



Institutional Adaptability in China: Local Developmental Models Under Changing Economic Conditions

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Summary. — Distinct patterns of regional development have emerged in China’s political economy since the initiation of economic reforms in late 1970s. In particular, the localities of Suzhou, Wenzhou, and Dongguan each achieved dramatic economic growth during the first three decades of reform, earning them national reputations as developmental “models” for other cities in China to recognize and emulate. However, the local states of Suzhou, Wenzhou, and Dongguan responded differentially to changing conditions in the broader domestic and global economy; and the global financial crisis at the end of the 2000s affected the three localities with varying levels of severity. This article thus seeks to explain why previously well-performing developmental models diverged in their performance and capacity to recover from a major economic shock. Drawing on national economic census data, in-depth field interviews, and relevant secondary literature, we argue that variation in the institutional adaptability of Suzhou, Wenzhou, and Dongguan throughout the course of their developmental experiences had a defining effect on how these cities fared during the financial crisis. The process-tracing case studies reveal that a locality’s ability to adjust to changing market conditions may be conditioned by structural endowments, but ultimately hinges on agent-centric factors, including *motivated and capable local leadership*, *openness to new policy ideas*, and *state capacity for policy implementation*. Ultimately, our analysis makes the broader observation that in a dynamic environment, factors that promote economic success at one point can become barriers later on. Hence, exploring a region’s institutional adaptability and identifying the factors that facilitate or impede such adaptability in local economic governance provides a more nuanced means for understanding a locality’s evolving developmental patterns and performance—during normal times, as well as more challenging periods.
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Key words — China, regional development, institutional adaptability, local governance, economic performance, global financial crisis

“We have always followed Beijing’s directions.”
[Suzhou, Private entrepreneur]

“I have only heard local officials shout slogans, but never seen them actually invest in human capital.”
[Wenzhou, Private entrepreneur]

“More and more foreign companies have moved to other places like Kunshan, Suzhou. We are no longer attractive to them now.”
[Dongguan, Local official]

1. INTRODUCTION

Since the late 1970, China’s political economy has been distinguished by its decentralized and experimental approach to reforming socialist-era institutions (Naughton, 1995). This relatively permissive policy stance facilitated the emergence of distinct patterns of regional development. In particular, the localities of Suzhou, Wenzhou, and Dongguan each achieved dramatic economic growth over the first three decades of reform, earning them national reputations as “models” for other cities of China to recognize and emulate (see Table 1). Suzhou developed vibrant township and village enterprises (TVEs), and further enhanced its competitive status through the creation of special economic zones and high-technology parks. Initially impoverished during the Mao era, Wenzhou’s developmental path became known for its vibrant private sector when the political status of profit-making activities was still highly controversial (Parris, 1993; Tsai, 2006). Dongguan, located between Hong Kong and Guangzhou, developed an export-oriented manufacturing economy by attracting large amounts of foreign direct investment (FDI). Until the global financial crisis, all three localities yielded growth rates that

were more than double the national average of 8.1% (during 1978–2004) (WSB, 2005). However, the local states of Suzhou, Wenzhou, and Dongguan responded differentially to changing market conditions, and the economic downturn at the end of the 2000s affected the three localities with varying levels of severity.¹ This paper thus seeks to explain why previously well-performing developmental models diverged in their performance and capacity to recover from a major economic shock. In so doing, it traces the reform-era developmental paths of the three localities based on both primary and secondary sources. We also conducted fieldwork by interviewing private entrepreneurs and local officials from different bureaucracies (See Appendix A).

This paper argues that variation in the institutional adaptability of local governments throughout their developmental experiences proved to be a key indicator of how well the respective cities weathered the global financial crisis. Existing explanations for variation in institutional adaptability may be divided into those that emphasize structural versus agent-centric factors. Conventional structural variables include: (1) *natural endowments and historical legacies*; (2) *external resources and opportunities*; and (3) *fiscal conditions*. The agent-centric variables include the following attributes of local leadership and administration: (1) *highly motivated and capable leadership*; (2) *openness to new policy ideas*; and (3) *state capacity for policy implementation*. While acknowledging the relevance of structural conditions, this study highlights the

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Table 1. *Developmental characteristics of Suzhou, Wenzhou, and Dongguan*

Locality	Period	Local economy	State–business relationship	Central–local relationship	Type of capital
Suzhou, Jiangsu Province	1980s	Dominated by TVEs and strong collective sector	Local state-led macroeconomic planning	More central-oriented	State and foreign capital
	1990s	Privatization of TVEs and attraction of FDI	Strong local state intervention and stronger social safety net		
Wenzhou, Zhejiang Province	1980s	Dominated by private household factories	Minimal state intervention	More independent and autonomous	Mainly domestic capital
	1990s	Small commodities with more out-migration	More state intervention, planning, and regulation		
Dongguan, Guangdong Province	1980s	Small-scale manufacturing	Close relationship between levels of local state and business	More independent and localized	Mainly overseas Chinese capital
	1990s	Promotion of export-oriented development	More centralized city-level government		

role of agent-centric factors in mediating, and even redirecting pre-existing developmental patterns. Localities demonstrating greater institutional adaptability tend to have ambitious leaders who are well educated and have a progressive outlook toward developmental strategies, along with the administrative capacity to implement local developmental policies. Leaders in such localities are also more willing to mobilize resources from higher levels of government, and are more likely to be promoted.

The paper proceeds as follows. The first section situates our analysis of local governmental adaptability in the literature on institutional development. We argue that state capacity to adjust to a dynamic economic environment ultimately depends on the agency of local leaders even though structural endowments may condition their policy options. The subsequent sections trace the developmental paths and patterns of institutional adaptability in Suzhou, Wenzhou, and Dongguan, respectively. We then compare the factors accounting for variation in institutional adaptability among the three localities. Each locality established a distinct area of comparative advantage at the outset of reform, which yielded impressive growth rates. Over time, however, they diverged in adaptability to changing conditions in the broader domestic and global economy. Suzhou shifted its priorities to fostering technology-intensive industries prior to the crisis; Wenzhou persisted in its original economic model; and Dongguan attempted belated reforms. We conclude with the caveat that policies associated with growth during a particular period do not guarantee continued success later on, as market conditions shift during the very process of economic development.

2. EXPLAINING INSTITUTIONAL ADAPTABILITY

By definition, “institutional adaptability” has a normatively positive connotation, but what are the sources of such adaptability? The late economic historian and institutionalist, Douglass North (1990, 2005), noted the importance of *adaptive capacity* in his explanation of developmental success, arguing that adaptive capacity facilitated by formal and informal institutions enables actors to experiment with a broad spectrum of options in both political and economic systems. Richardson and Bogart (2008) depict Great Britain’s adaptability in property-rights institutions as a response to the will of the people in fostering economic development during 1700–1830. From an alternative perspective, Nassim Taleb (2010) explores the concept of *adaptive governance* and contends that varia-

tions in innovative strength result not from systemic features, but from the opportunities provided through “maximum tinkering.” Such tinkering may occur in non-democracies as long as rulers encourage openness to exploring a wide range of plausible alternatives among its institutions, processes, and actors.

