REGIONAL BARRIERS TO CENTRAL CONTROL:
MICROREGIONALISM AND INFORMAL URBAN NETWORKS IN CHINA

地方对中央集权的障碍

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“Gratitude is one of the least articulate of the emotions, especially when it is deep”

-Felix Frankfurter

Dedicated to my family

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Given the pressures attendant upon the reform and opening in a globalizing 21st century, it is of vital strategic importance for China to eliminate local market fragmentation and establish an integrated national market to accelerate its economic development, the better to participate in international competition.

Yin Wen-quan, Academy of Macroeconomic Research  
State Development Planning Commission, People’s Republic of China

-Special Report, China & World Economy, Number 6, 2001

上有政策下有对策 (shang you zhengce xia you duice)

“Whenever there are policies from the top, the bottom produces counterstrategies.”  
-Chinese saying
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1.0 INTRODUCTION

As the economic disparity between coastal and interior regions widens at an increasing rate, China’s central government has initiated a Western development plan aimed at alleviating increasing economic and social disparity. In promoting coastal growth during the 1980’s and 1990’s, the central government believed that such growth would slowly diffuse westward.\(^1\) The logic was that the coastal region would develop first and transfer technology and knowledge inland while simultaneously integrating the Chinese economy with other East Asian economies. Once the coastal economy became advanced and capital intensive, the need for resources, labor, and local market demand was predicted to be complemented by the western regions. There is an earnest belief that development is contagious, and once several booming economic centers were supported, the rest of the nation would benefit by proxy.

Yet there is a different reality that undermines this belief. The Chinese economy is mired by local protectionism while the development trajectory of several coastal cities is incomparably greater than its western counterparts. Seven years after Beijing’s promulgation of the “Go West” policies, vast government investment has not translated into significant equalization gains. There has been no dearth of central effort to alleviate inter-regional economic disparity, with widening regional disparity feared to hamper the creation of a national common market and threaten the

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\(^1\) China’s western region includes 10 provinces, municipalities and autonomous regions: Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang, Sichuan, Chongqing, Yunnan, Guizhou, and Xizang. The region covers 5.38 million square kilometers, 56% of the country land area, and has a population of 287 million people, 22.99% of the national total. From Yeung and Shen’s Developing China’s West. Hong Kong: Chinese University Press (2004).
government’s most valued mandate of social stability. Clearly there is a flaw in the logic of western development.

Internationally, China’s economic integration with East Asia is a relatively nascent occurrence since the imperial era. China’s admission into the World Trade Organization (WTO) stamps its official entry into a wider global market. It is widely recognized by policymakers in Beijing that before China can become a dominant force in the international economy it must first consolidate a domestic market that is fragmented by local protectionism. Market fragmentation refers to the partitions erected by local governments that use administrative controls to block the inflow of resources from other areas and limit the outflow of local resources to outside regions.\(^2\) Since membership rules for the WTO stipulate that the central government is responsible for any trade violations of local governments, Beijing is legally accountable for the difficulties foreign companies may have accessing the economy with the possibility of incurring sanctions. Domestically, local protectionism often leads to trade wars that reduce competitiveness of Chinese enterprises in general.\(^3\) Local protectionism, an unwanted offspring of economic reforms, is bolstered by the formation of regional urban networks that threaten to undermine the central government’s control over macroeconomic policy. Contrary to official regional denominations, however, I argue against conceptualizing the region as a

\(^{2}\) This is the definition used by the State Development Planning Commission in Yin Wen-quan, “Causes for China’s Local Market Fragmentation,” *China & World Economy*, 6 (2001).

\(^{3}\) One example in the automobile industry is in 2000, Shanghai imposed an 80,000 yuan license fee for Hubei Province-originated Fukang autos (the auto fee for Shanghai cars were only 20,000 yuan). In return, Hubei Province ordered all institutes and departments that received national funds to opt to buy the local Fukang autos or make a 70,000 yuan extra “contribution” to the “Enterprise Poverty Relief Fund.” *Regional Protectionism Weakening State Capacity*. China.org.cn March, 2001.
collective body of provinces with mutual interests and instead as fragmented networks of capital production and accumulation with amphibious boundaries.⁴

The question that emerges is why, despite serious central government attempts at national integration, do we see a trend of informal micro-regionalism occurring in China? I propose that this failure is due to the rise of inter-provincial and transnational urban networks along the coastal and border areas of China. The linking of urban areas across East Asia and China is a self-serving process that keeps wealth concentrated, compartmentalized, and contained within networks. The concept of urban networks have long been present in sociology and urbanization studies, but have yet to be translated into the realm of political science. These urban networks are serious threats to central control due to their lack of regulation by the central government. I will show that because their growth is largely the result of informal domestic and global forces, there is a pressing need to reconfigure our conceptualization of spatiality and governance in China. There are three forms of regionalism to emerge from the reform era: central projects, inter-provincial cooperation, and informal urban networks. The one the center has least control of is the one that is most integrated outside of its authority: informal urban networks. This thesis will show that these informal urban networks present a formidable obstacle blocking Beijing’s attempt to create a common market due to its nature as a bottom-up process of regionalization, central government cessation of economic control, and

⁴ “Amphibious” in this regard is borrowed from XL Ding’s coining of “institutional amphibiousness” in state-society relations. The idea that the boundary separating two entities can have ambiguous demarcations as the institutions within each are intertwined and mutually manipulative. In my definition regional boundaries are amphibious due to their indeterminate adherence to both the limits of political jurisdiction and to the flows of capital between cities. See X.L. Ding’s “Institutional Amphibiousness and the Transition from Communism: The Case of China.” British Journal of Political Science 24 (1994) 293-318.
the network’s deep international linkages and foreign support. Informal urban networks have come into being by central policy but have become part of provincial coping strategies to advance local economic interests ahead of central policy. Broadly speaking, I am arguing for micro-regions as critical level of analysis due to their potential to integrate or further fragment the national economy.⁵

Organization of the thesis

This thesis is divided into five chapters. The first chapter argues for the rescaling of state spaces and the importance of cities and regions as critical levels of analysis before introducing a theoretical conceptualization for urban networks. The subsequent chapters are devoted to case studies that test and expand my model. Each case has had vastly different histories and factor endowments, yet all exhibit the same trend toward network formation. Case studies in Guangdong, Yunnan provinces and the Shanghai provincial municipality were selected to augment my framework with a different aspect. The Guangzhou urban network was selected because it demonstrates intra-provincial disparity contained within a province. The following Shanghai urban network highlights domestic inter-provincial linkages, and contrasts with Guangzhou because as a city with provincial status without much territory, it is strongly connected with its neighboring provinces. The Kunming urban network highlights informal transnational network formation and the linking of micro-regions with sub-

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⁵ To clarify some terminology used throughout this paper, there is a difference between the usage of local in “central-local” relations and in “local” governments and localities. Within “central-local” relations, local refers to provinces and provincial governments. In the second case it refers to any substate actor or place below the central level, encompassing provinces, townships, and villages.
regions. Each case study, while different in their aim, yields the same broad finding that development is a spatially biased and concentrated process. The final chapter will extrapolate the significance of the rise of informal urban networks and their implications for governance. I will conclude with several policy recommendations for the central government in their effort to integrate the national economy and alleviate economic disparity.

The purpose of this thesis is to expose a bottom-up micro-regional process. The rise of informal urban networks between cities is made possible by the central government but fueled by non-state actors. As will be discussed later, fiscal decentralization and economic reforms have created the conditions for cities to become key units of analysis in both international and domestic regional processes. Informal urban networks lack an overarching grand strategy from Beijing but instead are the result of an evolution of complementary economic functions between nearby cities combined with supportive local government policies. As I will argue, these urban networks transgress national boundaries by linking across the entire East Asian region and constrain foreign policy behavior with their massive economic influence. Informal networks are, on one hand, beneficial as a source of growth and regional integration, and on the other hand, dangerous because they expand without the control of the central government. Their economic interdependence with foreign economies compromise Beijing’s monopoly on foreign policy-decision making and with Chinese foreign policy being best characterized as pragmatic, informal networks provide endogenous pressure on Beijing’s foreign relations.
1.1 LIMITATIONS OF THE STUDY

The immediate challenge of developing models for China is the country’s immense size, heterogeneous peoples, languages, cultures and variety of factor endowments that make the simplification that accompanies model-building divorce theory from the complex spatial reality. This thesis is not intended to be an exhaustive study of informal urban networks but rather to present a different approach for conceptualizing regionalism in China. Rather than extensively develop a complete model for future research, the use of informal urban networks is intended to provide a framework for understanding the shortcomings of central government economic integration efforts. The primary focus is on why informal urban networks are biased processes and not so much the how.

National and Provincial statistics are largely drawn from various years of the China Statistical Yearbook, with the latest available years at the time of writing being 2003. Due to my personal inadequacies in reading Chinese, the majority of my sources are from Western social scientists with the exception of translated works and government publications. This inherent Western bias in my research has both its disadvantage of prejudiced perspective but also an advantage of carrying a different agenda than Chinese authors who may be predisposed to a foregone conclusion. I am not exonerating Western sources from such dispositions but have found that in much of my study of economic geography there is a conscious attempt to separate politics and economics. There is also a dearth of current research of economic geography in China when it is most relevant. Around the time of Krugman’s Geography and Trade in 1991 that outlined a new economic geography, there was much research done on
China in this field. I believe that this was the result of the enormous spatial reconfiguring that happened during the 1980s economic reforms that led to escalating economic disparities. Also, due to its global importance, there is far more research available on Guangzhou and Shanghai than Yunnan.

My mapping of urban networks is far from complete and I cannot present an adequate quantitative analysis. This is because of an incongruity of research done on each province and because I lack the required economic specialization to produce a convincing case for each urban network. I accept that my designation of the cities in each urban network is open to debate, as can what is a core or peripheral city. That being said, due to the inherent nature of the topic as a multidisciplinary subject, my analysis will not be particularly focused on one area but its strength is the incorporation of many.

1.2 DEFINING THE REGION: COMPETING CONCEPTUALIZATIONS

The definition adopted in this paper of “regionalism” is what Dorothy Solinger broadly defines as, “the phenomenon whereby distinct groups, living in discrete territorial enclaves within larger political communities, exert pressures for recognition of their differences.” This concept of the region in China studies is much different than the official delineation of regions along provincial boundaries. The Regional Analysis Framework (RAF) that was promulgated by

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6 Dorothy Solinger. *Regional Government and Political Integration in Southwest China*, 1949-1954. (Berkeley: University of California Press, 1977). Solinger highlights the role of the southwest China regional government in actually aiding political integration and consolidating Communist power. Solinger notes that regional organs were highly effective in solving provincial economic problems such as the economic dislocation of 1949, and that there is no necessary connection between regional and central power.
Beijing in the Seventh Five Year Plan (1986-1990) has greatly shaped the way policymakers perceive regions. The RAF demarcates China’s provinces into coastal, central, and interior regions and outlines different specialization and development strategies for each region. This grouping was composed to conform to the extents of administrative power held by the provincial governments with the aim of distinguishing which areas were rich and poor. Although abandoned in 1990, this framework can be useful in understanding the rationale behind provincial and central policies during the 1980’s economic reforms. In studying economic reforms during this period, for instance, Dali Yang argues that different provinces from the coastal and interior regions often competed for preferential policies and special treatment from Beijing. The shortcomings of this framework is not only that is has become outdated, but that it is overly simplistic in its division of China. Guangxi, for example, is one of the poorest provinces in China yet was classified as part of a Coastal region along with some of the richest provinces (and provincial-status cities) such as Guangdong and Shanghai.

An important outgrowth of the RAF is the creation of three different types of regional networks: an inter-provincial network, a network of smaller economic zones linking provincial capitals, ports, cities along vital communication and transport lines, and a network of central cities. Of the three regional networks only one is a bottom-up process: the network of central cities.

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9 David Goodman, China’s Regional Development (London: Routledge, 1989) 14-17
By bottom-up process, I mean that the network is initiated and fostered by local agents as opposed to central objectives. The first two were established by the central government in order to either ensure consolidated control over important public goods (such as electricity and energy) between provinces or to attempt to alleviate economic disparities between the coast and the interior.¹⁰ These regional processes foster horizontal linkages that surpass provincial borders; a result intended by the central government in an attempt to improve efficiency by encouraging enterprises and local authorities to cooperate beyond provincial boundaries.¹¹ Regional bodies like the Shanxi Energy Base that links parts of Mongolia, Hebei, and Shanxi therefore have a unified purpose of energy production and are designed to advance national interests. I classify them as top-down and formal regional processes due to their instigation by the central government.

In May 2004, the Development Research Center of the State Council released a report predicting the future of regional development, citing China’s rapidly increasing urbanization rate that is expected to jump from 39.1% in 2002 to 60% by 2020.¹² The Report claims that large-city spheres will become the leading force in economic development, with primary spheres forming at the Yangtze River Delta, Pearl River Delta, Beijing-Tianjin-Tangshan, Shandong Peninsula, Shenyang-Dalian, and Chongqing-Chengdu.¹³ In each this regional model, a central city serves as the

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¹³ Shantong, Jie, Yongzhi (2004) Ibid.
nucleus, while surrounding smaller cities serve as industrial and economic complements. As central cities shift their industrial production to the peripheral secondary cities, the report claims a rational system of division of labor and the optimally efficient allocation of resources will be realized. This city-sphere model is much akin to throwing a stone into a lake and expecting the ripple effect to disperse equally and in all directions. In reality, this model is severely constrained by several factors such as territorial borders, geography, and provincial/local identities. As I will show, the city-sphere argument makes a false assumption that urban development will initiate a contagion effect of economic growth to peripheral areas.

In contrast, the informal urban networks that form micro-regions around key cities are fostered by local governments that have considerable influence in shaping micro-regions. These urban sub-regions interlink due to shared recognition of mutual gains that are locally motivated and not demanded by the central state. An example of the development of an urban network is Guangzhou’s expansion as an economic region. Natural gas exploration in the South China Sea coupled with industrial and technological coordination with nearby cities is intended to relieve pressure on Guangzhou and allow it to further develop tertiary economic enterprises and technology such as intensive light industries. In Guangzhou, for example, we see a devolution of functions to lesser cities while Guangzhou remains the nucleus in the expanding regional process. Guangzhou’s regionalization process, however, is not limited within China’s borders but links with Hong Kong, Macao, and Taiwan as well.

\[\text{Shantong, Jie, Yongzhi (2004) Ibid.}\]
\[\text{Shantong, Jie, Yongzhi (2004) Ibid. 54-59.}\]
\[\text{Yeung, Deng, Cheng (1992) Ibid. 259-261.}\]
Due to the increasing importance of cities as main actors in China’s development strategy as well and rising exposure to global market forces, there is a pressing need to rescale spatiality to deal with conceptual incongruities between domestic internal political demarcation and economic transnationalism. If we divide the vertical governance structure into hierarchical levels of the central party-state, provincial governments, and local governments, regions would be the *de facto* level between Beijing and the provinces that has no corporeal manifestation (Figure 1). To clarify, there is no political institution that represents regional interests within the state apparatus (hence the lack of boundaries on the pyramid). The regionalization process studied in this paper is the rise of urban centers at the bottom level that exerts influence up the pyramid.

