are in different phases of urban economic development and therefore focus on different city branding goals. The two mega-cities, Hong Kong and Macao have a longer experience in city branding than the others (de Jong et al., 2018; Dinnie, 2010; Mei & Ying, 2017; Sou et al., 2016). Consequently, we feel this broad selection of contiguous cities is suitable to explore the extent to which various types of cities have adopted city branding practices, and to test the progression proposition. Figure 3.2 shows the location of the 23 cities. The GDP per capita of the Guangdong province is 86412 RMB. In 2018, the population in the Guangdong province was at 113.46 million (GBoS, 2019). Table 3.6 (Appendix B) lists some basic social and economic information of the sample cities in 2018 (CSD, 2019; GBoS, 2019; SCS, 2018).

[1] New first-tier cities refer to cities that have developed at a high speed in recent years. Their development is weaker than the original first-tier cities, but stronger than second-tier cities.

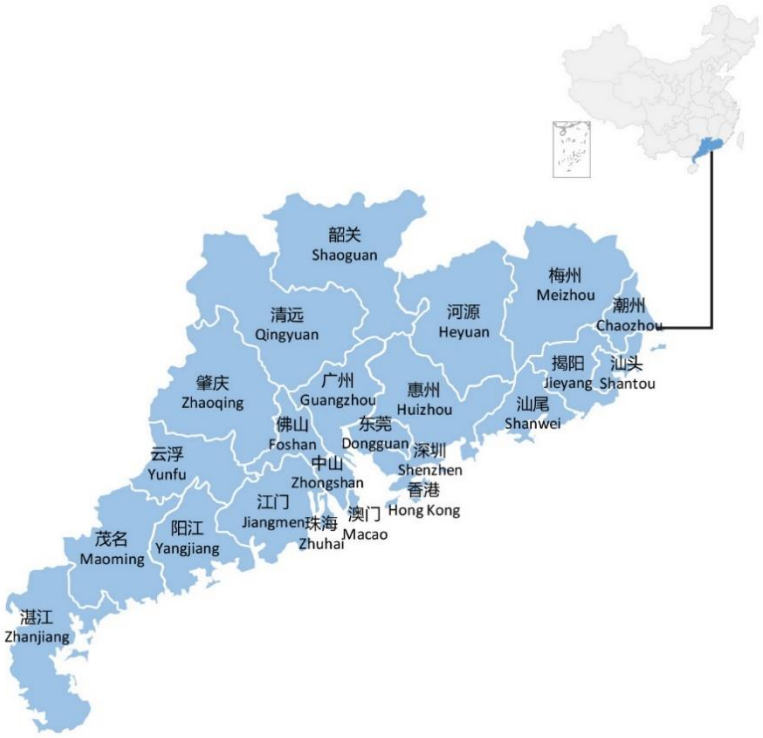

Figure 3.2 Location of Guangdong province, Hong Kong and Macao and the PRC.

3.3.2 Operationalization and data collection

Following experience acquired from existing literature, we use three proxy variables to represent a city's urban development stage: urban size, level of economic development and industrial structure (de Jong et al., 2018). To be more specific, we use permanent population, urban GDP per capita, and the proportion of three industrial sectors as indicators for the three stages of urban development.

In terms of city branding practices, we formulated a list of indicators to guide our data collection based on our classification and explanation of the three city branding concepts as presented in section 3.2. Table 3.2 shows the framework of indicators that we used for the three concepts and also presents the sources that were used to obtain the data.

Table 3.2 Indicators framework

	Variables	Code	Indicators	Data source
Urban developmental stage	Urban size		Permanent population	Statistical Yearbook
	Economy		Urban GDP per capita	
	Industrial structure		The proportion of primary/secondary/tertiary sector	
The stage of branding focus	City promotion	CP1	Presence of a city logo	Official government website
		CP2	Presence of a city slogan	
		CP3	Presence of a video of the city	
		CP4	Presence of a digital brochure of the city	
		CP5	Presence of a specific promotion website/webpage to promote the city (separate or embedded in the municipality website)	
		CP6	Presence of another media platform to promote the city in an indirect way, such as *Sina Weibo and* an *official WeChat*	
	City marketing	CM1	Specific measures/actions to attract and keep visitors	Government Work Report
		CM1-1	The city has constructed some tourism demonstration areas, e.g. *The state of global tourism demonstration area*	
		CM1-2	The city has the tourism projects, such as *Ocean Park*	
		CM1-3	The city compiles tourism development plans and policies	
		CM1-4	The city hosts tourism activities, such as the *Light and Shadow Art Festival and Food Carnival*	
		CM2	The city has developed specific measures/actions to attract and keep investors and companies	
		CM2-1	The city seeks to reform business systems and improve business services	

Table 3.2 *Cont.*

	Variables	Code	Indicators	Data source
The stage of branding focus	City marketing	CM2-2	The city releases preferential policies and measures to attract companies	Government Work Report
		CM2-3	The city provides a special fund to attract companies	
		CM2-4	The city holds the investment promotion meetings	
		CM2-5	The city reduces business costs and tax burden to companies	
		CM3	Specific measures/actions to attract and keep top talents	
		CM3-1	The city provides housing support for talents	
		CM3-2	The city provides preferential policies to attract talents	
		CM3-3	The city has plans for talent recruitment	
		CM3-4	The city improves service level for talents. For example, local government will solve the problems of talent registered permanent residence (*Hukou*) and staffing establishment (*Shiye Bianzhi*)	
		CM3-5	The city hosts talent recruitment activities and conferences	
	City branding	CB1	Presence of a professional website to do city branding	Official government website
		CB2	Presence of a specific city branding organization or department	
		CB3	Presence of city branding documents identifying construction and implementation	
		CB4	Presence of a city brand identity and coherent goal, vision, strategy, roadmap or policy in place	Urban Master Plan
		CB5	Active involvement of different stakeholders in city branding processes (e.g. participation of politicians, governmental organizations, promotion agencies, academic organizations, residents, companies; multiple forms of stakeholder participation)	Official government website
		CB6	The city regularly organizes professional city branding activities, including conferences, forums, or mega events	Government Work Report

The data regarding urban developmental stages were collected from Statistical Yearbooks for each of the cities included in the dataset (see Appendix B, Table 3.6). The contents of official government websites of each city and online documents on these websites provided the information for all 23 cities under study (indicators CP1-6 and CB1-3,5). Descriptions for city identities and visions were collected from Urban Master Plans of each city (indicator CB4). The specific policies and projects undertaken by cities in the context of city branding (Table 3.2, indicators CM1-3 and CB6) were identified via an analysis of the Government Work Reports which describe city government activities. The time period we selected covered the 13th 5-year urban plan period (2016-2020).

3.3.3 Data analysis

To compare and distinguish how the selected cities applied different city branding strategies—based on the theoretical claims and conceptual notions (see Section 3.2) —data were processed and analyzed. To be specific, we constructed scales and assigned a value to each condition. Appendix B (table 3.7) provides a detailed description of the construction of the scales. First, qualitative scores were assigned per case. Next, five point scales were developed (ranging from '1' for poor conditions, to '5' for strong conditions for city branding). Qualitative descriptions and categories were developed for all five values (1,2,3,4,5) to qualify conditions for eventually assigning quantitative values for each one of the 23 cities. Each condition of each indicator in each city was recorded and mapped in a table box by using qualitative descriptions, and an operationalization per item used (see Appendix B, table 3.7).

Then, we provided a descriptive statistical analysis of our data variables (see Section 3.4.1). By adding up the scores for items in each city, we obtained a total score for city promotion, city marketing and city branding respectively. This allowed us to fathom how different cities practice their different city branding strategies (see Section 3.4.2). To test the progression relationship and relation between the three concepts and the urban development stage, we conducted a bivariate correlation analysis (see Section 3.4.3) to assess whether highly developed cities are more likely to adopt city branding

strategies and lower urban developed cities tend to choose city promotion strategies.

3.4 Results and Analysis

3.4.1 Descriptive statistical analysis

The means and standard deviations (SD) of the items measured are shown in Table 3.3. We found that the statistical mean for city promotion (3.74) is higher than that for city marketing (3.55) and city branding (2.26). This implies that in comparison to city marketing and city branding, a greater variety of city promotion strategies are used. City promotion has been in existence longer and is more widespread. The strategies of city marketing are more widely adopted than those of city branding. The findings lend moderate support for our progression hypothesis.

Table 3.3 Descriptive statistics of the measured items.

Item	Indicator code	Mean	Std. Deviation	Item	Indicator code	Mean	Std. Deviation
Urban size	permanent population	5,287,383	34,285,035	Industrial structure	primary sector %	0.0835	0.06939
					secondary sector %	0.3909	0.13270
Economy	GDP per capita	111,483.70	144,907.781		tertiary sector %	0.5257	0.14875
City promotion	CP1	3.61	1.852	City marketing	CM1-1	3.76	1.044
	CP2	4.27	0.985		CM1-2	3.75	1.070
	CP3	5.00	0.000		CM1-3	3.64	1.120
	CP4	2.30	1.769		CM1-4	3.83	1.030
	CP5	4.13	1.325		CM2-1	4.23	1.013
	CP6	3.17	1.193		CM2-2	3.37	1.116
					CM2-3	3.43	0.976
City branding	CB1	1.52	1.082		CM2-4	3.56	1.153
	CB2	1.52	1.082		CM2-5	3.17	1.098
	CB3	1.78	1.445		CM3-1	3.40	0.894
	CB4	2.74	1.630		CM3-2	3.20	0.632
	CB5	2.71	0.914		CM3-3	3.50	0.850
	CB6	3.26	1.251		CM3-4	3.54	0.877
					CM3-5	3.36	0.809

3.4.2 The application of three concepts

Figure 3.3 shows the results of the application of the three city branding concepts by the cities in our sample. The specific practical results of each city for each indicator are shown in the Appendix B (Table 3.8-3.10). City promotion and city marketing are fairly developed and present in all 23 cities. Although city branding is also present in all 23 cities, there is a substantial variation in the intensity of city branding among cities. City branding appears to be relatively more heavily employed in large, highly urbanized cities, and less so in smaller ones.

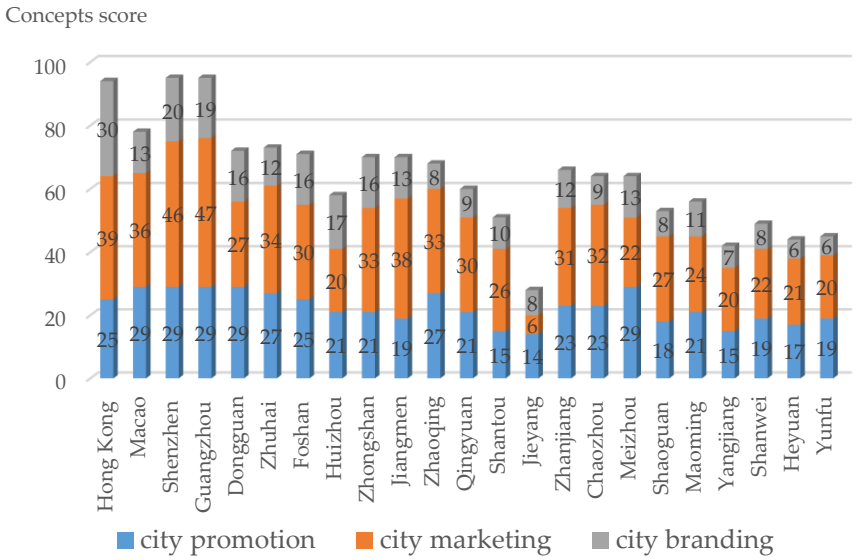

Figure 3.3 Application of three city branding concepts in 23 cities.

3.4.2.1 City promotion practices

Except for Jiangmen and Zhongshan, all the major cities in the Greater Bay Area (GBA)[2]. have a special city logo. Some medium-sized cities in the Guangdong province also have a city logo. In contrast, there is no

[2] The Greater Bay Area (GBA), is a megalopolis, also known as the Pearl River Delta, and consists of nine cities and two special administrative regions in south China.

professional city logo in government official websites in some medium and small-sized cities of the Guangdong province.

All cities use one or more city slogans to promote their cities except Hong Kong, for which we were unable to identify a slogan. Slogans express different ideas. Some slogans emphasize industrial characteristics of a city, such as the slogan: 'Made in Foshan', which serves to reflect that Foshan is a typical Chinese manufacturing city. Other slogans reflect a cities' urban development goal(s) and transformation vision, such as 'Innovative Shenzhen'. Some slogans highlight historical and cultural features of the cities, such as 'Zhongshan, the hometown of Sun Yat-sen'. The slogans of Zhuhai and Zhanjiang emphasize their specific natural resources and ecological environment, whereas other cities only make use of very generic slogans, for example, 'Beautiful Jieyang Welcomes You', 'Beautiful Shaoguan Welcomes You', 'Charming Yangjiang', or 'Beautiful Heyuan'.

All the cities provide advertisement videos to promote their cities' image on their websites. Some cities update their city videos annually, whereas others design promotional videos based on different themes. The spread of the city advertising film is a widespread and rapidly developing trend which enables city government to communicate information to target groups intuitively and directly.

Only few cities still publish brochures, indicating more financial investment and design input. Digital brochures are adopted less frequently because of their limited effectiveness.

Some cities conduct publicity through official government websites, such as the website of the Municipal Party Committee Propaganda Department, the website of the Civilization Office, the website of the Tourism Bureau, and other local tourism websites. Some tourism companies' websites are also devoted to develop tourism via city promotion.

Almost all the sample cities use the official microblog or WeChat official account to publish city information. In addition to using domestic media

platforms, Hong Kong also releases city information via international media platforms, such as Facebook and Instagram to boost its international image.

These data and our observations of the application of city promotion, show distinct differences in the employment of promotion tools between the cities to develop and promote their city image. Mega cities seem more capable and willing to engage in city promotion in various ways. Except for Hong Kong, the large cities invest heavily in city promotion, such as Macao, Shenzhen, Guangzhou and Dongguan, followed closely by Zhuhai and Zhaoqing. In the group of medium and small cities, Meizhou and Chaozhou perform a little better than the rest of the small cities. This may stem from their years of commitment to industrial tourism management and city advertising. Other small cities are likely to follow the general promotional pathways and lack specific characteristics.

3.4.2.2 City marketing practices

Based on data about city marketing, we identified small differences between large cities and small cities in attracting the target visitors. Some cities, such as Hong Kong, Macao, Guangzhou, Zhaoqing and Chaozhou, actively attract target visitors by constructing tourism demonstration areas, publishing tourism development plans, and organizing tourism activities and projects . In contrast, according to the description of the Governmental Work Report, some cities perform less well in these items, such as Shenzhen, Dongguan, Huizhou and Jieyang (See Appendix, table 3.9). It can be speculated that these cities focus more on their manufacturing industry than on their tourism industry.

However, in terms of attracting investment enterprises and improving the business environment, Chinese cities generally release many policies and measures to support small and micro businesses and private enterprises, such as favorable loan policies. Local governments implement business system reforms to shorten the time for starting up enterprises and introduce tax and fee reductions to reduce the operating costs of enterprises. They provide special funds to support medium and small companies and expand the

channels of urban investment by holding other investment promotion conferences.

Large cities are very active in attracting business investment and improving the business environment. For example, Shenzhen released more than 160 policy measures, and provided 228 billion (RMB) in special funding to support industry and business development in the years 2015-2019. According to our data, Shenzhen reduced the cost of doing business by about 466.7 billion (RMB) in this period, closely followed by Hong Kong, Macao, Guangzhou, and Dongguan. Zhuhai and Foshan adopted fairly similar measures to attract companies and improve their business environment. Medium cities, such as Shantou and Zhanjiang, show a lower capability to attract enterprises. Some small cities, such as Yangjiang, Shangwei, and Heyuan display a limited ability to adopt measures to attract businesses. To be specific, these cities can only provide very little preferential policies and tax breaks to companies and do not provide any support funds.

In terms of attracting talent, many cities have released talent introduction plans, solved housing problems by providing houses or housing subsidies, supported the construction of scientific research teams, and improved the service of talent management. Talent recruitment forums and conferences are also hosted to attract talents. As can be expected, mega cities provide more support in these aspects, for example, providing more attractive funds to settle families of talents and providing career development platforms. Small cities are also eager to attract talents, but they only can implement some basic "Talent Plans" which are announced by the Guangdong province. The ability of smaller towns to provide preferential policies and attractive conditions to the talents is very limited.

Above all, we found that the cities of the Greater Bay Area provide many more resources and conditions to attract investments, enterprises, and talents. The rest of the cities of the Guangdong province have introduced many measures to attract visitors in terms of tourism city construction, but they on average have little resources available to attract business enterprise investment and talent recruitment.

3.4.2.3 City branding practices

Hong Kong scored full marks in all sub-items of city branding, followed by Shenzhen. Except for Hong Kong, very few cities have specific websites that construct brand associations related to city branding, only Shenzhen, Foshan, Zhongshan and Zhanjiang do. Meanwhile, these websites are used to promote the city's enterprise and industrial brands. There is neither a dedicated city brand organization nor a professional website on city branding of the rest of the cities.

Hong Kong has published a large number of documents on city brand construction and promotion. Some cities compiled specific city branding plans, such as the "Dongguan City Image Master Plans (2011-2015)". Guangzhou released the "Report on Guangzhou Flower City Brand Strategy Planning" and the city of Zhanjiang spent a chapter on the realization of its "Brand Promotion Research Center". The rest of the cities pay less attention to the publishing of documents on city branding.

Most large cities can identify a clear position for their cities, such as Hong Kong, Macao, Shenzhen, Guangzhou, Zhuhai and Foshan. Their city identity combines their own advantages and conditions and can be distinguished among their neighboring cities. In contrast, many small and medium cities adopt some relatively general descriptions on their city identity in their Urban Master Plan. For example, they claim that they are "the historical and cultural city", "the ecological and livable city", the "central city" and "modernization city".

As far as the participation of stakeholders is concerned, we find that local administrations still heavily influence on the city branding participation processes. Most urban governments collect ideas from public and network voting in the process of city image design, as for example Jiangmen, Zhongshan, Yangjiang, Maoming, Shantou and Jieyang do. Some cities organize seminars and consult experts, as Guangzhou and Qingyuan do. Guangzhou, Zhongshan, Jiangmen, Meizhou and Shanwei invite representatives from companies and experts to participate in the city branding processes. Hong Kong and Huizhou have adopted more elaborate

forms of stakeholder participation and multiple ways to become involved in city branding. More specifically, Hong Kong has invited public and private sector players to collect suggestions on Hong Kong's brand in 2000. In 2010, Hong Kong's brand was reviewed and checked by collecting opinions from an international audience and by issuing a survey among the public.

Holding various kinds of activities, conferences and forums is an important way for a city to implement its brand. We found there is a direct relationship between the hosting of activities and a city's economic capacity. Obviously, mega cities have more opportunities and capabilities to host more international and influential events, such as Hong Kong, Macao, Shenzhen and Guangzhou. Small cities can only hold very few international events and mostly focus on activities at the regional or municipal level, such as provincial sport games and local marathons.

3.4.3 City branding strategy in relation to urban development

In this section, we analyze the relation between the city branding strategy and the urban development stage of cities. Table 3.4 shows the results of the bivariate correlation analysis between urban size, economy, industrial structure and the practices of three branding concepts respectively. Table 3.5 presents the results of the bivariate analysis between the three city branding strategy concepts.

Table 3.4 Bivariate correlations between city development indicators and city promotion, marketing and branding (Spearman's rho; N=23).

				The stage of branding focus		
				City promotion	City marketing	City branding
Urban developmental stage	Economy	GDP per capita	Correlation Coefficient	.538**	.703**	.721**
			Sig. (1-tailed)	0.004	0.000	0.000
	Urban size	permanent population	Correlation Coefficient	0.298	0.246	.621**
			Sig. (1-tailed)	0.083	0.129	0.001
	Industrial structure	Primary sector	Correlation Coefficient	-.423*	-.575**	-.702**
			Sig. (1-tailed)	0.022	0.002	0.000
		Secondary sector	Correlation Coefficient	-0.295	-0.273	0.045
			Sig. (1-tailed)	0.086	0.103	0.418
		Tertiary sector	Correlation Coefficient	.478*	.492**	0.298
			Sig. (1-tailed)	0.010	0.009	0.084

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Table 3.5 Bivariate correlations between city promotion, marketing and branding (Pearson's R; N = 23).

		City promotion	City marketing	City branding
City promotion	Pearson Correlation	1.000	.651**	.545**
	Sig. (1-tailed)		0.000	0.004
City marketing	Pearson Correlation		1.000	.592**
	Sig. (1-tailed)			0.001
City branding	Pearson Correlation			1.000
	Sig. (1-tailed)			

**. Correlation is significant at the 0.01 level (1-tailed).

Table 3.4 shows that the economic factor appears to be significantly and positively related to the city promotion, marketing and branding activities. More importantly, the correlation coefficient is higher for city branding than for city marketing and promotion. The results show that economically advanced cities indeed are more likely to adopt city promotion, city marketing and city branding strategies than their less advanced peers (i.e., smaller, lower tier cities with a weaker service economy). Combined the results of Figure 3.3, Macao, Shenzhen, Guangzhou, Dongguan show fine-tuned adoption of city promotion, and so do some small cities, such as Meizhou, Chaozhou, and Zhanjiang. Adoption of city marketing practices varies from city to city. Hong Kong, Macao, Shenzhen and Guangzhou perform better on city marketing by having adopted more of the city marketing items we measured in our study, followed by Zhuhai (see Appendix B, table 3.9). Most medium-sized cities can be found in the middle level with regard to the adoption of city marketing policies, except Huizhou and Jieyang. GBA cities seem to perform better than the other cities in the Guangdong province. A reason could be that medium- and small-sized cities lack experience in managing city branding strategies.

Urban size appears to be significantly and positively related to the city branding strategy, but no such relationship was identified with regard to city promotion and city marketing. This can be explained by pointing out that populous cities such as Jieyang, Zhanjiang and Maoming can still have a

rather backward economy and are incapable to practice city promotion. They also have insufficient resources and lack the capacity to adopt city marketing.

When looking at industrial sectors, it turns out that primary sector presence in cities is significantly and negatively related to city promotion, marketing and branding (especially showing a stronger negative correlation towards branding than towards marketing and promotion). Cities with a large primary sector presence pay less attention to city branding and perform less well in city promotion, city marketing and city branding strategy. In addition, according to the literature on urban development pathways (De Jong et al., 2018), cities with a higher ratio of primary to other sectors tend to choose eco-tourist city, modern agricultural city and livable/green city as their urban development pathways. So, they pay more attention to city promotion than to city branding. For example, Meizhou actively promotes its 'Hakka culture' for tourism purposes. The secondary sector is not significantly related to any of the three branding strategies. Finally, the tertiary sector in cities is significantly and positively related to both city promotion and city marketing. It is, however, not significantly related to city branding. Cities with a high proportion of the tertiary industry show a high score on all three branding strategies, except for Macao and Zhuhai, which perform less well on city branding. By observing the city branding identity of these two cities, we found they are typical examples of tourism cities. Consequently, the significance of city promotion and city marketing for these two cities is greater than that of city branding.

In sum, the cities with a larger population, advanced economy, and a higher share of tertiary sector and a lower share of primary sector are more likely to employ all city branding strategies. Examples are Hong Kong, Shenzhen and Guangzhou who in particular seem to perform well in city branding policies. Cities that have a lot of primary sector economic activity and perform economically less well, have a lower likelihood of employing city marketing or city branding strategies. Examples are cities like Shanwei, Heyuan, and Yunfu. Our data analysis confirms: the more developed a city, the more likely it is to display features of city branding.

Finally, we also found significant statistical inter-relationships between city promotion, city marketing, and city branding (See Table 3.5). This supports claims on the complex and overlapping relationship between the three concepts.

3.5 Discussion

3.5.1 The application of three concepts

3.5.1.1 City promotion

Many if not all cities apply promotional tools such as slogans, logos and city videos on city council websites to promote the city (Florek et al., 2007). For example, "I Amsterdam" and "Only Lyon". Every year, Shenzhen releases a new city propaganda video to attract high quality talents. City promotion tools are relatively cheap and easy to adopt. In this study, we found city promotion is also favored by smaller cities and seems to encompass basic operations of urban image delivery by local city government. Our findings confirm those presented in a previous study; some middle level cities have begun to engage in more specific city advertisement in search of more exposure (Wen, 2013). However, these generic promotional tools cannot always express the specific characteristics and unique aspects of cities.

3.5.1.2 City marketing

Some big cities do not engage in marketing campaigns or tools to attract visitors; instead they put more effort into attracting enterprises and top talents, as is the case for Dongguan, Shenzhen and Huizhou. These cities focus more on the manufacturing industry than on tourism. Mega cities in fact attract sufficiently high numbers of visitors even without deploying much effort. For example, Shenzhen ranked 13th out of 100 top destinations in 2019 (Rabia, 2019). On the other hand, Shenzhen shows a lesser performance on the first item (specific measures to keep and attract visitors) among the city marketing strategies (CM1, Appendix B, table 3.9). These mega cities are more concerned with the question whether they can attract high-quality people to work and live here, and whether they can attract

potential companies to invest there, rather than just tourists coming here for a single visit. Similarly, many international cities, such as Milan and Turin, pay more attention to lasting effects of city marketing including the stimulation of investment rather than the short-term revenue from tourism (Ferrari & Guala, 2017).

Some cities are experiencing a rapid development in recent years. They have a large population and advanced economic conditions, as well as a good industrial structure. These cities have adopted more policies and made more efforts to improve the business environment and attract companies. For example, Macao sets up many cooperative industrial parks, organizes investment and trade forums to stimulate business. These measures also can be identified in other countries, such as setting up free economic zones in Dubai (De Jong, Hoppe, & Noori, 2019).

In recent years, local governments in many Chinese cities have put forward a variety of talent introduction plans to recruit talents and research teams. For example, "the Peacock Plan" in Shenzhen and the "Pearl River Talent Scheme" in Guangdong province and the "Taishan Scholars" in Shandong province. These talent introduction programs are accompanied by a great deal of policy support and benefits for talented people. Almost all local governments have a strong eagerness to attract talents, but they use different strategies to achieve this goal due to their rather different economic capacities. The use of city marketing tools to attract talents is a specific characteristic of China's situation. As a result of a sustained period of rapid economic development Chinese cities and engaged in a serious competition for talents.

3.5.1.3 City branding

Successful city branding serves many functions for urban development, but this can be brought into play only through the implementation of the city brand in public urban policies. Three out of twenty three cities that we analyzed actually successful brand themselves. Hong Kong, Shenzhen and Guangzhou have clear city brand identities and positions. Most of cities in the Guangdong use few strategies/measures that form part of city branding.

The vast majority of cities, simply lack the professional organizations that specialize in city brands and the participation of stakeholders (see table 3.10, Appendix B). Many international cities have already set up professional city branding organizations and teams to focus on city branding, such as The Hague (the Netherlands) and Oslo (Norway) (Boisen et al., 2018; Pike, 2012). Lack of professional institutions and experienced staff obviously influences the effectiveness of city branding practices (Fan, 2014). Overall stakeholder involvement in city branding processes is thus small and the branding implementation efforts are predominantly based on one-way communication efforts of city organizations, such as official media organizations and other propaganda departments (Ma et al., 2020). They merely consult public and experts to obtain opinions on city slogans and logo selections. This goes against the commonly embraced principle of broad participation in city branding (Dinnie, 2010; Kavaratzis & Kalandides, 2015; Klijn et al., 2012; Ma, et al., 2020).