Taleb’s insight holds particular relevance to China given that its experimental approach to reform reconfigured the country’s socialist political economy within the span of just a few decades. During the 1970s, profit-making activities were illegal, China’s economy was closed to foreign trade and investment, and internal migration/labor mobility was highly restricted. By the 1990s, those key constraints to market-oriented development had been reversed: the private sector was legalized and thriving, China became one of the world’s leading destinations of FDI, and hundreds of millions of rural migrants were working in its cities. Incremental reforms generated unexpected economic transformation.

Within this national macroeconomic context of economic liberalization, localities have exhibited remarkable diversity in their developmental patterns and capacity for institutional adaptation. One of the recurrent themes in studies of China’s political economy is that the interests and policy priorities of central and local governments are not always aligned. Breznitz and Murphree (2011) describe this tension in central-local relations as “structured uncertainty.” This uncertainty has enabled local adaptation of ambiguous central mandates to build an innovation economy through “trial and error based experimentation (p. 19).” Along similar lines, Chen (2014) finds that the choice of global business allies by local governments affected the manner in which domestic firms pursue industrial upgrading, leading to varying levels of success. In a broader analysis of local developmental paths during the reform era, Ang (2016) contends that industrial growth and bureaucratic capacity has occurred in a coevolutionary, rather than sequential manner. Furthermore, local variation in developmental resources and trajectories exhibits a “domestic flying geese pattern,” whereby coastal localities that attracted foreign direct investment earlier in the reform era, now represent a domestic source of investment for interior regions. Unlike Ang’s structured approach, however, this paper advances an agent-centric perspective to explain variation in institutional adaptability, and in turn, divergent economic performance during different stages of development.

Beyond the literature on China’s contemporary political economy, our emphasis on agency departs from conventional explanations for cross-national or regional variation in devel-

opment. In institutional analysis, the concept of path dependence has generated considerable attention and refinement. Pierson (2000), for example, characterizes path dependence as “social processes that exhibit increasing returns (p. 252).” He emphasizes the importance of sequencing, such that “Earlier events matter more than later ones, and hence different sequences may produce different outcomes (p. 253).” By showing how historical and developmental legacies narrow the choice of a region’s future developmental trajectory, path dependency privileges a region’s structural conditions. A cognate concept from evolutionary economic geography is the phenomenon of “lock-in” (Essletzbichler & Rigby, 2007). Similar to path dependence, it stresses the importance of past and structural conditions that constrain future developmental choices. Meanwhile, the varieties of capitalism (VOC) literature reinforced the concept of distinctive models of political economy, highlighting institutional complementarities that are mutually reinforcing (Hall & Soskice, 2001). By focusing on the institutional mechanisms underlying continuous reproduction of existing systems, however, this comparative statics approach underestimates the potential for actors to adapt old strategies in light of altered circumstances (Streeck & Thelen, 2005). VOC similarly overlooks the possibility of what James Mahoney (2000) calls, “path dependent reactive sequences,” whereby “early events trigger subsequent development not by reproducing a given pattern, but by setting in motion a chain of tightly linked reactions and counterreactions (p. 526–527).” In reactive sequences, strong responses may “transform and perhaps reverse early events.”

While acknowledging the constraints that a region’s past can have on its future development, this paper highlights *institutional adaptability* as the central causal concept for explaining regional unevenness in *crisis-coping ability*. The latter refers to the ability of an economy to withstand, recover from, or adjust to the negative effects of adverse exogenous shocks (Briguglio, Cordina, Farrugia, & Vella, 2009). Institutional adaptability is indicated by the capacity to enact diverse responses—meaning a variety of proactive, preemptive, and reactive operations and procedures—that facilitate continual adjustment to and absorption of endogenous and exogenous challenges (Heilmann & Perry, 2011). It is in this context that we emphasize the possibility that local agents could introduce policies that lead a region to diverge from an apparently self-reinforcing developmental trajectory, even before a crisis demands a policy reaction. The likelihood of proactive reforms depends on the availability of *leaders who are highly motivated and open to new ideas* about economic development. Such leaders may be regarded as political entrepreneurs. Sheingate (2003) notes in the context of American politics that political entrepreneurs “engage in speculative acts of creative recombination in ways that challenge existing boundaries of authority” (p. 202). As entrepreneurs, they are by definition risk acceptant and inspired to mobilize resources to support novel endeavors.

Building on this concept, we contend that in order to promote economic development, political entrepreneurs pursue particular courses of action based on causal beliefs about the principles and possibilities of growth. In the study of comparative political economy, economic ideas have been characterized as “institutional blueprints,” particularly during times of crisis—because they “reduce uncertainty, give content to interests, and make institutional construction possible (Blyth, 2001, p. 3).” The present study suggests that economic ideas are equally relevant for guiding policy during non-crisis periods. Adherence to pre-existing beliefs about static formulas or models for economic success should be distinguished from receptiveness to alternative visions of economic development.

The importance of political agency and the ideational outlook of individual leaders have been shown in some studies of why Chinese localities with comparable endowments and institutions have pursued vastly different developmental strategies. In a comparison of two northeastern coastal cities, Qingdao and Dalian, Chung (1999) found that Dalian’s leaders were far more “open minded and reformist” in the 1980s, and therefore more entrepreneurial in cultivating foreign economic relations than leaders in Qingdao.² Similarly, Donaldson’s (2009) comparative study of two interior provinces, Guizhou and Yunnan, found that Guizhou’s provincial leadership deviated from central priorities by pursuing poverty reduction policies over GDP growth. While serving as Guizhou’s provincial party secretary, Hu Jintao was “motivated by specific ideas about how the problem of rural poverty should be addressed (p. 441).” By contrast, Yunnan’s leaders prioritized development of its tobacco and tourism industries, reasoning that “the choice of specific poverty reduction programs should not only satisfy the immediate demand of food and housing for the poor, but also consider long-term and sustainable development. . . and focus on profit (p. 442).” These differing developmental ideas during the 1980s yielded higher growth rates in Yunnan without much poverty reduction, and the reverse outcome in Guizhou by the mid-1990s.

In addition to the leadership of motivated local officials and their receptiveness to alternative economic ideas, the third agent-centric factor that facilitates institutional adaptability is *state capacity to implement policies*. Even when strong leaders hold similar sets of economic ideas, they may not translate into similar outcomes due to variation in administrative capacity. During the late 1950s, for example, the presidents of Argentina and Brazil, Arturo Frondizi and Juscelino Kubitschek, respectively, shared congruent “developmentalist” economic ideas about the causes of underdevelopment and adopted similar policy responses (Sikkink, 1991). Although both governments promoted import-substituting industrialization, Brazil’s state-led efforts yielded growth, while administrative instability in Argentina inhibited effective implementation of developmentalist policies. Indicators of state capacity include having reliable agents (civil servants), low levels of corruption, and functional monitoring mechanisms. Besides these organizational features, the structural availability of fiscal revenues further enhances state capacity. In other words, local state capacity constitutes an agent-centric variable that is also conditioned by the structural supply of public finance.