![Figure 1: the region within the government hierarchy of control](image-url)

*Figure 1: the region within the government hierarchy of control*
1.3 THE FAILURE OF FORMAL INTEGRATION PROJECTS

One such example of a failed integration project is the Shanghai Economic Region that was designated during the 6th and 7th Five-Year Plans (1981-1990) to promote economic integration between the provinces of Jiangsu, Zhejiang, Anhui, Jiangxi, and Fujian. The State Planning Office ordered the co-operative development of electricity and coal industries. Shanghai even ended up investing billions of Renminbi into developing neighboring provinces’ raw material industries with the promise of supplies in return.\textsuperscript{17} Yet the Shanghai Economic Planning Office was shut down in 1988, just five years after its creation due to the lack of inter-provincial cooperation. This failure of central government regional initiative is largely attributed to the lack of interest of richer provinces in helping to develop their poorer neighbors.\textsuperscript{18}

In 2004, Guangdong Provincial Party Secretary Zhang Dejiang developed a Pan-Pearl River Delta cooperation scheme designed to dismantle trade barriers and build a common market among the provinces and special administrative regions of Fujian, Jiangxi, Hunan, Guangdong, Hainan, Sichuan, Guizhou, Yunnan, the Guangxi Zhang Autonomous Region, Hong Kong, and Macao.\textsuperscript{19} These provinces account for 47 percent of the Chinese economy and over half of its foreign trade. Each province specializes according to this regional framework. For example, Hong Kong is designated as the logistics and financial hub, Macao the gaming and trade services

\textsuperscript{17} Terry Cannon and Le-Yin Zhang. “Inter-region tension and China’s reforms.” in Cook’s \textit{Fragmented Asia: Regional Integration and National Disintegration in Pacific Asia} (Brookfield: Ashgate Publishing Company, 1996) 78-80.
\textsuperscript{18} Ibid.
center, and Guangdong as the manufacturing base. In addition, the rapid development of transportation infrastructure as well as annual economic and trade forums was believed to contribute in breaking down trade barriers.

Although it is too soon to deem this project a failure, it has already come under criticism for failing to address the root of the problem. An editorial attacked the project in the *South China Morning Post* just a year later, claiming that the development of transport links would have been done regardless of a formal government project. It also argued that nothing had been done to solve the root problem of competing provincial interests.\(^{20}\) The vast economic disparity between the involved provinces means that dismantling barriers often means higher costs for poorer provinces. Abolishing tolls, for instance, is much harder for a province that relies on tolls as a key source of revenue but not so much for Guangdong. A year later, rich provinces still refuse to sacrifice more resources for less gain. Without a change in incentives, formal government attempts at regional integration will have trouble succeeding.

In 1999, Beijing embarked on its largest regional project to date: the “Go West” plan to develop the Western regions. According to government studies, through heavy government investment, it is expected that the West will enjoy the benefits of catch-up effects and grow at a faster rate than its Coastal counterparts, which in time will alleviate regional disparity.\(^ {21}\) Government investment runs the gamut from industrial development to ecological protection, with Beijing planning to


invest more than 500 billion yuan (US$60.5 billion) in planting trees and restoring grasslands in its 12 western provinces, autonomous regions and municipalities by 2010.\textsuperscript{22} China has already launched a series of projects attempting to link East and West, including an electricity transmission project, a pipeline for natural gas, highway construction, and the Qinghai-Tibet Railway project. It seems as though such major central projects have already yielded results, with each of the ten provinces, municipalities and autonomous regions in west China -- excluding Guizhou and Tibet -- logging economic expansion rates of more than 12 percent in the first half of 2004.\textsuperscript{23} In terms of a national common market, the central government hopes that the western regions, rich in energy and mineral resources, will form complementary economic ties with the advanced, comparatively capital-intensive coastal region.\textsuperscript{24}

However, in 2004, The \textit{China Daily} reported the frustration at the lack of improvement after five years since the initiation of the “Go West” policies in 1999. Widening regional disparity is feared to hamper the rise of domestic demand and threaten social stability.\textsuperscript{25} Although the west is rich in natural resources, spans almost three-fourths of the nation's territory and is home to one-fourth of its population, its gross domestic product (GDP) only accounts for only 40 percent of that of the booming eastern regions.\textsuperscript{26}

Therefore, we can identify three key reasons why government led economic integration projects have failed. First, when they are intended to integrate rich and

\textsuperscript{23} Ibid.
\textsuperscript{24} Xinhua News Agency (October 15, 2004) http://www.china.org.cn/english/government/109486.htm
\textsuperscript{26} Ibid.
poor provinces, rich provinces lack incentives to cooperate. Second, such initiatives
often are not planned around the optimal market allocation of resources, labor, and
capital, and as such make little sense to local agents. Finally, provincial governments
often cannot coordinate cooperation between local governments; as a direct result
inter-provincial coordination is difficult. There is an underlying erroneous
assumption that because coastal cities need resources and raw materials, they will
forge marketing routes from inland provinces to sustain development, while at the
same time create foreign linkages for overseas capital, foreign technologies, and
management know-how.

1.4 REGIONALISM, SUB-REGIONALISM, AND MICRO-REGIONALISM

The term “regionalism” is meaningless without clear definitions of the actors,
scale, and processes involved. When applied to interstate relations, regionalism can
be viewed as a government response to the wider international system.27 From an
economic perspective, states engage in regionalism in order to protect their global
market share and increase their negotiating influence by forming coalitions with
mutually interested neighbors. In this case, regions can be an effective intermediary
between states and the international economy. Member states of The Association of
South-East Asian Nations (ASEAN), for example, often use the regional organization

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as a platform to negotiate trade issues with larger foreign economies. Unlike European integration, East Asia lacks governing regional institutions but instead relies on informal networks that facilitate interregional transactions and communication.

In opposition to arguments in globalization studies that supranational processes weaken state capability, Katzenstein argues that in East Asia, regional market integration is part of government strategy to stay embedded in markets in the face of a liberalizing world economy. Therefore in the case of East Asia, we can conceive of regionalism as an intermediary platform between global and local economy, with domestic governments having a vested interest in encouraging the economic linkages that bind the region together. Globalization, the process which the International Monetary Fund defines as, “the growing economic interdependence of countries worldwide through increasing volume and variety of cross-border transactions in goods and services, freer international capital flows, and more rapid and widespread diffusion of technology” and regionalization, the process by which proximate countries becoming increasingly interdependent and integrated, are two concurrent phenomenon. The “region” is an amorphous grouping of actors, yet we can firmly cement its position between the level of domestic and global. For the sake of comparison, we can divide regions into macro-regions, sub-regions, and micro-regions. To avoid confusion, because my thesis is on urban networks as a form of

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28 One recent example is the negotiation of bilateral free trade areas between ASEAN, China, and Japan.
31 IMF, World Economic Outlook (May 1997)
micro-regionalism, I distinguish between these three scales of regionalism by the number of cities involved. A micro-region comprising of four or five cities, for example, can therefore be part of a greater sub and macro-region that involves more. Since my unit of analysis is the city, as a natural corollary my configuration of micro-regions is based on cities.

1.5 A HEURISTIC MARKET EXPLANATION

In general, why have formal integration projects supported by the central government failed? I propose a basic market explanation for understanding why such attempts have failed. The good in this case is inter-provincial economic integration, with the central government attempting to sell this good and localities as rational buyers making optimal choices whether or not to “buy” this good. The distinction is not whether or not they agree to the arrangement, but whether they actively support integration. Often such integration projects receive vocal support from localities but stagnate and ultimately fail due to a lack of implementation. This chapter discusses the formation of this regionalist market where the central government and localities negotiate on the price of economic integration. A market analysis is appropriate because the ontological significance of markets is not the actors of buyer and seller but rather the incentives that govern their interaction. By understanding the choices localities make we can begin to understand why some have turned to informal urban networks and micro-regionalism as the preferred strategy for economic growth over inter-provincial cooperation and horizontal integration.
The Market

Informal urban networks are the offspring of economic reforms, and the market mechanism that allows for local choice over formal cooperation is a relatively nascent phenomenon. During the Mao and pre-reform era, provincial and local governments were obsessed with implementing central policies and campaigns and local politics was so heavily ideologized that market incentives had little bearing on government policy. After 1979, once economic growth became the focus of central policy and fiscal decentralization granted provinces prerogative over local development, provincial interests were given the means to make fairly autonomous decisions on horizontal integration with other provinces. Once provincial and local leaders were instructed to deliver economic growth, Chung (1998) claims that provincial actions became governed by economic logic, where provinces and localities, “have to rely on some economic logic suitable for the promotion of comparative advantages, competition, efficiency, and so on, as opposed to autarky, organizational dependence, equality, and so forth.”

Supply and Demand

The central government must decide what the price for integration is. Granting preferential policy means tax breaks and less revenue from the most

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productive localities. There is a significant social cost that must be factored in as well. In a Pew Poll released in 2002, 33 percent of Chinese respondents believed that the greatest global danger was the gap between rich and poor.\textsuperscript{33}

The center’s supply curve for economic integration is shaped by social costs and by the need for revenue. Horizontal integration makes development of poorer provinces cheaper for Beijing since it is often other provinces that share the cost burden.

Localities demand economic growth. For local elites, high growth rates mean more opportunities for career advancement, and for local leaders the incentive is the same: to move up the political hierarchy. Local demand curves are shaped by the costs of economic integration. They are much more likely to accept economic integration with similarly endowed localities that can complement their economy.

*Price*

The market model for economic integration has only one seller but many potential buyers. The price, in this case, is the cost to localities. Let us identify two potential buyers as $B_1$ and $B_2$. $B_1$ is an economically productive and well-off locality. $B_2$, on the other hand, lacks an economic advantage and is

\textsuperscript{33} The Pew Research Center for the People and the Press. Field data was compiled from July 20 – August 18, 2002, with the majority of respondents from urban areas from a sample of 3,000. Respondents were asked to rate the biggest global danger from a list of five choices: nuclear proliferation, religious and ethnic hatred, the AIDS epidemic and other diseases, and pollution and environmental problems. Concern over the rich/poor gap was second with 33 percent, just behind pollution and environmental concerns at 34 percent.
comparatively worse-off. Economic integration for $B_1$ means that it will shoulder a greater share of the fiscal burden of completing regional infrastructure projects, and as a result it is less willing than $B_2$ to accept formal government attempts to integrate. $B_2$ has its own share of concerns, as it will expose its local industries to increased competition and surrender valuable extrabudgetary revenues that they derive from tolls and various trade barriers. Yet at the same time they have more to gain from regional integration than a richer locality.

![Figure 2: Market for Economic Integration](image)

Therefore, richer localities are not as inclined as poorer ones to demand economic integration. Unless the price is acceptable, localities will not pursue economic cooperation, especially if there is an alternative foreign alternative that promises greater returns.

The following section shows how the reform era has created the preconditions for such a market exchange to occur. The first is the decline of
central planning and the return of natural geography in affecting spatial
development. During the Mao era, development was the product of central
directives that were influenced by security and ideological factors. The second
is the rise of urban governance, which places localities in the buyer’s role in
determining whether or not to cooperate with central mandates to integrate. The
third is the dynamics of competitive liberalization that shapes the horizontal
relationship between localities and how they compete with one another.

The logic of informal urban networks is inextricably tied with the
domestic market for economic integration. As this thesis will show, the gains of
trade and network formation with other developed urban areas far exceed the
gains of inter-provincial cooperation with poorer areas with less to offer. The
central government’s challenge is to create demand for regional integration as it
is not a good that can be supplied. As opposed to the view of regions as a sum
of provincial administrative units, an accurate conceptualization begins with a
delineation between the territorial jurisdiction of provinces and the flows of
capital between fixed points of accumulation. These two do not always overlap,
although capital flows may be constrained by trade regulations or tariffs.
Therefore, government policy and capital flows are often mutually reinforcing as
economic policy aims to expand capital flows while capital flows direct where
the government needs to channel resources. Fiscal federalism has transferred
policy power down the vertical command structure from the center to the
provincial and local governments, meaning that this flow of capital is less
subject to an overarching national interest and more to local preference. Despite
local protectionism, Beijing still retains a significant measure of control over the localities as provincial governments still operate within the political framework.  

1.6 DOMESTIC AND INTERNATIONAL PRECONDITIONS FOR INFORMAL URBAN NETWORKS

How did informal urban networks become so prominent in China? Since the initiation of economic reforms, there have been two major developments that have made urban networks possible: China’s integration with other East Asian economies and the domestic central-local compromise. In an East Asian region divided by historical resentment and lacking in multilateral political institutions, cities have become central actors in linking regional economies. Growth triangles between countries have formed investment corridors that take advantage of complementary economic functions, which in turn encourages the spread of production chains across national borders. A few urban centers in East Asia such as Hong Kong, Shanghai, Tokyo, and Seoul, serve as “the locus for 90 percent of international finance, transportation, tradable manufacturing, and information” in the entire region. As a result, cities are critically important in understanding the informal linkages between nations that allow national

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governments to enjoy the benefits of economic interaction without complementing it within a political framework. As I will show, informal urban networks serve as gateways that link local and foreign economies.