Many cities are eager to promote their international image by organizing mega events, such as the Dubai 2020 Expo, or the World Cup football in Qatar (de Jong, Hoppe, & Noori, 2019). In China, cities in different stages of development are actively involved in various types of activities to promote urban renewal or the maximization of local income. However, the types and opportunities for organizing activities are closely related to the relative economic strength of a city.

3.5.2 Examining the progression proposition

In previous research, scholars explored the relationship between three concepts, such as Boisen et al. (2018) and Ma et al. (2019). Traditional studies show partial overlap and partial contradiction in their understanding of the concepts. Promotion is considered part of the marketing mix (Ashworth & Voogd, 1990) and branding is said to be a marketing strategy (Eshuis et al., 2014). In contrast, the research results in our study show that from a urban governance perspective, city branding is more comprehensive than marketing and promotion. We also found moderate evidence to support the claim that there is a progressive relationship between city promotion, city

marketing and city branding. Our study verified the connection between urban development and the stage of branding focus.

On the one hand, the link between a focus on branding and different stages of urban development increases across the three concepts. Compared to city promotion and city marketing, city branding involves a more advanced and extensive scope of urban developmental goals. Some urban development targets can be achieved by implementing city branding. City branding also shows a more strategic focus on urban development. For instance, many cities attempt to trigger industrial transformation (Ma et al., 2020) and ecological modernization (de Jong et al., 2018) by applying attractive city brands. From the data we obtained about city identity we conclude that large cities generally have strategic development visions, and are thus more willingness and capable to carry out city branding. Except for adopting city promotion, mega cities tend to choose city branding strategies. This is probably because large cities are not satisfied with the functions city promotion and city marketing entail. They require more. These cities show higher capacity in hosting mega events and cooperating with stakeholders, especially when it comes to private sector participation. For example, the Brand Hong Kong Management Unit is a very professional department in charge of city branding. Compared with small cities, large cities obtain more policy support from higher level authorities and pay more attention to city branding. We would also argue that clear city branding strategies in cities improve the quality of their city promotion and city marketing. The city can implement city promotion and marketing more targeted if its city branding position is clear and accurate. In most occasions, if a given city performs well in city branding, it is likely also to implement aspects in city promotion and city marketing as well, as is for instance the case in Hong Kong. All these conditions do not apply in small cities.

Finally, we observe that most of the cities we analyzed focus more on city marketing than on city branding. This is understandable, and conforms the urban governance characteristics of Chinese cities, which implement policies to encourage economic development and urban competition (Wu & Zhang, 2007). So, currently Chinese cities are eager to attract companies and talented

workforce. However, with the growing demand among cities for urban transformation, wider adoption of city branding strategies can be expected in the future.

3.6 Conclusions

In this research, we set out to contribute to the city branding literature via a systematic analysis of city branding concepts. We distinguished three concepts: city promotion, city marketing and city branding and proposed that they are in fact part of a urban governance dimension. Three consecutive stages for urban governance result in progressively more comprehensive set of city branding strategies. Promotion is one-way communication to a broad audience. Marketing consists of a broader set of techniques to exchange information with target groups of which promotion is only one element alongside others. Branding refers to the capability of urban governments to improve themselves and their policies by co-creating and implementing a new conception of themselves in collaboration with stakeholders. Furthermore, we built the theoretical link between the three concepts and urban transformation. We proposed that each new stage can do more things than the previous one and preserves all features of the previous ones. We expected this superior set of characteristics to prepare cities better for real urban transformation.

Via our study of 23 Chinese cities who are engaged in different development types we were able to test the progression proposition. In terms of use of city promotion strategy, we found that some medium and small cities have actively begun to engage in city promotion. However, the imitation of the general path cannot guarantee sophisticated or successful application. The adoption of city marketing strategies is influenced by the economic strength of the city. Shenzhen and Guangzhou apply most features of city marketing and do this professionally. Compared with mega cities, small- and medium sized cities are subject to economic constraints in the process of city marketing. Our results show that with the exception of Hong Kong, most cities do not actually brand themselves. Also, the most economically developed and best-known cities of our sample (Hong Kong, Shenzhen and Guangzhou) sometimes omit or overlook particular elements in the

promotion or marketing mix which less privileged cities do apply. The reason for this is that many of the tools and indicators for city promotion aim for a city to get name recognition and to maximize the number of visitors and tourists. This is, however, not so much what the more successful cities aspire to. Their conception and expectation of what they represent is not only much broader than tourism alone; in fact for them, tourism has become a minor detail in their package of broader urban economic development; they apparently can afford to let aspects of promotion to be snowed under.

Our findings show moderate evidence in support of the progression proposition. City size, level of economic development and industrial structure were also found to correlate to city branding strategies used. What we found was that professional city branding proved to be a tougher job than city marketing. Furthermore, skilled application of marketing techniques proved to be harder to realize than 'simple' city promotion. The findings of our analysis among 23 Chinese cities justify this conclusion. Highly developed cities are more likely to adopt and use city branding strategies. These cities have a large population, an advanced economy and sophisticated services industries. Compared to economically less developed cities, they have more willingness to reinvent themselves and truly implement their choice of brand.

The limitations of this research are that it is based on limited, second-hand data, and lacks information regarding stakeholder involvement and the detailed implementation of the city branding strategies. Future research could broaden our knowledge of how stakeholders play an active role in city branding processes. This research should include a detailed description of stakeholder engagement and involvement, with rich-descriptive case studies using insights from interviews with stakeholders. Furthermore, we only examined the 'progression proposition' in all cities in one province and two Special Administrative Regions of one particular nation. However, Chinese cities are set in a specific national and institutional context. Future research could expand our knowledge of city branding and investigate the progression proposition in different countries which have cities which display varying levels of urban development, such as Italy, Brazil and South

Africa. In line with this we suggest that a comprehensive database be developed that covers data on city branding strategies, city characteristics and urban governance of different types of cities across the world. This could be used for systematic research into the adoption, use and implementation of branding strategies by local governments.

Appendix B

Table 3.6 Key social and economic information for selected cities (2018).

No.	Indicators / Cities	Perm. Pop. at Year-end by City (10000 persons)	Per Capita GDP by City (RMB)	Land area (sq.m)	1/2/3 as GDP (in %)
1	Hong Kong	748,25	381870	1106,7	0/7/93
2	Macao	66,74	666893	30,8	0/4/96
3	Shenzhen	1302,66	189568	1997,47	0/41/59
4	Guangzhou	1490,44	155491	7249,27	1/27/72
5	Dongguan	839,22	98939	2460,08	0/49/51
6	Foshan	790,57	127691	3797,72	2/56/42
7	Zhuhai	189,11	159428	1736,46	2/49/49
8	Huizhou	483	85418	11347,39	4/53/43
9	Zhongshan	331	110585	1783,67	2/49/49
10	Jiangmen	459,82	63328	9506,92	7/49/44
11	Zhaoqing	415,16	53267	14891,23	16/35/49
12	Qingyuan	387,4	40476	19035,5	15/35/50
13	Shantou	563,85	44672	2199,15	4/51/45
14	Jieyang	608,94	35358	--	8/52/40
15	Zhanjiang	733,2	41107	13262,8	18/36/46
16	Chaozhou	265,66	40219	3146	7/49/44
17	Meizhou	437,88	25367	15865	18/32/50
18	Shaoguan	299,76	44971	18413	12/33/55
19	Maoming	631,32	49406	11427,63	16/38/46
20	Yangjiang	255,56	52969	7955,9	16/34/50
21	Shanwei	299,36	30825	4865,05	15/44/41
22	Heyuan	309,39	32530	15654	11/38/51
23	Yunfu	252,69	33747	7785	18/38/44

Table 3.7 Evaluation standard of indicators

Code	Indicators	5	4	3	2	1
CP1	Presence of a city logo	The city has a special and designed logo. This logo appears in government official website obviously.		Apply some changed font as the logo on the official websites.		The city doesn't have a special logo.
CP2	Presence of a city slogan	The city has special slogans. These slogans can reflect the characteristics of the city.		The city has its own slogans, however, these slogans do not reflect the characteristics of the city.		The city doesn't have a special slogan.
CP3	Presence of a video of the city	The city has some city image videos. The videos are carefully crafted and often updated.		The city has a special advertising campaign. But it is not updated very frequently.		The city doesn't have a special city image video.
CP4	Presence of a digital brochure of the city	The city has professional city brochures.		The city has guidelines for application of signals in use.		The city doesn't have any professional city brochures.
CP5	Presence of a specific promotion website/webpage to promote the city (separate or embedded in the municipality website)	The city has other specialised government websites to promote the city.		The city has some enterprise websites to promote the city.		No other websites to promote the city.
CP6	Presence of another media platform to promote the city in an indirect way	The city has multiple media platforms for publicity, including some international platforms.	The city has other multiple media platforms for publicity.		There is only one media platform to do city promotion.	There is no other media platform to promote the city.
CM1-1	The city has constructed some tourism demonstration areas	There are many tourism demonstration areas.		There are some tourism demonstration areas.		There is no tourism demonstration area.
CM1-2	The city has the tourism projects	There are many tourism projects.		There are some tourism projects.		There is no tourism projects.

Table 3.7 *Cont.*

Code	Indicators	5	4	3	2	1
CM1-3	The city compiles tourism development plans and policies	There are many tourism development plans and related documents.	There are some tourism development plans and related documents.		There are very few tourism development plans and related documents.	The city doesn't have any tourism development plans and related documents.
CM1-4	The city hosts tourism activities	They hosted many tourism activities.		They hosted some tourism activities.		They did not host any tourism activities.
CM2-1	The city seeks to reform business systems and improve business services	Reform of the business system; Save start-up time and improve business services.		Reform of the business system		They didn't reform of the business system.
CM2-2	The city releases preferential policies and measures to attract companies	More than 60 policies and measures	31-60 policies or measures	11-30 policies or measures	1-10 policies or measures	No measures have been taken.
CM2-3	The city provides a special fund to attract companies	Abundant budget allocated	Substantial budget allocated	Some budget allocated	Limited budget allocated to attract business	No budget allocated to attract business.
CM2-4	The city holds the investment promotion meetings	Held a large number of influential, high-level business activities, fairs, trade shows.	There were some trade fairs.		Held a small number of small impact, small scale marketing activities.	They did not organize marketing campaigns.
CM2-5	The city reduces business costs and tax burden to companies	Reduce a lot of tax and business costs (more than 50 billion yuan)	20-50 billion yuan	5-20 billion yuan	0-5 billion yuan	No tax breaks
CM3-1	The city provides housing support for talents	Provide lots of houses and housing subsidies for talents.		Provide some housing or housing subsidies for talents.		No housing or housing subsidies provision for talents.
CM3-2	The city provides preferential policies to attract talents	Provide lots of preferential policies		Provide some preferential policies		No preferential policy

Table 3.7 *Cont.*

Code	Indicators	5	4	3	2	1
CM3-3	The city has plans for talent recruitment	The city has a couple of professional plans about talents recruitment.		The city has some professional plans about talent recruitment.		The city doesn't provide any plans.
CM3-4	The city improves service level for talents	Adopt a lot of measures to improve service level for talents.		Adopt some measures to improve service level for talents.		There is no any measures to improve service level for talents.
CM3-5	The city hosts talent recruitment activities and conferences	Held a large number of activities to attract talents and with high influence.		Held a small number of small impact, small scale marketing activities.		There was no marketing campaign.
CB1	Presence of a professional website to do city branding	The city has a special city brand website. This website updates information in time and constructs well.		The city has a special city brand website. But the website construction is not professional.		The city doesn't have any special city branding websites.
CB2	Presence of a specific city branding organization or department	The city sets up a special city branding organization or department. This organization or department is very professional.		The city has a special city branding organization or department.		The city doesn't have any special city branding organization or department.
CB3	Presence of city branding documents identifying construction and implementation	The city releases a lot of documents about city branding construction and implementation.	The city releases some documents about city branding construction and implementation.		The city releases very few documents about city branding construction and implementation.	The city doesn't release any documents about city branding construction and implementation.

Table 3.7 *Cont.*

Code	Indicators	5	4	3	2	1
CB4	Presence of a city brand identity and coherent goal, vision, strategy, roadmap or policy in place	The city has a clear vision of urban development, in line with the reality of the city. The city identity of the city combines with the city's characteristics, resources and conditions. The city identity has a very high differentiation.	The city has a clear vision of urban development. The identity of the city can be distinguished by other cities.	The characteristics of a city can be seen from the nature of the city.	The degree of differentiation is not high.	The city doesn't have a clear city identity. City identity doesn't combine with city's characteristics.
CB5	Active involvement from different stakeholders (politicians, governmental organizations, promotion agencies, companies, public, experts) in the city branding processes	The city has very broad stakeholder participation in its city branding processes, especially from the private sector. Participation is very diverse.	Broad stakeholder involvement.	Government oriented; Invite design companies and experts to participate in the city branding process. Collect opinions on city slogans and logos from the broader community.	Government oriented; Collect opinions on city slogans and logos from the broader community.	Very limited stakeholder participation.
CB6	The city regularly organizes professional city branding activities, including conferences, forums, or mega events	The city hosts a large number of influential international and domestic events.	The city hosts a small number of international events and a large number of national events.	The city has hosted a small number of international and national events and some provincial level events.	The city hosted a small number of international, national and provincial events and a number of municipal events.	The city hosts very few events.

Table 3.8 City promotion practices in 23 cities

No.	Indicators / Cities	CP1	CP2	CP3	CP4	CP5	CP6	The score of city promotion
1	Hong Kong	5	--	5	5	5	5	25
2	Macao	5	5	5	5	5	4	29
3	Shenzhen	5	5	5	5	5	4	29
4	Guangzhou	5	5	5	5	5	4	29
5	Dongguan	5	5	5	5	5	4	29
6	Foshan	5	5	5	1	5	4	25
7	Zhuhai	5	5	5	3	5	4	27
8	Huizhou	5	3	5	1	5	2	21
9	Zhongshan	3	5	5	1	5	2	21
10	Jiangmen	1	5	5	1	3	4	19
11	Zhaoqing	5	5	5	5	5	2	27
12	Qingyuan	5	5	5	1	1	4	21
13	Shantou	1	3	5	1	1	4	15
14	Jieyang	1	3	5	1	3	1	14
15	Zhanjiang	3	5	5	1	5	4	23
16	Chaozhou	5	5	5	3	3	2	23
17	Meizhou	5	5	5	5	5	4	29
18	Shaoguan	5	3	5	1	3	1	18
19	Maoming	5	3	5	1	3	4	21
20	Yangjiang	1	3	5	1	3	2	15
21	Shanwei	1	3	5	1	5	4	19
22	Heyuan	1	3	5	1	5	2	17
23	Yunfu	1	5	5	1	5	2	19

Table 3.9 City marketing practices in 23 cities

No.	Indicators	CM1				CM2					CM3					The score of city marketing
	Cities	CM1-1	CM1-2	CM1-3	CM1-4	CM2-1	CM2-2	CM2-3	CM2-4	CM2-5	CM3-1	CM3-2	CM3-3	CM3-4	CM3-5	
1	Hong Kong	--	5	5	5	--	3	3	--	5	3	--	5	5	--	39
2	Macao	3	3	5	5	3	3	--	--	3	--	--	3	3	5	36
3	Shenzhen	3	3	--	--	5	5	5	5	5	5	--	5	--	5	46
4	Guangzhou	5	3	3	5	5	3	4	5	3	--	3	3	5	--	47
5	Dongguan	--	--	--	--	5	4	4	5	3	3	--	--	--	3	27
6	Foshan	3	3	--	--	5	3	--	5	5	--	3	--	3	--	30
7	Zhuhai	5	5	--	--	5	3	--	--	3	3	--	3	4	3	34
8	Huizhou	3	--	--	--	--	5	--	4	4	--	--	4	--	--	20
9	Zhongshan	3	3	--	5	5	3	--	4	4	--	3	--	--	3	33
10	Jiangmen	5	5	3	--	5	4	--	4	4	--	5	--	--	3	38
11	Zhaoqing	5	3	3	5	--	2	--	4	2	--	3	--	3	3	33
12	Qingyuan	5	3	3	3	5	--	--	3	2	--	--	--	3	3	30
13	Shantou	4	2	--	--	3	5	3	--	3	3	3	--	--	--	26
14	Jieyang	2	--	2	--	--	--	--	2	--	--	--	--	--	--	6
15	Zhanjiang	3	5	3	3	3	5	--	3	3	--	--	--	3	--	31
16	Chaozhou	5	3	5	3	--	4	2	--	2	--	3	--	5	--	32
17	Meizhou	5	5	--	--	3	--	--	4	2	--	--	--	3	--	22
18	Shaoguan	3	3	5	3	3	4	--	--	--	--	--	3	--	3	27
19	Maoming	3	5	--	--	--	2	3	3	2	--	3	--	--	3	24
20	Yangjiang	3	5	--	3	--	2	--	2	2	--	--	3	--	--	20
21	Shanwei	3	3	--	3	--	2	--	2	--	--	3	3	3	--	22
22	Heyuan	3	5	3	3	--	2	--	2	--	--	--	--	3	--	21
23	Yunfu	5	3	--	--	--	--	--	--	--	--	3	3	3	3	20

Table 3.10 City branding practices in 23 cities

No.	Indicators / Cities	CB1	CB2	CB3	CB4	CB5	CB6	The score of city branding
1	Hong Kong	5	5	5	5	5	5	30
2	Macao	1	1	1	5	--	5	13
3	Shenzhen	3	3	4	5	--	5	20
4	Guangzhou	1	1	4	5	3	5	19
5	Dongguan	1	1	5	3	2	4	16
6	Foshan	3	3	1	5	--	4	16
7	Zhuhai	1	1	1	5	--	4	12
8	Huizhou	1	1	4	3	4	4	17
9	Zhongshan	3	3	1	3	3	3	16
10	Jiangmen	1	1	1	3	3	4	13
11	Zhaoqing	1	1	1	1	--	4	8
12	Qingyuan	1	1	1	1	2	3	9
13	Shantou	1	1	1	3	2	2	10
14	Jieyang	1	1	1	1	2	2	8
15	Zhanjiang	3	3	2	1	--	3	12
16	Chaozhou	1	1	1	1	2	3	9
17	Meizhou	1	1	1	3	3	4	13
18	Shaoguan	1	1	1	3	--	2	8
19	Maoming	1	1	1	3	2	3	11
20	Yangjiang	1	1	1	1	2	1	7
21	Shanwei	1	1	1	1	3	1	8
22	Heyuan	1	1	1	1	--	2	6
23	Yunfu	1	1	1	1	--	2	6

4

Mix and Match: Configuring Different Types of Policy Instruments to Develop Successful Low Carbon Cities in China

This chapter is mainly based on the following peer-reviewed article:

- Ma, W., de Jong, M., de Bruijne, M., & Mu, R. (2021). Mix and Match: Configuring Different Types of Policy Instruments to Develop Successful Low Carbon Cities in China. *Journal of Cleaner Production*, *282*, 125399.

4.1 Introduction

Climate change has become a serious global challenge which increasingly affects people's quality of life and work. According to an EU based Research Centre, China is still the world's largest CO_2 emitter with power generation and industrial combustion contributing most to its fossil CO_2 emissions (Crippa et al., 2019). In 2016, China's central government proposed the *Work Plan for the Control of Greenhouse Gas Emission during the 13th Five-Year Period* as its national policy for climate change (SC, 2016). Local climate action especially aims to be an effective response to Sustainable Development Goal 11 (sustainable cities and communities) and SDG 13 (climate action) (Griggs et al., 2013; Hák, Janoušková, & Moldan, 2016). In response to these policy goals, Chinese local governments have changed their policy orientation and adapted more sustainable development models under the eco-city and low carbon city labels (Dong et al., 2017; Fu & Zhang, 2017; Lu & de Jong, 2019; Ma et al., 2020). Local governments are exploring new pathways to achieve more sustainable forms of industrial development (de Jong et al., 2018; Yu,

2014). Developing Low-Carbon Cities (LCC) is an urban development strategy that is frequently used by Chinese local governments to reduce fossil fuel and energy consumption and achieve a decarbonized mode of industrial development (Cheshmehzangi, Xie, & Tan-Mullins, 2018; de Jong et al., 2015).

Some scholars claim LCCs are an effective strategy to reduce carbon emissions (Belloso, 2011; Rius Ulldemolins, 2014), which constitute a key element in the realization of the SDGs (Gupta & Vegelin, 2016; Huang et al., 2017). However, other scholars claim that this popular city label is merely a tool that is employed by local governments to greenwash their doubtful industrial traces (de Jong, 2019; Ma et al., 2019; Schuetze & Chelleri, 2016). Scholars have conducted ample research on low carbon cities, such as low carbon economy (Bridge et al., 2013), low carbon tourism (Zhang, 2017), and examples such as Shenzhen International Low Carbon City (de Jong et al., 2013; Khanna, Fridley, & Hong, 2014; Zhan & de Jong, 2018). However, thus far little attention was paid to the policy instruments that have been adopted by local governments to implement low carbon city policies, and how effective these policy packages have been.

A variety of low carbon policy instruments such as carbon taxes and clean innovation have been adopted to reduce greenhouse gas emissions and build low carbon cities (Huang et al., 2016; Kammerlander et al., 2020). Some scholars claim that low carbon instruments are helpful to support low carbon governance (Wang & Chang, 2014). They believe that specific low carbon policy instruments can reduce carbon emissions (Ekins et al., 2017; Kammerlander et al., 2020; Nissinen et al., 2015). Specifically, low carbon instruments can be classified into different types. For example, regulation instruments include applying forced power to close enterprises with high energy consumption and emission of pollutants (Liu et al., 2017). Carbon trade policy, the use of financial subsidies, tax incentives and differential pricing measures can be considered market-based instruments (Henstra, 2016). Government policies targeting the disclosure of data about environmental pollution can be seen as information-based instruments, while measures to strengthen cooperation among organizations and thus promote

environmental restoration are network-based ones. In order to take effect, however, combinations or mixes of such policy instruments are required.

Some scholars discuss the selection of policy tools, the application of individual policy tools, and the effects of individual policy tools in environmental governance and low-carbon city construction. Examples include the target responsibility system and carbon trading in low carbon cities (Khanna, Fridley, & Hong, 2014; Lo, 2014; Stead, 2018; Wang & Chang, 2014). Low carbon policy instruments can be packaged in different ways to reduce carbon emissions and deal with climate change (Ekins et al., 2017; Nissinen et al., 2015). The configurations and combinations of policy instruments can be expected to have an impact on urban low-carbon development (Filippini, Hunt, & Zorić, 2014; Khan, 2013). However, the extant literature focuses on the application of a single type of policy instrument in the analysis of low carbon city development; little attention is paid on the effectiveness of combinations of policy instruments.

To address this knowledge gap, this chapter investigates *what low carbon policy instruments are selected and adopted by low carbon cities in China. What is the effectiveness of different combinations of low carbon instruments in terms of environmental sustainability?* To answer these questions, this study presents 35 of China's low carbon pilot cities as a research sample and applies a fuzzy set qualitative comparative analysis (fsQCA) to explore how low carbon policy instruments are packaged. It also assesses their relative effectiveness in promoting sustainable development.

Section 4.2 reviews key literature on low carbon city evaluation and categorizes low carbon policy instruments. It presents a detailed explanation of low carbon instruments, including their functional characteristics and application mechanisms. Furthermore, this section proposes a framework for mapping low carbon policy instruments. This framework is used to collect data in the empirical part. A brief description of low carbon pilot cities in China is presented in Section 4.3. Research methodology, data collection and data processing strategies are explained in this section. Section 4.4 shows the results of the analysis in this study through fsQCA. It examines the

relationship between the low carbon policy instrument configurations and the low carbon performance of low carbon cities. A sensitivity analysis is conducted to assess the impact of other factors. Section 4.5 presents a discussion of the research findings and compares these with experiences in other countries. Section 4.6 provides the conclusions of this study.

4.2 Literature Review on Low Carbon City Evaluation and Low Carbon Policy Instruments

4.2.1 Literature on low carbon city evaluation

When scholars discuss low-carbon cities and identify their special features, they mention low carbon production, low carbon consumption, low carbon energy use and low carbon technologies as vital elements for assessments (Wu et al., 2016; Zhang, 2018). These elements are influenced by different policies. These in turn may be influenced by macro aspects such as level of urban economic development, city size, energy mix, quality of urban infrastructures, mobility patterns, resource consumption, adoption of environmental policies (Jia et al., 2012; Tan et al., 2017) and energy consumption transportation and buildings (Huang et al., 2012; Zheng, 2012).

For evaluation purposes, Tan et al. (2017) suggest using a comprehensive method based on a weighted sum model to evaluate policy effectiveness in low carbon cities, while others use specific indicators to assess low carbon levels, such as carbon emission efficiency (Zeng et al., 2019) and CO_2 equivalents (Fan et al., 2011). Many scholars study the performance of low-carbon cities by developing an evaluation index of low-carbon cities (Wu et al., 2016). AHP (Analytic Hierarchy Process) is a widely adopted method to develop low-carbon index systems (Duan et al., 2016). Some cities were selected to test the indicator system, such as Lanzhou and Dalian (Duan et al., 2016; Zhang et al., 2012). In addition, some scholars established a three-layer low-carbon city evaluation index system to calculate low carbon scores (Yang et al., 2011; Zhou et al., 2015). In all of these studies, single case studies are used as a research method to assess the performance of low carbon cities.

Multiple case study analysis and large-sample assessments of the performance of low carbon cities are rare.

4.2.2 Literature on low carbon policy instruments

Figure 4.1 shows the literature review process that was undertaken to develop a low carbon instrument framework for this study. A keyword search was conducted to examine core journals in urban planning, environmental science, public governance and other relevant disciplines from the Scopus platform and the downloaded database. Google Scholar and Web of Science were also checked as complementary resources. The keywords used in the literature research include environmental policy instruments, low carbon instruments, hierarchical instruments, authority, regulations, fiscal instruments, environmental information disclosure and network governance, etc. Irrelevant literature was eliminated by reading the title, keywords, and abstract after which the remainder of the documents were used for in-depth study. Especially influential and frequently cited articles were Cheshmehzangi et al. (2018), Wang (2014), Lo (2014), Safarzadeh et al. (2020), Napp et al. (2014), Henstra (2016), Grubb et al. (2020), Blazquez et al. (2018), Nissinen et al. (2015) and Böcher (2012).

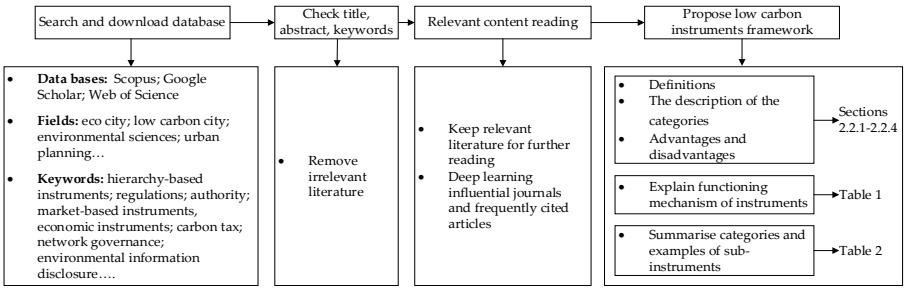

Figure 4.1 Literature review process for identifying classification and listing low carbon instruments.