Returning to the overarching problematic of institutional adaptability, our argument may be summarized as follows (see Figure 1). In any given locality, structural factors—*natural resource endowments and historical legacy, external resources, fiscal conditions*—both constrain and provide different developmental options. Yet institutional adaptability cannot be read off deterministically from structural context because agent-centric variables—*leadership, ideas, and state capacity*—ultimately determine the manner in which local resources are deployed. To borrow the title of an influential article in political economy, “Structures do not come with an instruction sheet (Blyth, 2003).” Political entrepreneurs may seek to mobilize external resources. Leaders insulated from alternative ideas about the economy may not recognize the potential value of certain endowments. Complacent cadres may squander resources. Structural conditions are necessarily mediated by the vision and capabilities of local leaders and governing institutions.

With this context in mind, this paper compares Suzhou, Wenzhou, and Dongguan to explain variation in the adaptive

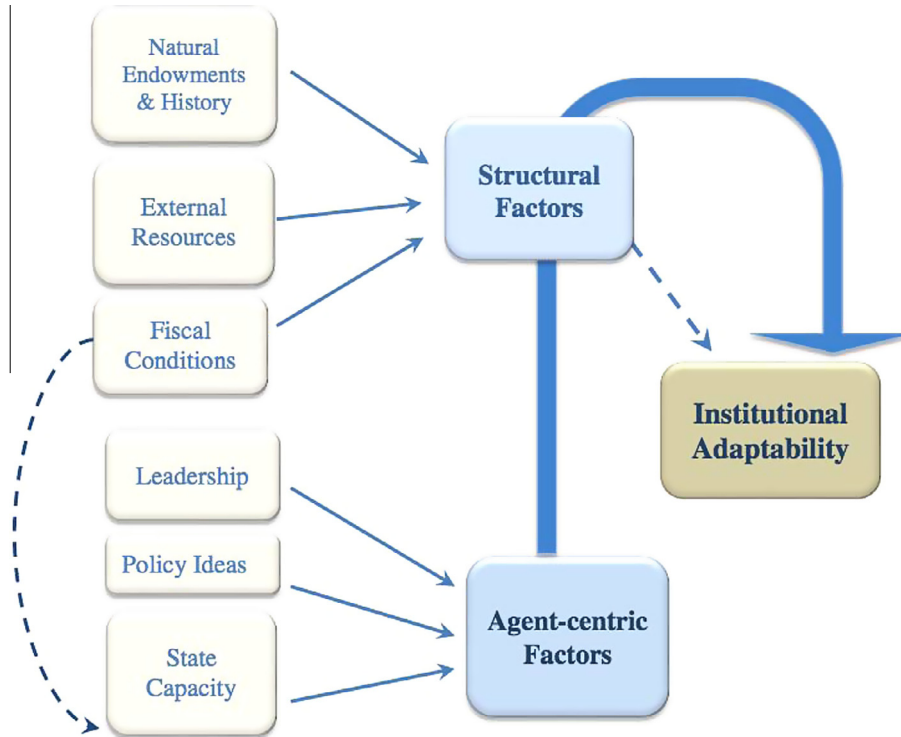


Figure 1. Factors contributing to variation in institutional adaptability. Note: The dotted line connecting Fiscal Conditions and State Capacity is meant to indicate that the structural supply of public finance has implications for local state capacity. Other indicators of local state capacity include the presence of reliable agents, low levels of corruption, and functional monitoring mechanisms.

capacity of their respective local states during the global financial crisis. We propose that strong adaptive governance is required for a state to introduce policies that match its changing economic circumstances at appropriate turning points—*prior to* shocks that force the issue. Both a city's economic mode and type of local governance are dynamic, and thus able to change in response to exogenous and endogenous challenges. Whether the local state pursues policies that are appropriate to its economic situation at different stages of development indicates the strength of its adaptive governance. The patterns of institutional adaptability in the three cities may be described as *proactive* (Suzhou), *delayed* (Dongguan), and *reactive* (Wenzhou). *Proactive adaptive governance* means actively adjusting to changing economic situations at appropriate turning points. *Delayed adaptive governance* refers to adjusting in a constructive direction but only after the appropriate turning point. *Reactive adaptive governance* demonstrates passive adaptation to dynamic economic situations with inappropriate and poorly timed interventions. We then analyze how and why each of the three local states adopted different policies in response to the continuously changing economic environment, and assess the institutional adaptability of their local states in response to external challenges.

3. VARIATION IN ECONOMIC PERFORMANCE AND CRISIS-COPING ABILITY

Although the global financial crisis of 2008–09 affected the entire Chinese economy, its impact varied regionally, as seen in Suzhou, Wenzhou, and Dongguan. The variation in their economic performance and crisis-coping ability is apparent in the pre- and post-crisis performance of five economic indicators: GDP per capita, gross value of industrial output, total

investment in fixed assets, total utilized foreign capital, and total patent authorizations. (See Table 2 for a summary of the basic economic conditions of Suzhou, Wenzhou, and Dongguan from 1979 to 2010, and Table 3 for the number of patents.)

The following figures illustrate the impact of the economic crisis on the three local states, as indicators of their ability to withstand and recover from the effect of the exogenous shock.

As shown in Figure 2, all three cities experienced decreases in the growth rate of per capita GDP during 2008, and all three started to recover after 2009. Dongguan experienced a greater drop than Wenzhou during 2008–09, and Suzhou suffered the least. Growth in per capita GDP subsequently rebounded during 2009–10 to 18.5% in Suzhou, 14.6% in Wenzhou, and 7.8% in Dongguan.

Figure 3 shows that the growth rate of gross value of industrial output (GVIO) declined in all three cities during the financial crisis, and all three started to recover after 2009. Dongguan suffered the greatest drop in GVIO growth, and again, Suzhou performed best of the three.

Figure 4 reveals that Suzhou experienced the least volatility in total fixed asset investment among the three cities. Following a slight drop during 2007–08, investment in Suzhou started to recover. Wenzhou suffered most during 2007–08 and recovered during 2008–09 to a level slightly lower than before the crisis. Dongguan experienced a smaller decrease than Wenzhou and had a similar recovery during 2008–09. Dongguan's reduced growth rate during 2009–10 was due to reduction in industrial expansion and relocation of some industries to places such as Kunshan (in the southeast Jiangsu Province, adjacent to Shanghai municipality) with more favorable business environments.