The Importance of Rapprochement

Informal urban networks have been made possible due to domestic reform and foreign rapprochement. The normalization of relations between China and many of its neighbors was a fundamental pre-condition that gave urban networks access to foreign markets and made them recipients of foreign investment. Illegal foreign trade was present before rapprochement, with many countries using Hong Kong as an intermediary. The establishment of formal diplomatic and economic relations has greatly reduced transaction costs, as well as made greater regional cooperation possible. Although Sino-Burmese trade began in 1984, it would not be until 1988 that relations would be normalized. China established formal relations with Laos and Vietnam in 1987 and 1989 respectively, and it would not be until 1992 that China would normalize relations with South Korea. In all of these cases, rapprochement occurred when it was blatantly obvious that trade was increasing despite formal linkages. To use the case of South Korea as an illustration, Beijing needed to frequently denounce South Korea to reassure North Korea of their alliance. Using Hong Kong as an intermediary, however, Chinese and South Korean trade steadily grew from a measly $19 million in 1979 to $8 billion by the time of rapprochement in 1992,

all in the absence of formal linkages.\footnote{Chae-Jin Lee, \textit{China and Korea: Dynamic Relations} (Washington D.C.: Hoover Press Publication, 1996) 140-150.} By 1992, irrepressible informal economic trade made it quite clear that in accordance with China’s pursuit of economic growth, normalization of relations with South Korea was an inevitable development. With South Korea being so close to China, it is no surprise that economic relations increased so rapidly that by 2001, South Korean investment in China exceeded investment in the United States with China reciprocally becoming the largest source of new foreign investment for South Korea.\footnote{James Brooke. “Courtship of Beijing and Seoul” A New Twist for an Old Bond.” \textit{The New York Times}, 3 Jan 2003: A12.} While this attests to the power of informal linkages, on the other hand, the fact that it took so long also shows the deep historical enmity in East Asia that makes formal cooperation so difficult and hinders the realization of natural economic territories. In East Asia, after the 1997 financial meltdown exposed both the interdependence of regional economies and the reliance on US-led international organizations like the IMF, nations began to openly embrace monetary regionalism as a preventative mechanism against future economic shocks. While Japan’s proposal for an Asian Monetary Fund (AMF) was rejected by the United States, in 2001, 13 Asian states arranged for currency swaps among their central banks in an effort to increase shared access of foreign reserves.\footnote{Dieter Heribert. “Asia’s Monetary Regionalism.” \textit{Far Eastern Economic Review}. Hong Kong, July 6, 2000. Vol. 163, Iss. 27, 30.} Strong economic linkages between major trading cities are now openly supported by national governments as East Asia exhibits an unmistakable trend toward future economic integration.
The Domestic Central-Local Compromise

Domestically, due to the sheer size of Chinese state, the central government has always faced exacerbated logistical and coordination problems with its localities compared to smaller polities. As a result, the vertical state apparatus has been subject to repeated revision over the course of China’s long recorded history to finally craft a delicate balance between central and local authority. Unlike previous imbalances of power, current central-local relations are in an unprecedented situation of compromise. Previous oscillations in the pendular relationship between center and localities have tended to end tragically for China when power falls too far to one side. On one hand an effective central government is needed to encourage cooperation, coordinate foreign policy, and balance local interests while on the other hand, localities need to be empowered in order to efficiently administer their territories and promote local interests. The main differences between China’s regionalism today and previous manifestations are the center’s current retention of military and macroeconomic control while conceding in the areas of local governance and fiscal revenues. As a result of this historical double movement of localization and recentralization we see the groundwork for informal urban networks.

Beginning in the Nineteenth Century, in the aftermath of the Taiping Rebellion, Li Hongzhang from Anhui emerged with the most powerful and
modernized army in China.\footnote{Stanley Spector, \textit{Li Hung-chang and the Huai Army: A study in nineteenth-century Chinese regionalism} (University of Washington Press: 1964).} Although he began as a provincial leader, his military victories against the Taiping led to him extending his influence over a large region that included territory from nearby provinces including Anhui, Jiangsu, and Zhejiang, and Shandong. His military dominance enabled him and Zeng Guofan, another provincial leader, to gain control of the likin system (an internal transport tax on water routes) and therefore with an independent source of revenue he was only subservient to Beijing in name.\footnote{Spector (1964) Ibid.} Within time Li Hongzhang was appointed to handle China’s foreign relations by Empress Cixi, eventually commanding his provincial army to represent China in the Sino-Japanese War and also negotiate the ensuing surrender conditions at the Treaty of Shimonoseki. With the Qing Empire left with no bargaining chips vis-à-vis the localities, it did not take long for the Dynasty to collapse under the weight of revolution. The fall of the Qing demonstrates the dangers of excessive local extrabudgetary funds and as a loss in military control.

The weakness of the succeeding Republican state soon led to China’s return to a feudal economy during the period of Warlordism from 1917-1927. A marginalized central government with nominal power could once again do little to orchestrate and enforce policy with China in a state of both political and economic federalism. Domestic military campaigns to unify China and the internal struggle between the Guomindang (KMT) and Chinese Communist Party (CCP) left the nation unable to repel Japanese invasion. After Liberation
in 1945, the CCP gradually recentralized power and established military and economic control.

During the Mao era, the degree of fiscal decentralization has been an indirect function of the need for a national public good such as security or macroeconomic stability. During the 1950’s the system remained highly centralized in order to finance the Korean War, while in 1968, China adopted total centralization in response to the economic crisis that arose from the failed fiscal policies of the Cultural Revolution. Under Soviet-style central planning, provinces were akin to collection agencies for Beijing and lacked independent budgetary resources. Under Mao and the first Five Year Plan (1953-1957) outlined a strategy of balanced regional growth was tied in with security reasons. The Third Front (san xian) Policy rested on the belief that in the event of Soviet invasion or attack, China could fall back on its interior and Western regions for protection. As a result, areas that were not optimal investment sites were saturated with central funds, while the coastal area’s inherent geographic advantage went unfulfilled. Provinces such as Sichuan and Hubei benefited most from the investment, but due to a lack of regional specialization and an investment policy based on regional preference rather than economic logic, regional disparity did not decrease. The Sixth and Seventh year plans focused on creating a complementary economic relationship between coastal and interior province, yet the coinciding rise of local protectionism and economic

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fragmentation severely hindered such a relationship. In 1952, the coastal region had only 14 percent of the total area of China yet had 42.3 percent of the population and 68.1 percent of the gross value of industrial output.\(^\text{44}\)

After the Tiananmen Square Incident in 1989, Beijing ousted Zhao Ziyang and the conservative Chen Yun led a series of recentralization efforts to reign in the provinces and reassert central control after nearly a decade of economic reforms. To the outside world, however, Beijing’s violent reaction to the Tiananmen demonstrations seemed to signal a loss of party legitimacy and an erosion of central control. In the wake of the Incident, scholars and journalists began speculation of China’s disintegration into independent or loosely associated states. It was predicted that fiscal federalism of the 1980’s would be succeeded by political federalism.\(^\text{45}\) This forecast was given more credence following the denouement of the Cold War and former Communist regimes collapsed and dissolved into smaller republics. In stark contrast, with China currently taking a more prominent role in East Asia and continuing its exceptional record of economic performance, the disintegration theory appears to be wholly discredited. If we can use Beijing’s response to the East Asian Financial Meltdown in 1997 as an example of the center’s tight retention on macroeconomic control, it appears that the central government has emerged from its legitimacy crisis with great aplomb.\(^\text{46}\) For the first time in its history, the


\(^{46}\) Dorothy J. Solinger reports on local government compliance to central macroeconomic objectives during the 1997-1998 Crisis despite intensified pressures of competitiveness between localities in
Chinese government has managed to successfully negotiate a power balance between the center and the localities.

It would not be until Deng Xiaoping’s economic reforms in the 1980’s that the central government would formally begin to institute a dichotomy between political and economic control. Huang Yasheng identifies the three major changes of reform era as the decentralization of output planning, increase in local fiscal control, and overhaul of the tax system. Fiscal federalism gave the provinces increased economic control over their localities, while despite debates over the political side effects of economic decentralization, there was no destabilizing transfer of political control. This central-local compromise ensured that Beijing could retain its political legitimacy and at the same time sustain economic growth. Local authorities were given the ability to establish horizontal economic relations and cooperation between provinces without consulting the center. Although government policy allowed for provincial regionalism (for example the designation of the Shanghai Economic Region of Shanghai, Jiangsu and Zhejiang, Jiangxi, Anhui, and Fujian) the provinces could not overcome noncompliance from local authorities that undermined cooperation. Provinces were in competition with one other as they existed within a political framework where Beijing still maintained control over appointments and


48 Dali Yang argues that the center’s retention of control over the nomenklatura system of appointments was a critical factor. Beyond Beijing: Liberalization and the Regions of China.

49 Also, the center realized it could not effectively administer the provinces. Susan Shirk, The Political Logic of Economic Reform (Berkeley: University of California Press, 1993) 153-155.

50 Goodman, Ibid.
preferential policy, so had little incentive not to resort to local protectionism.\textsuperscript{51} Yet the role of the central government had greatly shifted during the 1990’s from director to regulator.\textsuperscript{52} The rise of local protectionism can be seen as an inadvertent offspring of fiscal reforms, as increased provincial pressure to deliver economic performance created competition between localities for markets and investment.\textsuperscript{53} With reforms of the tax system leading to increased extra-budgetary funds for localities, provinces now have the financial means to pursue their own interests. As a result, there is friction between central macroeconomic policies and developmental initiatives by localities, which are on one hand expected to promote their localities and on the other hand implement central policies that may contradict local interest. Si Ming-Li explains this relationship: “China is still a very centralized state, and provinces still have to follow state directives. But at times the alliance between provincial governments and enterprises is able to take measures to promote local interests even at the expense of national interests.”\textsuperscript{54}

Provinces now compete for economic development and therefore have incentives to develop their main engines of growth and source of wealth: the cities. Even though a 7 percent annual growth rate is necessary to fulfill the goal for the 11\textsuperscript{th} Five-Year Program, almost all provincial governments have planned annual rates above 9 percent.\textsuperscript{55} As provincial governments attempt to maximize growth, there is concentrated investment into targeted areas at the expense of intra-provincial equality.

\textsuperscript{51} Yang, Ibid. 138-142.
\textsuperscript{52} Dali Yang, \textit{Remaking the Chinese Leviathan} (2004) Ibid.
According to Yang (1997), provinces and local governments are engaged in a race of competitive liberalization, where all provinces try to avoid being last on the economic liberalization bandwagon. Once economic liberalization was officially sanctioned by the central government, there has been intense competition from provincial governments to lobby for special preferential policies that encourage foreign investment. Because of provincial competition, only on rare exceptions will provinces successfully cooperate in order to increase their bargaining power. In 1985, five provinces in the southwest, Yunnan, Guizhou, Guangxi, Sichuan, and Tibet, cities of Chongqing and Chengdu formed the Southwest Economic Coordination Region (Xinan Jingji Xiezuoku) to organize large-scale intra-regional trade fairs on a rotating basis, but the main goal was to create a provincial bloc that could jointly lobby the center. In 1989, individual cities in southwest and northwest similarly joined forces in the “United Association of the Shaanxi-Gansu-Sichuan-Ningxia Borders (shaan-gan-chuan-ning diqu lianhehui). These are just two examples of lagging provinces attempting to strengthen regional coordination in order to better compete with the more prosperous and influential coastal regions. Even provincially-initiated regional attempts often fail to enact meaningful economic integration. Theoretically, provinces should cooperate based on a regional adaptation of Ricardo’s theory of comparative advantage; because particular areas are more efficient than others at producing some things, they specialize in production and create linkages with cities with complementary functions and needs. The areal specializations, in such cases, lead to macro-markets, and these markets gradually expand as a bottom-

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up process that is supported by local governments and economic actors. In the case of the Northwest provinces, however, there is an abundance of natural resources but a lack of processed goods fit for export. As a result, there have been calls to coordinate processing industries in the region and create an inter-provincial industrial chain.\(^{58}\) Yet while such coordination would greatly enhance the region’s competitiveness, such cooperation has failed to materialize.

This failure can be attributed to the pre-reform era, where central mandates calling for local self-reliance and enterprise self-sufficiency created a cellular economy.\(^{59}\) The problem of duplication, or repetitive industries in neighboring localities, has been an enduring source of inefficiency and local protectionism. This legacy, in turn, has hampered overall regional competitiveness. For instance, there were two simultaneous construction projects of deepwater container ports in Shenzhen, Zhuhai, and Daya Bay, when only one port would have been necessary to complement Hong Kong’s Kwai Chung port.\(^{60}\) As a result, investment is redirected to other areas that are more attractive than individual projects. The Pearl River Delta has five major international airports, even though regional economic development only requires two at most.\(^{61}\) Local governments took on a role as protectors of local industry, regardless of its position in a wider regional economy. As a result, it did not matter if it was a raw material-producing region protecting its infant industries or

\(^{58}\) “NW Provinces: Join Forces to Develop Trade.” China Internet Information Center, November 29, 2004.


a manufacturing region defending its mature industries, local governments constructed barriers that prevented areal specialization. As Wedeman points out, during the 1980’s, there was a conflicting pressure for localities to export surplus production of their manufacturers for profit but also to restrict the external access to local markets, or in other words, “the resulting shift from a sellers’ to a buyers’ market created incentives to restrict access to local markets while aggressively exporting surplus production to other localities.” As China is still in the process of dismantling the cellular economy and combating local protectionism, in the case of informal urban networks that have access to foreign markets, these localities have found a new export market.

The realization of natural economic territories

The most important legacy of economic reforms that has led to informal urban networks is the realization of natural economic territories. A conceptualization I borrow from is William Skinner’s “macro-regions” (only the concept, not the terminology) that determines regions based on a common market model rather than political administrative boundary. According to Skinner, a regional economy can be defined by three factors: areal specialization in production, a differentiated occupational structure, and a hierarchical system of credit that supports a network of intraregional trade. Skinner’s study of how urban centers came to serve as the hubs

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63 Wedeman Ibid. 194.
of macro-regions in late imperial China still has relevance today and warrants another look due to the current primacy of economic development on local government agendas. Skinner was the first to divide China into economic regions, arguing that the formation of regions was largely due to physiographic constraints. Skinner mapped out nine macro-regions with boundaries determined by drainage basins, watersheds, and the crests of mountain ranges. Geography, he argued, was the main factor in determining transport efficiency, trade flows, and linkages between cities and towns. In Skinner’s macro-regional model, he pinpoints regional cores at river-valley lowlands, which enjoyed major transport advantages compared to peripheral areas. Within this system, cities serve as the nodes and command posts that direct activity within the region.  

He summarizes:

In short, it appears that each system of cities developed within a physiographic region. I eventually came to conceive of urban development – the formation of cities and the growth of their central functions – as a critical element in regional development – the processes whereby regional resources of all kinds, social and cultural as well as economic and political, were multiplied, deployed with greater effectiveness, and exploited with increased efficiency.

Skinner argues that major cities within each region developed on key transport routes leading into them, and that all cities within a physiographic region developed hierarchical transaction patterns culminating in one or more cities in the regional core. As trading centers, market towns and commercial cities were central nodes in the flow of goods and services, money and credit, as well as the sites for primary public institutions. Because the extraction of economic surplus is a critical enabling

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65 Skinner Ibid. 216.
66 Skinner Ibid. 211.
67 Skinner Ibid. 217.
mechanism of politics, it was efficient for political institutions to focus on commercial centers in their efforts to control and regulate the means of exchange and production, as well as to tap into the wealth of a local system.\textsuperscript{68} Domestic studies in space spatiality often serve as extensions of Skinner’s physiographic regions and use geography and trade as determinants of the region. Yet despite the criteria for these regional studies, they are almost always limited to domestic political jurisdiction without considering the possibility of expanding the borders of the region to incorporate territories outside of China.

The central government has recognized the importance of natural economic territories, and in 1985 opened the Changjiang River Delta Economic Region (around Shanghai), the Pearl River Delta Economic Region (around Guangzhou), and the Minnan Delta Economic Region (around Xiamen) to foreign investment due to their advanced economic development, communication systems, and tertiary education institutions, in order to spread the benefit from the SEZs to surrounding areas.\textsuperscript{69} These areas are not just favorable geographic locations but also have important urban areas situated on them. It is cities, not states, that are the leaders in turning favorable geographic position into economic advantage.