The result of the above procedure is a categorization of low carbon instruments into hierarchy-based, market-based, network-based instruments and information-based instruments. Within the four classes of policy instruments for low carbon city development 16 instruments were identified. The resulting classification is described in table 4.1 and includes a description

of the different government roles, resources and incentives in use and the diversity in relationships underlying these instrument classes. Specific examples of the different types of low carbon policy instruments can be found in table 4.2. The definitions, characteristics, merits and disadvantages of the identified classes of instruments are discussed in more detail in sections 4.2.2.1 to 4.2.2.4.

4.2.2.1 Hierarchy-based instruments

Hierarchy-based policy instruments (HBIs) are conventional top-down policies applied by governments. Target groups have to follow requirements and reach goals set by government (Howlett et al., 2009; Peters, 2013). The hierarchy-based instruments are specified in laws or regulations and provide governments with legal and administrative powers (Howlett et al., 2009; Wang & Chang, 2014) to develop and enforce policies which seek to restrain or specify certain behaviour (i.e. cap of emissions (standards), or requirement of use of specific technology standards for production) (Liu & Qin, 2016).

Hierarchical governance is the most robust and influential form of external governance (Knill & Tosun, 2009). The application of hierarchical methods, however, forces government to incur higher administrative costs to cope with conflicts and resistance (Peters, 2013). The effectiveness of the instruments are very much dependant on monitoring and sanctioning of the performance of target groups. In case of violation, target groups can be punished. Hierarchical instruments include laws and regulations, target responsibility and supervision and oversight systems. These regulatory instruments are widely applied in the energy, industry restructuring and economic domains. Hierarchy-based instruments and their related administrative measures continue to be favoured policy instruments by local Chinese governments in the pursuit of the development of low carbon cities (Khanna, Fridley, & Hong, 2014; Liu & Qin, 2016).

Some scholars believe that hierarchy-based instruments such as regulation are an efficient response to the environmental crisis (Blazquez, Nezamuddin, & Zamrik, 2018) and provides government with a powerful tool to implement low carbon cities and successfully reduce carbon emissions (Wang & Chang,

2014). The centralized and top-down character would allow for improved cooperation and collaboration among different policies and government departments (Peters, 2013). Compared with economic instruments, such as subsidies or tax incentives, regulations are more prescriptive (Park, 2015). Critics claim that top-down regulation and policies are too rigid, hierarchical control is often inflexible which inhibits innovation, produces economic inefficiency and so actually hinders rather than stimulates the development of a low carbon economy (Blazquez et al., 2018; Song & Lu, 2009; Wang & Chang, 2014).

4.2.2.2 Market-based instruments

Market-based instruments (MBIs) apply economic or financial measures to reduce or eliminate negative externalities from pollution and promote clean production processes (Stavins, 2003). Many national governments, including those of Brazil and South Africa, apply market-based instruments, such as emission trading and carbon taxes (Milhorance et al., 2020; Tyler & Cloete, 2015). The EU also favors market-based instruments to tackle climate change problems (Laes et al., 2018). MBIs influence polluters via economic signals and are based on competition and the price mechanism (Blazquez et al., 2018). In the application of this family of instruments, governments use markets, prices, tax incentives, green loans and other supportive policies to encourage enterprises to implement environmentally desirable behaviour (Knill & Tosun, 2009; Snyder, 2015). Governments can use tax revenues from polluting enterprises to finance sustainable policies. Besides, other financial instruments (taxes, fines) can also be used to weaken undesirable behaviour. Normally, market-based instruments include tax incentives, pricing incentives, financing of preferential policies, competition-based government sponsorships and carbon trade policies (Blazquez et al., 2018; Park, 2015; Wang & Chang, 2014). Applying MBIs also requires some forms of regulatory intervention (Finon, 2019). Like the hierarchical instrument family, the financial instrument family ensures a vertical pattern in the relationship between government and industries. MBIs have lower administrative costs and allow for more flexibility over traditional hierarchical command and control approaches (Baeumler, Ijjasz-Vasquez, & Mehndiratta, 2012). MBIs

allow different firms to make different adjustments according to their business structures (Song & Lu, 2009). However, some scholars argue that market-based policy tools drain public financial resources, while others argue that carbon trading encourages rather than decreases pollution (Blazquez et al., 2018). At the same time, some subsidies are economically inefficient and stimulate unsound environmental practices, such as overconsumption of energy (Blazquez et al., 2018).

4.2.2.3 Network-based instruments

Applying network-based instruments (NBIs) implies looser forms of governance, strengthening the participation from public and private actors such as enterprises, NGOs, voluntary organizations and citizens in policy making, and obtaining support from different stakeholders (Khan, 2013). Because of its legitimacy and implementation capacity, network governance has emerged as a new and increasingly popular governance model to respond to the challenges of climate change (Khan, 2013; Nochta & Skelcher, 2020). The relationship between government and other actors is more even-handed. In pursuit of a low carbon cities, (local) governments play the role of network facilitator, organizer and coordinator (Khan, 2013). However, target groups are legitimate and important participants in these networks. Cooperation among actors in the network is based on mutual resource dependence (Lu, de Jong, & ten Heuvelhof, 2018). Communication and cooperation within departments can promote project implementation (Peters, 2013). Network governance has sometimes been accompanied by environmental information exchange, the introduction of market forces and participation of communities and voluntary organizations (Nochta & Skelcher, 2020). An explicit role of allocation, as well as effective coordination of policy activities within the public departments and private actors are a necessity for any low carbon effort and a fundamental step for low carbon city development (Nochta & Skelcher, 2020). Governments also use authority to stimulate the development of network coordination (Tenbensel, 2018). Sweden is one of the countries where network governance for low carbon city transitions is successfully deployed (Khan, 2013). Network governance may provide an effective mode of urban governance in which the hierarchical

effect is absent (Nochta & Skelcher, 2020). Some supporters believe that private participation in offering social and economic services offers more flexibility. Others state that involvement of voluntary organizations also promotes community spirit and social cohesion (Howlett et al., 2009). However, it also raises potential governance issues in terms of equity, efficiency and accountability (Shen, 2015). Financing arrangements and inefficient operations also cause administrative challenges to quangos and voluntary associations.

4.2.2.4 Information-based instruments

Information-based instruments are based on knowledge transfer and public learning (Büchs et al., 2018; Esmark, 2009). Governments release information aimed at persuading and influencing people's preferences and actions (Howlett et al., 2009). For example, local governments widely advocate low-carbon life and low-carbon traveling to the public (Büchs, et al., 2018). Public information campaigns, exhortation and environmental information disclosure are normally adopted in low carbon governance (Nakamura & Hayashi, 2013; Palm & Lantz, 2020; Stelling, 2014). Information-based instruments (IBIs) are considered the least coercive of all policy instruments and require low levels of hierarchical control (Carley, 2011). Instead, there is an almost horizontal relationship between the (local) government and other actors. Governments function as hubs of information which in turn are provided to other actors; the other actors receive and take in this information. Information instruments can also be interactive, with two-way communication and information flowing (Bemelmans-Videc et al., 1998). From the perspective of resource application, information tools are considered relatively efficient (Howlett et al., 2009). Information diffusion and sharing improve project coordination (Peters, 2013). Information-based instruments put pressure on polluters to improve their environmental performance (Napp et al., 2014). IBIs are more accurate in influencing specific target groups and obtaining particular responses (Palm & Lantz, 2020). At the same time, different ways of presenting information will also affect the public's understanding and thus effective policy implementation, such as providing general or personalized information (Büchs et al., 2018). The

disadvantage of information-based governance is that information disclosure may not change policy and behaviour automatically or immediately (Tyler & Cloete, 2015). Environmental information tools usually have the characteristics of a short implementation cycle and low effect (Laes et al., 2018). Besides, some organizations may be unwilling to share information due to privacy and safety motives (Peters, 2013).

4.2.2.5 A low carbon policy instrument framework

Table 4.2 provides a more detailed overview of the various types of policy instruments used in the various classes of low carbon policy and shows to what different instrument categories they belong. This study modifies certain elements in the low carbon policy instruments framework and adds some missing ones based on a through reading of the literature on policy instruments and policy packages, climate change, energy and environmental governance (Ekins et al., 2017; Henstra, 2016; Milhorance et al., 2020; Nissinen et al., 2015; Wang & Chang, 2014; Zhou et al., 2018). The framework will be used when collecting data and analyzing the empirical evidence in Section 4.4.

Table 4.1 Categorization of different classes of low carbon policy instruments.

	Incentive	Government role underlying use of policy instruments	Relationship between government and target groups	Type of resources in use
Hierarchy-based instruments	Performance measurement; Punishment and reward	Policy goal formulation and subsequent monitoring and oversight	• Vertical: Top-down • Government: commander • Other actors: implementer	Administration power; Political capital;
Market-based instruments	Competition and price	Facilitation and regulation of markets	• Vertical; • Government: instruments provider • Other actors: receiving party of instruments	Economic resource
Network-based instruments	Resource interdependency	Facilitation and coordination of resources in policy networks	• Horizontal; • Government: facilitator, organizer and coordinator • Other actors: participants • The network distance between the target group and the government is different.	Develop and apply organization resource
Information-based instruments	Learning	Knowledge sharing via communication	• Horizontal; • Government: information provider • Other actors: information consumers • Information instruments can also be interactive.	Knowledge

Table 4.2 Low carbon policy instruments framework

	Policy instruments	Description	Examples	References
Hierarchy-based instruments (X1)				
1	Regulations	A regulatory policy that is imposed by a local government on the policy target population and that involves sanction measures if noncompliance is found.	e.g. environmental laws and regulations e.g. emission permits e.g. industrial and technology standards e.g. energy efficiency standards	(Jenkins, 2014; Liu et al., 2017; Wang & Chang, 2014)
2	Target responsibility system	The target responsibility system sets targets for different levels of governments and departments, to reduce major pollutants, decompose the targets for pollutant emission control, and links the performance of pollutant emission control on specific indicators to leaders' career promotion (Zhang & Hao, 2020).	e.g. strengthen accountability	(Lo, 2014; Zhang et al., 2010)
3	Supervision and oversight	Higher-level governments adopt measures to supervise local companies and to promote policy implementation.	e.g. strengthen supervision	(Zhang et al., 2010)
Market-based instruments (X2)				
4	Tax incentives	Applying tax mechanisms such as 'deferrals, deductions, credits, exclusions or preferred rates, contingent on some act' (Howlett et al., 2009) to achieve energy conservation and reduce emissions. Tax incentives include positive and negative incentives.	e.g. reduce new energy vehicle purchase tax e.g. financial punishment	(Fankhauser et al., 2010; Snyder, 2015; Wang & Chang, 2014)
5	Pricing incentives	Applying pricing mechanisms to achieve energy conservation and reduce emissions.	e.g. low electricity price e.g. fuel prices	(Bongardt, Breithaupt, & Creutzig, 2010)
6	Financing preferential policies	Clean producers or projects can obtain bank loans at an interest rate below the market rate.	e.g. easy loans from state-owned banks e.g. green loans (clean enterprises obtain more favourable loan interest rates and loan policies)	(Huang, Mauerhofer, & Geng, 2016)

Table 4.2 *Cont.*

	Policy instruments	Description	Examples	References
7	Competition-based government sponsorship	Governments distribute the general revenues to provide grants, subsidies and adopt procurement behaviours to make the producers offer a clean good, service or behaviour.	e.g. government grants e.g. government subsidies e.g. government procurement	(Laes et al., 2018; Wang et al., 2015)
8	Carbon trade policy	The use of carbon trade policy as an instrument for achieving significant reductions in carbon emissions (Dong & Whalley, 2010).	e.g. tradeable emissions allowances e.g. establish a market mechanism for carbon emissions	(Snyder, 2015; Tyler & Cloete, 2015)
Network-based Instruments (X3)				
9	Ad hoc taskforce	Organizing professional working groups to promote departmental coordination and strengthening departmental linkages.	e.g. establish a special leading group and work promotion group e.g. establish a special joint meeting system for promoting work	(Bulkeley & Kern, 2006; Khanna, Fridley, & Hong, 2014; Nakamura & Hayashi, 2013; Stelling, 2014)
10	Public-public partnerships	Cooperation between two or more public or nongovernmental organizations which provides public services and activities.	e.g. participation from state-owned enterprises, power companies, coal and mining companies e.g. participation from NGOs	(Cheshmehzangi, Xie, & Tan-Mullins, 2018; Liu et al., 2015; Wang & Chang, 2014)
11	Public-private partnerships	Cooperative institutional arrangements between public and private sector actors to obtain a wide interest (Hodge & Greve, 2007).	e.g. encourage private participation, including individuals and private firms	(Britton & Woodman, 2014; Hodge & Greve, 2007; Khanna et al., 2014; Roy et al., 2013)
12	Voluntary participation	Government measures which seek voluntary participation of organizations to serve the goal of low carbon building.	e.g. voluntary measures e.g. family and community	(Howlett et al., 2009; Moloney et al., 2010; Oikonomou et al., 2010)

Table 4.2 *Cont.*

	Policy instruments	Description	Examples	References
Information-based Instruments (X4)				
13	Public information campaigns	Information can be communicated and released by the government through public service advertising (Howlett et al., 2009).	e.g. publish low carbon information through news media, etc. e.g. advertising measures e.g. low carbon labelling e.g. public information diffusion	(Oikonomou, Flamos, & Grafakos, 2010; Wang & Chang, 2014)
14	Exhortation and education	Government adopts efforts to influence the preferences and actions of societal members with the hope that behaviour will spontaneously change in a desired manner (Stanbury & Fulton, 1984).	e.g. advocate and encourage low-carbon life e.g. public education e.g. conduct and organize low carbon activities e.g. government exhortation or suasion	(Moloney, Horne, & Fien, 2010; Shen et al., 2018)
15	Public consultation	Government use of temporary bodies to gather information and advice about an issue (Howlett et al., 2009).	e.g. the use of outside experts e.g. advisory committees e.g. consultation of citizens	(Howlett et al., 2009)
16	Open government data	Releasing and disclosure of public sector information as open data to all kinds of actors, ranging from companies to non-governmental organizations, from developers to simple citizens (Vetrò et al., 2016).	e.g. establish an environmental information sharing mechanism and platform e.g. environmental information disclosure	(Wu et al., 2011; Zhang et al., 2010)

4.3 Method

4.3.1 Low carbon pilot cities in China

In 2008, the Ministry of Housing and Urban-Rural Development (MOHURD) and World Wildlife Fund (WWF) jointly launched "Low Carbon City" pilots in Shanghai and Baoding. In 2010, National Development and Reform Commission (NDRC) issued the "*Notice on Launching Pilot Work in Low-carbon Provinces and Low-carbon Cities*", and identified Guangdong, Liaoning, Hubei, Shaanxi, Yunnan as pilot provinces to develop low carbon cities. Tianjin, Chongqing, Shenzhen, Xiamen, Hangzhou, Nanchang, Guiyang and Baoding were identified as the first batch of eight national low carbon city pilots in China (Appendix C, Table 4.6). Subsequently, in 2013 NDRC proposed 28 cities and one province as a second batch, and 45 cities as a third batch in 2017. Anno 2020, China has 81 low carbon pilot cities and six low carbon pilot provinces in total (NDRC) (Appendix C, Table 4.6).

The first and second batches of low carbon cities announced in 2010 and 2013 of which implementation can now be studied and selected for this study. Since the information on the low carbon effectiveness of Huaian could not be obtained, this city was discarded. Consequently, 35 low carbon pilot cities were selected as research sample, representing the various types of cities in China, including mega cities, medium and small-sized cities of all tiers (4 "First-tier" cities, 6 "New First-tier" cities, 8 "Second-tier" cities, 6 "Third-tier" cities and 5 "Fourth-tier" cities, 5 "Fifth tier cities" and 1 "sub-prefectural city[3]") (YICAI, 2020). Figure 4.2 shows the location of the sample of low carbon cities. The cities are located in different provinces, ranging from the eastern shore to inland areas. Key social, economic and environmental indicators for each city (table 4.3) were collected from the 2018 Statistical yearbook of each city, and the countries' China City Statistical Yearbook 2018 (NBoS, 2018a) and supplemented by data from the Air Quality Index Ranking (Tianqi, 2020).

[3] A sub-prefectural city is officially considered to be a county-level city.

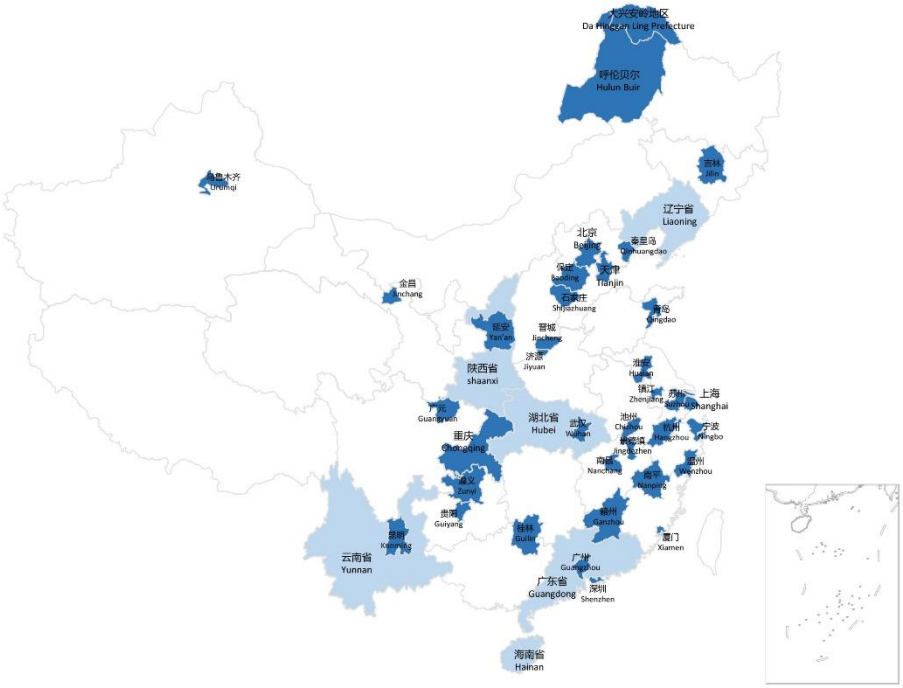

Figure 4.2 Distribution of 1st and 2nd batches of Chinese low carbon provinces and cities.

Table 4.3 Key economic and social information for the low carbon pilot cities (2018).

No.	Cities	Population (10^4 persons)	GDP per capita ('000 RMB)	Industrial structure (1/2/3 as GDP) (in %)	City level	Air quality rank (2020.08.05)
1	Beijing	2171	129.0	0/19/81	First-tier	208
2	Shanghai	2418	126.6	0/31/69	First-tier	158
3	Shenzhen	1253	183.5	0/41/59	First-tier	8
4	Guangzhou	1450	150.7	1/28/71	First-tier	41
5	Hangzhou	947	135.1	2/35/63	New first-tier	102
6	Chongqing	3075	63.7	7/44/49	New first-tier	139
7	Tianjin	1157	119.0	1/41/58	New first-tier	201
8	Suzhou	691	162.4	1/48/51	New first-tier	207
9	Wuhan	1089	123.8	3/44/53	New first-tier	181
10	Qingdao	929	119.4	4/41/55	New first-tier	47
11	Kunming	685	76.4	4/39/57	Second-tier	172
12	Ningbo	597	124	3/52/45	Second-tier	48
13	Xiamen	411	118	1/41/58	Second-tier	40
14	Shijiazhuang	1088	54.9	7/45/48	Second-tier	107
15	Nanchang	546	89	4/52/44	Second-tier	53
16	Wenzhou	825	65.9	2/40/58	Second-tier	52

Table 4.3 *Cont.*

No.	Cities	Population (10^4 persons)	GDP per capita ('000 RMB)	Industrial structure (1/2/3 as GDP) (in %)	City level	Air quality rank (2020.08.05)
17	Guiyang	480	74.5	4/39/57	Second-tier	114
18	Baoding	936	32.8	10/42/48	Second-tier	116
19	Zunyi	625	44.1	15/45/40	Third-tier	80
20	Guilin	534	52.0	6/34/60	Third-tier	26
21	Ganzhou	981	32.4	12/43/45	Third-tier	27
22	Urumqi	351	79.9	1/30/69	Third-tier	272
23	Qinhuangdao	313	52.4	6/35/59	Third-tier	126
24	Zhenjiang	319	126	4/49/47	Third-tier	178
25	Nanping	268	60.7	17/43/40	Fourth-tier	24
26	Jilin	415	55	10/36/54	Fourth-tier	78
27	Jingdezhen	167	50.7	1/45/54	Fourth-tier	89
28	Yan'an	226	69	9/59/32	Fourth-tier	204
29	Chizhou	162	52.3	9/50/41	Fourth-tier	94
30	Guangyuan	301	30.1	15/45/40	Fifth-tier	258
31	Hulun Buir	253	50	22/29/49	Fifth-tier	38
32	Jincheng	234	58	4/53/43	Fifth-tier	281
33	Jinchang	47	56.4	7/55/38	Fifth-tier	136
34	Da Hinggan Ling Prefecture	43.9	34.1	48/10/42	Fifth-tier	--
35	Jiyuan	73	87.6	3/65/32	--	198

4.3.2 Method: fuzzy-set Qualitative Comparative Analysis (fsQCA)

This study aims to explore the causal relationship between different types of low carbon policy instrument configurations being applied in China's low carbon cities and their effectiveness in terms of sustainability performance. The Qualitative Comparative Analysis method (QCA) proposed by Ragin (2000) is used. The method claims the outcome (dependent variable Y) is the result of the combined effects of several relevant factors (multiple independent variables X1, X2,...) (Mu et al., 2018), in our case different low carbon policies. The combination of factors is called a "configuration". The sample-size of 35 low carbon cities satisfies QCA's requirement for a small- to medium-sized sample set (Schneider & Wagemann, 2012).

Specific fsQCA was used to perform the fuzzy-set analysis. Two main indicators (consistency, coverage) were used to observe the fit between the

fsQCA model and the empirical data (Schneider & Wagemann, 2012). Consistency explains the extent to which the empirical evidence confirms the assumed relations in the model (Schneider & Wagemann, 2012, p.141). Coverage shows how many cases are covered by the specific solution (a specific policy configuration). Both indicators have values between 0 and 1. The higher the value, the higher the reliability of the calculated results. QCA models are generally considered to yield high reliability outcomes if the value of the two indicators is above 0.5 (Mu, Jia, & Li, 2019).

4.3.3 Data collection and calibration

To identify what policy instruments are used in low carbon city pilots to reduce carbon emissions, city policy documents were reviewed. In the Chinese context, local government websites are traditionally regarded as one of the most important and authoritative sources of information of local city government policies.

As a first step, official municipal government websites where all policies are promulgated were visited and scanned for relevance to low carbon city development. All titles of policies and documents covering low carbon city development, such as (low carbon) plans, (industrial) development and production policies were subsequently downloaded. A variety of policy documents including laws, regulations, notices, and measures related to low carbon city construction provided a detailed descriptions of low carbon policies and measures between 2010 and 2019 referring to the requirements of low carbon development announced by China's National Development and Reform Commission in 2010 (NDRC, 2010). Data was collected from the year the city was first identified as a low-carbon city pilot until 2019 as this was the last year of which full data could be obtained for the various indicators.

As a second step in the data collection, the low carbon instrument framework as described in Section 4.2.2 was used to identify the different types of low carbon policy instruments in each low carbon pilot city. Specifically, the full text of policies were screened and the descriptions of the application of low carbon instruments for each city in each policy were subsequently recorded.

For example, in 2018, Beijing issued the '*Notice on adjusting and improving the fiscal subsidy for the promotion and application of new energy vehicles*'. In this policy, Beijing claimed to provide financial subsidies to encourage the purchase and use of more sustainable vehicles. Furthermore, Beijing set up a hotline and reporting platform to supervise the development, safe operation and subsidising of new sustainable vehicles. Therefore, Beijing's policy to stimulate sustainable vehicles was recorded as being composed of the instruments 'supervision and oversight' and 'competition-based government sponsorship'. All documents were checked applying the principle that as soon as the instrument is mentioned, it is recorded as "1" - no matter how many times it is subsequently mentioned. The results of this step and the list of policy instruments are shown in table 4.9 (Appendix C).

In 2019, the Institute of Urban Development and the Environment of the Chinese Academy of Social Sciences (CASS) released the '*Report on the Evaluation of China's Green Low Carbon City'*. Each city was evaluated based on the result of 15 macro level low carbon city assessment indicators (among them low carbon industries, low carbon energies, low-carbon lifestyle, resource and environment, low-carbon policy and innovation). The specific evaluation index system and scoring rules for low-carbon cities are shown in table 4.7 (Appendix C). Since this method is reliability and scientific soundness, the CASS ratings were adopted as indicator of the effectiveness of the low carbon city policy instrument configuration study. The scores of each city are shown in the right column in table 4.9 (Appendix C).

In the calibration process, each instrument item is assigned a score to indicate its performance. The value of the variable in the fuzzy set is between 0 and 1. In order to express qualitative differences more accurately, four value-fuzzy sets were adopted to determine the value of the variable as 0 and 0.33, 0.67 and 1. Correspondingly, both the condition variables and the outcome variables were divided into four groups. The CASS evaluation rates low-carbon cities on a five-point scale, including scores of 90 points or above, 80 to 89 points, 70 to 79 points, 60-69 points, and below 60 points. Since none of the cities scored below 60, the low-carbon cities could be divided into four groups according to their low carbon results in the CASS evaluation. In

calibrating the conditions, this study focused particularly on the application of diverse classes of sub-instruments by city governments (Yang, Veeneman, & de Jong, 2018). Multiple policy instruments that reinforce and complement each other improve policy implementation effectiveness (Bengston, Fletcher, & Nelson, 2004). The diversity of sub-instruments can be an indicator to assess the effectiveness of low carbon city development. Corresponding scores were assigned to each group both in conditions and outcome. The detailed description of the calibration of outcome and conditions is offered in table 4.4. The results of the calibration are shown in table 4.8 (Appendix C). The fsQCA 3.0 software is applied for data analysis and processing. Results are presented in Section 4.4.

Table 4.4 Description of variable calibration

Variable	Set membership			
	0	0.33	0.67	1
Y (low carbon effectiveness)	If LCC score is 60-69	If LCC score is 70-79	If LCC score is 80-89	If LCC score is greater than and equal to 90.
X1 (Hierarchy-based instruments)	There are no hierarchy-based instruments.	Only one type of hierarchy-based instrument was adopted.	Two types of hierarchy-based instruments were adopted.	Three types of hierarchy-based instruments were adopted.
X2 (Market-based instruments)	No or only one market-based instrument has been adopted.	Two types of market-based instruments were adopted.	Three or four types of market-based instruments were adopted.	Five types of market-based instruments were adopted.
X3 (Network-based instruments)	No or only one network-based instrument has been adopted.	Two types of network-based instruments were adopted.	Three types of network-based instruments were adopted.	Four types of network-based instruments were adopted.
X4 (Information-based instruments)	No or only one information-based instrument has been adopted.	Two types of information-based instruments were adopted.	Three types of information-based instruments were adopted.	Four types of information-based instruments were adopted.

4.4 Findings

4.4.1 Results

The goal of this study is to examine the use and relative effectiveness of the four categories of low carbon instruments discussed in Section 4.2 in terms of environmental performance. The intermediate solution in table 4.5 presents the outcome of the calculations. A consistency requirement of 0.75 was selected (Schneider & Wagemann, 2012). More than 76.8% of the empirical result is consistent with the path term, meaning that the outcome (low carbon city construction) is normally present for the cases that display the produced paths. The coverage score for the entire solution pattern is quite high. Actually, 95.3% of the sustainability performance is explained by one or more of the four paths. The solutions in this study show strong consistency and coverage, which are necessary to evaluate the fitness situation of the overall QCA model.