Figure 5 indicates that Suzhou maintained stable growth in total utilized foreign capital both before and after the

Table 2. *Social and economic conditions in Suzhou, Wenzhou, and Dongguan, 1979–2010*

Year	GDP per capita (yuan)			Gross industrial output value (billion yuan)			Total foreign capital used (million USD)			Total investment in fixed assets (one hundred million yuan)		
	Suzhou	Wenzhou	Dongguan	Suzhou	Wenzhou	Dongguan	Suzhou	Wenzhou	Dongguan	Suzhou	Wenzhou	Dongguan
1979	9.0%	11.3%	7.2%	16.3%	18.2%	16.7%	n/a	n/a	n/a	n/a	75.0%	0.0%
1980	13.9%	17.7%	8.4%	29.8%	30.8%	20.4%	n/a	n/a	447.1%	n/a	400.0%	0.0%
1981	6.6%	4.8%	24.7%	8.1%	0.0%	16.9%	n/a	n/a	-41.9%	n/a	17.1%	100.0%
1982	7.5%	9.5%	23.6%	2.5%	5.9%	20.3%	n/a	n/a	33.3%	11.4%	-22.0%	350.0%
1983	9.6%	12.0%	12.5%	13.4%	16.7%	14.5%	n/a	n/a	25.0%	18.4%	21.9%	0.0%
1984	29.4%	22.2%	21.1%	33.3%	38.1%	15.8%	n/a	n/a	113.3%	44.8%	30.8%	66.7%
1985	33.9%	23.5%	39.6%	52.4%	44.8%	54.5%	n/a	n/a	50.5%	76.8%	51.0%	136.7%
1986	12.9%	17.4%	30.6%	22.8%	16.7%	41.2%	31.8%	900.0%	5.2%	16.5%	37.7%	62.0%
1987	20.8%	21.0%	28.8%	31.0%	26.5%	54.2%	313.5%	233.3%	270.4%	34.4%	19.8%	23.5%
1988	28.7%	24.2%	39.1%	41.8%	30.6%	67.6%	18.7%	0.0%	114.3%	45.2%	36.2%	16.2%
1989	5.7%	4.0%	8.2%	17.4%	11.1%	25.8%	0.4%	470.0%	3.4%	-18.7%	-2.9%	-69.7%
1990	13.7%	5.8%	29.5%	11.5%	5.6%	26.9%	0.0%	-56.1%	-2.5%	0.9%	4.8%	50.0%
1991	15.5%	18.1%	-17.5%	17.0%	29.5%	29.3%	70.6%	208.0%	7.5%	37.7%	13.6%	82.7%
1992	52.2%	35.3%	-1.1%	74.7%	48.8%	46.1%	624.9%	223.4%	78.2%	102.4%	41.5%	38.0%
1993	45.6%	53.1%	16.1%	54.6%	87.4%	43.3%	75.5%	130.5%	100.5%	76.1%	110.6%	73.5%
1994	36.5%	49.4%	8.7%	34.7%	53.6%	45.1%	45.2%	6.6%	12.2%	13.2%	53.4%	329.3%
1995	24.9%	34.6%	16.7%	-18.3%	36.4%	34.2%	6.2%	20.1%	0.8%	8.6%	40.9%	-55.2%
1996	10.7%	25.2%	13.8%	15.9%	39.6%	29.5%	-3.0%	7.5%	1.8%	13.9%	21.9%	7.1%
1997	12.8%	17.8%	15.4%	6.5%	23.7%	18.2%	8.4%	-23.7%	12.9%	6.5%	13.4%	-2.5%
1998	10.2%	10.6%	15.6%	8.0%	11.5%	23.7%	25.5%	-38.6%	10.2%	11.1%	13.0%	16.8%
1999	8.6%	7.5%	10.9%	14.9%	12.3%	25.7%	-6.0%	51.9%	8.9%	5.6%	16.7%	14.7%
2000	13.1%	11.3%	9.5%	20.5%	16.2%	22.4%	-0.1%	28.1%	13.0%	8.7%	13.0%	16.5%
2001	13.8%	11.1%	11.6%	12.6%	11.0%	21.5%	4.8%	-23.5%	10.2%	9.4%	23.9%	22.0%
2002	17.6%	13.6%	18.8%	26.1%	13.4%	24.3%	59.3%	45.6%	18.3%	43.9%	17.9%	52.7%
2003	33.5%	14.9%	22.3%	36.4%	17.7%	25.2%	41.4%	49.3%	19.3%	73.3%	15.7%	66.7%
2004	21.6%	14.0%	24.3%	36.4%	12.1%	28.1%	-26.0%	74.8%	18.4%	10.4%	13.1%	42.4%
2005	18.3%	13.9%	20.8%	26.8%	18.1%	21.3%	1.6%	70.7%	23.6%	20.3%	6.9%	31.3%
2006	16.8%	14.1%	17.7%	26.3%	16.7%	23.7%	19.3%	29.6%	15.6%	12.7%	19.1%	18.1%
2007	17.7%	16.4%	15.0%	24.4%	19.7%	20.6%	17.4%	33.5%	16.3%	12.3%	14.2%	19.2%
2008	19.7%	11.0%	12.0%	16.0%	7.4%	9.7%	13.5%	-57.6%	-36.0%	10.3%	2.9%	12.3%
2009	8.6%	4.0%	-2.9%	7.2%	1.1%	-7.5%	1.2%	-10.4%	-8.8%	13.6%	10.5%	15.9%
2010	18.5%	14.6%	7.8%	20.2%	21.2%	14.4%	3.8%	-25.1%	7.5%	21.9%	10.5%	1.9%

Sources: SSB (1993, 1994, 1998, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2015); DSB (2005, 2006, 2007, 2008, 2009, 2010, 2011, 2014); WSB (2005, 2006, 2007, 2008, 2009, 2010, 2011).

Table 3. *Total Number of Patent Authorizations in Suzhou, Wenzhou, and Dongguan*

Year	Suzhou	Wenzhou	Dongguan
2000	1,922	n/a	1,399
2001	1,749	n/a	1,753
2002	2,324	n/a	2,680
2003	2,593	n/a	2,858
2004	2,783	n/a	3,167
2005	3,315	3,116	3,114
2006	4,855	3,816	4,872
2007	9,157	5,309	6,752
2008	18,270	5,159	8,093
2009	39,288	7,214	12,918
2010	46,109	10,554	20,397

Sources: SSB (2005, 2006, 2007, 2008, 2009, 2010, 2011, 2015); DSB (2005, 2006, 2007, 2008, 2009, 2010, 2011, 2014); WSB (2005, 2006, 2007, 2008, 2009, 2010, 2011).

financial crisis, with only a slight dip during 2008–09. By contrast, Wenzhou experienced the largest decline during 2007–08. Although Wenzhou started to recover after 2008, foreign capital utilization did not return to pre-crisis levels. The growth rate in total foreign capital utilization continued to decline during 2009–10 due to limited foreign investment in Wenzhou. Dongguan was also

negatively affected by the crisis during 2007–08, but to a lesser extent than Wenzhou, and recovered better than Wenzhou.

Figure 6 shows that Suzhou experienced greater growth in patent authorizations than the other two cities during 2007–09, while Dongguan withstood the financial shock slightly better than Wenzhou.