\textit{The rise of urban governance and the case of Western Europe}

\textsuperscript{68} Skinner. “Cities and the hierarchy of local systems” in \textit{The City in Late Imperial China} (1977) 276.

My analysis of micro-regional urban networks in China will focus on what Neil Brenner calls “urban governance” or as he defines, “the broad constellation of social, political, and economic forces that mold the process of urban development within modern capitalism.”\(^{70}\) Brenner’s study on state space in Western Europe has an important insight of state space as an ongoing process rather than a fixed entity. In studying the rise of urban governance in Western Europe, Brenner shows that preceding state-led scale-making projects targeted urban areas for successful development. Two objectives of these state scale-making projects were to embed cities within the state structure and to position cities within a network of capital accumulation.\(^{71}\) In the 1980’s, a wave of national welfare state retrenchment process across Western Europe forced local governments to secure an independent fiscal base as there was less budgetary support from central authorities. Coincidentally during the same period, there was a “marked intensification of territorial inequalities…divide between winning and losing regions; various intra-national divides between booming urban cores and declining manufacturing zones or depressed rural peripheries; intra-regional divides between central city cores and surrounding hinterlands.”\(^{72}\) As local governments became more independent in employing development policy, regional disparities became greater as certain urban areas grew at much faster rates than others.

Western Europe’s spatial transformation in the 1980’s is particularly relevant to my study as China attempted a similar scale-making project under Deng Xiaoping’s economic reforms. In 1979, Beijing granted tax and fiscal exemptions to


\(^{72}\) Ibid. 468-470.
four cities (Shenzhen, Zhuhai, Xiamen, and Shantou) on China’s coast and designated them as “Special Economic Zones” (SEZs) as an experiment to attract foreign investment and accelerate economic growth. By 1984, there were fourteen coastal cities with preferential treatment were allowed to form Economic and Technological Development Zones (ETDZ). These coastal cities were designed to form as the base for new industries and enterprises and serve as the future technological, economic, and social pillars of the entire country.  

Like the case of Western Europe, a closely interlinked and flourishing urban network left other regions marginalized and unable to compete. Quite contrary to government expectations of a trickle-down effect of growth from developed urban cores to their poorer peripheries, there was instead a systematic reconcentration of development capital back into the favored urban network.

There is little reason to believe that China’s story will be any different.

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73 Yeung and Hu. Ibid. 9-10.
74 Brenner. Ibid. 468-470.
CHAPTER II
A FRAMEWORK FOR INFORMAL URBAN NETWORKS

2.0 INTRODUCTION

I will now develop an analytic framework for conceptualizing informal urban networks. As the term “regionalism” is dependent on the scale, actors, and processes involved, I label informal urban networks as a form of micro-regionalism due to their smaller scale compared with other forms of regionalism with cities as the unit of analysis. Compared to macro and sub-regions, in terms of sheer amount of territory covered by these networks, a micro-regional process is often localized and more sensitive to spatial distance than a macro-region. Due to the smaller scale and distance between actors, micro-regions are usually connected in non-economic ways such as language, culture, or shared history. Several antiquated dichotomies that informal urban networks defy are domestic versus international space, state versus society, and urban versus rural. Urban networks feature transnational links, cooperative state and society arrangements, and sprawling urban centers. It is clear that there is a conflict between the central government’s analysis of regional networking and economic geographers. The center’s strategy in the 1980’s hinged on following “step-ladder policy” for regional development where the coastal areas would develop advanced processing industries and utilize natural resources from the interior and western provinces. Following Ricardo’s theory of comparative
advantage, it was predicted that each region would develop what they were best at, and a complementary and symbiotic relationship between coast and interior would be forged. Opposing this stance is the contrary view that natural resources are becoming increasingly irrelevant in determining the economic landscape. As Glaeser and Kohlhase argue (2004), consumption-related natural amenities (such as weather), state/city government policies, and historically developed infrastructure are the main factors preventing convergence to a single area.75 Although I believe this view is a bit simplistic, by looking at the actual pattern of regional development it appears to be more accurate than Beijing’s forecasts. This chapter will develop a framework for approaching urban networks that modifies Glaeser and Kohlhase’s argument by approaching it through the lens of trade and economic linkage. This chapter begins by redefining the role of the coastal city from a gateway port to a growth node, then identifies the three main agents of informal urban networks as local governments, local enterprises, and labor. Once a basic framework that assesses the relationship and role of these agents is established, I discuss the determinants of scale for measuring the scope of these networks. The purpose of this chapter is to explain why urban networks are not regional growth nodes but rather polarizing forces due to their tendency to keep investment and growth confined within the network.

2.1 THE CHANGING ROLE OF THE CITY: 
THE CITY AS A NODAL UNIT OF ANALYSIS

Administratively, my use of the “city” label refers to the *de facto* administrative unit below provinces and prefectures and above counties, townships, and villages within the political hierarchy. The designation of Beijing, Tianjin, Chongqing, and Shanghai as provincial-level municipalities (直辖市 zhìxiáshì) demonstrates the enormous political influence cities can wield. Since 1983, over 280 prefecture-level cities (地级市 dìjíshì) were designated that consist of a central city surrounded by a rural periphery. Reflecting China’s rapid urbanization, prefecture-level cities have largely replaced prefectures as administrative units. In a report to the National People’s Congress in 1982, Zhao Ziyang said that the development of key economic cities (经济中心城市 jìngjì zhōngxīn chéngshì) was to drive regional economic growth and therefore the nation, especially in the area of technical transformation and the upgrading of industrial capacity. Under a State Council directive promulgated in 1986, many counties have been reclassified as cities in a county with a total population of less than 500,000, a county-town with a non-agricultural population of at least 100,000, and annual output of at least 300 million RMB, qualify for city designation. As a result many county cities encompass much rural area. The Open-door Policy was a key cause that has given cities such

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76 The CCP Constitution only allows for three levels of province, county, and township yet in actual implementation there has been the addition of prefectures and villages as administrative levels.
77 This policy was called 市县 (shi guan xian), which literally translates to “city governs county”
78 In order to be a prefecture-level city, a pre-existing prefecture must have an urban centre with a non-rural population over 250,000, a gross output of value of industry of 200,000,000 RMB, a greater tertiary industry output than primary industry, and over 35 percent of the GDP of a province.
centrality in the economy. The policy established SEZ’s, opened up coastal cities to FDI, established economic and technological development zones, and reformed the foreign trade system.\(^8^0\)

With the progress of economic reforms, the urban-rural divide is becoming increasingly obsolete as an analytic framework. Beginning in the late 1970’s without Mao’s anti-urban rhetoric, the government view of urbanization has shifted from one of caution to one of support. By 1980, the National Conference on Urban Planning Work was no longer debating whether or not to encourage urban development but rather discussing the best urban development strategy.\(^8^1\) Official support of rapid urbanization has led to rural farmland shrinking at an alarming rate due to urban expansion and rural industrialization. This sanctioned growth fever influences local governments to ignore environmental effects and overlook labor malpractice as they try and attract as much industrial capital as possible. Ever since Mao’s rhetoric denouncing urban development has disappeared from government language, “cities” have expanded in size and are far from their literal translation of “walled cities” (城市). Rural-urban integration is a new feature of the economic landscape since reforms allow for five developments: state deregulation of the rural economy, free market capitalism, agricultural restructuring, the inflow of transnational capital, and regional transport infrastructure.\(^8^2\)

\(^8^1\) Chan calls this a shift from viewing urbanization as “the product of rural-urban antithesis under capitalism” to “an inevitable process of modern development.” Chan, *Cities with Invisible Walls*, 104.
The city serves as the building blocks for informal urban networks for the aforementioned reasons that they are fixed points at which all three of these elements converge. They are also hubs for trade, commerce, and the primary locations of foreign direct investment. Historically, port cities have served as gateways into China. During the Qing, the city of Canton (now Guangzhou) was the only designated foreign port and was the main gateway of trade between China and the rest of the world. The city is my primary unit of analysis due their function as concentrated nodes of capital, labor, and industry. Quite simply, the city is the physical accommodation where there is a concentration of all three factors. Cities compete for firm investment and location, high living standards to attract talented labor, and as optimal nodes of exchange and processing of information and capital flows. The polarizing nature of cities is best articulated by Cook (2000) who argues that cities, “render disparities of wealth, status, housing provision and the like highly visible, and

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can threaten social cohesion because of this manifestation of unequal access to goods, services, wealth, employment opportunities and other features of contemporary life.”

Ever since the governance strategy of total administration of economy and society was abandoned by the central government in the late 1970’s, the communes and the household registration system were used to exert direct administrative control over rural and urban areas respectively. The communes, however, have been replaced by the incentive-based institution of the household responsibility system. These reforms can be characterized as moving from a control system of direct surveillance to an indirect incentive-based one that allows individual actors more control over urban activity.

2.2 DEFINITIONS, KEY ACTORS, AND LINKAGES

The usage of “informal” throughout this paper is quite different than traditional state-society conventions. In the context of urban networks, “informal” pertains to the unofficial process of network formation not authorized by the central government. Local governments are integral actors in my framework as they have shown a proclivity and the means to defy central mandates that conflict with their interests. Informal institutions, in this regard, are best explained as the conflict between “official” and “natural” societal structures. In late imperial China, Skinner

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distinguishes between official structures as being comprised of yamens (local bureaucrats), political administrators, and officials within a formal hierarchy while natural structures as the marketing and trading systems, informal politics, and a nested subculture of elites and merchants. Such natural structures serve as the backbone of informal urban networks today albeit in within a modified system.

The study of informal urban networks is important due to the pressure they can place on formal governing institutions. As Tsai (2003) points out, in non-democratic settings where formal institutions exert their influence down a hierarchy without inputs from the bottom, a combination of constraints and opportunities for actors at the bottom lead to “adaptive informal institutions” that may eventually lead to the reform of formal institutions. While my usage of informal institutions strays from traditional state-society definitions, the potential effect of adaptive informal institutions to affect institutional change demonstrates the logic behind why informal urban networks are capable of influencing formal institutions.

When we combine the power of adaptive informal institutions with a relationship of institutional amphibiousness between formal and informal structures, we can begin to understand the theoretical potential for informal networks to exert enough endogenous pressure on formal institutions to shape and change them.

86 William Skinner, “Cities and the hierarchy of local systems” in The City in Late Imperial China (1977) 276.
88 The rise of farmer’s markets is one such example of how informal institutions can exert pressure on formal institutions to change. After widespread public complaints on the bad quality of foodstuffs, the central government opened free markets for agricultural produce (ziyou shichang) in 1977 in towns outside of cities. The success of these markets led to the extension of farmers markets to twenty large cities in 1978, from Chan, Cities with Invisible Walls (1994) 100-101.
EMBEDDED KEY ACTORS

I have divided my framework for informal urban networks into three actors: local governments, businesses, and labor. All three of these sectors are embedded, mutually supportive, and most importantly, spatially confined within network systems. The most detrimental forms of local protectionism, for instance, are policies that shield the labor force, which in turn affects where businesses turn to for necessary human capital. For further development, I have separated these into three subfields. The relationship between these actors is characterized by a modification of Ding’s institutional amphibiousness.\(^{89}\) Whereas in Ding’s theory, ambiguous boundaries between state and society leads to manipulation and conversion, within urban networks the relationship between state, labor, and enterprises is marked by cooperation and it is the relationship between central government and urban networks that exhibit manipulation and conversion. This ambiguous relationship has formal institutional origins, but this paper deals with the informal incentives that foster cooperation between them. The relationship is depicted in figure 2, where intersection between the circles represents the realm of converging interests. The central overlapping area where all three conjoin determine the effectiveness of network formation; as comparisons between the case studies will show, the larger the central area of cooperation the stronger transnational links and economic weight the urban network has. To borrow a term used by the World Bank, this relationship is not

\(^{89}\) See footnote 4 on Ding’s institutional amphibiousness.
so much cooperation but rather “collusive behavior”\textsuperscript{90} where there is an understanding that beneficial results from one sector positively affect the others.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{three embedded actors with overlapping and ambiguous boundaries}
\end{figure}

\textbf{Local Government Policy}

Studies on East Asian economic regionalism often treat the relationship between booming investment between economic areas and domestic government policies as mutually exclusive. Likewise, studies into growth triangles and economic links in the Asia-Pacific are usually unconcerned with the governing implications of

such linkages. The local state is usually overlooked in economic studies, yet just because economic relations are largely informal does not preclude the involvement of state actors.

In the case of China, the role of local state governments is particularly important due to their high level of integration with local businesses. Not only do local governments promote and direct economic development within their territories, they provide protection for local industries. Borrowing Oi’s (1999) notion of local state corporatism, local state and business interests often converge. Often when formal institutions are arranged in a hierarchical manner and are immune to popular will there is a resultant counterforce from informal institutions. Economic fragmentation is a direct result of protectionist policies designed to give local enterprises competitive advantages. Although in regards to SOE’s, local governments adopted a policy of “developing the large, ignoring the small” (zhуда fangxiao), they still remained heavily vested in private sector development due to its contribution to economic growth. Coinciding state and private interests have led to the phenomenon of “red-hat” enterprises where private enterprises, starved of official bank credit, register as state-owned enterprises in collaboration with local officials. As a result the dichotomy between state and business is ambiguous and the relationship, in the case of urban networks, can be characterized as cooperative and not predatory.

92 Tsai’s (2003) terming of “adaptive informal institutions” as informal institutions react and supply the demands of both political and economic actors. “Coping by Innovating: The Formal Origins and Consequences of Informal Institutions in China,” 2.
Local governments also influence the formation of informal urban networks due to their supply of preferential policy and control over public infrastructure projects. While only Beijing has the formal authority to designate special economic zones or grant special incentives, there have been many informal attempts to attract investment by declaring special zones without the consent of the central government. In this regard local governments play a significant role in directing development and supporting local businesses. Their control over transport infrastructure leads to skewed construction in areas they deem will offer the greatest returns. These choices of transportation projects, in turn, affect the choices of local businesses and influence the destination of investment. Since transportation infrastructure is a public good, local governments affect the private production and consumption processes of firms and individuals.  

In regards to the spatial distribution of land, after economic reforms, local governments now collect land-use fees and charge for land-use rights. This income from land-leasing has become an invaluable source of revenue for local governments for use in infrastructure projects. The combination of low labor costs and the high land price in coastal cities such as Guangzhou and Shanghai mean high rates of return for local governments to pour into infrastructure projects. As a result they can fund improvements in telecommunications, water transport, electricity projects, and road development that create a more attractive environment for foreign investment. On the

94 In the cities of Guangzhou and Shenzhen, who began charging annual fees in 1983 and 1981, local governments tried to stimulate economic development from foreign investment by charging low annual fees for industrial investment and high fees to tourist and commercial uses. Anthony Gar-ooh Yeh, “Foreign Investment and Urban Development in China,” in Ling and Tang’s China’s Regions, Polity, & Economy (Hong Kong: Chinese University Press, 2000) 53-55.
other hand, local governments in areas with unfavorable endowments and low land prices do not generate nearly as much revenue as their coastal counterparts. This leads to less funding for infrastructure projects which then makes them less competitive for foreign investment.