Table 4.5 Solutions for successful low carbon city development.

	Configurations	Consistency	Raw[4] coverage	Unique[5] coverage	Cities
Path 1	X1*X2*~X3	0.850613	0.362643	0	Guiyang, Guilin, Nanping, Da Hinggan Ling Prefecture, Ningbo, Hulun Buir
Path 2	X1*~X3*X4	0.925307	0.394487	0.0318441	Guiyang, Yan'an, Guilin, Nanping, Da Hinggan Ling Prefecture, Hulun Buir
Path 3	X1*X2*X4	0.780008	0.904943	0.5423	Beijing, Shenzhen, Guangzhou, Hangzhou, Tianjin, Qingdao, Shijiazhuang, Xiamen, Guilin, Kunming, Chongqing, Guangyuan, Shanghai, Nanchang, Wuhan, Guiyang, Nanping, Jingdezhen, Da Hinggan Ling Prefecture
Path 4	X1*~X2*X3*~X4	0.900302	0.141635	0.0161597	Suzhou
Solution coverage: 0.952947					
Solution consistency: 0.768494					

[4] The raw coverage refers to how much of the outcome is covered by each of these paths.

[5] The unique coverage means how much of the outcome is covered only by a specific path.

The fsQCA identified four paths (policy instrument configurations). The first path is "X1*X2*~X3". It consists of a combination of hierarchy-based policy instruments and market-based policy instruments, without network-based instruments. The second path (X1*~X3*X4) combined hierarchy-based and information-based policy instruments, without network-based instruments. Some cities (Guiyang, Guilin, Nanping, Da Hinggan Ling Prefecture, and Hulun Buir) are covered not only by path 1 but also by path 2. It means these cities choose path 1 and path 2 to construct their low carbon cities. These cities are almost all small cities or prefecture-level municipalities[6].

The third path (X1*X2*X4) consists of hierarchy-based policy instruments, market-based policy instruments and information-based policy instruments. Unique coverage indicates the extent to which the outcome is simply explained by each policy configuration. The higher the unique coverage, the lower the overlap between the different policy configurations (i.e. the more diverse the application of specific policy instruments). Path 3 is perfectly consistent and uniquely explains 54.23% of the sample set in terms of sustainability performance. Table 5 shows that the policy configuration is employed in most cities in this sample, especially large ones (all mega cities and most capital cities).

The fourth path (X1*~X2*X3*~X4) entails hierarchy-based and network-based policy instruments, in the absence of market- and information-based instruments. Only Suzhou employed the combination of policy instruments.

Based on the above, the examination of necessary conditions (a condition is defined as necessary if it must be present for an outcome to occur) demonstrates that hierarchy-based instruments are necessary for low carbon city development because this condition is included in all paths. Therefore, the overall path for successful low carbon construction can be rewritten as (according to Boolean logic language, logical AND is written with a "*" and logical OR is written as a "+"):

[6] A **prefecture-level municipality** (Chinese: 地级市) is an administrative division of the People's Republic of China (PRC), ranking below a province and above a county.

X1* (X2*~X3+~X3*X4+ X2*X4+~X2*X3*~X4) → successful low carbon development (1)

Formula (1) is the overall path of this model. It indicates that successful low carbon construction requires building on the presence of hierarchy-based instruments, but also that hierarchy-based instruments need to be supported by other types of instruments, which are therefore complementary.

4.4.2 Interpretation

All cities in this research sample adopted three types of hierarchy-based instruments (See Table 4.9, Appendix C). In addition to the local policies, Chinese national government also issued laws and action plans for the prevention and control of atmospheric pollution in recent years. For example, in 2007, the State Council issued *China's National Plan on Climate Change* followed by *the Action Plan for Prevention and Control of Atmospheric Pollution* and *The Three-Year Action Plan to Win the Battle for Blue Skies* in 2013 and 2018 respectively. In 2015, *the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* was published. As a response, local governments have come out with their relevant action plans on climate governance. In this sample, 30 cities adopted such comprehensive plans to deal with climate change. A variety of measures were applied in these comprehensive policies, especially regulatory measures.

Path 1 consists of hierarchical (X1) and market-based instruments (X2) and requires the absence of network-based instruments (~X3). Guiyang, Guilin, Nanping, Da Hinggan Ling Prefecture, Hulun Buir, and Ningbo chose this combination. This solution is normally used to reduce high pollution, eliminate backward production and update polluting equipment. Governments use this combination to tackle pollution problems with coercive measures and offer subsidies to companies that have suffered losses from upgrading equipment or closing down outdated capacity. For example, Hulun Buir issued a notice on decentralized coal-fired boilers and implemented renovation of furnaces and grids in 2014. In 2015, Ningbo published '*Opinions on Promoting the Elimination and Renovation of the City's High Pollution Fuel Boilers*'. In 2017, Da Hinggan Ling Prefecture released two policies about the encouragement of elimination of "yellow label" vehicles. In

these three policies, the governments needed to achieve the goal of carbon reduction by dispersing coal-fired boilers, restricting the use of "yellow label" vehicles, phasing out and upgrading high-pollution fuel boilers. Meanwhile, special funds were used for subsidies, grants and price incentives to promote the implementation.

The second path combined hierarchy-based policy instruments (X1) and information-based policy instruments (X4), with the absence of network-based instruments (~X3). In 2018, State Council published the '*Notice on the Three-year Action Plan for Winning the Blue Sky War*'. Subsequently, local governments also issued corresponding planning documents, such as Da Hinggan Ling Prefecture, Hulun Buir and Yan'an. These plans present ideas how to strictly control pollution, close down backward production, deepen industrial treatment and develop new energy sources. They also propose strengthening environmental information disclosure and persuading the public to enjoy a low-carbon life. In addition to taking strict control and pollution control measures, Guiyang actively promotes energy-saving weeks and national low-carbon days in the whole city and for units at the district level, all through publicity. On the one hand, Guiyang uses the official microblog and WeChat public platform to publicize knowledge related to national energy conservation. On the other hand, Guiyang encourages saving energy and reducing consumption in the office and organizes an online knowledge contest on garbage classification of public institutions.

Path 3 was selected by most cities, especially large cities and capital cities. These cities are normally successful in improving their low carbon performance. This solution appears effective and an acceptable path for Chinese cities. To be specific, in addition to taking strict control measures, subsidies are most frequently adopted to respond to various environmental problems, especially in mega cities. To encourage the use of sustainable vehicles, cities such as Beijing and Chizhou employ tax exemptions. Many cities promote new sustainable vehicles via subsidies, including Beijing, Shanghai, Hangzhou, Tianjin, Suzhou, Wuhan, Nanchang, Qingdao, Ningbo, Ganzhou, and Jincheng. Other cities such as Shanghai, Tianjin, Qingdao, Shijiazhuang and Hulun Buir also provide subsidies to renewable clean

energy. In 2011, Hangzhou municipality improved the subsidy standard for the relocation of industrial enterprises and required enhancement of the transparency in providing environmental information for these enterprises. Other subsidies are provided to eliminate 'yellow label' cars and deal with the exhaust of heavy diesel trucks, such as in Wuhan, Suzhou, Wenzhou, Baoding, Jincheng, Zunyi and Da Hinggan Ling Prefecture. These governments also publicize the dangers of highly polluting technologies. Besides, governments use other economic instruments, such as grants in Beijing, Shanghai, Nanchang and Wuhan to promote energy conservation, emission reduction, and green transformation. In 2016, Beijing issued a loan preferential policy to replace light-duty gasoline cars. Ningbo set a charging service price of public charging piles for new energy electric vehicles in 2018. Carbon trade policies were adopted by some large cities in their low carbon governance, including Beijing, Shenzhen, Tianjin, Xiamen and Hangzhou. In this policy mix, market policy tools are extensively used, while regulation policies are a compulsory means to reach a certain goal. Financial tools provide economic support for this goal, and information tools are auxiliary tools in these policy combinations.

Path 4 is an alternative solution to low carbon city construction. Suzhou selected this solution. On the one hand, Suzhou has released a large number of strict measures to ban the discharge of fireworks, delimit the urban areas to prohibit the use of high-emission non-road mobile machinery, expand and adjust the forbidden zone for high-pollution fuel, and eliminate the old motor vehicles. On the other hand, Suzhou set up a number of special leading groups to coordinate the implementation of these activities. For example, in 2016, a working group on banning fireworks was established. In 2017, Suzhou set up energy conservation demonstrations in public institutions. Suzhou is among the cities that established a network governance structure.

4.4.3 Sensitivity analysis

The results in this study could be affected by some controlling variables, which were also considered. Table 4.3 summarizes the key economic and social information for each low carbon pilot city in 2018, including population

level, economic output, industrial structure, city level, and environmental (air quality) condition.

In general, cities with large populations emit more carbon dioxide, and their governments will invest more in the reduction of carbon emission than smaller cities. All mega cities of more than 10 million people indeed adopted lots of instruments. Except Baoding, all of them perform well in low carbon city construction. Cities with populations under 2 or 3 million perform less well. Some of them cannot be retraced in our paths, such as Chizhou, Jincheng, Jinchang and Jiyuan. Therefore, it can be assumed that population size as such does not affect the application of policy instruments.

Normally, cities with good economic conditions can invest more financial resources in controlling carbon emissions. Wealthy cities such as Beijing, Shanghai, Shenzhen, Guangzhou and Hangzhou adopt a wide variety of instruments, including market-based ones, and obtained very fine effectiveness. These are all mega or large cities and experiencing deep urban transformation. Cities with less favorable economic conditions such as Ganzhou, Yan'an and Da Hingan Ling adopt fewer instruments and do not obtain such positive emission indicators. It is thus tempting to conclude that economic conditions of cities influence the adoption of low carbon policy instruments and influence policy effectiveness.

A city's industrial structure affects both the government's low-carbon policy input and its effect. The proportion of secondary sector production in some cities (manufacturing and mining) is still high. For example, Qingdao, Ningbo, Shijiazhuang, Baoding and Jiyuan adopted many different low carbon policy instruments. Shijiazhuang is Hebei's capital city, Qingdao and Ningbo are vice-provincial cities with enough urban governance capability and transformation readiness to build low carbon cities. They also have strong industrial bases and economic conditions and adopt many different instruments. So did Baoding and Jiyuan. However, their low carbon city construction effectiveness in these five cities is not apparent, as they experience difficulties in adjusting their industrial structure in the short term.

It can thus be concluded that industrial structure seriously affects low carbon performance.

Governance capacity affects the ability or willingness to implement low-carbon policy instruments. Smaller and administratively less powerful third, fourth or fifth-tier cities such as Ganzhou, Zunyi, Zhenjiang, Yan'an, Jinchang, and Chizhou did not adopt low carbon policy tools although their secondary industry constituted a major share of their production. These cities released few documents and adopt few low carbon policy instruments. Except for Zhenjiang, all these cities are small and located in China's central or western regions, facing relatively weak economic conditions. In China, the classification of city levels can reflect the cities' governance capability. Apparently, their industrial structure impels them to prioritize their economy and accept high pollution levels.

Cities with good environmental background conditions, especially those in forested areas, generally do not seem to need strict governance measures but obtain well low carbon performance. Xiamen and Guilin are examples. Therefore, the environmental factor also affects the research results to a certain extent.

4.5 Discussion

The identification and comparison of four configurations of low carbon policy instruments via fsQCA and the empirical evidence regarding their application in low carbon cities makes it possible to engage in a discussion about their impact of various configurations in China and compare these findings with what else known from experiences elsewhere in the world.

Hierarchy-based instruments are widely adopted by local governments in China's low carbon pilots and according to the fsQCA could be considered a necessary condition to reduce carbon emissions. However, in themselves, hierarchical low carbon policy instruments are insufficient. Other classes of policy instruments need to be employed by local governments alongside them to reduce carbon emissions and thus achieve the low carbon city policy goals. The widespread use among municipal governments of hierarchical

measures such as command and control and mandatory tools in low carbon city policies confirms the findings of previous studies (Wang et al., 2015; Zhang & Wang, 2017). The explanation for these findings is relatively straightforward. China is one of the largest carbon emitters worldwide (Shuai et al., 2018) and a variety of environmental problems have accompanied its rapid economic development (Gilley, 2012; Lo, 2016). Chinese governments introduced a variety of pollution control measures in recent years in an attempt to reduce carbon emissions. An important regulation is the carbon dioxide emission performance requirement for major generation groups (Liu et al., 2017). Regulatory instruments are thus widely applied in local environmental and energy policies, to achieve emission goals and satisfy mandatory requirements. These include eliminating outdated production and reducing pollution sources (enterprises and equipment), and a strengthening of inspections (Li & Taeihagh, 2020). The use of this class of policy instruments to achieve low carbon policy goals is also consistent with previous studies which found that mandatory measures are in line with China's top-down management characteristics in the early stages of low-carbon city development (Wang et al., 2013). Furthermore, the hierarchical policy tools are relatively simple to deploy by local governments and require little coordination.

Previous research claimed that the use of market-based instruments in Chinese cities was inadequate and weak (Khanna, Fridley, & Hong, 2014; Wang et al., 2013). Some scholars believe that market-based instruments such as carbon taxes, carbon trading, carbon offsets and energy performance contracting (EPC) played a very limited role in China's local low carbon governance (Wu, 2011). In comparison with other developing countries, China seems to adopt more hierarchical policy measures to achieve low carbon goals, whereas for example India, relies more on market-based policy instruments (Kedia, 2016). Actually, many OECD countries have also recently adopted economic instruments, such as emission trading schemes (Hashmi & Alam, 2019). Besides, Portugal implemented carbon tax in 2015 (Doshi, 2018). Singapore has operated the Carbon Pricing Act (CPA) and its accompanying regulations from 1 Jan 2019 (NEA, 2020). Chile planned to implement tax legislation in 2017, while South Africa expected to adopt

carbon price scheme (Doshi, 2018). However, this study shows that market-based low carbon policy instruments in the form of pricing and tax incentives for new energy automobile and energy-saving industries, are adopted by some mega Chinese cities, provincial capital cities, and some rich prefecture-level cities. For example, Shenzhen implemented carbon emission trade schemes in 2012 and Tianjin introduced a similar scheme in 2013. The application of more market-based instruments is consistent with China's shift towards a more competition-oriented pattern of societal and urban development in recent years. Since the reforms and opening up in 1978, the national government has actively encouraged competition in the economic development of cities (Wu & Zhang, 2007). Large cities appear more capable in applying market-based instruments than smaller ones. Mega cities are thus in a better position to direct a sustainable urban transformation and can muster their resources to achieve reduce carbon emissions.

Market- and network-based instruments do not seem to be utilized concurrently in China's low carbon city pilots. Market-based policy instruments are typically straightforward subsidy-schemes and deployed in a simple pattern with few requirements for interdepartmental cooperation. The application of market-based instruments thus restricts the functioning of network-based instruments. Strong competition-oriented policy instruments directly affect the redistribution of resources and benefits (Juhola & Westerhoff, 2011), which in turn, reduces the motivation for interdepartmental collaboration. Conversely, powerful state intervention and strong coordination hinder the development of markets and competition (Lo, 2016). Therefore, it is unlikely for market- and network-based policy instruments to coexist in one policy configuration. Since market-based policies are simple to apply and require little cooperation, they are more widely accepted by local governments, especially the adoption of government sponsorship (see Appendix C, table 4.9).

Network governance is only used to overcome organizational barriers that arise from the application of hierarchy-based policy instruments. Chinese cities typically set up special leading working groups and systems of joint meetings to organize and coordinate activities and promote mandatory

policy objectives. Setting up a special leading group reflects the focus of local governments on the implementation of a project. On the other hand, voluntary afforestation programs among local governments are a widely used method for participation in low-carbon development, since it easier to implement than other instruments (Grubb et al., 2020; Safarzadeh et al., 2020). However, underdeveloped network governance, insufficient government-enterprise interactions, limited participation from private sector actors and environmental NGOs still hamper low carbon city development. This finding is consistent with previous studies indicating that network governance in China's low carbon city pilots is still underdeveloped (Lo et al., 2018; Lo, 2016). Private actors lack the motivation and capacity to become involved in the development of activities to reduce carbon emissions (Lo, 2016; Shen, 2015). In contrast, in Western cities, such as those in Sweden, network governance is amply utilized to mobilize private actors and put climate issues on the top of the local political agenda (Khan, 2013). The city of Berlin involved the private sector in the development of policies to actively reduce their carbon footprint (Reusswig et al., 2020). Participation of private firms, communities, voluntary organizations have become important elements in European urban governance (Nochta & Skelcher, 2020).

In the process of policy portfolio selection, information-based policy instruments are favored over network-based policy instruments in China's low carbon city pilots. On the one hand, information-based instruments can be used to exchange information and stimulate and communicate desired forms of public behavior. Peters (2013) claims that information diffusion can promote coordination among departments. Governments prefer to deploy hierarchical policy instruments alongside a limited set of information-based policy instruments, leading essentially to 'one-way communication'. Governments prefer to use regulation and information as a combination of policy instruments to reduce complexity and minimize costs and the use of valuable resources (Li & Taeihagh, 2020; Palm & Lantz, 2020). Thus, information-based policy instruments are especially favored by small and prefecture-level cities although they are universally employed by all low carbon city pilots as complementary instruments in all policy instrument configurations. When using information-based policy tools Chinese

governments generally employ information-based instruments to publish general information in attempts to influence and persuade public behaviour. However, a UK study concluded that personalized and focused information activities could be more effective in influencing behavioural change (Büchs et al., 2018). In other words, variety and focus in the application of information-based policies in China's low carbon city pilots is still open to improvement.

4.6 Conclusions

In China, as elsewhere, low carbon city development aimed at reaching SDG11 and SDG13 has been taken up full-swing. In this contribution, an analysis was conducted to examine the impact of combinations of low carbon policy instruments on low carbon city construction.

The findings indicate that China's low carbon city pilots primarily employ hierarchical policy instruments to reduce carbon emissions. An analysis of the policy configurations shows their application to be a *sine qua non*, but insufficient in itself for a satisfactory outcome. Combinations of hierarchy-based instruments and other instruments, on the other hand, seem to increase the effectiveness of low carbon city policies. Hierarchical policy instruments seem to co-exist primarily with market-based policy instruments. Both types are widely adopted in efforts of urban governments to reduce carbon emissions, particular in mega cities. Network governance, on the other hand, requires collaboration and trust among organizations and these tend to be weakly developed in Chinese cities, especially participation of the private sector. Information-sharing is a fourth category of policy instruments which can be used in combination with any of the three previous types.

While the use of hierarchical instruments is crucial and makes a very significant contribution to the development of low-carbon cities and can be considered the cornerstone of the system, the use of market-based instruments has also risen. Their combined deployment has consequently become a key feature in the policy mix among many forward-looking low carbon cities in China. Network-based and information-based instruments, however, are underused. Part of the explanation may lie in the rising popularity of the more competition-driven market-oriented instruments

which sit uncomfortably with network-based instruments, which rather require cooperation. There appear to be restrictions in the combinations of instruments that can be adopted in the chosen configuration. Information-based instruments, on the other hand, can be used in combination with any of the other categories but their application is still open to improvement in the Chinese context. A deeper analysis of the factors that can explain the level of progress made in achieving low-carbon development points at the relevance of a city's industrial structure, its economic conditions, its governance capacity and its willingness to transform. In line with these features, local governments can choose specific configurations of policy instruments that suit their characteristics and levels of ambition in terms of sustainable development.

This study is the first comprehensive study to identify and map configurations of policy instruments at a theoretical level, empirically apply them to low carbon city development and relate urban government choices to policy impact emerging across a wide range of cities. The patterns that emerge are robust but obviously typical of the Chinese cities that had been selected. It has been shown that chosen configurations will presumably be markedly different in cities outside China, but no systematic research has been conducted on that topic thus far and it would be worthwhile in future to engage in such studies.

Mentioning a number of limitations in this study is due. First of all, it made use of second-hand data in existing official documents provided by Chinese authorities; future research could mitigate potential bias adding supplementary use of other sources of qualitative information such as semi-structured interviews or field observations. A second limitation rests in the relatively crude form of 'measurement' of the use of policy instruments. This study merely checked presence or absence of instruments in use as derived from mentioning of these policies in documentation. This method cannot ascertain the proportional use of policy instruments, nor establish its relative weight. Further study is required to assess to what extent specific policy instruments influence carbon emissions and contribute to low carbon city development. Finally, as became obvious above, this contribution only

examined configurations of policy instruments in Chinese cities. In further research, more thorough cross-national comparisons can be made highlighting both national institutional and other specificities and the potential for cross-national and cross-city lesson-drawing.

Appendix C

Table 4.6 National low carbon pilot cities list.

Time		Batch	No. of cities and provinces	Cities
2008	MOHURD & WWF			Shanghai; Baoding
2010	NDRC	1	8+5	**Cities:** Tianjin; Chongqing; Shenzhen; Xiamen; Hangzhou; Nanchang; Guiyang; Baoding; **Provinces:** Guangdong; Liaoning; Hubei; Shaanxi; Yunnan
2013	NDRC	2	28+1	**Cities:** Beijing; Shanghai; Shijiazhuang; Qinhuangdao; Jincheng; Hulun Buir; Jilin; Da Hinggan Ling Prefecture; Suzhou; Huaian; Zhenjiang; Ningbo; Wenzhou; Chizhou; Nanping; Jingdezhen; Ganzhou; Qingdao; Jiyuan; Wuhan; Guangzhou; Guilin; Guangyuan; Zunyi; Kunming; Yan'an; Jinchang; Urumqi; **Province:** Hainan
2017	NDRC	3	45	**Cities:** Wuhai; Shenyang; Dalian; Chaoyang; Xunke County; Nanjing; Changzhou; Jiaxing; Jinhua; Quzhou; Hefei; Huaibei; Huangshan; Liuan; Xuancheng; Sanming; Gongqingcheng; Ji'an; Fuzhou; Jinan; Yantai; Weifang; Changyang Tujia Autonomous County; Changsha; Zhuzhou; Xiangtan; Chenzhou; Zhongshan; Liuzhou; Sanya; Qiongzhong; Chengdu; Yuxi; Simao district, Puer; Lasa; Ankang; Lanzhou; Dunhuang; Xining; Yinchuan; Wuzhong; Changji; Yining; Hetian; Alaer

MOHURD: Ministry of Housing and Urban-Rural Development of the People's Republic of China
WWF: World Wildlife Fund

Table 4.7 Evaluation index system and scoring rules for green and low-carbon cities.

Important areas	Weight	Index	Weight
Macro fields	31%	Total carbon emission	11%
		CO_2 emission per capita	9%
		Carbon emissions per unit of GDP	11%
Low carbon energy	20%	The proportion of coal accounts in primary energy consumption	10%
		The proportion of non-fossil energy in primary energy consumption	10%
Low carbon industries	17%	The energy consumption decline rate of industrial added value above the scale	9%
		The ratio of value added of strategic emerging industries in GDP	8%
Low carbon life	17%	The number of public (electric) cars owned by ten thousand people	7%
		Housing construction area of urban residents per capita	5%
		Daily production of household garbage per capita	5%
Resource and environment	7%	Average concentration of PM2.5	3%
		Forest coverage	4%
Low carbon policies and innovation	8%	Low carbon governance	2%
		the proportion of funds for energy conservation, emission reduction and climate change in fiscal expenditure	4%
		Other innovative activities	2%

Source: Report on the Evaluation of China's Green Low Carbon City (CASS)

Table 4.8 Results of the calibration process.

No.	Cities	X1	X2	X3	X4	Y
1	Beijing	1	1	1	1	1
2	Shenzhen	1	1	1	1	1
3	Xiamen	1	1	1	0.67	1
4	Guilin	1	0.67	0.33	1	1
5	Kunming	1	0.67	0.67	0.67	1
6	Guangzhou	1	1	1	1	0.67
7	Chongqing	1	1	1	0.67	0.67
8	Hangzhou	1	1	1	1	0.67
9	Guangyuan	1	0.67	1	1	0.67
10	Shanghai	1	1	0.67	0.67	0.67
11	Nanchang	1	0.67	0.67	1	0.67
12	Wuhan	1	0.67	1	1	0.67
13	Guiyang	1	1	0	0.67	0.67
14	Nanping	1	0.67	0.33	0.67	0.67
15	Jingdezhen	1	0.67	0.67	1	0.67
16	Da Hinggan Ling Prefecture	1	1	0.33	0.67	0.67
17	Tianjin	1	1	1	1	0.67
18	Wenzhou	1	0.67	0.67	1	0.67
19	Suzhou	1	0.33	0.67	0.33	0.67
20	Qinhuangdao	1	0.67	0.67	1	0.67
21	Qingdao	1	1	1	1	0.67
22	Zhenjiang	1	0.67	0.67	0.67	0.67
23	Zunyi	1	1	0.67	0.67	0.67
24	Ganzhou	1	1	1	0.67	0.67
25	Yan'an	1	0	0	0.67	0.67
26	Baoding	1	0.67	0.67	1	0.33
27	Chizhou	1	0.67	0.67	0.67	0.33
28	Ningbo	1	0.67	0.33	0.33	0.33
29	Jilin	1	0.67	0.67	0.67	0.33
30	Shijiazhuang	1	1	1	1	0.33
31	Hulun Buir	1	0.67	0.33	0.67	0.33
32	Urumqi	1	0.67	1	1	0.33
33	Jincheng	1	0.67	0.67	1	0.33
34	Jinchang	1	0.67	0.67	0.67	0
35	Jiyuan	1	1	1	0.67	0

Table 4.9 Adoption of low carbon instruments and LCC scores in each city.