WORLD DEVELOPMENT

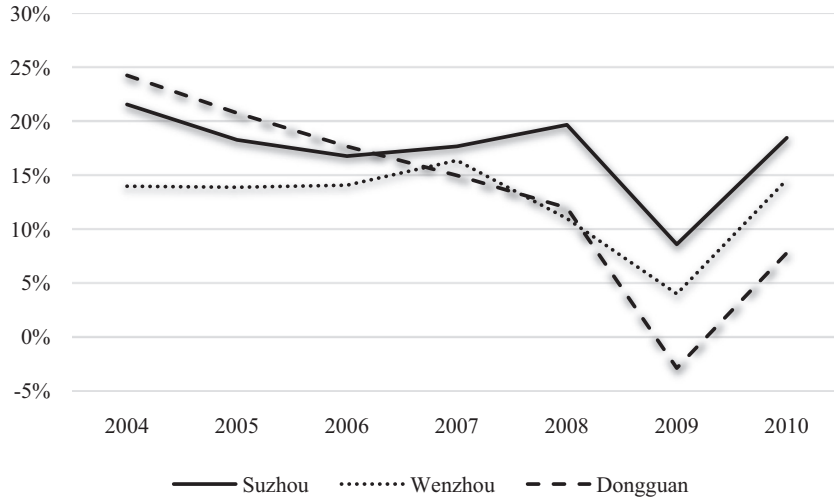


Figure 2. Growth Rate of per capita GDP (2004–10). Sources: WSB (2005–11); DSB (2005–11); SSB (2005–11).

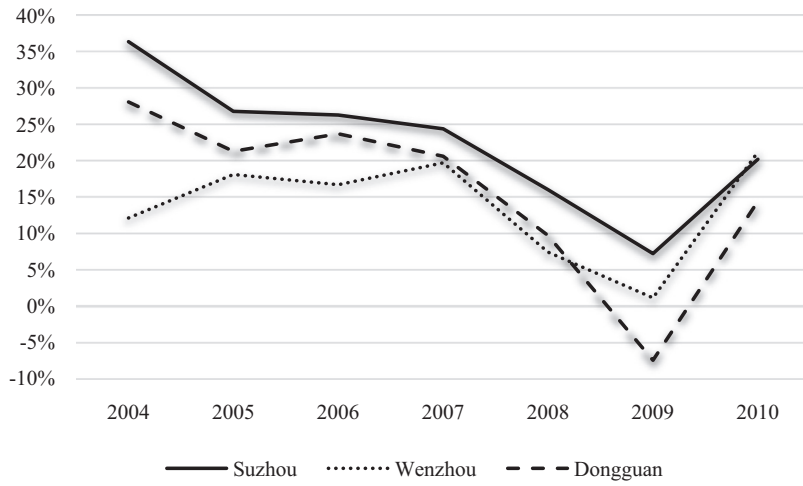


Figure 3. Growth rate of gross industrial output value (2004–10). Sources: WSB (2005–11); DSB (2005–11); SSB (2005–11).

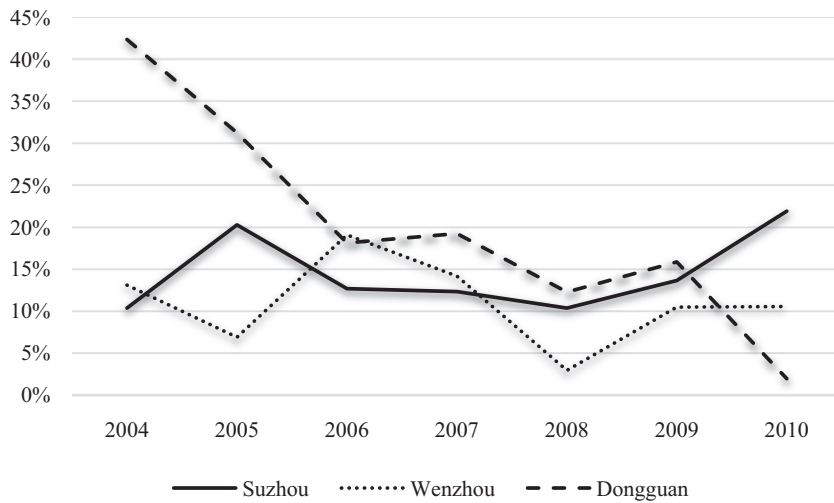


Figure 4. Growth rate of total fixed asset investment (2004–10). Sources: WSB (2005–11); DSB (2005–11); SSB (2005–11).

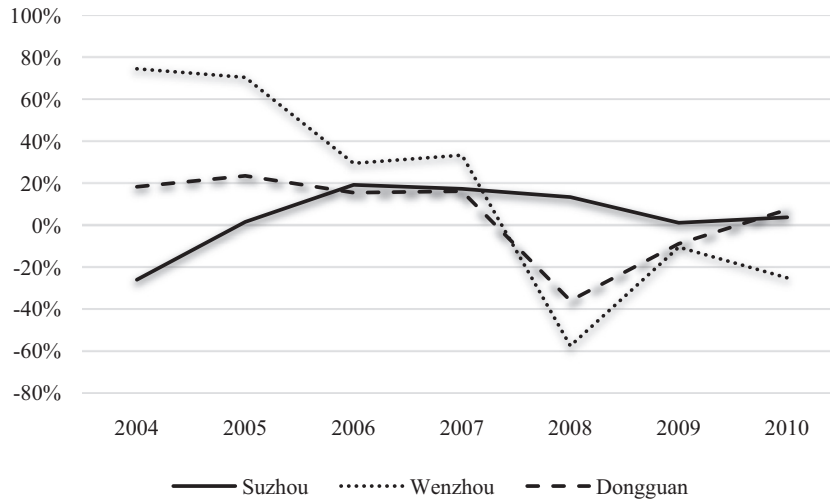


Figure 5. Growth in total amount of utilized foreign capital (2004–2010). Sources: WSB (2005–11); DSB (2005–11); SSB (2005–11).

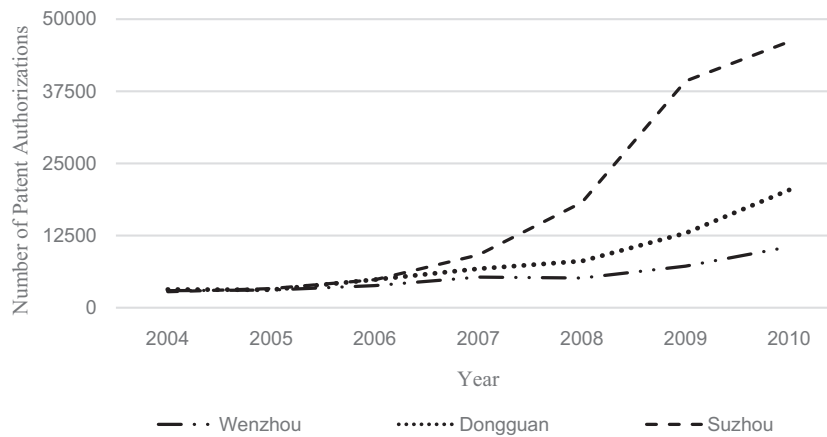


Figure 6. Total number of patent authorizations (2004–10). Sources: WSB (2005–11); DSB (2005–11); SSB (2005–11).

Overall, Suzhou demonstrated the most resilience in withstanding the effects of the economic crisis, and also recovered most robustly among the three cities. Although Wenzhou and Dongguan achieved extraordinary economic growth during the first two decades of reform, they experienced different degrees of decline as measured by different indicators. Overall, both coped poorly under crisis.