Local Enterprises

Local enterprises are the second sphere and are linked to local governments. This sector is crucial in creating transnational linkages between urban centers within China and major trading cities in East Asia. As a result, foreign direct investment and outward investment from China will be the focal point of my study. Local governments play a critical role in attracting FDI, and the race between provinces to liberalize their economies and attract investment has led to skewed economic growth. While there is debate over whether there is a causal link between FDI and economic growth, in the case studies I have chosen, the urban networks all have a historical tradition of extensive foreign relations. Central government attempts to make the interior provinces more attractive to FDI by offering them preferential policies, however, reveal the consensus in Beijing that FDI is necessary for promoting economic growth. Accordingly, the regional disparity in terms of FDI reflects the regional disparity in terms of GDP contributions to the center’s coffers.\textsuperscript{95} The resulting disparity is a self-defeating cycle. Perspective investors are less inclined to

\textsuperscript{95} Since 1978, the gap between Western and coastal areas consistently increased in terms of percentage of national GDP each region contributes. In 1978, the eastern provinces commanded 52.5 percent of the national GDP while the west had 17.8 percent. In 2000, these figures were 64.3 percent and 14.6 percent. China Statistical Year Book, various years in OECD’s Foreign Direct Investment in China: Challenges and Prospects For Regional Development. 54 (chart)
invest in the poorer Western regions due to inconvenient transportation, backward telecommunication services, and poor urban environments, and as a result these areas must rely on funds from the central government for growth.  

Foreign investment in China has mainly been greenfield and concentrated on secondary industries such as the manufacturing sectors. Foreign direct investment has spatial consequences for development. Whereas in countries such as the United States, FDI has gone mainly toward the development of existing enterprises, while in China, FDI has been going toward the creation of new enterprises. In 1984, among the top eight sources of FDI to China, Japan and Hong Kong were the only contributors based in East Asia, accounting for 67.5 percent. A little over ten years later in 1995, Asian countries accounted for 81.9 percent of FDI in China. FDI contributes to regional disparity, as Dennis Wei points out, “the spatial concentration of FDI often leads to a polarized process of urbanization and reinforces regional inequality…foreign investment tends to be located in major cities and core regions as these places have advantages in labor market conditions, access to domestic and international markets, preferential policy treatment, and infrastructure.”

Along with economic reforms there has been a rise in fiscal extrabudgetary funds for local governments as well as enterprise extrabudgetary funds. Fiscal extrabudgetary funds are a set of nonbudgetary levies and charges of governments and administrative units and are largely used by local governments to avoid sharing

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98 Yasheng Huang, Selling China (Cambridge: Cambridge University Press, 2003) 6-8.
99 Yehua Dennis Wei. Regional Development in China, 117.
100 Yehua Dennis Wei. Regional Development in China, 118-125.
revenues with the central government. Enterprise extrabudgetary funds, however, are the retained earnings and the depreciation funds of enterprises. Due to increased enterprise independence since 1987, government control over SOEs has diminished. Account for 12 percent of GDP, these funds can no longer be legitimately regarded as part of government revenue. Extrabudgetary funds are important because they give enterprises increasing autonomy to support their economic decisions.

In 1985, the total product of the private industrial firms was 18 billion yuan, which was 1.2 percent of the annual industrial output. In 1990, the total output for private industrial firms reached 130 billion yuan, over 5 percent of the total industrial output. Coupled with the new surge in private development, foreign direct investment accounts for about 4 percent of the economy. Foreign direct investment greatly contributes to spatial disparity since its destination is often areas with developed infrastructure and productive industries. Of the six types of FDI in China, the most prominent ones are equity joint ventures, where foreign and domestic companies share operation of, profit, and losses of the venture and wholly foreign-owned subsidiaries where the investor is responsible for capital, input, costs, marketing, and management of the venture. This combination of private growth and foreign investment leads to new enterprises being more likely to locate in the urban areas where they can better enjoy economies of scale; a process that contributes to industrial agglomeration in spatially concentrated areas. Agglomeration occurs as firms try and take advantage of efficiency gains that come from decreased transaction

101 World Bank Comparative Study, China: Macroeconomic stability in a decentralized economy, 31
103 Anthony Gar-on Yeh, Ibid. 20.
costs and the diversity of products exchanged within a limited area that happens as a result. Complementing this process is local government hard and soft institutional structures. Fung (2005) defines hard institutional structures as transport infrastructure and soft institutional structures as increased transparency and economic reform designed to attract foreign investment. The embeddedness of enterprises and labor is present in both their institutional relationship as well as public perceptions. A 2004 Globescan survey conducted predominantly in urban areas showed that 78 percent of respondents had some to a lot of trust in large Chinese companies operating in the interests of society, with 69 percent having the same level of trust in foreign companies.

**Labor**

Labor, or human capital, is a key part of the framework mainly because the most prominent forms of local protectionism are policies that restrict the movement of workers. While it can be argued that labor is merely a subset of local enterprises, for the purpose of this study it is given a separate grouping due to its different interests from the business sector. The importance of labor is stated by Zweig (1999) who argues that, “even if [cities] possessed a comparative advantage in location, local entrepreneurship was necessary if communities were to shed their institutional

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106 Globescan poll published on June 4, 2004. Respondents were asked: “Please tell me how much you trust each of the following institutions to operate in the best interests of our society,” and answered either “a lot of trust” “some trust” “not much trust” “no trust at all” or “don’t know.”
constraints and path dependence, gain preferential policies which deregulated their relationship with the outside world, and turn their city’s comparative advantages or endowments into opportunities for growth and development.”

The decisions made by enterprises, for example, on where to invest are motivated by profit, efficiency, and feasibility. Labor, on the other hand, faces economic constraints of sufficient wages as well as non-economic constraints of native-place, language, and culture. Economic reforms have gradually increased the mobility of labor compared to the original hukou system. Urban jobs have been opened to outsiders under state conditionality, which has lead to the formation of a floating population (liudong renkou) that have been attracted to more prosperous regions seeking better job opportunities and a higher per capita income. Within the field of economic geography, included within this labor sector is knowledge, skills, and information, which is part of the central government’s erroneous assumptions is that the coastal cities will serve as a conduit to the Western region for new technology and skilled labor. Wang and Zhang (2003) argue that knowledge is inexorably tied to labor since it contributes to growth by creating a more productive labor force, improving the income-earning ability of individuals, creating knowledge-related businesses, and

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108 The hukou system divided Chinese society into registered agricultural and non-agricultural segments, where the majority 84 percent of Chinese people were classified as agricultural. It was notoriously difficult for farmers to gain “non-agricultural” registration for urban areas, which was granted primarily to those that had a state job or were a university student. As a result of these formal restrictions, many farmers adopted informal adaptive counter-measures. One strategy was to forge personal connections (la guanxi) with urban contacts and set up businesses in larger cities through such informal linkages. Hein Mallee, “Migration, hukou and resistance,” in Perry and Selden’s Chinese Society: Change, conflict and resistance (New York: RoutledgeCurzon, 2000) 139-141.
ameliorating economic efficiency and labor productivity. The notion of knowledge-spillover is largely discredited when such knowledge is largely contained within agglomerated industries and networks. Studies done by Lin, Wang, and Zhao (2004) on interregional migration reveal a startling increase in inland to coast migration from 32.5 percent of all inter-provincial trade in a 1985-1990 period to 60.1 percent in a 1995-2000 period. The percent of working-age migrants moving from coastal areas to inland decreased from 14 percent to 6.1 percent during the same periods. In the wealthy coastal areas in particular, workers within informal urban networks are tied by shared cultures, language, and identity. As a result, local governments enforce protectionist policies to prevent the exit of skilled labor and the choices of enterprises on where to invest are strongly influenced by these non-economic factors. Labor is also a fundamental factor that affects the amount of FDI a city can attract. Foreign investors find China appealing due to the abundance of cheap, unorganized, and relatively skilled labor with low government regulation.

One consequence of economic reforms was that the buoyant labor markets grew beyond administrative boundaries. A mobile and flexible labor market is a

110 “Knowledge” is studied by the level of educational attainment of population, public spending on knowledge advancement in education and research, the marketisation of innovations such as patents, and the physical knowledge infrastructure of schools and universities. In empirical studies it is clear that regional economic disparity coincides and is directly correlated with knowledge disparity. Wang and Zhang (2003) Ibid. 384.
111 Silicon Valley in the United States, for example, is a good demonstration of concentrated agglomeration of computer technology within a limited area that, supporting Krugman’s assumptions, attracts more investment from other less developed areas due to its developed infrastructure. Innovation is quickly diffused throughout the region due to strong networks and skilled labor tends to migrate within the Valley instead of leaving it.
114 A survey of 10,000 Japanese companies in 1990 showed that the low cost of labor was a primary reason for investment in China. The lack of unions and organization in the Chinese case suggests its edge over other sources of low cost labor in several Latin American countries. Weiping Wu, Pioneering Economic Reform in China’s Special Economic Zones (Brookfield: Ashgate, 1999) 66-67.
prerequisite for structural economic transformations due to its consequences for industrial functioning and innovation. If the labor market is contained by government policy, then such economic transformations become difficult to enact.

2.3 NETWORK LINKAGES

A bit overdue is a discussion on what exactly constitutes a “network.” Networks can have several different types of meanings. During the Qing, different urban systems were integrated through communication linkages and informal links among yamen functionaries that traveled between cities. They were primarily linked by shared conceptions of a “same-native-place” which generated trust and thus reduced transaction costs. We can look at the phenomenon of network formation between urban centers separately through each of the main actors of local governments, local enterprises, and labor. Local governments affect network formation through policy choices for industrial and infrastructure investments, securing development capital for their localities, and cultivating domestic and overseas business networks. As a result, local governments are partially responsible for the physical linkage between urban centers by directing the development of transport infrastructure. McCann and Shefer (2004) articulate this

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117 William Skinner. “Urban and Rural in Chinese Society” in The City in Late Imperial China. 270
118 Jae-ho Chung, Cities, 926.
relationship and its impact on network formation, stating that “the impacts of infrastructure provision will depend on how the infrastructure dovetails with the range of available regional business incentives, and planned linkages between new infrastructure and existing infrastructure networks.”\textsuperscript{119} Cooperation between state and enterprises means that state infrastructure projects are coordinated to support interfirm linkages between cities.

Besides being systems of exchange that can provide benefits such as coordination, capital, risk minimization, and information, network formation can be seen as an informal process that is a response to a legal system that does not provide reliable contract enforcement or secure property rights.\textsuperscript{120} As a result, local actors have incentives to develop network alternatives that can provide them. Local alliances that arise from network formation are more useful to individual actors than a regulatory systems that create risks or obstacles for foreign investors.\textsuperscript{121}

Local enterprises support network formation through strategic investment choices, which we can categorize into internal and external networking. As Chen and Drysdale (1995) distinguish internal networking is determined by ownership control while external networking is the use of bonding mechanisms of a non-equity type such as licensing, supplier or original equipment manufacturer contracts, subcontracting, or strategic alliances.\textsuperscript{122} In terms of firms, networking is different from the bonds of market interaction due to the benefits that arise from linkages.

\textsuperscript{120} Natasha Hamilton-Hart in “The Regionalization of Southeast Asian Business: Transnational Networks in National Contexts.” In Remapping East Asia, 171.
\textsuperscript{121} Natasha Hamilton-Hart in “The Regionalization of Southeast Asian Business: Transnational Networks in National Contexts.” In Remapping East Asia, 172.
\textsuperscript{122} Chen and Drysdale (1995) Ibid. 205
Link transactions between firms create an established relationship that returns profit based on how often and intensively the network is utilized.\textsuperscript{123} Taking all of the above, we can detect network formation between urban centers by frequency of use and the volume of economic activity.

Network formation occurs among labor as well, as migrants provide information and assistance with moving, finding jobs and accommodation to later migrants from their own villages, thus linking specific origins with specific destinations.\textsuperscript{124} In regards to labor networking, a major shortcoming of a limited focus on the economic aspect of labor is the cultural factor that can have a large influence in shaping urban networks. While I will address the cultural aspect in each case study, due to the subjective nature of culture it will not be the focus. In the formal Shanghai Economic Region, for instance, there was a significant lack of cooperation in areas in the lower Changjiang River due to language and cultural barriers. I am not arguing that informal urban networks are determined by such cultural factors but the impact in many cases is significant. Although culture is impossible to quantify and empirically determine, cultural identity plays a strong part in differentiating between core and peripheral nodes in an informal urban network. Fujian, for example, is home to a significant overseas Chinese population, and for this very reason attracts a fair share of investment. Because the Chinese labor market is highly segmented with a dual labor market where immigrants work in the second, informal sector, where they must

\textsuperscript{123} Bruce Johansson and John M. Quigley, \textit{Agglomeration and networks in spatial economies} (2004) 172.
rely on personal networks (guanxi) to permeate their way into the permanent workplace.¹²⁵

2.4 SCALE AND SCOPE

Once we establish the key actors and process driving informal networks, what remains to be answered are the factors that determine the scale and scope of urban networks. The actual scope of urban networks is difficult to accurately determine due to overlapping sectors among all three actors. The indeterminate borders of economic linkages make it difficult to accurately pinpoint the amount of territory involved in urban networks. It is impossible to draw a line on a map and announce the end of one and the beginning of another. As a result I propose different criteria in determining the scale of urban networks that is based on spatial concentration rather than distance. The three determinants of scale that I use are the supply of preferential policy, the agglomeration of investment, and the density of transport links within the network. How can we distinguish the core of an informal urban network from its periphery? By mapping urban networks along the scale of activity between the three actors of local governments, local enterprises, and labor, we can measure scope by examining the supply of preferential policy, the agglomeration of industry, and the development of transport infrastructure. Within the economic geography literature, scope of enterprises can be measured through spatial agglomeration. As Krugman argues, the

location of demand itself depends on the distribution of manufacturing in a self-strengthening cycle.\textsuperscript{126} Therefore, by observing the placement of manufacturing bases we can get a sense of the presence of urban networks.

Looking at transport infrastructure with industrial agglomeration is particularly interesting due to its revelation of priority and volume of trade in a specific area. In order to show that growth is spatially biased, my framework of informal urban networks relies on the combination of these two spatial phenomena of agglomeration and network formation. Despite Glaeser and Kohlhase’s (2004) claims that analyzing physical infrastructure (such as transport links) is an antiquated strategy for analyzing modern urban regional economies due to declining transport costs, it works in this case since China is still a developing country. Since the

adoption of economic reforms, local governments now have the funds and incentives to pour into infrastructure projects. Studies done by Kumar, however, show that after economic reforms, there was a severe lack of adequate transport infrastructure to sustain growth. In 1989, it is estimated that at 200 million tons of freight, 10 percent of total freight capacity was unsatisfied in China.  