No.	Cities	H1	H2	H3	M1	M2	M3	M4	M5	N1	N2	N3	N4	I1	I2	I3	I4	LCC scores
1	Beijing	39	18	21	4	6	5	25	5	14	3	5	1	10	8	3	7	93.50
2	Shenzhen	19	12	10	9	4	2	13	1	9	4	1	1	1	3	1	1	92.46
3	Xiamen	8	15	13	3	2	2	11	2	5	4	6	3	6	7	0	3	91.80
4	Guilin	10	6	3	1	3	0	5	0	9	0	2	0	2	4	2	3	91.47
5	Kunming	11	2	8	5	1	0	2	0	1	0	1	1	1	1	0	5	90.55
6	Guangzhou	8	6	7	4	2	3	8	1	3	3	5	1	3	3	3	4	89.99
7	Chongqing	8	7	4	3	6	2	8	4	3	5	5	1	3	3	0	2	89.88
8	Hangzhou	18	15	10	3	6	7	16	2	7	5	7	2	4	8	0	2	89.30
9	Guangyuan	6	5	4	4	2	2	6	0	5	3	4	1	5	4	3	1	88.78
10	Shanghai	7	12	9	1	4	2	12	2	10	1	2	0	2	4	0	1	87.75
11	Nanchang	18	13	12	2	4	1	18	0	10	1	5	0	14	3	2	3	87.66
12	Wuhan	13	17	12	4	3	4	18	0	16	7	9	3	15	7	3	4	85.51
13	Guiyang	9	8	4	2	1	3	7	1	4	0	0	0	7	9	0	2	85.31
14	Nanping	2	1	4	1	1	0	3	0	4	0	1	0	1	1	0	1	85.00
15	Jingdezhen	12	6	5	4	1	1	0	1	6	1	4	0	4	3	1	3	84.79
16	Da Hinggan Ling Prefecture	13	10	9	2	4	2	4	1	7	0	3	0	12	4	0	3	84.53
17	Tianjin	37	21	28	5	13	11	22	7	18	8	11	2	11	12	11	8	84.46
18	Wenzhou	12	6	6	1	0	2	8	2	9	2	1	0	5	8	1	3	84.38
19	Suzhou	10	4	3	0	1	0	13	0	2	1	3	0	2	0	0	2	84.14
20	Qinhuangdao	6	3	4	4	3	2	6	0	5	1	2	0	5	3	1	2	83.93
21	Qingdao	10	9	10	3	4	4	13	1	3	2	7	1	6	6	1	3	82.85
22	Zhenjiang	6	2	2	1	1	1	0	0	3	2	2	0	4	3	0	1	82.82
23	Zunyi	6	7	1	3	1	2	1	1	3	2	4	0	5	3	0	5	81.78
24	Ganzhou	6	6	5	3	1	2	6	1	8	2	3	1	7	4	0	4	80.53
25	Yan'an	4	2	5	0	0	0	4	0	6	0	0	0	2	2	0	1	80.11
26	Baoding	26	11	19	5	3	2	10	0	7	0	4	2	7	4	3	5	79.73
27	Chizhou	6	5	3	4	1	1	4	0	3	1	3	0	8	1	0	2	79.65
28	Ningbo	1	3	1	2	3	1	5	0	2	0	1	0	1	1	0	0	79.28
29	Jilin	1	1	1	1	1	1	0	0	1	1	1	0	1	1	0	1	78.87
30	Shijiazhuang	49	43	36	4	8	9	29	2	38	7	9	7	28	16	7	12	78.51
31	Hulun Buir	1	1	1	1	1	1	2	0	1	0	1	0	1	1	0	1	76.14
32	Urumqi	11	8	2	2	3	2	4	0	6	3	1	1	4	2	1	4	75.22
33	Jincheng	22	16	17	2	6	2	12	0	10	5	4	0	7	4	1	10	72.61
34	Jinchang	7	4	5	1	3	1	6	0	1	0	3	2	4	5	0	1	66.91
35	Jiyuan	18	19	9	4	2	1	12	2	19	1	3	2	16	4	0	2	66.77

5

Economic City Branding and Stakeholder Involvement in China: Attempt of a Medium-sized City to Trigger Industrial Transformation

This chapter is mainly based on the following peer-reviewed article:

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5.1 Introduction

Chinese cities have experienced unprecedented economic growth rates in the last forty years (Deng et al., 2010; Fleisher, Li, & Zhao, 2010; Zhang, Wang, & Wang, 2012). This has brought many positive changes, especially in terms of quality of life and material prosperity for a great many people who live in these cities (de Jong et al., 2018). On the other hand, a variety of social and ecological problems are associated with urbanization and industrialization. Examples of social problems include growing (regional) disparity between cities (Fan, Kanbur, & Zhang, 2011; Wang & Fan, 2004) and a growing gap between the wealthiest and the underprivileged living inside these cities (Cai, Wang, & Du, 2002; Fan, Kanbur, & Zhang, 2011; Wang & Fan, 2004; Zhang, 2001). Environmental problems which are increasingly plaguing industrialized Chinese cities are traffic congestion, air pollution, and a growing waste-pile (Chien & Wu, 2011; Logan & Molotch, 2007; Shao et al., 2006; Yeh et al., 2015). The aforementioned problems are especially poignant

in cities in the nation's densely populated western and central heartlands, which are less prosperous than those in the coastal provinces. Furthermore, there is intense competition between cities due to their limited access to resources (e.g. a highly qualified workforce, financial and cultural facilities) and a growing mobility among inhabitants. For these reasons, many local policymakers are exploring new pathways to stimulate economic development and generate a sustainable urban transformation. Many decision-makers have embraced city branding as a key strategy to guide their municipalities' industrial transformation process. City branding is viewed as an essential strategy to remain 'competitive' (Kavaratzis, Warnaby, & Ashworth, 2014). Supporters argue that city branding is crucial to realize a metropolitan vision which feeds into sustainable urban transformation (Belloso, 2011; Goess, de Jong, & Meijer, 2016; Rius Ulldemolins, 2014), whereas critics have claimed that city branding is a vague policy term and merely a tool that is employed by local governments to greenwash a city's image (Braun, 2012; de Jong, 2019; Kavaratzis & Ashworth, 2005; Schuetze & Chelleri, 2016; Zenker & Martin, 2011).

City branding in the more advanced coastal regions in China have gained some attention in academic studies. For example, Berg & Björner (2014) studied city branding in Chinese mega cities, including Beijing and Shanghai. City branding in the Pearl River Delta and the Bohai River basin (around Beijing and Tianjin) are similarly discussed (de Jong et al., 2018). Other scholars have studied different aspects of city branding in Chinese settings. For example, Wu (2000) has focused on urban development and place promotion in Shanghai, while Zhu et al. (2011) investigated the globalization and city image in Guangzhou. Especially, the relationship between large international events and city branding has been extensively studied by hosts of scholars, for example, the Beijing Olympics (Chen, 2015; Zhang & Zhao, 2009), the Shanghai World Expo (Dynon, 2011; Yu, Wang, & Seo, 2012), and the Guangzhou Asian games (Chen, 2012). Obviously, city branding has been widely adopted by Chinese cities as a strategy to achieve a variety of urban development goals. However, little is known of what the smaller and lesser known cities located in China's central heartland provinces do in this regard, even though they represent the large majority of Chinese cities and its urban

population. This is remarkable since we would argue that these regions and cities are of more importance from a policy perspective than the 'outliers' which have been studied so far; mega cities in China harbour less than 13% of the overall population in China (NBoS, 2017).

This contribution focuses on city branding activities of a medium-sized Chinese city, Jingmen. Jingmen represents a typical average Chinese city. This type of city faces an increasingly complex mix of economic and environmental problems. On the one hand, governmental officials and departments face a relentless competition for resources, economic activity and residents with other cities (Jessop & Sum, 2000; Xu & Yeh, 2005). On the other hand, policymakers have the unenviable task to 'reinvent' and 'transform' these cities to become more sustainable (Joss & Molella, 2013; Ye, 2011; Zhan & de Jong, 2018). Some cities experience this challenge as deeply conflictual, others perceive this as a challenge and consequently embrace city branding as an opportunity to engage in industrial transformation (Ma et al., 2019). Jingmen belongs to the second category employs city branding strategies to generate industrial transformation (and the promise of economic growth resulting from that). Jingmen thus avoids using the outdated branding label 'Industrial City' and explores new brands and underlying economic 'business models' in an attempt to generate economic growth. These include brands which focus on general aviation, more specifically navigation equipment (the General Aviation New Town brand) and the local food industry and tourism (small private farmers and local food producers as destinations for food tourism) (China's Agricultural Valley brand).

The design of a city brand and the subsequent implementation of the brand via city branding is influenced by stakeholder involvement (Dinnie, 2010). Effective stakeholder engagement is crucial for the acceptance of city branding and can help fix and convey the image of a place (Kavaratzis, 2012). Stakeholders' attitudes and roles are essential factors in the process of city branding (Stubbs & Warnaby, 2015). However, public sector players are still the most influential stakeholders in China, and other ones tend to be followers rather than participants (Lu et al., 2017). More needs to be known

about what roles these stakeholders take on, and to what extent and how they are involved in the city branding process.

Therefore, this chapter seeks to explore *how a medium-sized Chinese city engages in city branding strategies that help trigger industrial transformation.* More specifically, we examine *how different stakeholders get involved in the city branding creation and implementation phases of developing a city brand.*

Section 5.2 explores the relationship between city branding and local economic development and industrial transformation. The practice of stakeholder involvement in Chinese political systems is explained. It identifies the types of stakeholders in Chinese cities, their roles and resources and provides an analytical framework to analyze our empirical data. In Section 5.3, we explain our research process, methodology and the representativeness of Jingmen in the broader population of small and medium-sized cities in China and present detailed information regarding our fieldwork. Section 5.4 offers a brief description of Jingmen city, its industrial structure, and a concise history of brand development. In Section 5.5, a comparative analysis is made of two processes of brand creation and implementation we encountered in Jingmen, which allows us to analyze the roles, resources, and interactions between city departments and stakeholders in each project. Furthermore, we analyze the barriers encountered during brand implementation. We demonstrate that specific stakeholder roles are underrepresented, what resources are missing and subsequently assess the consequences for Jingmen's city branding strategy. Section 5.6 provides an in-depth discussion about city brand creation and implementation. Section 5.7 concludes by summarizing how mechanisms for stakeholder involvement work in medium-sized Chinese cities, where their weaknesses lie and we offer some suggestions for further study.

5.2 Stakeholder Involvement in City Branding in Chinese Cities

5.2.1 An economic policy-oriented view of city branding and China's application

City branding has been intensely studied in both the academic and professional domains in the last ten years, particularly in urban planning and governance (Lucarelli & Berg, 2011; Ma et al., 2019). In this contribution, we consider city branding as "a whole set of actions to build a positive image of the city and communicate it among various target groups via visuals, narratives, and events locally and internationally to gain a competitive advantage over other cities" (Vanolo, 2008, p.371). On the one hand, city branding has a strong connection with local economic development (Anttiroiko, 2014; Blakely & Leigh, 2013; Cleave et al., 2016; Rowe, 2009) and responds to global intercity competition (Anttiroiko, 2015). It aims to direct towards business relocation, expansion and investment (Baker, 2012; Harvey, 2013). Many Chinese cities apply city branding to obtain a competitive advantage and improve their economic position (Lu et al., 2017). For example, economic city brands are adopted in Greater Pearl River Delta as a policy instrument to trigger economic development (Lu et al., 2017). On the other hand, city branding as a process stimulates and enables cities to experience in-depth urban and industrial transformation, economic restructuring and policy change (Boisen et al., 2018; Joo & Seo, 2018; Ye & Björner, 2018). Thus, in this chapter, city branding can be understood as an economic policy instrument, covering the industrial dimension of city branding.

Ye and Björner (2018) claim that city branding has become a growth-driven urban policy and governance strategy in Chinese mega-cities. In the Chinese context, city brands are widely adopted as brand identities in various plans, such as the Urban Master Plans and Five Year Social-Economic Plans, which provide a local vision on social, economic and industrial development (Lu et al., 2017). National, provincial, and local plans provide the direction for urban development and guide industrial change. Ideally, all the campaigns, promotions and policy actions should be fleshed out in line with these plans.

Baker (2012) identified the key factors for branding small cities in some countries, such as making a consistent effort to achieve a vision with reality matching the positive expectations. However, research on city branding in Chinese small cities is non-existent.

5.2.2 Stakeholder involvement and Chinese administration characteristics

Freeman defined a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p.46). Stakeholder analysis has emerged as an approach to understand policy design and implementation (Bryson, 2004; Freeman, 2010), including in various fields such as place branding (Kavaratzis, 2012; Stubbs & Warnaby, 2015), urban transformation (Höijertz, 2013; Song et al., 2016), urban renewal (Zhuang et al., 2019), sustainable city projects (Zhan et al., 2017), environmental marketing (Cronin et al., 2011; Polonsky, 1995), and public and citizen participation in China (Enserink & Koppenjan, 2007; Li & de Jong, 2017).

Hankinson (2004) claims that place branding, in essence, is a set of relationships between stakeholder groups. International scholars claim that stakeholder involvement strengthens the effectiveness of city branding (Klijn, Eshuis, & Braun, 2012). Stakeholder engagement enriches and deepens the concepts of city branding, introduces new opinions, ideas, and perspectives (Dinnie, 2010; Kavaratzis & Kalandides, 2015). Some scholars emphasize the importance of involving professionals in city branding and take a more instrumental approach, while others believe inclusive, citizen-centric and socially-oriented branding to be more suitable for urban governance (Hereźniak, 2017; Joo & Seo, 2018; Paganoni, 2012).

Compared with urban development in Western countries, public authorities play a much bigger role in China (Xu & Yeh, 2005). Governments are the core stakeholders in China as most resources and policy instruments are regulated and controlled by the state (Chen et al., 2011). A rich variety of *public* stakeholders can be identified, ranging from regional and local organizations to sections of state-owned enterprises who operate at the national level. Furthermore, politicians occupy key positions in the aforementioned

government organizations, non-profit organizations, and state-owned companies (Li & Zhou, 2005). China's one-party system is organized more or less in parallel to the various government levels, so that party leaders occupy high positions both within the party and in (local) governments and state-owned enterprises. The party is thus involved at multiple-levels and in many aspects of China's societal governance down to cultural and sports organizations (Oi, 1995). However, we have insufficient knowledge of stakeholder involvement in the city branding activities of Chinese medium and small cities.

5.2.3 Stakeholder identification via an adopted involvement framework

The identification of stakeholders is a crucial step in any stakeholder analysis. A mixture of several techniques will be adopted, including a positional approach to map power or resources of stakeholders (Enserink et al., 2010) and a social participation approach to identify to what extent the stakeholders relate to activities (Bryson, 2004).

Here, we combine previous studies on stakeholder involvement in place branding (Kavaratzis, 2012; Klijn, Eshuis, & Braun, 2012; Stubbs & Warnaby, 2015), stakeholder involvement in China (Zhan et al., 2017; Zhuang et al., 2019) and Chinese institutional characteristics (Li & Zhou, 2005; Ye, 2013, 2014) to identify the stakeholder structure in city branding processes in Chinese cities. We apply Stubbs et al.'s model (2015) to the Chinese context as shown in table 5.1 (left side) but make some crucial adjustments to achieve a better fit with Chinese institutional characteristics. Most importantly, the role of politicians should be merged into various governmental organizations and state-owned enterprises. In China, there are also professional government organizations in charge of organizing cultural and sports activities. So we also merge the cultural and sports organizations into government organizations. Since religious organizations are rarely involved in the design of city-level policies and city branding, we exclude them from our analysis. We will use our adjusted stakeholder framework to identify and analyze the various (potential) stakeholders in city branding creation and implementation processes in Jingmen in section 5.5.

Table 5.1 Stakeholder involvement framework in city branding in China.

No.	Stubbs et al.'s structure	No.	Type of Stakeholders (adjusted)		Explanations for the stakeholders	Roles	Resources
1	Politicians	1	Governmental organizations	Politicians	Party executives working at different levels of government or core departments, such as party-secretaries and mayors at the provincial and municipal levels	• Dominate the branding creation stage • Influence brand creation and implementation, e.g. approve brand creation and push brand implementation • Influence city branding selection and implementation	Opinion leaders
2	Governmental organizations			Departments and agencies	• Different administrative level governments outside the city (top-down hierarchical organization) • Different governmental departments within a city	• Ask approval from higher level governments • Execute, participate, coordinate and monitor the brand implementation process	Administrative (hierarchical) power (policy-making); Financial resources; Regulatory power
3	Cultural and sports organizations						
4	Promotion agencies	2	Promotion agencies		• Governmental media departments • Travel agencies	• Publish and deliver information about brands and activities through different channels	Media channels and the capability to respond to various audiences

Table 5.1 *Cont.*

No.	Stubbs et al.'s structure	No.	Type of Stakeholders (adjusted)	Explanations for the stakeholders	Roles	Resources
5	Businesses	3	Enterprises	• State owned companies at different levels • Local private companies	• Invest and operate projects • Provide knowledge, resource, technology, finance support	Technology; Finance; Investment opportunities
6	Academic organizations and schools	4	Academic organizations and schools	• Local universities, schools, and academic institutions • External experts and academic associations	• Provide expert knowledge	Knowledge; Policy expertise
7	Infrastructure and transport providers	5	Infrastructure and transport providers	Transport Construction & Investment companies	• Develop the transport and infrastructure • Participate in the brand implementation	Investment & financing
8	Residents	6	Residents	Local citizens	• Express their opinions and provide feedback via digital media and public media platforms • Receive brand information and participate in branding activities	Labour; Opinions
9	Religious organizations					

5.3 Research Methodology

A case study can be used to investigate a contemporary phenomenon more deeply and to explore the underlying mechanism of this phenomenon (Yin, 2009). It is a deliberate research strategy to describe and explain the creation and implementation processes of city branding in a specific medium-sized city in China. Jingmen is a highly industrialized city and in its planning documents displays a strong willingness to experience economic, industrial and urban transformation. Roughly 600,000 of Jingmen's inhabitants live in the main urban district, which makes Jingmen a typical medium-sized municipality in China in terms of population numbers (SC, 2014). In terms of social and economic development, Jingmen closely represents the 'average' among Chinese cities. In 2017, its GDP per capita (57,357 RMB) (HBoS, 2018), closely resembles the Chinese national average GDP per capita (59,201 RMB) (NBoS, 2018b). In 2018, Jingmen's urbanization rate reached 59.21% (JMBOS, 2019), quite close to the national level (59.58%) (NBoS, 2019b). Jingmen is one of the 128 "fifth-tier" cities and localities inlands in China, from a grand total of 337 listed cities in 2019, according to a Chinese media investigation (YICAI, 2019). Based on these data, we argue that the city of Jingmen can serve as a representative case to study city branding practices of a large group of cities.

Figure 5.1 shows the specific research process in this chapter, which focuses on the involvement of stakeholders in the creation of city brands and their subsequent implementation in city branding activities. In step 1, we identify the various stakeholders that were involved in two recent city branding projects which are indicative of recent attempts at city branding in the city of Jingmen. The stakeholder framework that was developed in section 5.2.3 was used to identify relevant stakeholders via interviews and document analysis during our fieldwork in Jingmen. In step 2, we examined additional information about the city branding projects via interviews and official documents to trace brand creation and implementation processes and map the interactions among the different stakeholders. Expert panel discussions were used to complete the in-depth analysis of the city branding projects to subsequently analyze the barriers and challenges experienced in both projects. Finally, in step 3, we summarize the patterns of underlying

stakeholder involvement in the city brand creation and implementation phases in a medium-sized Chinese city.

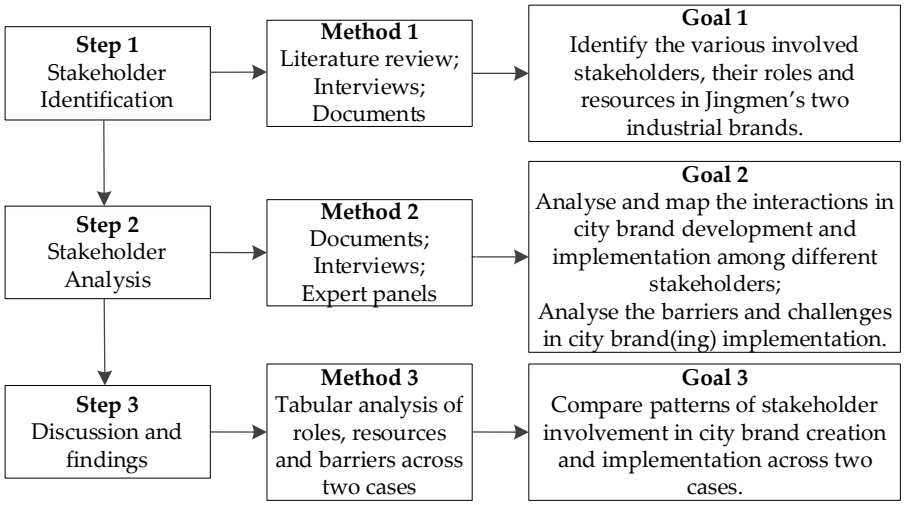


Figure 5.1 Research process

Specifically, we summarize the generic economic and social information from the websites about Jingmen City and the project information of two economic brands: China's Agricultural Valley (CAV), and General Aviation New Town (GANT).

We conducted our fieldwork in Jingmen from November 2018 to January 2019 and conducted semi-structured interviews with representatives of involved stakeholders. In total, 18 respondents were interviewed, among them the CAV and GANT project leaders. Four respondents were interviewed more than once (See Appendix D, table 5.7). Most interviewees were employed in local government departments, such as the Jingmen Planning Bureau, Jingmen Planning and Design Institute, Jingmen Daily Media Group and Jingmen Development and Reform Commission (DRC). We also consulted experts at local universities and research institutions; and the leaders of local enterprises about their knowledge about the city branding policies.

Furthermore, we participated as observers and participants in two meetings of the Jingmen Urban Planning Bureau, and organized a workshop with the local officials and external experts to analyze and discuss Jingmen's approach to city branding projects and industrial transformation (see Appendix D). Five foreign experts from Delft University of Technology, four experts from Chinese top universities, and eight PhD students participated in the workshop discussions.

In addition, we conducted telephone interviews and email inquiries with officials and experts to obtain updates and additional information. To complement these interviews, we used information from official websites and project documents and publications to understand the urban context (e.g. *Jingmen Urban Master Plan*). Combined with the interview results in Jingmen, official documents, and the suggestions from expert panels, we present our analysis and results in section 5.5, especially focusing on the interactions among different stakeholders (see Figure 5.5 and Figure 5.6).

5.4 General Information about Jingmen

5.4.1 A brief description of Jingmen in China

The location of Jingmen in Hubei province is shown in Figure 5.2. The land area of Jingmen is 12,404 sq.km. The number of inhabitants in the administrative area is reported as 2,896,500 (JMBOS, 2019). The Gross Domestic Product of Jingmen in 2018 was RMB 184.8 billion. Historically, Jingmen belonged to Jingzhou, another city next to Jingmen (see in Figure 5.2). On August 19, 1983, the State Council approved the promotion of Jingmen to prefecture-level municipality. (PGOJM, 2019). Currently, Jingmen promotes the development of equipment manufacturing, new energy and new materials, renewable resource utilization and environmental protection, electronic information, health, fine chemicals and processing of agricultural products (PGOJM, 2019).

Figure 5.2 Location of Jingmen in Hubei and the PRC.

To obtain insight in Jingmen's economic structure, we distinguish the primary, secondary, and tertiary sectors in the economy. Figure 5.3 shows the distribution of GDP across the three economic sectors in Jingmen from 1949 to 2018 (HBoS, 2018). The relative proportion of the primary sector decreases significantly over time, whereas the contribution of the secondary sector increases rapidly from the 1970s and onwards. Since then the secondary industry has maintained its economic importance in Jingmen's economy until the time of writing (2020). In 2017, the percentages of GDP in Jingmen's three economic sectors were 13.4%, 51.1%, and 35.5% respectively (JMBOS, 2019), which shows that the secondary sector still dominates the city's economic structure. In contrast, the workforce distribution of the three industrial sectors is 36.7%, 25.1%, and 38.2% respectively (HBoS, 2018). Roughly half of Jingmen's GDP is produced by a quarter of its working population. A substantial proportion of the working population is still employed in the primary sector even though its contribution to the city's GDP is relatively low. Although the tertiary industry experienced stable growth over time, its

proportional contribution to Jingmen's GDP is still substantially lower than that of the secondary sector.

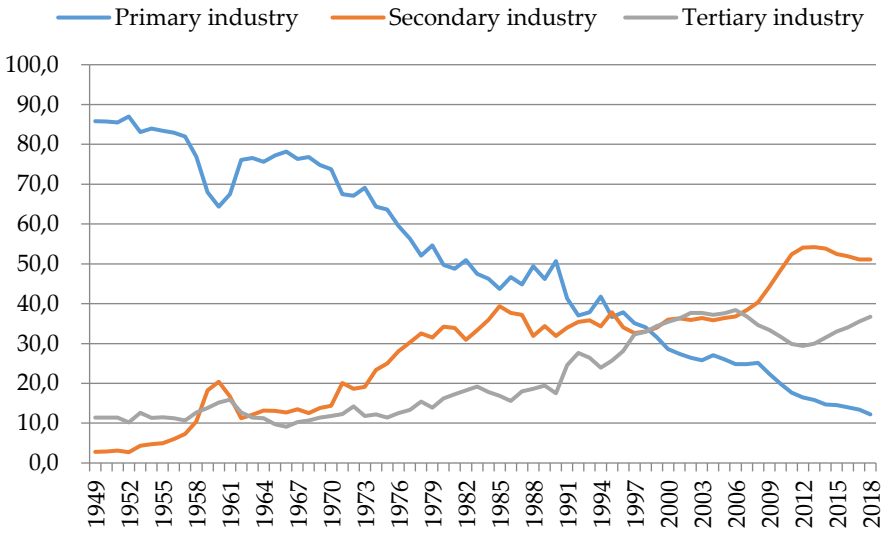


Figure 5.3 Industry's relative contribution to Jingmen's GDP between 1949 and 2018.

5.4.2 Jingmen's city brands: evolution and development

City branding development in Jingmen has seen some shifts over the previous decades. The evolution of city brand development from the beginning of the 1970s to the current day can be broadly divided into three stages. Jingmen's first city brand (Industrial City) was created during the period of the so-called *Third Front Movement*[7] as part of a large-scale national plan to industrialize China's interior. A substantial number of large national companies were (re)located to stimulate economic development (Qian, 2000). As a result of this deliberate national industrial policy, Jingmen evolved into

[7] The **Third Front Movement** (Chinese: 三线建设; pinyin: *Sānxiàn jiànshè*) was a massive industrial development by China in its interior starting in 1964. It involved large-scale investment in national defense, technology, basic industries (including manufacturing, mining, metal, and electricity), transportation and other infrastructures investments.

an important petrochemical industrial hub and became well-known as a typical 'Industrial City' (interviewee 1).

Jingmen's Industrial City brand was maintained until 2012 when a new city brand - China's Agricultural Valley (CAV), was developed and launched as part of Jingmen's new urban development model. Being mostly located on plain land, Jingmen is an important production base for commodity grain and high-quality rapeseed oil in the country (PGOJM, 2019). The output of cotton, oilseeds, fruits, pigs and aquatic products ranks among the highest in the province (PGOJM, 2019).

As part of a deliberate local government policy to stimulate Jingmen's primary sector and economic development in the region of Qujialing[8] (see in Figure 5.4), China's Agricultural Valley (CAV) brand quickly caught on. The CAV brand was gradually extended from Qujialing to encompass Jingmen proper, and was later even used to brand the entire Hubei Province. Spurred on by high levels of attention from leaders of municipal and provincial governments the CAV brand quickly gained popularity as an economic concept, which in turn further stimulated the developed of CAV into a city brand of Jingmen itself.

[8] Qujialing is the core implementation area of China's Agricultural Valley in Jingmen, as Figure 5.4 shown.

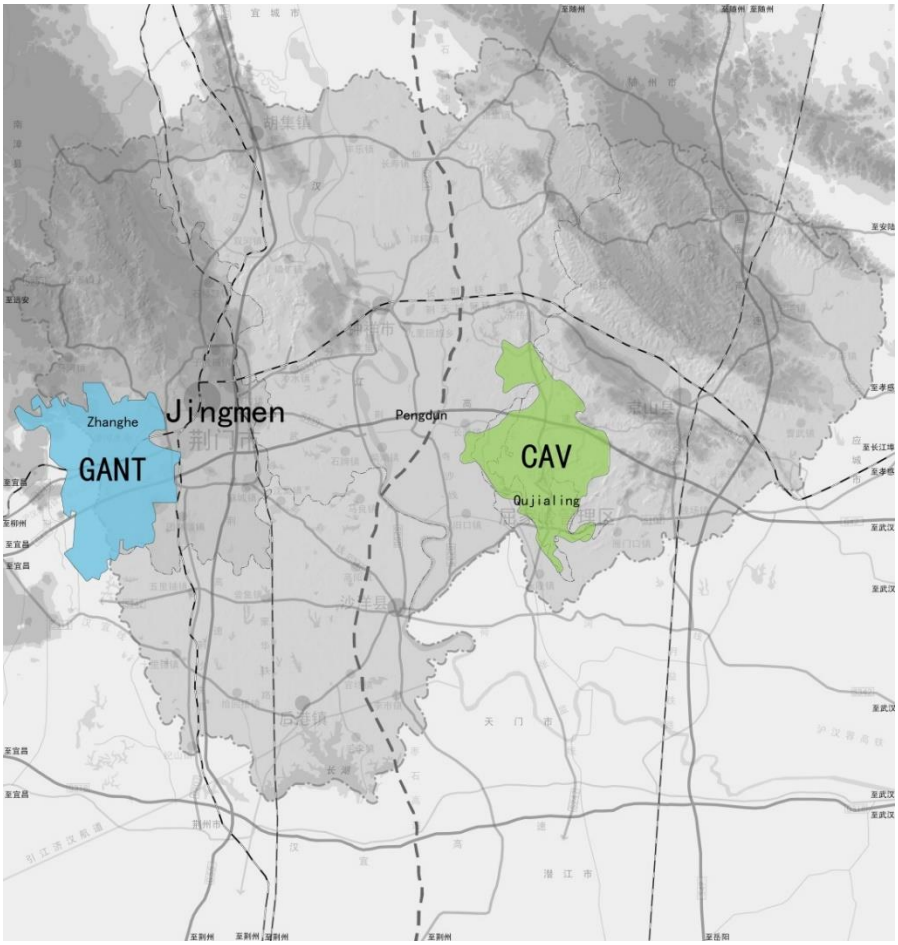


Figure 5.4 Core areas of China's Agricultural Valley (CAV) and General Aviation New Town (GANT) projects in Jingmen City: Qujialing and Zhanghe (Source: Jingmen Urban Master Plan).