4. SUZHOU

(a) Suzhou's Developmental Path

Located in the lower Yangtze valley in southeast Jiangsu province with a population of 10,469,000 (SSB, 2010), Suzhou has historically been a political and economic center connected to thousands of small towns in the region through transportation networks (Johnston, 1993). During the socialist era (1949–77), Suzhou's industrial development was deemphasized due to its coastal location (Wei, Yuqi, & Chen, 2009). Nevertheless, it developed productive light industries such as handicrafts and textiles (SZ815102014). Suzhou silk is known nationally and internationally as some of the best in the world, and contributed substantially to China's exports at later stages

(SZ815102014). During the early and mid-1950s, many small private enterprises in Suzhou were transformed into collectively owned enterprises (Yeung, 2013). By the end of the decade, communal enterprises focused on handicrafts were flourishing (Wei et al., 2009). Small-scale TVEs proliferated in the early 1970s, when Suzhou took part in China's second wave of rural industrialization (Ngo, 2011). The establishment of TVEs was facilitated by the human capital, business networks, technical expertise, and technology transfer provided by urban youth who relocated from Shanghai to Suzhou (Wei et al., 2009). By the 1980s, rural TVEs were outperforming urban SOEs (SZ313102014; Ngo, 2011), providing up to 48.8% of Suzhou's industrial output by 1985, and one-third of provincial exports by the late 1980s (Wei et al., 2009).

Aggravated by rising domestic competition, however, TVEs became less profitable: their net profit from sales dropped from 18.1% in 1980 to 7.2% in 1985 (Wu & Jiang, 2010). In response, Suzhou launched radical reforms to clarify property rights by transforming various firms into private and joint ownership enterprises (SZ915102014; Qian & Wu, 2000). As in other cities, Suzhou faced the burden of inefficient SOEs (SZ915102014). At the end of 2000, the local government introduced a second round of firm transformation that allowed local governments to stop running businesses and

focus on supporting the development of privately owned firms (Wu & Jiang, 2010).

Suzhou's performance in FDI was initially lower than that of the original four special economic zones (1980) and 14 coastal cities (1984) that were opened to FDI (SZ1124062014). Suzhou started to attract FDI in 1985, when the local government adopted a new development strategy, subsequently approved by the State Council in 1986 (SZ1124062014). This "Western Development" strategy aimed to establish the Suzhou New District (SND) on the west side of Suzhou city to preserve the old city, while providing more space for new development (SZ915102014). The SND was intended to be a sizeable, comprehensive, and relatively independent new district of economic development through the attraction of foreign trade, technological innovation, and domestic and international talent (SZ915102014). Nonetheless, throughout the late 1980s, Suzhou remained short of FDI, which comprised of mainly international loans and joint management (Ngo, 2011).

A turning point that marked Suzhou's commencement as a foreign capital-led developmental model was the creation of a joint Sino-Singapore venture in the east of Suzhou (SZ615102014). The Suzhou Industrial Park (SIP) project brought a 150-fold increase in FDI to the region from 1990 to 2005 (Wei, 2002). Vice-Premier Li Lanqing and Singapore's Lee Kuan Yew signed an agreement to establish the China-Singapore SIP Development Corporation (CSSD), with Singapore holding control with 65% and China holding 35% (Yeoh & Cai, 2003). SIP was formed with the clear objective of transferring knowledge, whereby "Singapore would share its knowledge of efficient economic management and public administration experience with its Chinese partner so that the latter could formulate pro-business policies in SIP and govern with transparency and efficiency" (Inkpen & Pien, 2006).

Besides its efforts to attract FDI, the Suzhou government foresaw the importance of developing technology and attracting talent (SZ1024062014). An example is the creation of Higher Education Town (HET), which was designed to establish higher educational institutions and research institutes to connect local industries and research (SZ1024062014). By 2006, HET had already attracted 16 top universities in China and broadened its aims to get renowned overseas universities to set up research institutes in the SIP (Cao, 2014). The local state also adopted policies to create a favorable environment for people to work and live in Suzhou.

(b) Suzhou's strong institutional adaptability

Suzhou not only performed well during favorable economic times, but also demonstrated strong crisis-coping ability and resilience during the 2008–09 global financial crisis. Compared with Wenzhou and Dongguan, Suzhou was the least affected and recovered the fastest economically. The key factor underlying Suzhou's success was the local state's strong institutional adaptability throughout its developmental experience, which we describe as *proactive adaptive governance*.

For decades, Suzhou functioned as a *local developmental state*, that is, one in which "the state gives overriding priority to the objective of rapid economic growth and adopts policies which are successful in achieving that objective" (Knight, 2014). The proliferation of TVEs that ultimately led to the creation of the Suzhou model was achieved with step-by-step

guidance from the local state (Oi, 1992). Suzhou's development of communal enterprises during the 1970s established a foundation for the development of TVEs in the subsequent decade. With rising competition in the domestic market, combined with the revelation of systematic problems with TVEs, Suzhou's local state recognized this dynamic market trend by making an effort to attract FDI starting in 1985, and restructuring TVEs in the mid-1990s. After Deng Xiaoping's 1992 tour of southern provinces—which signaled the political acceptability of deepening economic reforms—Suzhou's TVEs were all converted into joint ventures within three months (Zweig, 2002). With the establishment of the Suzhou New District and the Suzhou Industrial Park, it successfully attracted large amounts of FDI and built a well-established hardware infrastructure system. As a *local developmental state*, it offered more favorable policies to large companies, state-owned companies, and enterprises with foreign investment. In fact, Suzhou deliberately impeded the development of private enterprise during the early 1980s to protect the development of its TVEs (Zhang, 2007).

Suzhou embraced a *local developmental state model* early in the reform era and as new opportunities arose, continued employing developmental state strategies to promote economic growth. As a higher ranked city, Suzhou has had a closer relationship with the central government than localities such as Wenzhou. One interviewee commented: "We have always followed Beijing's footsteps" (SZ113102014). There is debate about whether the Suzhou government's effective performance as a *local developmental state* was self-motivated or merely a result of complying with Beijing's mandates (SZ514102014). The above policies indeed tracked Beijing's, but Suzhou itself recognized the importance of implementing these policies concretely, such as by restructuring the TVEs and developing their own innovations at opportune moments, rather than just passively executing Beijing's instructions. Moreover, Suzhou actively strove to attract central government resources and opportunities. For instance, when the Taihu Summit was to be held in Wuxi (a city in Jiangsu province), Suzhou tried to win the right to host the summit to increase Suzhou's reputation and attractiveness to returnee entrepreneurs (SZ414102014; Cao, 2014). Ultimately, the State Council agreed to set up the National Thousand Talents Entrepreneurship Investment Center in Suzhou in July 2011 before the Taihu Summit opened in Wuxi (Cao, 2014). From the 2000s, more effort was concentrated on improving software abilities to make Suzhou a more favorable environment for technological upgrading, innovation, and talent cultivation. After several years of manufacturing for multinational corporations, the local state started to develop and nurture local innovation. To avoid the "lock-in" trap of leaning too heavily on foreign investment, technology, and resources, as happened in Dongguan, Suzhou created a distinctive path by introducing research institutions such as the Higher Education Town and promoting targeted new industries such as nanotechnology to build its own solid knowledge base and sustain its competitive advantage. Through these efforts, the whole of Suzhou became dramatically more open, innovative, and technologically advanced. In the process, the city also attracted substantial foreign investment, talent, and business projects. Overall, Suzhou's local state demonstrated capacity to effectively implement appropriate strategies at the right transition points, creating strong institutional adaptability in response to the 2008–09 global financial crisis.