![Figure 7: Conceptualization for urban networks](image)

Therefore we combine all of these factors we have a framework for studying informal urban networks that features three actors of local governments, local enterprises, and labor. The city that these actors interact within is drawn with dashed lines to show the permeable borders within the network. The outside box is solid due to economic reforms, China’s rate of investment in transport has averaged around 1.3 percent of GNP, compared to other developing nation’s transport investment from 2 – 3.8 percent of GNP. Anjali Kumar, *China Deconstructs* (1994) 101-103.
to protectionist policies that block the free movement of goods, labor, and capital outside of them. These cities serve as nodes and are linked by the physical connection of transport infrastructure between cities, the cultural connection between the cores of place, culture, peoples and the economic connection of investment. The size of each actor is unequal according to specific factors. For instance, in the case of Shanghai, local enterprises play a much larger role than they do in Kunming for the simple fact that Shanghai’s industry is much bigger than Kunming’s.

![Figure 8: The virtuous but exclusive cycle of spatial concentration](image)

As this chapter has demonstrates, informal urban networks are by their very composition, spatial biased and exclusive processes. All three actors, local governments, local enterprises, and labor, are arranged in a polarizing way that acts more like a magnet than a growth node. Local government policy through preferential policy clearly demarcates which areas receive special exemptions and investment advantages while constraining the movement of labor markets. Local enterprises agglomerate at certain areas and foreign direct investment is drawn to areas that have pre-existing advantages. Concluding from this, there is what I call a virtuous but exclusive cycle of spatial concentration. As the chart shows, FDI
contributes to industrial agglomeration, which in turn develops both physical and transport infrastructure, which then attracts even more investment.
CHAPTER III: CASE STUDIES

Figure 9: The sites of case studies juxtaposed with a map of the administrative provinces of China

3.0 INTRODUCTION

Now I present three case studies of informal urban networks and use them to highlight different aspects not covered in the analytic framework. It is important to note that each central city has had a considerable historical advantage within their regions which distinguishes them. Guangzhou was originally the sole port of entry for foreign goods, Kunming was part of the Silk Road trade routes, and Shanghai has a tradition of foreign investment. The case studies briefly look at spatial biases in Guangdong, Shanghai, and Yunnan for the main purpose of illustrating the diverse manifestations of informal urban networks. The purpose of this study is to highlight the rise of micro-regionalism, not to provide an extensive qualitative and quantitative
study. To match this aim, the studies are not comprehensive proofs of my analytic framework, but are focused to augment particular aspects to my overall argument. In the Guangzhou urban network, I look in particular at intra-provincial disparity. In the Shanghai case study I focus on inter-provincial growth, and I conclude with the Kunming urban network that demonstrates linking micro-regions with a sub-region. In order to show how informal urban networks fragment the economy and are simultaneously governed by local incentives, my case studies are mainly focused on local choice for economic integration. In each case, economic development is mainly confined within provinces but not within national borders, and the formation of local disparity disputes the strategy of supporting growth nodes for alleviating economic disparity and encouraging inter-provincial cooperation.

The three urban networks were selected due to varying local conditions, local government strategy, and foreign relations. As mentioned earlier, urban networks have formed because of central government policies but their growth is fueled by local actors. Each urban network has a unique origin and has pursued growth in remarkably diverse ways. Chapter II developed a normative framework that identifies commonalities and three constant actors of local governments, local enterprises, and labor. Despite their variety, successful informal urban networks seem to have several prerequisites. Each case study should not be considered individually but as parts of a collective whole that contributes to the study of urban networks. When taken together, the studies will show the ineffectiveness of formal government attempts to determine regions and the resultant local counter-strategies.
3.1 THE GUANGZHOU NETWORK:
Intra-provincial disparity

My first case study is the Guangzhou network that features Guangzhou, Shenzhen, Zhuhai, Hong Kong, Macao, and Taiwan. Guangzhou’s domestic and foreign linkage is a model demonstration of informal urban networks. Of the first four SEZ’s designated by the central government, two of them (Shenzhen and Zhuhai) are located in Guangdong province. Their proximity to Hong Kong and Macao respectively was an intentional choice by the central government intended to strengthen economic links between the mainland and the two external economies. Historically, Guangzhou (previously Canton) had a virtual monopoly of China’s overseas trade as the sole port of entry for several important tribute missions. As a
result it has been gifted with centrality in foreign trade based on its traditional historical position in overseas trade.¹²⁸

Guangzhou is the hub of the urban network due its geographical position and administrative power over Guangdong Province as its provincial capital. The case of Guangzhou is a model example of informal urban networks. The SEZs of Zhuhai and Shenzhen along with the Special Administrative Regions (SARs 特别行政区 tèbiéxíngzhèngqū) of Hong Kong and Macao are government-created confined economic spaces with preferential policy having exact geographical delineations.¹²⁹ When Shenzhen and Zhuhai were originally designated as SEZs, the central government allotted them 327.5 square kilometers and 6.7 square kilometers respectively. As the four original SEZs recorded record economic growth, this boundary was expanded from 338.37 square kilometers total to 632 square kilometers.¹³⁰ By giving these cities investment and fiscal advantages, they also became important sites for contact development with overseas Chinese networks.¹³¹ As a result we can clearly see the nodal aspect of growth in the Pearl River Delta that demonstrates highly concentrated growth in designated areas compared to their immediately contiguous surroundings.

The provincial capital of Guangzhou is one of the richest cities in China, and Zhuhai and Shenzhen were both among the first SEZs. Although it is sometimes argued that Guangdong was given unfair advantages compared to Shanghai due to its

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¹²⁸ Skinner 239-240.
¹²⁹ Although they belong to China, I count Hong Kong and Macao as foreign economies due to their fiscal autonomy that includes their own currency, independent financial institutions, and control over foreign economic relations. The stark difference between the Mainland and the two SARs is best demonstrated by the moniker of Beijing’s SAR policy: “One country, two systems.”
¹³⁰ It is important to note that this number excludes the SEZ of Hainan island. Since Hainan has a total area of 33,920 square kilometers, including it would have increased the total area of SEZs to 34,552 square kilometers. Figures taken from Yeung and Hu, Coastal Cities in China (1992) 309.
¹³¹ Peter Katzenstein, A World of Regions (2005) 192.
lax remittance requirement to the central government, by the early 1990’s, Guangdong was contributing as much as Shanghai to the central treasury.\textsuperscript{132} Off Guangdong’s coast there is the prosperous Hong Kong economy, with which the provincial government has exerted much effort to build strong linkages. Although Hong Kong was formally returned to the Mainland in 1997, the central government has pursued a “one country, two systems policy” much akin to suzerainty status where the SAR retains administrative and fiscal control but cedes power in foreign relations. In 1994, Guangzhou and Shenzhen were among thirteen designated sub-provincial cities (sometimes referred to as deputy-provincial cities), granting them administrative powers just below provincial governments. Within the Guangzhou urban network, each node has significant fiscal autonomy to coordinate relations within the network. Wang Yijiang even argues that this high level of local autonomy makes the nodes greater magnets for investment. In the SEZs such as Shenzhen and Zhuhai, Wang Yijiang claims that these zones have developed a reputation of ignoring central directives and concordantly feature less price control, regulation for market entry and exit, and greater self-restraint from predatory taxes.\textsuperscript{133}

There is egregious spatial inequality and economic disparity in Guangdong province. If we divide the province into the Pearl River Delta and its peripheral area we see a sharp contrast in industrial agglomeration, foreign investment, and concentration of wealth. From 1980 to 1990, the Pearl River Delta (excluding the SEZs) registered higher growth rates than Guangdong province in general, with

\textsuperscript{132} Figures taken from Dali Yang in Naughton’s \textit{China Deconstructs} (1994) 87.

\textsuperscript{133} It should be noted, however, that cases exist that show otherwise. In Guangdong, highly successful refrigerator manufacturer Kelon was forced by the provincial government to buy a non-profitable state-owned air-conditioning company at an exorbitant price greatly exceeding its actual value, which led to Kelon’s eventual bankruptcy. From Huang Yasheng’s \textit{Selling China} (2004).
annual GDP growth in the Delta at 16.5 percent compared to 12.3 percent in the rest of Guangdong.\(^{134}\) Looking at the geography of the region we see that there is a small growth triangle around the delta with Guangzhou at the apex and Hong Kong and Macao as the other vertices.

![Image of Pearl River Delta and major transport linkages](http://www.landingchina.com/images/china_map/maps_of_cities/Shenzhen.jpg)

*Figure 11: the Pearl River Delta and major transport linkages*

In 1990, the Guangdong provincial government only financed 6.4 percent of infrastructure development while 34 percent was funded by localities and 21 percent was funded by foreign capital.\(^{135}\) Local self-reliance was required for growth, with many localities raising funds locally through domestic loans, self-financing, and foreign capital. The Pearl River Delta area, due to its reception of preferential policy,


\(^{135}\) The remaining financing came from domestic loans and “other sources”. Guangdong Statistical Yearbook 1992.
made it more attractive site for foreign investment and therefore capable of self-financing infrastructure development. Hopewell Holdings Bank, for example, raised $800 million for financing the Guangdong-Shenzhen-Zhuhai superhighway, borrowing from 29 other international banks.\footnote{Yue-man Yeung, “Infrastructure Development in the Southern China Growth Triangle,” in Asian Development Bank’s Growth Triangles in Asia (New York: Oxford University Press, 1994) 139.} Since their designations as SEZ’s both Zhuhai and Shenzhen have experienced a sudden inflow of basic infrastructure investment.\footnote{As of 1992 they had jointly attracted 20 billion yuan. Yeung and Hu, China’s Coastal Cities, (1992) 308.}

\textit{The Foreign Alternative}

In Guangdong province, there has a dramatic increase in FDI, jumping from $515 million in 1985 to $15.5 billion in 2003.\footnote{China Data Online, Guangdong Provincial Statistics 2003.}\footnote{Yeung and Hu, 308.} Currently, Guangdong attracts the second most FDI in China only to Jiangsu. However, the pattern or targets of FDI within the province are highly concentrated at the nodes of the urban network. Guangzhou, Shenzhen, and Zhuhai are all heavily dependent of FDI, with FDI providing up to a third of all fixed investment in Shenzhen. During the 1980’s, Shenzhen’s generation of foreign exchange increased from $11 million in 1980 to $2.17 billion in 1989.\footnote{Yeung and Hu, 308.}\footnote{Kevin Zhang. “China’s Inward FDI Boom and the Greater Chinese Economy,” \textit{The Chinese Economy}, 34.1 (2001) 79.} Hong Kong, the largest investor in China, contributes over half of total FDI inflows into China from 1979 to 1999.\footnote{Kevin Zhang. “China’s Inward FDI Boom and the Greater Chinese Economy,” \textit{The Chinese Economy}, 34.1 (2001) 79.} In 1990, FDI from Hong Kong and Taiwan that comprises such a large percentage of total FDI into China, is heavily concentrated with about 80 percent of FDI going to metropolitan or coastal
While Hong Kong investment extends all over the mainland, interviews done with Hong Kong investors reveal that they were often wary of investing elsewhere besides Guangdong. They were usually aware that they could save money investing elsewhere, but concerns over procuring supplies, unknown compositions of other workforces, and language differences in other areas made Guangdong their primary choice.\footnote{142}

Zhang’s (2001) empirical research shows that Hong Kong in China is primarily motivated by cheap labor, incentive policies, and market access.\footnote{143} With massive inflows of migrants providing cheap labor, preferential policies, and industrial agglomeration, and geographic proximity, Guangzhou and the SEZs in Guangdong are ideal investment sites with unfair advantages over other areas within the province. As a result, it is no surprise that Hong Kong and Taiwanese investment in Guangdong is heavily skewed toward the urban centers in the Pearl River Delta. It is estimated that an excess of 30 percent of Hong Kong notes circulate in Guangdong, highlighting the interconnectedness of the two economies.\footnote{144} Goodman (1994) points out, however, that geographical proximity was not the main factor behind a blossoming economic relationship between Hong Kong and the Pearl River delta. Just fifteen years ago the linkage was less obvious due to the presumed clash between a reforming centrally-planned economy and a booming free market economy. The

\footnotetext{141}{The actual percent is 79.39. It should be noted that FDI from developed countries was more biased toward the coastal region, with 51.22 percent of investment going to the coastal region and 33.84 percent going directly to metropolitan areas. Figures taken from the Special Report on US Investment in China, US-China Business Council (1990).}

\footnotetext{142}{Constance Lever-Tracy, David Ip, and Noel Tracy, The Chinese Diaspora and Mainland China (New York: St. Martin’s Press Inc., 1996) 243-245.}

\footnotetext{143}{This market access is greatly facilitated by Chinese connections, where Hong Kong and Taiwanese investors have operational advantages over other investors. Kevin Zhang. “China’s Inward FDI Boom and the Greater Chinese Economy,” The Chinese Economy, 34.1 (2001) }

\footnotetext{144}{David Goodman and Feng Chongyi in China Deconstructs (1994) 191.}
actual catalyst for integration, he claims, was largely from individual economic enterprises making judgments about their own development.\footnote{David Goodman and Feng Chongyi in China Deconstructs (1994) 190.}

Because goods manufactured by foreign enterprises are forbidden for export to the domestic market, foreign enterprises in Guangzhou and the SEZs choose to direct their linkages outward linkages instead of inward. Both finished and semi finished products are often sent to Hong Kong or Macao for re-export rather than going to other domestic economies.\footnote{Wang Jun, “Expansion of the Southern China Growth Triangle,” in the Asian Development Bank’s Growth Triangles in Asia (New York: Oxford University Press, 1994) 159.} Guangdong relies on Hong Kong’s service industries and commercial services, one-third of Guangdong’s production goes toward the domestic economy, while a third is exported.\footnote{Womack and Zhao, 161-163.} Hong Kong’s re-exports of goods made in Guangdong under outward processing contracts were worth US $36 billion in 1992, greater than its domestic exports of US $30 billion.\footnote{Yun-Wing Sung 57.} Also, Hong Kong is an intermediary site for investors from foreign nations such as Taiwan and other Western nations.\footnote{Graham, Edward M. and Wada, Erika, "Foreign Direct Investment In China: Effects On Growth And Economic Performance," Institute for International Economics Working Paper No. 01-03. Available at SSRN: http://ssrn.com/abstract=300884 or DOI: 10.2139/ssrn.300884} Guangzhou is more of an economic complementary to Hong Kong than other provinces in China. The majority of Hong Kong direct investment into China is focused on labor-intensive and low-technology goods for the international market. Developed countries investing in China tend to target access to China’s domestic market in capital-intensive goods.\footnote{Kevin Zhang. “China’s Inward FDI Boom and the Greater Chinese Economy,” The Chinese Economy, 34.1 (2001) 80.} The regional specialization that the central government is trying to promote has formed with most success without its guidance and with an eye on the global, not domestic economy. Instead of fitting on a domestic
production chain, Guangzhou and the SEZs are more aligned within a greater East Asian production chain by providing needed cheap labor for labor-intensive goods for other East Asian nations.