More recently, in order to realize an industrial upgrade and transform the economy, Jingmen has been exploring new options for development. Jingmen is considered one of five general aviation industrial clusters in China. Being designated as a 'general aviation industry comprehensive demonstration zone' enables Jingmen to plan and build a General Aviation New Town (GANT) as part of its ambitious growth plans. The core area in GANT is Zhanghe New District. The core areas of CAV and GANT are shown in Figure 5.4.

Actually, in addition to the aforementioned brands, the city of Jingmen also boasts being 'China's Outstanding Tourist City', 'Gateway of Hubei', 'National Garden City', 'National Forest City', 'Cultural Jingmen' and 'Ecological Jingmen' as city brands (PGOJM, 2019). However, since this chapter aims to analyze how Jingmen uses economic brands to achieve industrial transformation. China's Agricultural Valley, Industrial City, and the General Aviation New Town brands represent three typical industrial city brands in Jingmen. Since the building of Industrial City as a brand began in the 1970s further back in time, we were unable to obtain sufficient information about stakeholder engagement during the creation and implementation of this brand. Consequently, this article considers the Industrial City as background for the study of the other two brands in Jingmen. CAV and GANT are thus selected as cases for our analysis of economic city branding strategies in Jingmen which aim to trigger sustainable industrial transformation.

5.5 Stakeholder Involvement Analysis: CAV and GANT

From 1964, a large number of military-industrial and national defence enterprises were assigned to Jingmen because of the national *Third Front Movement* policy. These included Sinopec, Hongtu Aircraft Manufacturing Plant, 605 Research Institute, the 330 Cement Plant, various Thermal Power Plants, the Xiangsha Chemical Plant, but also the Dongguang Optoelectronics Factory, and the Jiangbei Foundry. Many petrochemical and phosphate industries companies joined these companies and most are still present in Jingmen today and are part of Jingmen's industrial basis (PGOJM, 2019). However, the governance of these state-owned enterprises is primarily concentrated at the national and provincial levels. From 1986 to 1995, China experienced a major reform of its economic system and a transition from a planned economy to a market-based economy (Qian, 2000). The Industrial City brand was developed in response to the abovementioned urban economic reforms in the national policy environment (interviewee 1; 4). This brand also stimulated the development of the secondary industry.

Currently, the Industrial City brand faces serious challenges. Severe environmental pollution presents an increasingly problematic living

environment for local residents and challenges Jingmen's attractiveness to prospective city inhabitants (interviewee 1). When it comes to competition with neighbouring cities, the Industrial City brand has become unattractive and lacks power as it represents an image of environmental pollution and bad air quality. However, at the same time, the economic data shows that Jingmen still relies heavily on the secondary industry (interviewee 6). Nonetheless, Jingmen increasingly avoids branding itself as 'Industrial City'.

These reasons push the city of Jingmen to explore new ways of generating deep sustainable industrial transformation. The solution that the Jingmen government has chosen so far is to let the heavy industry survive but downplay the importance of the industrial sector in its external communication while promoting new aviation technology and sustainable agriculture as key economic activities. In the next sections, we will analyze the creation and implementation of these two city brands.

5.5.1 Stakeholder involvement in China's Agricultural Valley (CAV) brand

5.5.1.1 General project introduction

China's Agricultural Valley (CAV) brand was officially kicked off in 2012 with the Jingmen municipal government as the key driver. It aims to stimulate the development towards a modern agricultural industry in the Jingmen area. China's Agricultural Valley project initially focused on the Quiialing and Pengdun areas (see Figure 5.4). The brand concept initially focused on the Qujialing farming culture, the rich and diverse agricultural resources in Jingmen. Table 5.2 shows more detailed information about project progress.

5.5.1.2 Stakeholder identification in CAV

The principal stakeholders, their roles and resources are shown in Table 5.3.

Table 5.2 Project progress in China's Agricultural Valley (CAV) 2008-2018.

	National	Provincial government	Municipal government
2008	--	The concept of "China's Agricultural Valley (CAV)" originated from a master plan for the Qujialing area, Jingmen. Made by two professors at Huazhong University of Science and Technology at the end of 2008.	--
2011	--	On July 18, 2011, the secretary of the Hubei Provincial Party Committee, gave important instructions on the publication of 'Boiled Agricultural Valley' in the Hubei Daily.	On July 2011, the secretary and mayor of Jingmen Municipal Government conducted research in the Qujialing Management Area in 2011 and then gave more instructions on CAV. In 2011, the Social Science Association, Jingmen's Development and Reform Commission, the Agriculture Bureau, the Tourism Bureau, and the CSBPP conducted a special investigation of Qujialing into the terms of CAV brand construction. The experts and scholars from the Municipal Social Science Association, and local media organizations put forward suggestions on the development of CAV. On September 13, 2011, Jingmen Municipal Party Committee and Jingmen Municipal Government issued a notice on the establishment of the *"China's Agricultural Valley" construction work leading group*.
2012	--	In 2012, the Hubei Provincial Government confirmed the construction of China's Agricultural Valley as a provincial strategy, and it would be implemented in Jingmen. In 2012, the Hubei Agricultural Valley Industrial Group Co., Ltd was set up to handle CAV strategy development.	--
2014	--	--	In 2014, the Jingmen Development and Reform Commission released *the Agricultural Valley Core Plan*. In October 2014, the Agricultural Valley Forum was established in the Qujialing Management Area.
2015	--	Jingmen Agricultural Valley Investment Co., Ltd. was set up in 2015.	August 7, Jingmen Municipal Government announced the cooperation with the Chinese Academy of Agricultural Sciences. August 8, Chinese Academy of Agricultural Sciences participated in compiling the *China Agricultural Valley 2025 Construction Plan*.
2016	--	--	Jingmen Municipal Party Committee and Municipal Government issued "Opinions on Implementing the Strategy of China's Agricultural Valley".
2018	--	--	Jingmen held the 10th China Agriculture Valley·Jingmen Rape Flower Tourism Festival and the 2nd China Agricultural Valley·Jingmen (Zhongxiang) Lagerstroemia Flower Culture Tourism Festival

Table 5.3 Stakeholders identification in CAV

No.	Type of stakeholders		Departments	Roles	Resources
1	Governmental organizations	Politicians	The secretary in the Hubei Provincial Government and the mayor in the Jingmen Municipal Government	Approve the creation of CAV Push and coordinate CAV projects at the provincial level	Opinion leaders
		Departments and agencies	***Government at other levels:*** Hubei Provincial Government (PG) Jingmen Municipal Government (MG) Qujialing Management District Government (QMDG)	Implement various brand activities relevant to their tier of government	Policy supply and administration power
			Departments or agencies inside Jingmen: Jingmen Municipal Party Committee and Propaganda Department (MPCPD) Jingmen Municipal Committee of Rural Office (MCORO) Agricultural Bureau of Jingmen (AB) Tourism Bureau (TB1) Bureau of Culture Sports Broadcasting Press and Publication (CSBPP)	Participate in city brand implementation Carry out city branding activities Organize cultural and sports activities within the CAV brand theme	
2	Promotion agencies	Public	Daily Media Group	Publish information about CAV projects	Media channels
		Private	Tourism agencies	Publish tourism information in alignment with the CAV city brand	

Table 5.3 *Cont.*

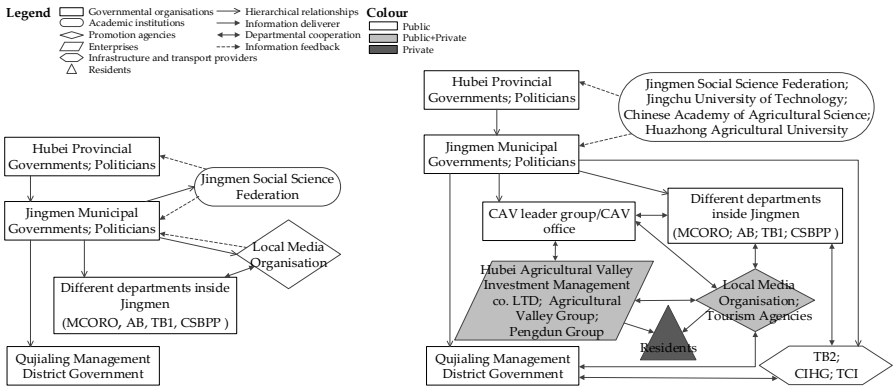
No.	Type of stakeholders		Departments	Roles	Resources
3	Enterprises	Public	Agriculture Valley Group Hubei Agriculture Valley Investment Management Corporation	Cooperate with investment companies to promote the agriculture industry and to serve project under the CAV city brand; Develop and cultivate modern agricultural practices	Financial resources; Project investment
		Private	Pengdun Group Jingmen Baigufeng Technology Co., Ltd.	Participate and cooperate in the realization of projects under the CAV city brand	
4	Academic organizations and schools	Public	Jingmen Social Science Federation Jingchu University of Technology Chinese Academy of Agricultural Science Wuhan University of Technology Huazhong Agricultural University	Provide suggestions on CAV city brand creation and promotion to the governments; Participate in city branding activities; Participate in the formulation and compilation of the agricultural plans underlying the CAV city brand	Knowledge support
5	Infrastructure and transport providers	Public	Jingmen Urban Construction Investment Holding Group Co., Ltd. (CIHG) Transport Construction & Investment Co., Ltd. (TCI) Jingmen Transport Bureau (TB2) and District Transport Bureau	Provide the farming infrastructure and transport in Jingmen and Qujialing Management Area	Investment & financing; Construction and operation
6	Residents	Private	Farmers in the (CAV) Qujialing Management District Residents in Jingmen City	Sell food and agricultural products to enterprises (farmers) Participate in industrial farming (Migrant workers) Participate in CAV city branding activities and provide feedback and opinions about the brand	Agricultural product; Labor; Views

5.5.1.3 Stakeholder analysis in CAV brand creation and implementation

Figure 5.5 (a) and Figure 5.5 (b) show the interactions between different stakeholders during the creation and implementation phases of CAV city branding.

5.5.1.3.1 Interactions between stakeholders during the CAV creation phase

The concept of "China's Agricultural Valley (CAV)" originated in a master plan made by two professors at Huazhong University of Science and Technology at the end of 2008 (PGOJM, 2017). The brand was originally designed specifically for Jingmen's Qujialing area, Jingmen (PGOJM, 2017). In 2011, the secretary of the Hubei Provincial Party Committee paid specific attention to the CAV brand after reading the publication 'Boiled Agricultural Valley' in the Hebei Daily. The secretary of the Jingmen Municipal Party Committee subsequently conducted research into the Qujialing Management Area in 2011 and gave more detailed instructions which focused on the construction of the CAV. Consequently, Jingmen government agencies such as the Social Science Association, the Jingmen Development and Reform Commission, the Agriculture Bureau, the Tourism Bureau, and the CSBPP in Jingmen conducted a special investigation to study Qujialing and the construction of the CAV brand. Scholars from the Municipal Social Science Association, and experts from local media organizations put forward suggestions on how to turn the CAV concept into a city brand. The Qujialing Management District Government was subsequently selected by the Hubei Provincial Government as a pilot area for the development of an agricultural demonstration zone in 2011. In 2012, the Hubei Provincial Government decided that the 'China's Agricultural Valley' brand would be used as a provincial strategy, and would be implemented in Jingmen first.



(a) (b)

Figure 5.5 Interactions between different stakeholders (CAV): (a) brand creation; (b) brand implementation.

5.5.1.3.2 Interactions between stakeholders during the CAV implementation phase

The Jingmen Municipal Government further developed the goals of the strategy underlying the CAV brand and promoted its implementation. China Agricultural Valley Construction Leading Group of Jingmen was set up in 2012 as project organization and charged with the management of the CAV project with Jingmen's mayor in charge. It operated directly under the Jingmen Municipal Government. China Agricultural Valley Office was a coordinating organization that was set up to help direct the efforts of the Jingmen Municipal Government and its other bureaus. Numerous other governmental organizations execute and participate in projects under the CAV brand. For example, the Jingmen Tourism Bureau publishes ecological tourism information on Jingmen's official website and organizes tourism activities, such as the CAV-Shayang Ecological Agriculture Experience. CSBPP organizes annual cultural and sports activities, such as "Farmhouse activities" (interviewee 3). In 2014, Jingmen's Development and Reform Commission published the *Master Plan of China's Agricultural Valley* and in 2017 the Municipal Party Committee Office released the *China Agricultural Valley 2025 Construction Plan.*

The general media organization and tourism agencies in Jingmen are the main promotion agencies of the CAV brand. The Daily Media Group

publishes the information on CAV via media channels, such as WeChat and newspapers (interviewee 11; 12). Tourism agencies publish farming tourism information to attract outside visitors (interviewee 10).

In 2012, the Hubei Agricultural Valley Industrial Group Co., Ltd was established as a key part of the city's CAV branding strategy. Its equity is entirely held by the Municipal State-owned Assets Supervision and Administration Commission. Its goals are to promote the development of CAV projects and develop modern agricultural practices (interviewee 13). Jingmen Agricultural Valley Investment Co., Ltd. is a wholly-owned subsidiary of Hubei Agricultural Valley Group and specially established to promote the rapid development of the Hubei Agricultural Valley Industrial Group in 2015 (interviewee 14). The two companies are public enterprises that cover financial gaps incurred by the development of CAV through asset management, project investment and other economic activities related to sustainable agriculture. The Pengdun Group is a large private company which participates in the implementation of projects under the CAV brand which have a clear focus on modern agriculture (interviewee 14).

The CAV Research Institute of the Hubei Academy of Social Sciences (HAOSS) was formally established by the Jingmen Municipal Government and HAOSS in 2012. It is the first policy research institution to specialize in the development of the CAV. Jingchu University of Technology applies for research grants and expresses its opinions on the development of the CAV every year. Scholars from the Jingmen Social Science Federation and Jingchu University of Technology advise on branding and promotion to the municipal and provincial governments through expert panels. However, their suggestions are not necessarily adopted (interviewee 15). The Chinese Academy of Agricultural Sciences invited internal and external experts to compile the "*China Agricultural Valley 2025 Construction Plan (2016-2025)*".

The Jingmen Urban Construction Investment Holding Group Co., Ltd. (CIHG), Transport Construction & Investment Co., Ltd. (TCI), and the Transport Bureau (TB2) are the main road infrastructure and transport providers in Jingmen. They are also in charge of the infrastructure and

transport construction projects and policies that have been started under the CAV brand, such as rural transportation, and farmland water conservancy projects.

Even though some residents participate in activities under the CAV brand, their participation is limited and communication about CAV is predominantly one-way; the government claims the brand, the residents receive brand information and participate in brand related activities (interviewee 16). The local farmers in the CAV area are important stakeholders, however, they only indirectly participate in CAV branding related projects. For example, the farmers sell their agricultural products to the large trading enterprises. Migrant workers participate in industrial farming work (interviewee 14). However, the farmers' participation has not been particularly massive, nor very passionate (interviewee 6).

5.5.2 Stakeholder involvement in the General Aviation New town (GANT) brand

5.5.2.1 General project introduction

In 2014, the Aviation Industry Corporation of China, Ltd (AVIC) and the Jingmen Municipal Government reached an agreement on the construction of the Jingmen General Aviation New Town (GANT). The Jingmen Municipal Government initiated this project to stimulate local economic activity and create a new city strategy for urban transformation. General Aviation New Town is aimed at four industries: the development of navigation research and manufacturing, navigation operation and maintenance, emerging navigation services, and navigation training. More detailed information about GANT project progress can be found in Table 5.4.

5.5.2.2 Stakeholder identification in General Aviation New Town

The principal stakeholders, their roles and resources in GANT are shown in Table 5.5.

Table 5.4 Project progress in General Aviation New Town (GANT) 2009-2018.

	National government	Provincial government	Municipal government
2009	In 2009, the State Council and the Central Military Commission jointly issued the *Opinions on Deepening China's Low-altitude Airspace Management Reform*.	--	--
2012	--	The master plan for the construction of Zhanghe New District was approved by the Hubei Provincial Government in August 2012.	--
2013	The Civil Aviation Administration of China issued the *General Aviation Flight Approval and Management Regulations* in November 2013.	The Zhanghe New District Management Committee was approved by the Hubei Provincial Government in February 2013.	--
2014	--	--	In August 2014, Jingmen AVIC Aviation Town Project was signed in Beijing. Since 2015, a Jingmen AVIC Flight Conference is held every year.
2015	--	--	
2016	On May 13, the State Council released the *Guidance on Promoting the Development of the General Aviation Industry*.	--	--
2017	--	--	In 2017, AVIC town, Zhanghe new district was selected as the site for pilot projects for sports and leisure towns by the State Sports General Administration. Although not directly in line with aviation activities, it was seen as strengthening the profile of the area.
2018	--	In January 2018, the Hubei Provincial Government Work Report proposed to support development of the general aviation industry.	--

Table 5.5 Stakeholder identification in GANT

No.	Type of stakeholders		Departments	Roles	Resources
1	Governmental organizations	Politicians	The main leaders in Jingmen's Municipal Government	Approve brand creation and push brand implementation	Opinion leaders
		Departments and agencies	***Government at other levels:*** Jingmen Municipal Government (MG); Jingmen Zhanghe District Management Committee (ZDMC); General Aviation Industry Demonstration Zone Office (GAIDZO)	Implement the projects and branding activities in different government levels	Policy supply and administration power
			Departments or agencies inside Jingmen: Jingmen Municipal Party Committee and Propaganda Department (MPCPD); Jingmen Development and Reform Commission (DRC); Tourism Bureau (TB1); Planning Bureau (PB); Bureau of Culture Sports Broadcasting Press and Publication (CSBPP)	Execute branding activities; Coordinate interests of different departments; Organize activities each year, such as AVIC Flight Conference	
2	Promotion agencies	Public	Daily media Group	Publish information about GANT projects	Media channels
		Private	Tourism agencies	Publish tourism information about GANT and organize the day trip	

Table 5.5 *Cont.*

No.	Type of stakeholders		Departments	Roles	Resources
3	Enterprises	Public	Aviation Industry Corporation of China, Ltd.; China Aviation Industry General Aircraft Co., Ltd.	Provide technical support and relevant expertise for local authorities	Financial and technology resources
		Private	Hubei Longhao Flight Training Co., Ltd.; Travel agencies	Participate in GANT project	
4	Academic organizations and Schools	Public	Jingmen Social Science Federation; Jingchu University of Technology; Chinese Aviation Society	Provide suggestions on city branding to the government; Provide professional talents to the general aviation industry	Knowledge support
5	Infrastructure and transport providers	Public	Jingmen Urban Construction Investment Holding Group Co., Ltd. (CIHG); Zhanghe New district Zhangfu Investment Development Co., Ltd.; Investment Development Co., Ltd.; AVIC Jingmen Development Co., Ltd.; China Special Aircraft Research Institute; Jingmen Traffic Construction Investment Co., Ltd.; Hubei Zhonghang General Airport Management Co., Ltd.	Construct Zhanghe New district infrastructure and Zhanghe airport; Invest and finance of infrastructure construction in the Zhanghe New district.	Financial and technology resources
6	Residents	Private	Local residents	Participate in GANT city branding activities and provide feedback and opinions about the brand	Views

5.5.2.3 Stakeholder analysis in GANT brand creation and implementation

Figure 5.6 (a) and Figure 5.6 (b) show the interactions between different stakeholders during the creation and implementation phases of GANT city branding.

5.5.2.3.1 The interactions between the stakeholders during the GANT creation phase

The origin of the GANT brand can be traced back to Jingmen's industrial development in the period of the Third Front Movement, as some aviation navigation manufacturing and operation facilities were located in the Jingmen area. In 2009, the State Council released a series of low-altitude flight policies to develop the general aviation industry in China. These policies provided the policy environment that enabled provincial and local government officials the opportunity to develop the aviation industry. In 2010, the Development and Reform Commission of the Hubei provincial government approved the "Jingmen Aviation Industrial Park Development Plan". In doing so, the Hubei Province supported Jingmen in its development of a new city district for the general aviation industry. In August 2014, the Jingmen AVIC Aviation Town Project was signed by Aviation Industry Corporation of China, Ltd (AVIC) and the Jingmen Municipal Government. The two sides agreed to build the Jingmen General Aviation New Town, a comprehensive demonstration base for general aviation industry development. In 2016, the Office of the State Council published "*the introduction of the guidance of on promoting the development of the navigation industry*" (SC, 2016), which strengthened the policy context for promoting the national aviation industry via GANT. Above all, GANT as a city brand was built based on the macro policy support from the national, provincial and municipal level governments.

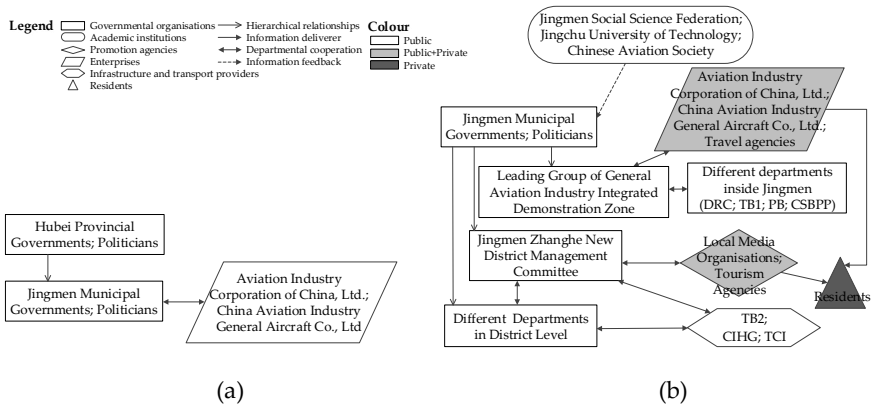


Figure 5.6 Interactions between different stakeholders (GANT): (a) brand creation; (b) brand implementation.

5.5.2.3.2 The interactions between stakeholders during the GANT implementation phase

In 2013, the Hubei Provincial Government approved the establishment of the Jingmen Zhanghe New District Management Committee (Zhanghe Xinqu Guanweihui). Zhanghe NDMC represents the district in which General Aviation New Town is situated, as shown in Fig. 4. It is the main management department related to the branding of the General Aviation New Town project. The Leading Group of General Aviation Industry was established in 2017 and became the key department for coordinating the GANT related projects with other local organizational departments. Since 2015, the Jingmen Municipal People's Government, the Hubei provincial Tourism Development Committee, the Hubei Provincial Sports Bureau and AVIC General Aircraft Co., Ltd. began to organize annual Jingmen AVIC Flight Conferences (interviewee 9). It is the biggest promotional activity to support the GANT brand. The conference attracts many visitors every year. In 2017, AVIC Town, Zhanghe new district was selected as a pilot project for sports and leisure towns by the State Sports General Administration. That denomination also pushed the development of GANT brand forward.

Local travel agencies publish travel information about GANT on their websites to attract outside visitors. The Daily Media Group also publishes news reports to promote GANT.

China Aviation Industry General Aircraft Co., Ltd. is a state-owned enterprise with experience in developing the general aviation industry. It was charged with providing technology and expertise to support the GANT projects in Jingmen. In 2017, the Hubei AVIC General Airport Management Company was launched as a flight service operation and management business at Zhanghe Airport. These public enterprises are the key stakeholders in the projects which aim to develop the GANT city brand. Some private tourism companies provide a platform and work with the government to promote the tourism industry.

During the 13th five year plan, Jingchu University of Technology established the School of Aviation and created graduation majors for its students including aircraft manufacturing engineering, avionics, electrical technology, and precision molding technology for aviation materials (JUT, 2016). In addition, the Jingmen Municipal Government cooperates with the Chinese Aviation Society in support of talent and technology development in the general aviation industry.

Many infrastructure and transport providers participate in the infrastructure and real estate projects which are all conducted under the GANT brand, especially in key projects, such as the reconstruction and expansion of Zhanghe airport and the roads connecting the new town with the city of Jingmen. The Hubei Jingmen Urban Construction Group is a state-owned company responsible for the construction of infrastructure in the Zhanghe New district. Zhanghe New District Zhangfu Investment Development Co., Ltd., was established in 2012, and is a state-owned enterprise. It is the main financial department for urban infrastructure construction and investment in the Zhanghe New District (ZNDZID, 2019). The China Special Aircraft Research Institute contributes to the Jingmen Zhanghe general airport reconstruction and expansion project. Hubei Zhonghang General Airport Management Co., Ltd. leads the construction of the Jingmen general airport, water terminal, temporary take-off and landing point construction project.

Residents only participate in certain projects and activities, such as AVIC Flight Conference, via their role as visitors. In other words, the role of residents in GANT brand implementation is minimal.

5.5.3 Implementation barriers in Jingmen's city branding

We use Table 5.6 to list the main barriers in Jingmen's city branding implementation process. Weakly represented roles among stakeholders and missing resources in industry, markets, and policy supply are shown which result in a rather unsuccessful implementation of the two brands. Both have so far failed to attract noticeable attention from the targeted groups (i.e. investors, private companies, local farmers, and prospective residents).

Table 5.6 The weak roles, missing resources and identified barriers in two branding projects.