5. WENZHOU

(a) *Wenzhou's developmental path*

Scholars tend to combine geographical, cultural, economic, and political explanations to account for Wenzhou's developmental success since the 1980s. Located at the estuary of the Ou River in the southeastern coast of Zhejiang province with a population base of 8,066,000 (WSB, 2010), three-quarters of Wenzhou territory is mountainous and rural. The limited amount of arable land is aggravated by high population density, making subsistence agriculture a challenge (Tsai, 2006). Culturally, Wenzhou people are known for their pragmatism and commercial success (Zhou & Zhang, 2011). Economically, Wenzhou was especially impoverished during the Mao era (1949–76) when state policy not only prohibited private enterprise, but avoided state investment in coastal locations due to geostrategic sensitivities (Ye & Wei, 2005). The paucity of state investment in Wenzhou—one-seventh that of similar cities in China—meant that Wenzhou's economy had fewer SOEs (Wei, Li, & Wang, 2007). Politically, unlike other parts of China that benefited from Deng Xiaoping's reform policies starting in 1978, Wenzhou enjoyed economic growth even before these national reforms due to the local state's tolerance of semi-legal and/or illegal practices prior to the reform period (Parris, 1993). Small private businesses already accounted for 35% of Wenzhou's industrial output by the end of 1986 (Xie, 2000). Meanwhile, larger private firms falsely registered themselves as collective enterprises—a disguising strategy called “wearing a red hat”—because private enterprises employing more than eight employees (*siying qiye*) were not approved until 1988 (Tsai, 2002).

Wenzhou shifted from being a target of state suppression to a locality of national emulation in 1983, when Wenzhou was mentioned favorably in the *People's Daily*. During the 1980s, Wenzhou became one of China's richest and fastest growing urban places in terms of per capita GDP. Enterprises such as CHINT and Delixi in Liushi Town joined the top 50 most competitive non-state domestic brands (WZ119122014; Wei et al., 2007). The so-called Wenzhou model of indigenously generated petty capitalism garnered the attention of leaders and researchers who traveled from Beijing to understand how an isolated impoverished locality managed to develop such a vibrant private economy. The primary components of the Wenzhou model of the 1980s included the following: (i) privately owned household factories were the dominant production units; (ii) production of inexpensive consumer commodities based on labor-intensive manufacturing; (iii) specialized commodity markets; (iv) extensive sales, purchasing, and marketing networks throughout China; and (v) reliance on a wide variety of informal finance (Tsai, 2002, 2006).

By the 1990s, Wenzhou's family-based, low-tech manufacturing model faced competition from other parts of China due to the deepening reforms (WZ818122014). In addition, the local state's tolerance and protection of local businesses led to serious quality problems (WZ219122014). For example, shoes made in Wenzhou developed a reputation for lasting barely a week or even a day (WZ219122014; Zhou & Tang, 2012). Therefore, the Wenzhou government pushed for restructuring (*gaizhi*) to convert the individual enterprises into shareholding cooperatives during the first round of institutional restructuring, and to limited liability corporations and conglomerates during the second round (WZ818122014; Wei et al., 2007).

The first round of restructuring aimed to clarify property rights and push Wenzhou businesses up the value chain (WZ818122014; Wei et al., 2007). The focus of the second round

of restructuring was on industrial upgrading, diversification, expansion, and specialization (Wei et al., 2007). Despite these two rounds of restructuring, Wenzhou's economy continued its downward trend. First, there was out-migration of capital and local businesses, as many SMEs seeking extra land to expand production found the land in Wenzhou too scarce and expensive (WZ502072014). From the early 1990s, business expansion was constrained by higher production costs and insufficient land and energy in Wenzhou. Given the scarcity of arable land in Wenzhou, many private entrepreneurs applied for cheaper commercial land in the developmental zone, but the application list was long and the eligibility to apply required a business tax contribution of at least 500 thousand RMB (Liu, 2011). Many businesses thus moved production to areas with lower costs and better resources. Second, speculative investments in real estate during the mid- to late-2000s undermined the production-based foundation of Wenzhou's informal credit markets (WZ502072014). Hit by the global financial crisis, many Wenzhou business owners went missing or committed suicide due to inability to pay their usurious debts (WZ502072014). Others relocated manufacturing production to inland provinces for lower costs, or migrated to Europe and Africa to develop new markets (CN114132014, YW14142014, WZ24152014).

(b) *Wenzhou's weak institutional adaptability*

Wenzhou's weak institutional adaptability over the course of its developmental process had a defining effect on its experience during the 2008–09 global financial crisis. The local state failed to upgrade its model of comparative advantage in light of growing domestic competition in the petty commodities industry and rising cost of local inputs (labor, capital, land). Wenzhou thus represents an example of *reactive adaptive governance*.

During the 1980s, Wenzhou maintained a *local liberal state* that governed the economy in a minimalist market-oriented manner. Although the government provided some guidance, most economic decisions were made primarily by individual entrepreneurs (WZ1018122014). Regional bureaucrats in Wenzhou did not directly intervene in the economy, but rather, provided a facilitating institutional environment for private commerce (WZ1018122014). For instance, they were keen to facilitate the development of specialized (single-product) markets and allowed these institutions to allocate goods and resources independently. The local state also allowed informal financial intermediaries to provide firms with key resources that were not easily accessible (Tsai, 2002; Zhou, 2009). The Wenzhou government's liberal approach of permitting individuals to make their own economic decisions suited Wenzhou's circumstances during that period, and led to domestic admiration of its successful model.

When its family-based, low-tech manufacturing sector faced challenges from other parts of China during the 1990s, Wenzhou tried to revitalize and protect the local economy by mimicking the practices of a *local developmental state*. This effort was not successful, however, due to its misalignment with the changing pattern of Wenzhou's economy. Increased intervention in the economy through oversight and economic strategizing did not meet the needs of changed market conditions, revealing the local state's weak institutional adaptability. For example, Wenzhou launched the Second Pioneering Initiative in 1993 to help its family enterprises upgrade, scale-up, diversify, and expand (Tsai, 2006). Yet despite two rounds of restructuring, Wenzhou's enterprises remained largely under family control and dominated by small low-tech

firms (WZ1018122014). Moreover, inappropriate interventions such as favoring large private enterprises further weakened Wenzhou's SME-dominated economy. Lacking governmental support, local businesses either relied on informal sources of credit from private sources or migrated to cities with more preferential policies (WZ219122014). Local leaders lamented that once the crisis hit, they held emergency meetings, "But there wasn't much we could do. Companies had to depend on themselves to survive the crisis. All we did was establish platforms to connect companies with banks, so they could get some loans (WZ818122014)." Once the national stimulus package was launched, however, banks engaged in reckless lending. An official recounted that banks were competing to extend large loans: "I know an entrepreneur who received eight loans of 10 million yuan each. It all went into real estate, so when property prices dropped, he was unable to repay those loans (CN114132014)." Wenzhou's ensuing financial crisis took local officials by complete surprise. Even retrospectively, they do not seem to recognize that they could have taken measures to curb risky financial practices, such as mutual credit guarantees among local businesses. In short, Wenzhou's weak adaptive capacity to support indigenous businesses amidst increasingly competitive domestic and international markets was similarly reflected in its poor performance during the financial crisis of 2008–09.