Coupling this external economic focus, Guangzhou also has high rates of outward emigration to foreign countries instead of inward movement to China. Adversely, Shenzhen did not focus on labor-intensive industries and restricted the inflow of unskilled labor, leading to the rapid increase in labor wages. In an attempt to recruit skilled labor, Shenzhen has made arrangements with Hong Kong investors for Shenzhen students abroad to be guaranteed employment on return to the SEZ.¹⁵¹ From looking at per capita incomes in the region, we can see that there is a difference between cities located within the urban network and those outside of it. Zhaoshan, located north of Guangdong and excluded from the network, has 1,130 yuan in 1990. Heyuan, located to the east of Guangzhou, only has 715 yuan. Maoming, located to the west, has a per capita income of 1,238 yuan. The biggest rates are south of Guangzhou along the urban network, with Shenzhen a staggering 4,785, Dongguan 4,078, and Zhongshan with 3,511.¹⁵² It is clear that even with provinces, location is crucial.

Development strategies of peripheral areas: the case of Panyu

Panyu, as geographically part of the Guangdong-Shenzhen linkage, sought development through infrastructure investment; in particular, highway construction. This choice was made in consideration of its geographic location en route from Guangzhou to Zhuhai and Hong Kong. Slow growth in the 1970’s and 1980’s sobered the local government into realizing that rather than support uncompetitive local industries, a more practical strategy for development was to focus on facilitating the linkage between Guangdong, SEZs, and Hong Kong through transport infrastructure development. In 1985, the local government of Panyu created a special organization called the “Directive Department for the Construction and Management of Roads and Bridges,” that focused on a development programme founded on the belief that “road construction can lead to economic prosperity” (lutong caitong). It is interesting to note that the two major investment projects during this period was the construction of the Ruoxi Bridge which connected Panyu to Guangzhou and the Humen Ferry at the mouth of the Pearl River Delta that facilitates trade between Zhuhai, Shenzhen, and Hong Kong. Construction was funded by the Panyu government and three Hong Kong companies. Lin (2000) makes the observation that in Guangdong, it was local governments instead of the central or provincial


154 George Chu-sheng Lin, Ibid. 256.
government that has been chiefly responsible for mobilizing and investing in construction capital.\textsuperscript{155}

Another aspect that is worth noting is the rapid increase in migrants that relocated to Panyu coincidentally after 1985. Due to its proximity to Guangzhou and the improvement in transport links, the temporary population of Panyu remained below 5,000 before 1986, while by 1991 there were 89,167.\textsuperscript{156} Opposed to the city leading county administrative reforms (\textit{shi guan xian}) in 1983, in the case of Panyu, development was originally hampered by its relationship and subordination to Guangzhou. Lam Tao-chiu’s (1999) study of Panyu shows that instead of enjoying beneficial “radiation effects” for being so close Guangzhou, Panyu was consistently demanded to serve the political and economic interests of Guangzhou.\textsuperscript{157} Consider then, that Nanhai province that is to the west of Panyu and not directly located on the urban network, despite efforts to gain foreign investment in infrastructure projects could only garner $3.69 US million compared to Panyu, where the Panyu Bridge alone cost about $85 million.\textsuperscript{158} Panyu’s geographic position made transport infrastructure development the most feasible strategy for growth, but areas not positioned within the network have little recourse.

\textsuperscript{155} George Chu-sheng Lin, Ibid. 257.
\textsuperscript{156} Statistics taken from the Public Security Bureau. George Chu-sheng Lin, Ibid. 265.
\textsuperscript{157} Lam Tao-chiu, “Panyu and Nanhai,” in Chung’s Cities in China (1999) 287.
\textsuperscript{158} Lam Tao-chiu, “Panyu and Nanhai,” in Chung’s Cities in China (1999) 238.
3.2 THE SHANGHAI NETWORK: Debunking Regional Growth Node Theory

Shanghai, China’s wealthiest city, is gifted with advantageous geographic location on the Chiangjiang Delta and a historical tradition of trade and foreign relations. Although Shanghai only has 1.1 percent of China’s population and 0.1 percent of its total area, it is estimated to contribute 20 to 25 percent of the central government’s revenues.\(^{159}\) As the largest city in China, and the fourth largest city in the world, Shanghai is a model example of the importance a single city can have in the national political and economic hierarchy. Unlike Guangdong, Shanghai was originally deemed too important for central revenues to risk economic experimentation through preferential policy. Deng Xiaoping later acknowledged that it was a major mistake to not designate Shanghai as a SEZ, a mistake Beijing tried to remedy by cordonning off the Pudong Development Sector in 1990 and 1992 to serve as the financial, industrial, and trading hub for the entire Changjiang Delta.\(^ {160}\) By granting Shanghai preferential policy, Beijing signaled that Shanghai was to be the Changjiang River Valley’s new growth node.\(^ {161}\) In a report given to the Fourteenth National Party Congress, Jiang Zemin stressed the need for the central government to develop Shanghai as an international economic, financial and trading center as soon

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\(^{159}\) Jacobs and Hong (1994) Ibid. 226.

\(^{160}\) Some of the literature on the Chanjiang Delta region still refer to its dated Wade-Giles spelling of Yangtze Delta or the pinyinized version of Changjiang. They all refer to the same geographic area.

\(^{161}\) In speeches given in 1990 and 1993, Deng Xiaoping and Jiang Zemin both called for Shanghai to take on a new role as an “outward-oriented, multi-function, modernized international city.” Bruce Jacobs and Lijian Hong, “Shanghai and the Lower Changjiang Valley,” in Goodman and Segal’s China Deconstructs: Politics, Trade, and Regionalism (New York: Routledge, 1994) 224.
as possible in order to promote economic growth in the Changjiang River Delta and the Changjiang River Valley.\textsuperscript{162}

Shanghai was selected as a case study due to its status as a provincial-level municipality and its enduring tradition of urban agglomeration that existed since the late Qing period. Unlike the Guangzhou urban network which is domestically contained within Guangdong, the city of Shanghai itself is located at the intersection of international and domestic spheres and is located in Zhejiang, close to Jiangsu while positioned close to the Korean Peninsula and Japan. Because the city of Shanghai borders two other provinces, its reasons for developing inter-provincial linkages differs from both Guangzhou and Kunming. It goes without saying that Shanghai has extensive foreign economic relations and is an integral urban center in the greater East Asian region. I would rather use this space to briefly discuss Shanghai’s inter-provincial relations to show that quite contrary to being a regional growth node, spatial inequality is most apparent in the Changjiang River Delta.

\section*{The Failure of the Shanghai Economic Region}

In 1982, the National State Council established a Shanghai Economic Region than encompassed ten municipalities and fifty-seven counties that included parts of neighboring Jiangsu and Zhejiang provinces. The ten cities that were encapsulated in this centrally designated region were Shanghai, Suzhou, Wuxi, Changzhou, Nantong, Jiaxing, Huzhou, Hangzhou, Ningbo, and Shaoxing, covering

\textsuperscript{162} David Goodman and Gerald Segal, China Deconstructs: Politics, Trade, and Regionalism (New York:Routledge, 1994) 239.
74,000 square kilometers of territory and over 50 million people.\textsuperscript{163} This was later expanded in 1984 to include all of Jiangsu, Zhejiang, Jiangxi, Anhui, and Fujian in 1986, expanding its size to a massive 637,000 square kilometers and a population of 228 million.\textsuperscript{164} Governed by the State Economic Commission, despite initial success in coordinating transport projects around the Lake Tai area, it failed in directing development of the industrial sector. Instead of complementary industrial development among localities, the region was mired by duplication and local protectionism until it was disbanded in the late 1980’s, less than ten years after its formation. Jacobs and Hong (1994) attribute the failure of this integration project as an overall lack of human resources, poor transportation, weak infrastructure, and capital shortage.\textsuperscript{165} Yet human resources, infrastructure, and capital is what Shanghai has in abundance, certainly more than most other cities in China. According to regional growth node theory, these factors should have spread to at least Shanghai’s neighboring areas.

\textsuperscript{165} Although plans to economically integrate the Changjiang River Valley have come across many obstacles, Jacobs and Hong report that an integrated regional economy emerging in a smaller area among the cities of Shanghai, Suzhou, Wuxi, Changzhou, and the Shanghai-Hangzhou corridor in Zhejiang. Jacobs and Hong (1994) Ibid. 243.
Shanghai was gifted with three Economic and Technological Development Zones of Minghang, Hongqiao, and Chaohejin. Minghang ETDZ is an industrial-based zone for light industry, textiles, electronics, precise instruments, fine chemicals, and metal processing industries. Hongqiao ETDZ is a tertiary industry zone for banks, trade centres, office and flats, hotels, commercial plazas, and foreign consulates, while Chaohejin ETDZ is a high technology area.\footnote{Anthony Gar-oh Yeh, Foreign Investment and Urban Development in China, 55.} Along with Pudong, Shanghai had clear advantages over neighboring areas in terms of attracting investment in light, heavy, and tertiary industries. These advantages are what made Shanghai so prosperous, but this has only contributed to a continuing process of polarization.
Figure 13: Industrial Agglomeration and Transport Linkages in the Changjiang River Delta from Maurice Howard’s “Industry, energy and transport: problems and policies,” in Cannon’s Geography of Contemporary China (1990) 185.

The economic geography of the Changjiang River Delta and neighboring Jiangsu province poignantly show industrial agglomeration and major transport infrastructure linking urban centers. Jiangsu largely neglected urban development and transport infrastructure development during the reform era due to its concentration on remitting substantial income to the central government, and as a result focused on linking what it determined to be the most important cities at the expense of underdeveloped areas. Whereas Jiangsu’s provincial government gave its two open coastal cities of Nantong and Zhangjiagang RMB 20 million from 1986 to 1989 for development, Guangdong invested an incomparable RMB 150 million in Guangzhou alone.\(^{167}\) As a result, within Jiangsu, internal economic disparity is

\(^{167}\) Zweig (1999) Ibid. 225.
immense as cities such as Suzhou and Wuxi boast per capita GDP over twice the amount of the provincial average. Even though the Changjiang Delta region is a hotbed for FDI, with Shanghai, Zhejiang, and Jiangsu accounting for approximately 20 percent of all FDI in China,\textsuperscript{168} the wealthy cities in these areas are poorly linked with peripheral cities and only have adequate transport infrastructure to link key cities. It is no coincidence that the richest area in China also has the greatest spatial inequality. In the case of Zhangjiagang, a county-cum-county level city during the reform era located on the Delta near Shanghai, Zhangjiagang was the poorest county in the Suzhou Municipality in 1978. The local government viciously promoted their township-village enterprises (TVEs) and pursued a strategy for export-led growth. The local government actively pursued cultivating foreign linkages in global communication, transactions, and investment while defying provincial attempts to interfere with its growth strategy.\textsuperscript{169} Rather than tie its growth to Shanghai or other growth nodes, Zhangjiagang pursued an independent strategy of direct integration with the global economy.

Like Guangzhou, Shanghai is a “migrant” city, but unlike Guangzhou, there are much fewer emigrants to leave the Changjiang River Delta area than Guangzhou and the Pearl River Delta area.\textsuperscript{170} Population statistics show that in 1970, population outflows from the city far exceeded inflows. Compared to 58,527 people moving to Shanghai, a staggering 370,955 exited, for a net population decrease of about 3

\textsuperscript{168} This percentage is calculated from the 2003 FDI figures for each province listed in Tai-Yuen Hon, Che-Cheong Poon, and Kai-Yin Woo’s “Regional Distribution of Foreign Direct Investment in China,” The Chinese Economy, 38.2 (2005).

\textsuperscript{169} One example is the Jiangsu provincial government’s plans to build a second-level city in Zhangjiagang’s harbor were scrapped by fierce local government opposition. Zweig (1999) Ibid. 218-220.

\textsuperscript{170} Lee Wing On and Brian Hook, “Human Resources,” in Hook’s, Shanghai and the Yangtze Delta (New York, Oxford University Press, 1998) 125.
percent. By 1985, after economic reforms started taking effect in Shanghai, although the inflow into the city dramatically increased to 182,904 for that year, outflow was a much lower at 129,973. In 1994 this trend has continued, with 199,600 people moving to Shanghai but only 125,400 leaving the city.\textsuperscript{171} White (1996) attributes the pre-reform high outflow rates to high demand for skilled Shanghai labor to mainly Zhejiang and Jiangsu, but greater population inflows during the reform era point to a tendency for labor to increasingly migrate and settle in the city. Studies of migrant populations show that in Shanghai, nearly 30 percent of registered migrants have completed higher education and have had, on average, 11.39 years of education. If we compare this to the population of Shanghai, where only about 7 percent have completed higher education, we can see a clear bias in the type of migrants that are granted registration by the city government.\textsuperscript{172} Decreasing population outflows and the adoption of skilled migrants shows that over the past twenty years Shanghai has started to not only attract but retain skilled labor. The proportion of skilled labor that Shanghai exports to the Changjiang Delta region has significantly decreased, challenging the central government’s plans for Shanghai to be a regional growth node.

\textsuperscript{171} It should also be noted that there was sizeable illegal migration that is not represented in these figures taken from Lynn White III, “Shanghai’s ‘Horizontal Liaisons’ and Population Control,” in Y.M. Yeung and Y.M. Sung’s Shanghai: Transformation and Modernisation under China’s Open Policy (Hong Kong: The Chinese University Press, 1996) 425-432.  
\textsuperscript{172} Conversely, less than 3 percent of unregistered migrants have completed higher education. Statistics taken from Zhou Zhugen, “A Study of Migrant Population in Big Cities,” in Shanghai City Census, Shanghai Population in the Nineties.
3.3 THE KUNMING NETWORK: Linking Microregion with Subregion

Cook (2000) points out that all nine provinces with a utilized FDI of more than US$1 billion are all coastal, and all of those with utilized FDI less than $300 million are interior provinces. Kunming is an example of urban networks transcending coastal versus interior bifurcation that was a major analytic weakness of the Regional Analysis Framework discussed in the first chapter. Unlike Guangdong and Shanghai, Yunnan did not receive preferential policy from Beijing. Kunming’s landlocked status forced local governments to actively pursue transnational and inter-provincial linkages, much more than Guangdong and Shanghai. Since more than 76 percent of industrial output in Yunnan comes from state-owned enterprises. As Yunnan’s economy is heavily dependent on SOE’s, economic growth is crucial for promoting social stability.