		CAV	GANT	Barriers
Roles	Approver or Pusher (governments; politicians)	Lack of guidance in attracting investment. Unable to build a vigorous market system for local produce. Limited encouragement of public participation from the government.	Insufficient planning and coordination of policy implementation. Focus more on more management than implementation.	Lack of political support and interest in implementation
	Coordinator	Dissolution of efforts as CAV office was merged into Jingmen's Agricultural Bureau. No specific departmental responsibility and authority for CAV project implementation.	Imperfect communication and coordination.	Lack of policy interest; Problematic organization and coordination
	Executor	Local government departments simply follow higher level government guidelines.	Local government departments simply follow higher level government guidelines.	Passive participation
	Information deliverers	Ineffective brand communication via traditional media channels, like newspapers and TV stations.	Only media departments are involved in publication and communication.	Limited brand publication and promotion
	Advisor	Policy suggestions are not adopted.	Few suggestions for GANT creation and implementation.	Weak influence of expert advice
	Participants	Insufficient participation from small private enterprises. Few large and strong enterprises support the brand. Farmers' passion are not mobilized. Farmers' participation is relatively small.	Leading (state-owned) companies insufficiently involved. Insufficient participation from private enterprises. Low general public participation.	Low private participation

Table 5.6 *Cont.*

		CAV	GANT	Barriers
Resources	Policy	Lack of policy support from higher level governments. Insufficient policy supply results in failure during the negotiations.	Lack of policy support from national government level. China lacks independent navigation regulations and standards. Insufficient policy supply results in failure during the negotiations.	Lack of political interest and support for implementation
	Market	The CAV brand hasn't resulted in a viable economic market in support of providers of local produce.	Immature market for general aviation. Overall weak industry. High operation costs of navigation and limited low-altitude airspace inhibit the realization of a vital market.	Lack of viable market (perspective)
	Media channels	Only use of simple and traditional brand promotion channels.	Only use of simple and traditional brand promotion channels.	Simple and traditional promotion channels
	Finance	Low efficiency of funds	Higher operating costs	Lack of finance
	Infrastructure	Difficulties in rural transportation, farmland water conservancy, and communications, e.g. Highways need reconstruction to connect Jingmen and the agricultural industrial plants.	Insufficient infrastructure; lack of a general airport in the Hubei Province.	Lack of involvement in policy implementation
	Technology, knowledge, and talent	Technology development was not transferred into agricultural products. Insufficient technology support for the agricultural sector. Lack of in-depth cooperation with non-public actors.	Lack of professional aviation talents	Lack of professional input

5.6 Discussion and Findings

The two economic city brands in Jingmen we investigated represent different choices with regard to the strategy towards industrial transformation. The CAV brand, leaning primary on the agricultural sector (potentially) focused on the involvement of a large share of the workforce, but of low added economic value to the Jingmen economy. The other GANT brand aims to trigger the development of an advanced, more sustainable part of the services side of the secondary sector (aviation navigation industry). However in doing so and focusing on aviation technology, the brand focuses on a very tiny percentage of the total Jingmen workforce, however one which could generate a potential high economic value. Still, we found the actual branding creation and implementation processes in both cases to show a very similar pattern.

Jingmen's local politicians and senior civil servants seem quite focused and successful in the identification and launching of potential brands which could be used to transform Jingmen. In both cases, they show remarkable skill in lining up especially provincial and national governments during the brand construction phase. However, the cases at the same time reveal that after these brands are created, politicians 'leave' the implementation to other players such as local government agencies which neither have the powers and authority, nor perhaps the right skills to actually realize the original, ambitious policy goals underlying the city brands. Figure 5.7 shows the key findings in Jingmen's city branding processes.

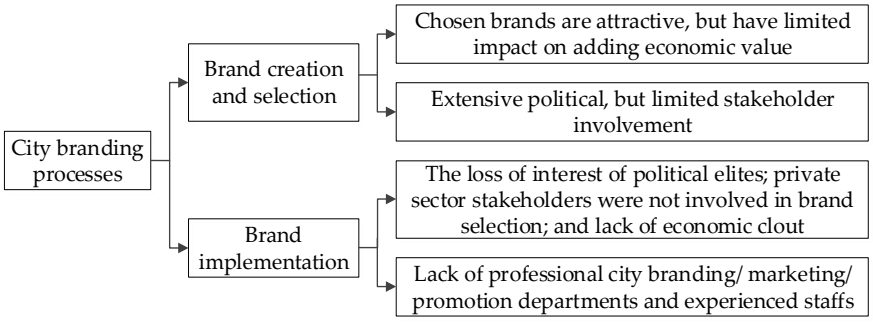


Figure 5.7 Key findings in Jingmen's city branding processes.

5.6.1 City branding selection and creation

A successful city brand should be aligned with national and provincial plans and policies, and based on historical and cultural traditions. The brand ideally would take into account the current demographic and economic context, reflect future ambitions of the municipal government, set challenging yet realistic goals, be attractive and distinct from its neighbours, adopt and apply the brand for the long term through implementation across the various departments within the municipal government and connect it with other policy measures. If these conditions are fulfilled, a brand is (far more) likely to generate deep sustainable transformation. In Jingmen's cases, local government promotes new aviation technology development and sustainable agriculture, which comes across as more attractive and more sustainable. However, the economic city brands that were studied in this research did not add much economic value and employment. Jingmen allows its heavy industry, with all of the environmental problems that come associated with it, to survive and simply downplays the importance of the industrial city in its external communication. Economically speaking the aviation industry and sustainable agriculture play a far smaller role in Jingmen's local economy than the secondary sector. The manufacturing and petrochemical industries remain unaffected by the new city branding efforts. Although this is understandable, however, brand selection and creation do not go very far in achieving industrial transformation. We would have to conclude that the current state of affairs in Jingmen is not the most productive one in the long run. Actually, city labels, such as 'eco city' and 'low carbon city', are widely chosen by China's local governments in their planning contexts since these attractive labels are related to national urban development programs and influenced by national policies (de Jong et al., 2016; Lu & de Jong, 2019). These reflect cities' development visions and economic restructuring ambitions. However, in many occasions, the selected new economic brands do not meet the actual requirements of urban industrial transformation. Moreover, the new city brands barely distinguish one city from the other in terms of brands. This situation also represents a common phenomenon in many Chinese cities.

According to Baker (2012), a brand that has been developed with broad stakeholder support is more easily accepted and more quickly recognized by those at the receiving end. The brand should be widely embraced by a critical mass of stakeholders (Henninger et al., 2016) within and outside the local government, and enjoy strong support from the political and administrative leaders and city officials. The city branding organization should integrate the city's stakeholders, such as local government departments, public and private enterprises and residents into participation in city branding management (Zavattaro & Daspit, 2016). However, in contrast to this, we found that the realization of city branding policies in Jingmen was primarily the result of opaque and deeply political processes in which many, especially private stakeholders are not or only quite passively involved. The cases show how political leaders skilfully identify and select seemingly attractive brands such as ecological agriculture or aviation new town to realize the industrial transformation goals for Jingmen. The branding creation can be successfully built with strong support from political leaders.

5.6.2 City branding implementation

In Jingmen's cases, only the attention of influential local politicians pushes the implementation of a brand. Effectiveness of a brand seriously is tightly related to the span of political attention. According to Kavaratzis's advice (2012), city brands should be recognized and accepted by many different stakeholders and this requires their involvement throughout the entire city branding process (Baker, 2012; Kavaratzis, 2012). However, Jingmen's governmental organizations at different levels, state-owned enterprises, public media organizations are the key stakeholders in both instances of city branding that we studied. Small private companies, promotion agencies, academic associations, and residents participate in city branding to a much lesser extent, and predominantly play a role as 'participant' or 'recipient' in the implementation phase. Their absence in the creation stage results in serious consequences during the implementation phase, while the absence of many essential public sector players (especially high level politicians and civil servants) similarly affects implementation negatively. The cases seem to provide evidence that branding processes in Chinese cities lack a coherent

and integrated city branding approach.

Social media activities (Cleave et al., 2017; Zhou & Wang, 2014) and mega events (Chen, 2015; Marin-Aguilar & Vila-López, 2014) are broadly adopted by policy makers to brand cities for inside as well as in outside communication. For the implementation of Jingmen's city brands, the local government has placed the responsibility primarily in the hands of its media and promotion departments. These agencies utilize general media and the organization of specific events as key instruments to establish a positive city image. In Jingmen, however, the limited number of activities and their small scale result in limited long-term effects of city promotion activities. In China, only the mega cities are in a position to organize mega events, such as Olympic Games or the G20 summits. And even then, it could be questioned whether these events are followed up by sufficient other activities and projects to really identify long-lasting effects in terms of branding. In contrast, the activities which are organized by small and medium-sized cities tend to be small in scale and weak in effect since they do not have sufficient resources at their disposal to organize mega events. Small cities can only focus on less glamourous activities generating far less publicity. Furthermore, we find that public information campaigns and advertising are quite passive policy instruments and therefore in themselves insufficiently powerful to singlehandedly implement brands without broader participation. The specific actions which were undertaken to implement the two brands in Jingmen are less impressive than the slogans. Potential branding policy instruments are simply not developed or applied.

The creation and implementation of city branding activities are processes which are meant to unite and align the various city departments and stakeholders in brand management, to have all the noses point in the same direction (Zavattaro & Daspit, 2016). Consistent and clear city brand recognition is the basis for successful city branding (Kavaratzis, 2004), which can only be achieved through the establishment of an appropriate city marketing organizational structure. Many international cities set up professional city branding organizations to focus on the creation and implementation of city branding projects; they focus on a specific tourist

market and seek to attract growing numbers of visitors (Boisen et al., 2018; Pike, 2012). In Jingmen, the work of city branding is managed by the Municipal Party Committee Propaganda Departments (MPCPD). City branding efforts are primarily implemented by the daily newspaper media and other propaganda departments. Other departments are barely involved in the field of city image enhancement and city brand building. There is a lack of professional staff specialized in city branding and promotion (Fan, 2014). Lack of professional institutions and experienced staff obviously influences the effectiveness of implementation.

5.7 Conclusions

This chapter has presented a case study research to analyze economic city brands' creation and implementation processes of a medium-sized city in China. We mapped a stakeholder oriented typology of city branding practices in Chinese medium-sized cities.

City branding in China clearly is embedded within a multi-level governance context. Politicians and provincial, municipal and district governments and departments are all involved in branding activities in different stages. The politicians are heavily involved in the brand creation phase and its final approval. They subsequently mobilize public resources and authorities at the local level to push for brand implementation. They engage in specific city branding activities and rely on specific public enterprises to finance and manage projects which are developed as part of a city brand. Different levels of administrative governments and different departments are the implementers of brand projects. They are the specific executive institutions. The special work office or leading group for each brand project coordinates the various interests and ensures cooperation from different departments. The media organizations such as promotion agencies and propaganda organizations are the information deliverers of city branding implementation projects. Academic associations and organizations are the advisors for brand selection and implementation. In most occasions, state-owned enterprises, private companies, residents and infrastructure and transport providers are mainly receivers of city branding projects.

The mechanisms underlying branding creation and implementation in Jingmen that we encountered could serve as a basis to increase our understanding of city branding processes in medium-sized Chinese cities. The creation phase of city branding in medium-sized cities in China is characterized by politically sophisticated processes during which local politicians compete for the acknowledgement and alignment of potential brands for their local city within the various layers of the Chinese government. However, the implementation of the brands is an altogether different story. City brands are more easily created than implemented. Implementation is generally weak because key private sector stakeholders are not involved during the brand creation phase. However, citizens and private sector stakeholders are required for successful city branding implementation. Conversely, powerful politicians and public organizations dominate city brand creation phase, but are hardly involved and seem hardly interested in the actual implementation phase. In other words, there remains a wide gulf between ambitious, politically inspired intentions during brand creation and a continuous and viable commitment of the majority of stakeholders during the implementation phase, which is needed to achieve industrial transformation. Long-term political and bureaucratic commitment to city branding implementation efforts after the brands are created also seem important for sustained and lasting success in city branding.

Chinese city branding practices present a different style than European or American or other Asian ones because of its unique governance culture. Chinese cities are exceptional in the sense that they do not use the universally acclaimed mechanism of broad stakeholder involvement in city branding, which is described in international literature. However, the research findings suggest that private stakeholders such as residents, farmers and private corporations should be encouraged to participate more fully in city branding creation and implementation to convey their opinions and interpretations and turn the city brand into something more than just a craftily politically engineered, temporary slogan. The case study findings provide evidence that seems to support the necessity of organizing broad stakeholder involvement in place branding process (Baker, 2012; Kavaratzis, 2012). The broad stakeholder involvement also should be applied in China's city branding,

which is a finding of great theoretical significance.

We are well aware that our conclusions are based on the analysis of two city branding policies within one city. However, Jingmen is representative of a large group of Chinese cities. China counts a great many medium-sized Chinese cities like Jingmen which boast high-level ambitions to use economic city brands to transform their urban economies and industrial structure into more sustainable directions. However, as becomes clear from our study, industrial transformation becomes very difficult for these cities. City officials face the daunting task of making this transition happen, with a dominant secondary sector that cannot easily be phased without incurring major economic damage, with major infrastructure issues and a lowly qualified labour force. Current institutional patterns favour politicization of the branding creation phase, which lacks of engagement from private sector and citizen engagement. The image of city branding in medium-sized cities in China in terms of branding implementation in comparison with more visible and advanced city branding processes of larger mega cities on the Eastern shore does not bode well. The outcome of our study is of importance since what actually takes place in Jingmen may reflect the result of industrial transformation patterns in many Chinese medium-sized cities. At the same time, we emphasize the need to investigate a greater number of medium-sized cities in future research to verify our findings. City branding is a potentially crucial tool for positive self-reinvention which could be enormously helpful to the majority of Chinese cities. Making this happen requires a major reconsideration of the prevalent institutional and organizational practices through which this is done.

Appendix D

Table 5.7 Interviewees in Jingmen in 2018 and 2019

Interviewee No.	Departments	Position	The interview topics
1	Jingmen Investigation, Design & Research Institute	Vice Dean	The role of JIDRI in city branding implementation
2	Jingmen Investigation, Design & Research Institute	Chief	Jingmen's city brands and characteristics
3	Jingmen Investigation, Design & Research Institute	Officer	The state quo of Jingmen's city branding and promotion
4	Jingmen Planning Bureau	Officer	The state quo of Jingmen's city branding and promotion
5	Jingmen Development and Reform Commission	Chief	GANT project implementation and promotion
6	Jingmen Municipal Committee of Rural Office	Chief	CAV project implementation and promotion
7	Investment Bureau in AVIC New Town	Chief	The industrial situation in GANT
8	Bureau of Culture Sports Broadcasting Press and Publication	The Chief in Industrial Office	The industrial situation in GANT
9	Bureau of Culture Sports Broadcasting Press and Publication	The Chief in Sport Office	AVIC conference and GANT construction
10	Jingmen Tourism Bureau	Chief	City branding promotion and tourism information publication
11	The Daily Newspaper Department in Daily Media Group	Editor A	City brand promotion and media channels in Jingmen

Table 5.7 *Cont.*

Interviewee No.	Departments	Position	The interview topics
12	The Night Newspaper Department in Daily Media Group	Editor B	City brand promotion and media channels in Jingmen
13	Hubei Agriculture Valley Investment Management Corporation	Manager	CAV implementation and promotion
14	Hubei Agriculture Valley Investment Management Corporation	Chief	CAV implementation and promotion
15	School of Media, Jingchu University of Technology	Associate Professor	City branding communication of Jingmen
16	School of Management, Jingchu University of Technology	Associate Professor	City branding choice and implementation
17		Citizen 1	The characteristics of Jingmen's city branding
18		Citizen 2	The characteristics of Jingmen's city branding
Meeting 1	Planning Meeting	Officers of Jingmen Planning Bureau and Institutes	Feedback on the investigation results of Jingmen's city branding
Meeting 2	Jingmen Strategy Planning Conference 2049	Officers of Jingmen Planning Bureau and Institutes	Discussion on Jingmen development strategy in future
Workshop	Experts Workshop	Experts and scholars from home and abroad	Jingmen's city branding and sustainable urban transformation

6

Discussion and Conclusions

China's cities present a very complex and rich picture of urban development. Drawing any conclusions is challenging as the sheer amount of and diversity between of Chinese cities force the researcher to consider many aspects. Some mega cities are highly developed, such as Shanghai and Shenzhen are actively engaged in efforts to increase connections with the outside world. Smaller cities, like Jingmen, lack these options and mainly have to rely on themselves in the face of various difficulties. Each type of city has its own vision of development and its own reality that it has to face. Currently, most Chinese cities are facing transformation problems in varying degrees. It is quite common that policy-makers have adopted city branding strategies to achieve the ambitious goals of urban transformation. However a process of urban transformation is anything but easy and never a smooth trajectory. The realization of an actual urban transformation requires an effective implementation of policies, and among them, a city branding strategy. This thesis examined the role city branding plays in urban transformation processes in Chinese cities. In doing so, this research focussed particularly on the connection between city branding and policy implementation. Via different projects and analyses, the knowledge gap that was identified at the start of the research was filled.

In this chapter, section 6.1 responds to the main research question by answering each sub-question that was posed at the start of the research. Section 6.2 presents the limitations in this research. Section 6.3 states the outlook for further study in city branding field.

6.1 Answers to the Research Questions

This dissertation posed the main research question "how do Chinese cities implement city branding strategies to achieve urban transformation?" This question was broken down in four sub-questions, which were researched in in the previous chapters. The main research findings are presented in the following paragraphs.

Sub-question 1. How do we understand and distinguish the various concepts in use in place branding research?

Place branding received increased attention from academic literature and urban governance since the 1980s, which has peaked in recent years. There are many similar and frequently used concepts in place branding literature. Based upon an analytical distinction between location types (i.e. urban, city, destination, place) and broadcasting activities (branding, marketing, promotion), twelve different concepts combinations can be identified in place branding. These concepts are overlapping and used in mixed form by scholars and administrators. An oversight of the key findings is shown in Figure 6-1.

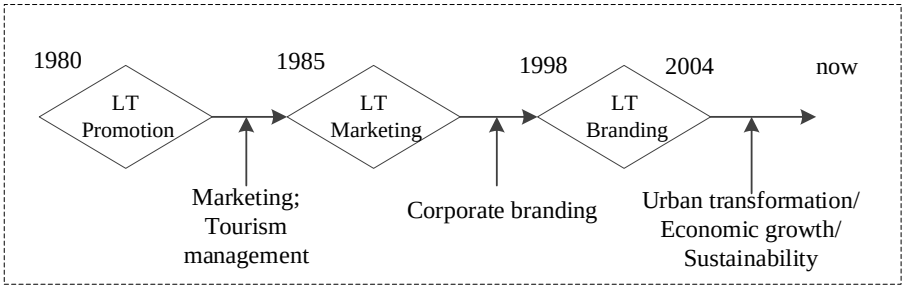


Figure 6.1 The evolution of place branding research.

Academic attention for place branding originated in marketing and tourism management literature and only later became a focus of attention in urban studies, environmental sciences and public administration. Consequently, the meaning of place branding evolved over time. The promotion and broadcasting activities of the cities that were the center of attention focusing in the marketing and tourism sciences gave way to increasing attention for

the marketing element of cities in the corporate branding literature. And more recently, place branding has focused increasingly on the branding activities of the city. The different types of broadcasting activities that are highlighted in these shifts reveal different goals and imply a different contribution to urban development and with it come different urban governance strategies. 'Location type (LT) promotion' aims to attract outsiders to visit a specific place, to expose the place and convince people to visit the place. It normally uses visual tools to achieve these goals, such as an attractive logo, catchy slogans, and lots of media and advertising activities. 'LT marketing' focuses more specifically on attracting outside visitors, companies or recruiting a talented workforce. It first identifies and distinguishes the target group it wishes to reach. Then, it develops and employs marketing techniques in efforts to respond to and satisfy the specific needs of these target groups. 'LT branding' relates to strategic goals and also requires that changes are made to ensure that the cities live up to the vision that was created with the brand. For example, activities and policies need to be undertaken to achieve and engage in urban regeneration, policies need to be developed to increase sustainability, and these will stimulate urban transformation. In contrast to the promotion and marketing activities, which focus mostly on marketing and tourism, place branding is a much broader and all-encompassing policy involving many different policy domains. It also involves more stakeholders and these not only need to play a role in the development of the place brand, but also need to participate in its implementation process.

'Destination BA (broadcasting activities)' so far received the largest proportion of research attention and established its own independent conceptual terminology in the field of tourism management. 'Place BA' has a broader spatial scope, including an interest in the broadcasting activities of nations, regions, cities, and towns. With unprecedented rapid and continuous urbanization taking place, cities realize they fulfill more functions and play an important role in different aspects of people's lives. The combination of 'city' and 'branding' implys an important role for public administration and the role of local city governments and their efforts to realize the brand. Given the need for more efforts from local governments to realize a more

sustainable environment, this field has received ever-increasing attention from both academic and policy circles in the last decades.

As a result of the exploration of the conceptual differentiation and evolution of the city branding over time, it is possible to have a better understanding of place branding as a concept. A key finding is that different concepts point to different development goals for cities and thus require corresponding tools and strategies, which differ from each other and have important management implications for city policy makers.

Sub-question 2. How do a selection of Chinese cities implement (city) branding strategies and how can they be classified as either city promotion, marketing or branding?

There are a variety of aspects to city branding since city branding has more functions for urban management than simply conveying a good image via a logo, a social media campaign and communication agencies. In practice, each city in China that engages in city branding places a different emphasize on urban governance, and undertakes different activities, including city promotion, city marketing and city branding. City promotion strategies seek to improve a city's image, via an attractive slogan or logo. City government engages in advertising and other promotional activities. City marketing involves the development of local policies to attract target groups, and other policies to react to their behavior, such as visitors, companies and potential city residents. City branding goes one step further and seeks to achieve a variety of urban development goals, including urban transformation, ecological modernization, and sustainability. Based on literature, a progressive relationship between city promotion, city marketing and city branding is proposed. The three concepts represent subsequent stages in a learning process among cities to improve their policies and make themselves more attractive to specific groups with increasingly comprehensive sets of policies. The later stages are assumed to be more capable and effective and preserve the features of the previous stages. Thus, more advanced stages of city branding are expected to propel cities towards urban transformation and development.

In order to explore how Chinese cities implement city branding practices, the abovementioned proposition was investigated and analyzed. City promotion is widely practiced by cities, although they differ in terms of their level of sophistication. Most cities that were researched in a sample of 23 cities (21 cities from the Guangdong province and two Special Administrative Regions (SARs) Hong Kong and Macao) practice some aspects of city marketing, but do not employ the full range of options. The professionalism of the city marketing efforts and its effectiveness is significantly influenced by cities' economic resources, which in turn are influenced by a city's economic conditions. Only a small minority of cities brand themselves successfully, and those are the most economically developed ones.

An analysis of the correlation between the urban development stage and the focus of branding confirmed the improved capabilities of later stages of city branding. Also, bigger and more developed cities display more willingness and a larger capability to actively engage in city branding strategies. Based on their urban governance characteristics, the majority of Chinese cities can currently be placed at the city marketing stage. Cities that rank lower and seem less developed are more likely to engage in city promotion.

Sub-question 3. How do policy instruments complement and strengthen city branding implementation?

A detailed study of city branding implementation of a certain brand (low carbon city) shows that cities employ a variety of policy instruments in different packages to promote low carbon development and reduce carbon emissions. Based upon a classification framework that distinguishes between hierarchy, market, network and information instrument families, the policy instruments in China's 35 low carbon pilot cities were plotted. Hierarchical instruments (regulatory instruments and state intervention) are employed most often. Although hierarchy-based policy instruments seem the most powerful and effective, their most effective application takes place in combination with other types of policy instruments. Mega cities adopt a greater variety of policy instruments and show greater efforts in terms of government policies that seek to construct low carbon cities. Mega cities also

employ more market-oriented instruments (e.g. government subsidies and tax incentives) to encourage sustainable behavior and promote the development of sustainable industries. Hierarchical policy tools combined with market policy tools are the generally adopted pattern in China's low carbon governance, which also conforms to the dominant management mode of Chinese cities. Network instruments seem to lack as insufficient government-enterprise interactions, limited participation from private sectors and environmental NGOs are still noticeable in current low carbon city policy packages. Compared to Western countries, combinations of hierarchical and network policy instruments are still underdeveloped in Chinese cities. Market-based instruments and network-based instruments barely seem to co-exist in these configurations, because they work at cross-purposes. To a certain extent the application of market-based instruments restricts the functioning of network-based instruments since economic policy tools emphasize competition, whereas network policy tools focus on cooperation. Information-based policy tools are favored over network policy tools in low carbon city construction since they are cheap and readily available.

Sub-question 4. How do medium-sized Chinese cities engage stakeholders in city branding strategies to trigger industrial transformation?

City branding is a process seeks the involvement of different stakeholders. Broad stakeholder involvement influences and promotes city branding implementation and reduces the barriers for industrial transformation. Based upon an analytical framework to analyze stakeholder interactions in city branding processes, a medium-sized city in China was investigated. Chinese medium cities trigger industrial transformation by adopting ambitious economic city brands for which they lack the financial resources. To realize sustainable transformation depends on local efforts. Chinese local public authorities and more specifically key departments, politicians and public enterprises are treated as the core stakeholders in branding practices, while private players are not. City branding in 'medium-sized cities' can be characterized as a politically sophisticated process, especially during the decision-making phase. However, key public sector players tend to withdraw

themselves when implementation begins, leaving previously uninvolved private (and public) players to implement the brands, resulting in the weak participation of societal actors, especially the private sector. Compared to the mega cities in China, medium-sized cities encounter numerous challenges in branding implementation, including insufficient linkage of branding with other policy instruments and a weak presence of private enterprises which complicates sustainable industrial transformation. The principle of broad stakeholder involvement that has earlier been identified in Western countries as being required for effective implementation of city brands also seems to apply in China.

The contribution of thus dissertation lies in the knowledge that is obtained on the implementation of city branding in Chinese cities. Many cities fail to live up to their ambitious plans. Using qualitative and quantitative methods, this research shows that different branding concepts can be related to different urban governance strategies and can be used to achieve different urban development goals. Compared to city promotion and city marketing, city branding is more comprehensive and requires much more efforts of city governments. Policy makers can adjust branding strategies to match their cities' characteristics and urban development visions. A variety of policy instruments can be developed and applied in city branding. Large cities are more willing and capable to implement city branding policies on their own, involving public and private stakeholders more easily via market-based instruments and thus make steps towards urban transformation. In contrast, smaller cities face many more challenges in city branding, especially with regard to their implementation.

6.2 Research Limitations

This PhD project sets out to examine city branding implementation in Chinese cities to achieve urban transformation. Based on research that was conducted for this dissertation, a distinction between various city branding concepts can be made, which increases insight into how Chinese city governments apply city branding strategies and interpret the variety of policy instrument combinations and stakeholder involvement.

Despite these findings, two major limitations of this research can be identified. Due to limited time and availability of data, most of the research in this PhD was necessarily based on desktop research of secondary data and text analysis. There is an inescapable selective bias in studies based on secondary data collection process (Bevan et al., 2013). More data on policy instruments and their effects would ideally have been used, but this was not (publicly) available. Consequently, it turned out to be very difficult to assess the effectiveness of city branding policies of Chinese cities in more detail. Furthermore, there is the issue of the (case study) samples being used in this research. Chinese cities show large differences on a large number of dimensions, such as regions, urban size and economic level. Different strategies seem to be used in different regions and may have different effects.

In addition, this PhD research only focused on a limited number Chinese cities within a highly specific political and institutional context. The findings from this research are therefore difficult if not impossible to generalize across national boundaries.

6.3 Future Research

Based upon the major limitations that were identified, the following recommendations for future research can be identified:

First of all, more research about city branding implementation in Chinese cities could improve our understanding of city branding implementation and its role and relative effectiveness and contribution to urban transformation. Not only the amount of cases could be increased, but the research could also be aimed at increasing the amount of primary data available on city branding implementation. In-depth studies could focus more on qualitative research methods (observations, interviews, etc) to obtain more detailed information and gain more insights into policy implementation and the relative effectiveness of policies and city branding strategies. A second focus of future research could be identified in city branding efforts of cities in other countries. This research would be relevant and valuable to increase our understanding

of the relation between city branding and urban transformation and allow for international comparative studies into this phenomenon.

The issue of city branding implementation and urban transformation can also be explored from other research and analytical perspectives to increase to our understanding of these processes in crucial aspects.

One could contribute to the longstanding debate on the value of city branding. There are many strategies and policies that local governments can employ to implement city branding, such as taxes or subsidies, the construction of new or improved infrastructures, large projects, mega-events, free trade zones, promotional campaigns or the construction of new town areas, etc. This research showed how different city branding strategies (promotion, marketing and branding) relate to different urban development goals and sought for evidence about the relative effectiveness of policy packages. City promotion aims to improve a city's image and attract visitors and it needs information instruments to achieve this. City marketing seeks to satisfy different target groups (e.g. visitors, investors, etc.) and employs economic policy instruments, such as taxes and subsidies for small and medium-sized enterprises, and residents. City branding seeks to involve stakeholders to realize urban transformation. Network-based instruments could be adopted in city branding practices but are seldom employed.

Another research angle that might be explored in-depth to enrich this study's empirical findings is a focus on flagship projects (e.g. mega infrastructure) and the hosting of mega events (the Olympic Games and international exhibitions). This perspective could be especially important since this research identified the highly politicized nature of the development of city branding policies. According to the research on Jingmen's city branding in Chapter 5, political factors have an important impact on project development and implementation. An in-depth understanding of long-term political commitment influence the policy continuity in the implementation of large projects. Since flagship projects and the hosting of mega events are considered highly politicized decisions as well, it would be interesting to assess the relation between both processes. What policy goals can be

identified behind these decisions and to what extent and how are these processes and policy goals aligned? Furthermore, what is the relationship between the mobility of politicians in office, branding policies and the planning and implementation of flagship projects?

Mega projects play an significant role in city publicity efforts and thus seek to contribute to urban transformation, but often also serve other goals. For example, the Hong Kong-Zhuhai-Macao Bridge (HZMB) has a very important function to contribute to the national image and drives economic development of the surrounding areas. Recently, High Speed Rail New Towns are also developed by many local governments to attract new residents, to promote the local economy and construct a city's new image. Similarly, the city of Jingmen's China's Agricultural Valley project is an important attempt to solve the problems of agriculture, rural areas, farmers and realize urban transformation. Future studies can explore how (local) governments decide on and use mega projects to implement city branding, how these projects are realized, what goals are identified and to what extent these projects contribute to urban transformation. The implementation of such large projects requires resources, support and participation from multiple stakeholders. Thus, a co-production perspective could provide further insights into how different actors (policy makers, NGOs, companies, residents) co-produce and participate in mega project implementation.

One final focus of future research could be found in Chinese smaller cities. This research uncovered how the issues and problems faced by 'average' Chinese cities differs dramatically from those of their larger and more well-known and often-studied brethren. In China, 288 prefecture-level cities (like Jingmen) are the medium- and small-sized cities from a grand total of 337 listed cities in 2020 (YICAI, 2020). These cities cover more land and house more residents than those of the more well-known coastal cities. They represent a different perspective on China's urban development. These cities are facing various problems and challenges in their urban development and transformation, which are hitherto under researched and additional research could provide more knowledge about the circumstances they find themselves. What measures are specifically effective to enable small cities to achieve

substantive urban transformation? Which combinations of policy instruments perform well in city branding implementation and urban transformation? How can policy instruments be applied successfully and how could they be combined with other policies to achieve other goals, such as welfare or economic development, as well? And how can different stakeholders be involved into transformation? Research and in-depth empirical studies of city branding in small cities is required and this topic could even be explored outside China and extended across the world in developing countries.

Summary

Chinese cities have experienced rapid economic development and urban population expansion in the last four decades. In 2019, the urbanization rate of China has reached 60.6% (NBoS, 2019a). That number is predicted to rise to 70.12% by 2030 (Sun et al., 2017). The quality of life of many people who live in cities has improved significantly. Meanwhile, a variety of social and environmental problems is associated with urbanization, such as ecological damage and air pollution. In 2018, China emitted 11.3 Gt CO_2, accounting for 29.7 % of global emissions (Crippa et al., 2019). To respond to the disastrous environmental problems and at the same time maintain high economic growth, Chinese central government has proposed some sustainable development visions, such as the "Scientific Outlook on Development", the "Ecological Civilization" and "Beautiful China". Under the influence of these policies, many local governments are also exploring new pathways to generate a sustainable urban transformation. They introduced pilot programs to respond to the national policies and construct a sustainable image for their cities, such as eco city, low carbon city and sponge city. Some attractive city labels also frequently appear in the local official government websites, the websites of local tourism agencies and various urban plans, such as 'Liveable and Romantic Zhuhai', and 'Innovative Shenzhen'. Local policymakers apply city branding strategies to attract tourists, private investments, a talented workforce and to enable cities to experience an industrial transformation. However, too little information is available about the actual implementation efforts and consequences of city branding policies. Consequently, to what extent and how city branding contributes to China's urban transformation is currently unknown.

The main research question of this PhD project is "How do Chinese cities implement city branding strategies to achieve urban transformation?" Four sub-questions are addressed for in-depth exploration to improve our understanding of city branding implementation in Chinese cities.

(1) How do we distinguish and understand the various concepts in use in place branding research?

(2) How do a selection of Chinese cities implement (city) branding strategies and how can they be classified as either city promotion, marketing or branding?
(3) How do policy instruments complement and strengthen city branding implementation?
(4) How do medium-sized Chinese cities engage stakeholders in city branding strategies to trigger industrial transformation?

This PhD project aims to study city branding as a governance strategy to respond to urban transformation based on theoretical research and empirical analysis.

Theoretical Research

Chapter 2 distinguished the concepts in use in the place branding literature and explored the evolution of research in place branding literature. Twelve overlapping and frequently used concepts were identified. These concepts can be expressed as a combination of location types (i.e. urban, city, destination, place) and broadcasting activities (promotion, marketing, branding). The concepts related to different academic fields and were coupled to different governance strategies. Apart from the categorization of the various concepts, the place branding research could also be mapped in a chronological order. Literature analysis revealed an evolution and development in use of concepts from promotion via marketing to branding. The overview shows what core concepts emerged in the field of place branding in what period, which literature it came from, the discipline it originated from and what research topics in this domain received the attention of scholars. The overview contributes to a better understanding of place branding research, which provides the theoretical basis for exploring the implementation of city branding.

Empirical Research

In Chapter 3, city branding concepts were distinguished and identified with different urban governance strategies. Based upon the findings, a progressive relationship between city promotion, city marketing and city branding is

proposed. The later stage provides more functions for urban governance and is more helpful to urban transformation. The city branding strategies and the subsequent policies of 23 Chinese cities (21 from the Guangdong province and two the Special Administrative Regions Hong Kong and Macao) were identified and compared. Based on the sample, it could be concluded that city promotion is widely implemented by cities, although there are large differences in terms of the level of sophistication of the applied strategies. The maturity and professionalism in the way city marketing is practiced seems to be significantly influenced by the urban economic conditions cities are facing. Only a minority of cities are actively engaged in city branding. Those that are the most economically developed, including Hong Kong, Shenzhen and Guangzhou. Apart from evidence of this relation, significant correlations between the city branding focus and the urban development stage were identified, providing evidence that highly developed cities are more willing and capable to adopt city branding strategies and experience urban transformation. Less developed cities are more likely to engage in city promotion.

It is impossible to test the policy instruments that are applied in all brands. Chapter 4 examined the application of policy instruments in a specific city brand, the low carbon city. The low carbon city brand is closely related to sustainable development and could be researched as the effects of low carbon city policies could relatively easy be operationalized and measured based on empirical data. Low carbon instrument applications in 35 Chinese low carbon pilot cities were collected and compared to gain insight into how different low carbon instrument configurations affect carbon output. Regarding policy instrument application, it could be concluded that hierarchy-based instruments are widely adopted by local governments. These instruments are combined with three other types of instruments. Market-based policy tools are favored by mega Chinese cities. However, market-based and network-based instruments complement hierarchical ones but do not suffice in themselves. The network governance and participation from other organizations is still comparatively underdeveloped in the policies of China's cities which brand themselves as a low carbon city. Information-based instruments play a complementary role in city branding policy packages.

Chapter 5 investigated city branding creation and implementation in two different city branding projects in a medium-sized Chinese city from the perspective of stakeholder involvement. The evidence shows that city branding in China is clearly embedded within a multi-level governance context. Different stakeholders participate in different city branding processes to a different extent. Chinese local public authorities and more specifically key politicians, departments, and public enterprises are core stakeholders in the branding creation process. However, implementation of the city brand is generally weak because key private sector stakeholders are not involved during the brand creation and implementation phases. Furthermore medium- or small-sized Chinese cities use highly ambitious economic city brands in attempts to realize industrial transformation. However, compared to mega cities, industrial transformation becomes very difficult for these cities due to their weak industrial structure, limited policy support from higher levels of government and insufficient private participation. The research findings indicate that broad stakeholder involvement in city branding processes are also necessary in medium-sized Chinese cities.

This dissertation connects knowledge of city branding implementation with information about urban transformation of Chinese cities. In four different research projects, different research perspectives and methods were used to increase our knowledge of the relation between both factors. Different branding concepts were shown to have different functions and meanings for urban development. Policy makers could increase the effectiveness of their policies by aligning the branding strategies with their urban development goals.

Many cities claim they apply city branding in their urban development plans. However, in practice, most Chinese cities do not brand themselves very successfully. The size of cities plays an important role in the level of success that cities can aspire to. Mega cities have more resources and seem to be more capable to implement city branding. Small cities encounter more challenges in efforts to engage in city branding and realizing an urban transformation.

The findings show that city branding needs the support and participation from the whole society.

Research limitations

Two major limitations of this research were the extensive use of secondary data and text analysis and the exclusive focus on implementation efforts by Chinese cities.

More data on policy instruments and their effects would ideally have been used, but this was not (publicly) available. Consequently, it turned out to be very difficult to assess the effectiveness of city branding policies of Chinese cities in more detail. Another issue was the use of few cases. Chinese cities show large differences on a large number of dimensions, such as regions, urban size and economic level and more cases could be studied to investigate their effects on city branding implementation.

Second, this study only focused on city branding implementation in Chinese cities. However, Chinese cities are set in a specific political and institutional system which need to be taken into account when interpreting and reflecting on the findings.

Future study

Based on the limitations some ideas for future study can be identified. More research about city branding implementation in Chinese cities could improve our understanding of city branding implementation and its role and relative effectiveness and contribution to urban transformation. Not only the amount of cases could be increased, but the research could also be aimed at increasing the amount of primary data available on city branding implementation. Furthermore, future studies could investigate and compare city branding implementation in different countries, in particular rapidly developing countries with different types of cities.

More research perspectives also can be explored. Firstly, since city promotion, city marketing and city branding have different development goals to cities, a more detailed understanding of what specific policy instruments could be

utilized to achieve different urban development goals is another potential research approach. An improved understanding of city branding implementation could be realized by the more detailed study of the relation between city branding strategies and the policy instruments used by city governments.

Flagship projects and mega events, such as the Olympic, international exhibitions, landmarks can be a way for governments to implement city branding strategy and experience urban transformation. However, often these projects have multiple goals. What policy goals can be identified behind these decisions and to what extent and how are these processes and policy goals aligned? Furthermore, what is the relationship between the mobility of politicians in office, branding policies and the planning and implementation of flagship projects?

Finally, future research could be aimed at small cities' city branding and urban transformation. What measures and policy packages are specifically effective to enable small cities to achieve substantive urban transformation? How can different actors be involved to promote their transformation?

Samenvatting

Chinese steden hebben de afgelopen vier decennia een snelle economische ontwikkeling doorgemaakt en de stadsbevolking is in deze periode snel gegroeid. In 2019 bedroeg de urbanisatiegraad in China 60,6% (NBoS, 2019a). Naar verwachting zal dit percentage nog snel stijgen tot 70,12% in 2030 (Sun et al., 2017). De kwaliteit van leven van de stadsbewoners, is in dezelfde periode aanzienlijk verbeterd. Maar is ook een schaduwzijde. Een verscheidenheid aan maatschappelijke en milieuproblemen wordt geassocieerd met verstedelijking, zoals luchtverontreiniging. China stootte in 2018 11,3 Gt CO_2 uit,; 29,7% van de wereldwijde uitstoot (Crippa et al., 2019). In pogingen om rampzalige milieuproblemen te reduceren en tegelijkertijd de hoge economische groei die bijdraagt aan groeiende welvaart te handhaven, heeft de Chinese centrale overheid enkele visies op duurzame ontwikkeling opgesteld, zoals "Wetenschappelijke vooruitzichten op ontwikkeling", "Ecologische beschaving" en "Mooi China". Veel lokale overheden onderzoeken in navolging van deze visies nieuwe manieren om stedelijke gebieden duurzaam te transformeren. Ze introduceren beleidsexperimenten om in te spelen op het nationale beleid en om een duurzaam imago voor hun steden op te bouwen. Beleidstermen die daarbij veel gehanteerd worden zijn: ecostad, de koolstofarme stad en sponsstad. Daarnaast gebruiken steden aantrekkelijke labels in communicatie richting bewoners en toeristen in en op de websites. Deze termen zijn ook terug te vinden in stedenbouwkundige plannen, zoals 'Leefbaar en romantisch Zhuhai', en 'Innovatief Shenzhen'. Kortom, lokale beleidsmakers gebruiken volop city branding-strategieën om toeristen, particuliere investeerders en de beroepsbevolking aan te trekken en in het bijzonder de industrie in en rond de steden te verduurzamen. Er is echter te weinig informatie beschikbaar over de wijze waarop de ambitieuze beleidsplannen in China's steden in de praktijk worden geïmplementeerd en wat de gevolgen van city branding-beleid zijn. Ook is nog niet bekend in hoeverre city branding nu eigenlijk bijdraagt aan stedelijke verduurzaming in China.

De centrale onderzoeksvraag van dit PhD-project luidt: "Hoe implementeren Chinese steden city branding-strategieën om stedelijke transformatie te bereiken?" Vier subvragen zijn geformuleerd.

(1) Hoe kunnen de verschillende concepten die worden gebruikt in city branding literatuur worden onderscheiden en begrepen?
(2) Hoe implementeren Chinese steden (city) branding-strategieën en hoe kunnen ze worden geclassificeerd?
(3) Welke beleidsinstrumenten worden ingezet bij de implementatie van city branding?
(4) Hoe betrekken middelgrote Chinese steden belanghebbenden bij city branding-strategieën om industriële transformatie te realiseren?

Dit PhD onderzoek heeft tot doel om te onderzoeken op welke wijze lokale overheden city branding strategieën toepassen in het kader van duurzame stedelijke ontwikkeling – in het bijzonder industriële transformatie.

Theoretisch onderzoek

In hoofdstuk 2 word op basis van literatuuronderzoek een inventarisatie gemaakt van de meest gebruikte concepten in literatuur over city branding. In de loop der tijd is onderzoek naar branding door steden geëvolueerd van onderzoek naar de wijze waarop steden adverteren naar marketinggericht onderzoek en recent naar onderzoek over branding. In totaal worden twaalf gedeeltelijk overlappende concepten onderscheiden die het meest worden gebruikt op het gebied van branding. De concepten kunnen worden geclassificeerd op basis van twee dimensies (locatietype en type activiteit: (promotie, marketing, branding). Het overzicht en de bijbehorende inzichten geven inzicht in de wijze waarop het branding concept zich in de loop der tijd in verschillende disciplines heeft ontwikkeld en deze inzichten komen van pas bij de nadere bestudering van de implementatie van city branding in Chinese steden.

Empirisch onderzoek

Nadat in hoofdstuk 2 de verschillende concepten rond city branding werden onderscheiden, worden in hoofdstuk 3 de concepten van city branding

gebruikt om te identificeren welke strategieën die steden hanteren. De manier waarop de verschillende city branding-strategieën (promotie, marketing, branding) worden toegepast zijn in kaart gebracht en met elkaar vergeleken. Hiertoe is informatie over branding strategieën van 23 Chinese steden - 21 uit de provincie Guangdong en twee speciale administratieve regio's (Hong Kong en Macao) - verzameld. Als basisaanname wordt uitgegaan van een progressieve relatie tussen stadspromotie, citymarketing en city branding. Iedere volgende fase heeft meer functies voor stedelijk bestuur en is nuttiger voor stedelijke transformatie. In de praktijk wordt vooral stadspromotie op grote schaal toegepast door steden, hoewel onderling grote verschillen bestaan in termen van verfijndheid van de gehanteerde strategie. De volwassenheid en professionaliteit waarmee citymarketing en daaruit voortvloeiend beleid wordt toegepast, wordt beïnvloedt door de economische conditie van de stad. Een kleine minderheid van de onderzochte steden lijkt succesvol te zijn in haar branding. Dat zijn de grootste en economisch meest ontwikkelde steden Hong Kong, Shenzhen en Guangzhou. Minder ontwikkelde steden maken gebruik van stadspromotie; er is sprake van een significante correlatie tussen de focus op city branding en de ontwikkelingsfase van de stad. Daarom kan geconcludeerd worden dat hoogontwikkelde steden meer bereid zijn en meer mogelijkheden hebben om city branding-strategieën toe te passen en beter in staat zijn om stedelijke transformatie te realiseren.

Hoofdstuk 4 onderzocht de toepassing van beleidsinstrumenten bij gebruik van een specifiek label: een koolstofarme stad. Het label werd gekozen omdat koolstofarme steden nauw verbonden zijn met duurzame ontwikkeling en effecten dus relatief eenvoudig gemeten kunnen worden. De beleidsplannen van 35 Chinese steden werd onderzocht en vergeleken met CO2 uitstoot om in kaart te brengen hoe verschillende koolstofarme instrumentconfiguraties bijdragen aan de realisatie koolstofarme stad. Hiërarchie gebaseerde instrumenten worden door lokale overheden universeel en op grote schaal ingezet in Chinese steden. Ze worden gecombineerd met de drie andere soorten instrumenten. Markt gebaseerde en netwerk gebaseerde instrumenten vormen een aanvulling op hiërarchische instrumenten, maar volstaan op zichzelf niet en informatie gebaseerde instrumenten spelen een

zuiver complementaire rol in de onderzochte beleidspakketten. Alleen in Chinese megasteden lijken markt gebaseerde beleidsinstrumenten relatief succesvol te worden toegepast om een koolstofarme stedelijke ontwikkeling te realiseren. Netwerken en private organisaties spelen bij de implementatie van beleid gericht op koolstofarme stedelijke ontwikkeling echter nauwelijks een rol. Op dit terrein is het beleid in Chinese steden nog steeds relatief onderontwikkeld, terwijl het onderzoek laat zien dat ook in de Chinese beleidscontext deze beleidsmaatregelen noodzakelijk zijn voor een succesvolle beleidsimplementatie.

Hoofdstuk 5 onderzocht de ontwerp- en implementatiefasen van city branding in twee verschillende city branding-projecten in een middelgrote Chinese stad vanuit het perspectief van stakeholderbetrokkenheid. Uit het onderzoek bleek dat dat city branding in China duidelijk ingebed is in een sterk gepolitiseerde en gelaagde bestuurscontext. Verschillende belanghebbenden nemen in verschillende mate deel aan city branding-processen. Chinese lokale overheden en meer specifiek belangrijke lokale politici, departementen en overheidsbedrijven zijn de belangrijkste actoren die betrokken zijn bij het creëren van 'stedelijke brands'. Belanghebbenden uit de particuliere sector worden echter niet of nauwelijks betrokken tijdens de ontwikkelfase van city brands. Bovendien blijken belangrijke stakeholders zoals lokale politici zich tijdens de implementatiefase echter weer terug trekken zodat deze fase als. zwak kan worden betiteld.

Bovendien blijkt uit het onderzoek dat veel kleine en middelgrote Chinese steden ambitieuze economische city brands ontwikkelen om de ambities in het kader van industriële transformatie te realiseren. Kleine steden staan voor meer uitdagingen in city branding en hun opgave tot stedelijke transformatie. In vergelijking met megasteden is industriële transformatie voor dit soort steden lastiger vanwege de sterk verouderde industriële infrastructuur, de relatief beperkte beschikbaarheid van middelen, het ontbreken van steun van hogere overheden en gebrek aan private participatie. Op basis van deze observaties kan worden geconcludeerd dat brede betrokkenheid van belanghebbenden bij de implementatie van city branding-processen ook belangrijk lijkt in Chinese steden.

De bijdrage van dit proefschrift is gericht op het vergroten van de kennis over de relatie tussen de implementatie van city branding en stedelijke transformatie van Chinese steden. Veel Chinese steden beweren dat ze city branding toepassen en een duurzame toekomst realiseren in hun stedenbouwkundige plannen. In de meeste gevallen is de daadwerkelijke impact van city branding plannen op de realisatie van duurzaamheidsdoelen minder groot. De meeste Chinese steden ondervinden problemen in het realiseren van successen in termen van duurzaamheidsdoelen. Het is duidelijk dat megasteden meer mogelijkheden hebben om city branding te implementeren en daarmee lijkt de kans op daadwerkelijke duurzame transformatie in grotere steden significant groter dan in kleinere steden. Een succesvolle implementatie van city branding en stedelijke transformatie vereist een effectieve toepassing en innovatief gebruik van combinaties van beleidsinstrumenten waarbij niet alleen lokale overheden maar ook private partijen betrokken zijn. Uit het onderzoek blijkt dat city branding draagvlak en participatie in de hele samenleving vereist. Voor een succesvol beleid is meer nodig dan alleen een aantrekkelijke slogan en een uitgewerkte city branding strategie. City branding kan worden gebruikt om stedelijke transformatie op gang te brengen. Stedelijke transformatie kan echter alleen plaatsvinden als de city branding effectief wordt geïmplementeerd. Samen vormen het onderscheid tussen city branding-concepten, toepassing van city branding-strategieën, toepassing en configuratie van beleidsinstrumenten, betrokkenheid van belanghebbenden een perspectief dat ons in staat stelt de implementatie van city branding in China beter te begrijpen.

Onderzoeksbeperkingen en vervolgonderzoek

Deze studie onderzoekt de relatie tussen de implementatie van city branding en stedelijke transformatie vanuit vier verschillende perspectieven.

Een van de beperkingen van dit onderzoek vormde de problemen rondom het verzamelen van kwalitatieve en kwantitatieve gegevens. Het onderzoek heeft zich moeten beperken doordat weinig primaire data over implementatie van beleid in Chinese steden aanwezig is.

Een tweede belangrijke limitatie vormt de focus van deze studie op de implementatie van city branding in Chinese steden. Chinese steden maken deel uit van een specifiek politiek-institutioneel systeem.

Op basis van bovengenoemde beperkingen kunnen enkele ideeën voor toekomstig onderzoek worden geformuleerd. Onderzocht kan worden hoe lokale overheden mega projecten zoals het organiseren van de Olympische spelen of internationale tentoonstellingen. inzetten voor city branding-strategieën en welke rol ze spelen in stedelijke tranformatie. Dit soort projecten hebben tot doel om naast de transformatie ook andere doelen zoals het imago van de stad te versterken (promotion) en economische stedelijke ontwikkeling te bevorderen (marketing). Welke rollen spelen verschillende actoren (overheid, ngo's, bedrijven en bewoners) en op welke wijze coproduceren en participeren zij in de uitvoering van megaprojecten? Toekomstig onderzoek zou de implementatie van city branding kunnen onderzoeken van steden uit verschillende landen en onderzoek kunnen doen naar verschillende niveaus van stedelijke ontwikkeling.

Een laatste aanbeveling voor vervolgonderzoek ligt in onderzoek naar maatregelen voor stedelijke transformatie in kleine steden. Hoe kunnen verschillende instrumenten worden toegepast en hoe kunnen verschillende actoren worden betrokken om economische transformatie te bevorderen? In hoeverre kunnen lessen en beleid van geavanceerde steden over de implementatie van city branding worden overgedragen naar middelgrote en kleine steden?

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Publication List

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2. **Ma, W.**, de Jong, M., de Bruijne, M., & Schraven, D. (2020). Economic city branding and stakeholder involvement in China: Attempt of a medium-sized city to trigger industrial transformation. *Cities*, *105*, 102754.

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Curriculum Vitae

Wenting Ma was born on 1 July 1988 in Qiqihar, Heilongjiang Province, China. Before starting the PhD, she completed the master education in Public Administration at Harbin Institute of Technology in 2014, and prior to that, a BA in Human Resource Management at Harbin Normal University.

In October 2017, Wenting became a Ph.D. candidate at the Organization and Governance section in the Faculty of Technology, Policy and Management at Delft University of Technology. Her Ph.D. research focused on city branding implementation and sustainable urban transformation in Chinese cities. This research explores how Chinese cities implement their city branding strategies to achieve sustainable urban transformation. During the research, she participated in a few international conferences and gave presentations. Wenting also published five journal articles in Cities, Journal of Cleaner Production, and Sustainability and Journal of Urban Affairs.

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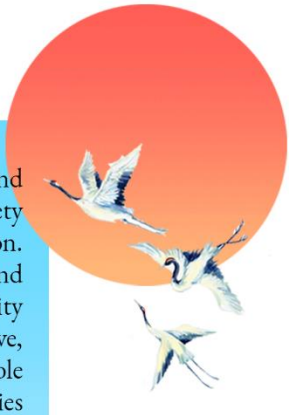
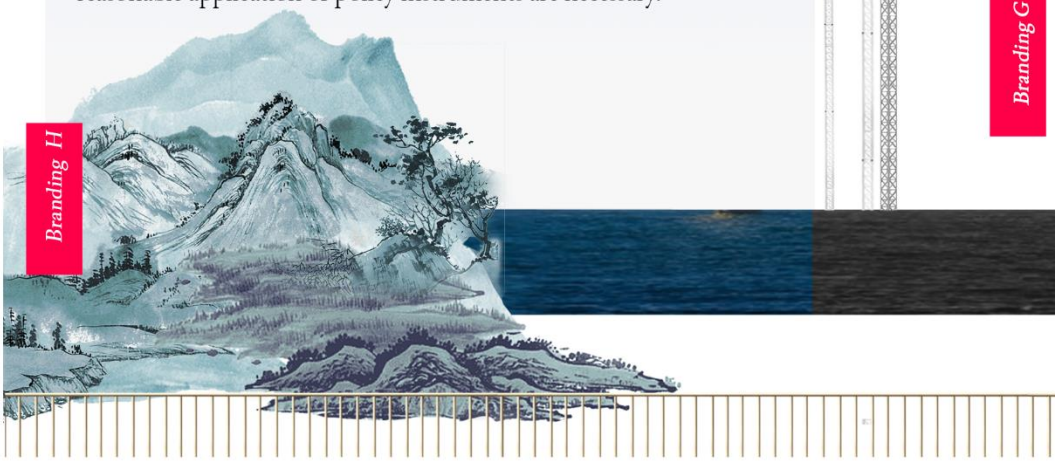


Chinese cities have experienced unprecedented economic growth and urban population expansion in the last four decades. However, a variety of social and environmental problems is associated with urbanization. Cities try to grapple with these challenges but simultaneously find themselves locked in an intense competition with other cities. City branding is viewed as an essential strategy to remain competitive, improve their environmental performance, experience a sustainable urban transformation. However, very little is known about how cities actually implement city branding strategies.

This study distinguishes the concepts in use and explores the evolution of research in place branding literature. A progressive relationship between city promotion, city marketing and city branding is proposed and empirically examined. Subsequently, a specific city brand is explored to study how different policy instruments are adopted and configured to realize urban transformation goals. Finally, a detailed investigation in a medium-sized Chinese city shows how stakeholders interact with city policymakers to create and implement city brands.

The findings show that cities can apply promotion, marketing or branding strategies to achieve different urban development goals. The study concludes that to successfully implement city branding, extensive stakeholder participation, continuous political commitment and reasonable application of policy instruments are necessary.

Branding G



Branding H