Of my three case studies, the Kunming Urban Network lacks coastal advantage, is landlocked, and is not geographically favored to take part in East Asian growth triangles and investment corridors. Located in Yunnan Province in Southwest China, the Kunming urban network provides a different kind of transnational linkage from the Guangzhou urban network. The old Chinese adage of “the mountains are high and the emperor far away” (shan gao huangdi yuan) is particularly pertinent to Yunnan in both its geographic setting and relatively less central government regulation compared to Shanghai or even Guangzhou. 84 percent of the province is mountainous, 10 percent plateau, and only 6 percent is arable basin. Due to unfavorable and restricting geography, it would not be until airline links and advanced railroad construction that Yunnan would begin to integrate with its neighbors.\footnote{174 Margaret Swain, “Transnational impact on Yunnan,” in Fitzgerald’s Rethinking China’s Provinces (2002) 183.} Domestically, Yunnan in contiguous with Guangxi, Guizhou, Sichuan, and Tibet while sharing international borders with Burma, Laos, and Vietnam. In order to compensate for unfavorable geographic location and the resultant lack of investment capital, Yunnan has been forced to take advantage of its numerous neighbors and develop inter-provincial and international linkages. This landlocked province has therefore taken a precarious position in regionalism and it is still in the process of finding its niche in a larger global economy. Regional integration projects are being actively pursued by two major bodies: the Asian Development Bank and the Kunming city government. As the Greater Mekong Subregion is coordinated by the Asian Development Bank, the Kunming urban network is at the crossroads of micro-region and sub-region.
The last time Yunnan featured prominently in the central government’s plans was during Mao’s san xian (three front) campaign of interior development. Back then, Yunnan profited from the center’s aversion for coastal growth, however, once war with the Soviet Union was ruled out and the san xian campaign was abandoned, there was little in terms of strategic value the province could offer the center until the 1990’s. The major change that has brought Yunnan back into the fray was China’s rapprochement with East Asia as discussed in the first chapter. Unlike Guangdong province, Yunnan only has one major city that is undoubtedly the economic hub and political leader: Kunming. Kunming exhibits complete centrality over the province and shows clear agglomeration of population, industry, and even tourism. Kunming Hi-tech Industrial Zone, Kunming Economic and Technological Development Zone, were both ratified by the central government in 1992 and was the only city in Yunnan to be granted such preferential treatment. In 1992, Kunming alone accounted for 40 percent of the entire province’s industrial output. Even though it is the provincial capital, Kunming has its own Foreign Trade Commission separate from Yunnan’s, and the Kunming International Trust and Investment Corporation is owned by the city, not by the provincial government. In the case of Yunnan, there is a clear institutional dichotomy between provincial and urban interests.

In terms of inter-provincial cooperation, Yunnan is a member of the Southwest Cooperation Zone, an inter-provincial regional economic development zone that was founded in 1984 and includes Sichuan, Guangxi, Guizhou, Chengdu, Chongqing, and Tibet. The Southwest Cooperation Zone is an example of provincial regionalism.

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by local actors in order to prevent further marginalization by the central government. The main purpose of this zone is to create a larger and more influential bloc to lobby the central government for preferential policy and investment. Yet such cooperation has not led to increased integration; in fact, Kunming’s designation as the site for the annual border fair was a sore point for other members.

Flourishing border trade has made transnational linkages far more important to Yunnan’s growth strategy than inter-provincial trade. With the central government limiting investment for just a few key projects, the Yunnan government decided to target key industries such as tobacco and sugar for growth.176 Because Yunnan faces a harder budget constraint than Guangdong and Shanghai, Yunnan was heavily engaged in local protectionism in the early 1980’s. The Yunnan economic plan of 1981 even explicitly commanded buyers to only buy goods from local producers.177 Yunnan’s local protectionist barriers and inability to secure capital from other provinces due to unfavorable investment conditions made it look outward to Hong Kong, Taiwan, Singapore and Thailand for trade, years before Beijing established formal relations with many of these countries. The informal nature of Yunnan’s transnational linkages is undeniable. Well before economic reforms formally opened up border trade, there was a flourishing drug trade and smuggling rings in what Segal calls a “black Natural Economic Territory”178 between Yunnan and other Southeast Asian nations.

178 Margaret Swain but in Goodman’s China Deconstructs, Segal’s paper (1994) 333
Currently there is a regional attempt at realizing the natural economic territory of the Mekong River that flows through the lower subcontinent. The Asian Development Bank, with the blessings of the national governments of all participating nations, designated the Greater Mekong Subregion (GMS) that is intended to establish cooperation in hydropower, transport and irrigation among all actors involved and develop the regional economy. The Yunnan government is the only non-national government participating, with Burma, Laos, Thailand, Cambodia, and Vietnam all participatory countries. Looking at investment patterns and transport infrastructure projects, it becomes clear that the purpose of including Yunnan is to integrate Kunming into the sub-regional economy.

In terms of transport infrastructure, internally the goal throughout the 1990’s was to develop and improve rail links between Kunming, Nanning, and two seaports of Beihai and Fangcheng. In terms of regional highways, the focus was on the Kunming-Daluo Road that links Yunnan with Burma and Thailand, as well as a road from Kunming to the Vietnamese city of Hekou.\textsuperscript{179} Major sub-regional projects in the transport sector are connecting Kunming with Chiang Rai in Thailand through both Myanmar and Laos, and the upgrading of the Kunming – Lashio roadway that links Yunnan with Myanmar.\textsuperscript{180} The main incentive for the Yunnan government is to link Kunming and Thailand. The two economies are much more advanced than the other neighbors, yet regional cooperation is the only way to physically connect the two countries. The Krung Thai Bank in Kunming that has been operating for eight

\textsuperscript{179} Ingrid d’Hoogle, “Regional Economic Integration in Yunnan,” in Goodman’s China Deconstructs (1994) 293.
years and offers international banking services, facilitates Thai private sector investment in Yunnan, and efforts to improve economic links with Thailand is what drives Kunming’s participation in the Mekong Subregion.\(^{181}\)

![Map of supra-provincial highway construction projects with Kunming as the hub](http://www.maps-of-china.com/maps/yunnan-s-ow-600x600.gif)

*Figure 15: Map of supra-provincial highway construction projects with Kunming as the hub*

The Mekong Subregion has greater implications, as it is predicted that Japanese companies will rotate the products in their global production networks in search of lower-cost production bases and eventually link with the Mekong sub-region and position it within the greater East Asian regional economy.\(^{182}\) Therefore, despite its unfavorable geographic position that boasts no advantage like Guangzhou or Shanghai, Kunming has followed a strategy of linking with the greater sub-region in the eventual hope of accessing a wider East Asian economy.

Since its inception, however, the greatest obstacle to success has been Beijing. Economic cooperation is undermined by collective distrust from Burma, Laos, Thailand, Cambodia and Vietnam who harbor fears of China’s true intentions. Active promotion and involvement by the Chinese central government has proven a major

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\(^{182}\) Tachiki in Remapping East Asia 168.
stumbling block, *despite* increasing economic linkage between Kunming and these countries. China’s intention of being a good neighbor is questioned due to historical enmity and its refusal to join the Mekong River Commission that oversees and coordinates projects. Also, to the great dismay of Laos, Vietnam, Cambodia, and Thailand, Beijing plans to build large dams on the border that will damage the ecology of the lower Mekong region.\(^{183}\) It is important to notice that in this case, although distrust limits the amount of formal cooperation between national governments, informal trade by local actors continues to flourish and remains the primary catalyst for economic integration.

CHAPTER IV
CONCLUSIONS

4.0 SUMMARY OF FINDINGS

Based on the three case studies of Guangzhou, Shanghai, and Kunming we can draw several conclusions concerning informal urban networks. In each case, informal urban networks have come into existence due to central government initiatives, but have prospered due to local agents. It is clear that the central government has a role to play in beginning the process. In Guangdong, central designations of SEZs and low fiscal remittances contributed to network formation among Guangzhou, the SEZs and offshore economies of Hong Kong and Macao. In Shanghai, the designation of Pudong was a key factor in Shanghai’s recent economic growth, and in Yunnan, Beijing’s rapprochement with border countries and approval of sub-regional projects has led to the realization of a Mekong Subregion. There is no one definitive model for informal urban networks but we can extrapolate several similar characteristics between them. First, in relation to geographic location, all three cases are located in provinces that have what Womack and Zhao call petty and grand advantage.184 This is significant because it provides localities the choice between promoting inter-provincial and/or international linkages. It grants them an invaluable bargaining position in international trade as gateways to the interior market. For example, if Burma wants to develop trade with Sichuan, it must develop

184 Womack and Zhao Ibid. 163.
linkages through Yunnan first. However, while Womack and Zhao empirically prove that coastal provinces boast the least export dependence on inter-provincial trade because they have diverse trading relations with a large number of countries,\textsuperscript{185} the Kunming case modifies this by proving that coastal status is not a prerequisite for high reliance on foreign trade. Rather than separating coastal from interior, geographic access to foreign countries seems to be a more appropriate explanation for transnational linkages. It is also no coincidence that each case is located on a Delta or near an international body of water. Besides the agricultural benefits that initially gave these areas growth advantages, due to water access these areas enjoy reduced freight transport costs. In each case, local governments have created supportive, not predatory, environments for local enterprises that attract investment. There is an understood embeddedness between local governments, enterprises, and labor. When a locality is presented with a choice of focusing international or domestic linkages, it will make a rational decision based on the benefits and cost of each.

As the thesis has shown, as a micro-regional process, informal urban networks are a threat to central attempts to alleviate economic disparity because their growth is spatially biased. Although informal urban networks have come into being through central government policies, their growth and network formation is a local process that hinders inter-provincial economic integration. Although theoretically, the central government still exerts subtle control through the \textit{nomenklatura} system of appointments and the supply of preferential policy, decreasing trends of cadre rotation means that local leaders are becoming more and more entrenched and vested in local, parochial interests. The declining exercise of \textit{nomenklatura} power of transferring

\textsuperscript{185} Womack and Zhao Ibid. 163.
provincial leaders horizontally means that more and more provincial leaders are natives of their province of appointment or have worked extensively in that province. The system was enacted to make local elites more responsive to central directives, but waning central use of this power is making it obsolete as a method of control.

The danger is the rising social cost to the central government. The Himmelman (1996) collaboration continuum shows that city collaboration begins as informal networks that gradually strengthen to collaboration. While this may seem desirable, the process of network formation is in itself spatially confining. To clarify, because networks repay their initial cost through repeated use, it is in the interests of urban centers to use and develop them as much as possible. For these networks to expand, the incentive of greater economic returns must exist.

4.1 POLICY RECOMMENDATIONS

At first glance the disadvantages with informal urban networks is not immediately clear. After all, areas like the Pearl River Delta and Changjiang River Delta are registering growth rates above the national average and have become crucial economic centers in East Asia. It is also quite clear that national disintegration and political federalism are no longer considered real dangers to central control. Pew

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186 Dali Yang, “Reform of central-local relations” in Goodman’s China Deconstructs (1994) 86.
188 It should be noted that although muted, such speculation has not completely disappeared. Even as late as 2000, Cook depicts a “nightmare scenario” where Guangzhou and Fujian break off from the national polity. Cook in Cannon’s China’s Economic Growth (2000) 51.
Research Polls of urban areas show overwhelming support for Beijing’s ability to deliver economic growth, and high growth rates in these areas will only strengthen Beijing’s legitimacy, not undermine it. The problem is not the rapid development and expansion of urban networks but Beijing’s commitment to balanced economic growth as outlined in the Tenth Five-Year Plan (2001-2005). The unfortunate reality is that informal urban networks prevent the realization of regional growth nodes as a viable strategy for widespread economic growth. Instead, we see a trend of polarization, spatial economic concentration, industrial agglomeration, and intra-provincial disparity. If this is happening in areas gifted with favorable geography and traditionally wealthy provinces, it is difficult to conceive that they will promote growth on a national scale.

The solution is not duplicating the coastal development strategy of the 1980’s and exporting it to the interior regions. Returning to the market explanation for economic fragmentation, a better strategy would be changing the incentives for regional cooperation. In the case of informal urban networks, when we compare local incentives for inter-provincial trade versus international trade, we see that the temptation to look outward outweighs the potential benefits of domestic cooperation. To put it another way, the profit from foreign economic integration greatly exceeds the profit from domestic integration. China’s coastal cities are in an exclusive position between domestic and international economies, and unlike interior areas, control access to China’s comparative advantage in the global market. In the case of landlocked Yunnan, there are serious local attempts to access this global market by developing transport infrastructure in the Mekong sub-region. What the central
government must do to encourage integration is to provide sufficient incentives for localities to actively pursue it. Informal urban networks are threats to central control as local, bottom-up processes that are governed by local actors. They are not, however, autonomous from the central government. Beijing’s semi-successful campaign curbing local protectionism in 1991 shows that economic reforms have weakened but not severed its directive capacity over localities.  

Currently, the preferred form of central investment is for transport and infrastructure development. The logic behind this is plausible: by developing these sectors, these areas become more attractive and therefore competitive sites of investment. By making poorer regions a more attractive investment prospect in order to give them leverage against much more developed areas, however, is only a cosmetic makeover. Top-down directives to encourage economic cooperation will only lead to bottom-up strategies to impede or manipulate such integration policies as a counterforce. Economic integration should follow market logic: supply will meet demand. But demand must begin with local actors. In the case of informal urban networks, demand for economic integration is particularly lacking because of weak incentives to engage in inter-provincial trade over foreign trade.

The broad strategy the central government should pursue is industrial investment projects encouraging regional specialization. Before transport and infrastructure development becomes the primary investment target, China must first break down the vestiges of the cellular economy that fragmented the market in the 1980s. Despite a relatively successful widespread and popular campaigns to curb

local protectionism, China is still dealing with its legacy. Furthermore, Beijing should aim to provide regional economic stability to support foreign linkages over bilateral relations. The financial crisis of 1997, for instance, severely hampered the development plans of the Mekong Subregion. This is different from a unilateral approach since it circumvents resentment and hostility many of China’s neighbors have toward the central government.

4.2 CONCLUDING REMARKS: CUTTING THE GORDIAN KNOT

As my treatment of informal urban networks was meant to be explanatory and not extensive, future research should consider using my analytic framework for mapping informal urban networks according to spatial concentration. There is much that can be done in terms of quantifying the economic relationship and linkages between these cities and comparing different forms of urban networks.

The central government will have to decide how seriously it is committed to mitigating regional inequality. Previously, Beijing has treated the subject with concern yet without sustained efforts. The “Go West” policy must take priority if any real gains are to be achieved. As I have argued, the key is not forcing provinces into cooperative arrangements that ignore spatial constraints but to address the incentives of local actors. Cutting the Gordian knot of spatial development and disparity will take much more than a single masterstroke; but rather a complete structural change of incentives for the actors involved. Within China’s long tension between central and local relations, there has always been the saying that, “whenever there are policies
from the top, the bottom produces counterstrategies.” If Beijing is to overcome regional barriers to integration, it should consider a simple inversion to this saying. Instead of directing formal integration projects, the center should let the bottom choose its own path of economic development and focus on coordinating an appropriate counterstrategy to meet its own goals.
BIBLIOGRAPHY


Huang, Cary. “Beijing ‘ignored’ by local cadres; State-run newspaper says regionalism needs to be reined in.” *South China Morning Post*, November 18, 2005.