The case of Wenzhou well illustrates our broader argument that factors underlying economic success at one point in time may subsequently become obstacles. For example, the geographical limitations that inspired private entrepreneurship in the early reform period later made Wenzhou less attractive to foreign investment and external talent that could have helped upgrade its low-tech businesses. Similarly, the structural factors that contributed to Wenzhou's weak institutional adaptability might have become future strengths under different leadership and circumstances. Nonetheless, cumulative incremental adaptations over the longer term could include elements of "institutional conversion" (Streeck & Thelen, 2005), in which formal institutions remain intact but change their purpose. For example, we can observe the conversion of industrial policy from protecting markets to subsidizing struggling firms. Since the *local developmental state's* failure during the global financial crisis, it has adopted policies to help struggling firms, such as legalizing private channels for the 400,000 small local firms to obtain finance, instead of merely protecting Wenzhou's market by tolerating almost any entrepreneurial behaviors as long as they are apparently profitable (WZ718122014).

6. DONGGUAN

(a) *Dongguan's developmental path*

Located at the center of the Shenzhen-Guangzhou economic corridor in Guangdong province with a population base of 8,225,000 (DSB, 2010), Dongguan was one of the first cities to respond to the opportunities of China's open door policy, and soon grew into an industrial center that led to its upgraded status in 1985 from a county to a county-level municipality (DG629072014). Dongguan's early economic transformation (1978–85) was based on a strategy of "urbanization from below," involving local corporatization of state-owned companies and collectives located in townships and villages (Airriess, 2008).

In 1985, the Dongguan government launched a "first industrial revolution" developmental strategy to develop an

export-oriented manufacturing economy. The combination of industrialized processing and assembly with outward-oriented commercial agriculture became known as the Dongguan model (Yeung, 2001). In particular, Dongguan pioneered a "three supplies with one compensation" (*sanlai yibu*) approach to export processing (McGee, Lin, Wang, Marton, & Jiaping, 2007), whereby foreign contractors provided raw materials, equipment, and designs while their Dongguan partners supplied labor, land, buildings, electricity, and other local utilities (Smart & Lin, 2007) in return for a processing fee (*jiaogongfei*) (Smart & Lin, 2007). Due to its proximity and ethnic connections, Hong Kong initially engaged with Dongguan in what was called a "front shop, back factory" manufacturing process (DG228072014). A large proportion of processing and assembly was in labor-intensive sectors such as textiles and clothing, plastic products, and shoe manufacturing (DG529072014; Liu & Zhen, 1992). Besides attracting foreign companies to invest in Dongguan, the local government also promoted export-oriented commercial agriculture and traditional industries to earn foreign exchange for further investment (Yeung, 2001). Dongguan's administrative status was further upgraded to prefecture-level in 1988.

Two features of Dongguan's economic model—its dispersed pattern of industries and large number of migrant workers—had a defining impact on its future development in a changing environment. Unlike Suzhou, Dongguan's industrial development was widely scattered among villages rather than concentrated in the urban center (McGee et al., 2007). Dongguan's mode of production did not require an urban location with good infrastructure and a skilled workforce. Its foreign investors sought cheap labor to complete their subcontracting work without high-tech R&D. Meanwhile, Dongguan's migrant population was more than three times that of its local population (Airriess, 2008). Welfare provisions and entitlements were polarized between local citizens and migrants because migrant workers lacked urban household registration status (*hukou*) in Dongguan (Smart & Lin, 2007). In addition, migrant workers tended to occupy the lowest tier of the labor market (DG930072014; Fan, 2002). A high degree of labor mobility contributed in part to Dongguan's later decline in growth. Intensified competition among China's municipalities for FDI led Dongguan to implement the "second industrial revolution" in the mid-1990s, which aimed to introduce higher-value-added, skill-intensive, higher-tech industries (Ou-yang, 1994). Seeing Dongguan's dispersed industrial locations as its main shortcoming, a new project was adopted to "group industries into parks and organize enterprises into zones" (*gongye jinyuan qiye jinqu*) (DG629072014). Among the established industrial parks, the Songshan Lake Industrial Park of Science and Technology, which began construction in 2002, attracted the most attention (DG629072014). This 7,200-hectare megaproject was located in the city center and financed by the municipal government (Airriess, 2008). Preferential policies were offered to foreign companies, including no administrative fees and a simplified approval procedure that could be completed within five working days (Smart & Lin, 2007). In addition to attracting more high-tech foreign companies, Dongguan tried to support local investment in select high-tech industries by providing tax breaks, financial assistance, and human capital (Yeung, 2001).

(b) *Dongguan's delayed institutional adaptability*

Although Dongguan's developmental model differs from Wenzhou's, it also revealed weak crisis-coping ability due to sluggish response to a changing economic context over its

developmental process. We identify Dongguan as the *delayed adaptive governance* type.

Dongguan initially served as a *local entrepreneurial state* that governed the economy through close relationships with local enterprises (DG1030072014). John Freeman first defined “state entrepreneurship” as a policy “through which enterprises are owned as public agencies but operated in accordance with standard business criteria” (Freeman, 1982). He notes that state entrepreneurship often depends on FDI to achieve economic growth. Being grouped as part of the Pearl River Delta economic development zone in 1985, Dongguan benefited so swiftly from export processing—mainly for Hong Kong enterprises—that it literally paved its road toward one of the richest areas in China. Dongguan enjoyed early internationalization thanks to its “grand trade advantages” of proximity to trading partners (Womack & Zhao, 1994), based on “transnational ethnic social capital” with investors from Taiwan and Hong Kong (Chen, 2000), and the positive attitudes of provincial and municipal officials toward attracting FDI (Zweig, 2002). Cadres in Dongguan welcomed foreign capital even when some economic planners criticized foreign capitalists as exploiting China’s cheap labor (Vogel, 1990). After 1978, Dongguan became known as one of the Four Little Tigers of Guangdong Province due to its export-oriented strategy. The local state sought to improve Dongguan’s competitive advantage by providing a favorable environment for foreign investment. This approach included state-appointed factory managers, accountants, treasurers, and customs officers, while foreign investors retained control over production and daily management decisions (Yeung, 2001). To compete for foreign investment with other Chinese regions, the Dongguan government also invested in a sound transportation system. Initially, foreign companies were primarily located along the Guangzhou-Shenzhen Highway running through the eastern part of Dongguan (DG328072014). To reduce transportation costs, the Dongguan government mobilized 1.74 billion yuan to build another highway connecting Dongguan with Shenzhen and Hong Kong (Smart & Lin, 2007), which became the first highway in China to be planned, funded, and constructed by a prefectural municipality without assistance from the central or provincial government ((DG1030072014; Smart & Lin, 2007).

In addition to building local infrastructure, Dongguan improved its administrative flexibility under the central government’s foreign investment laws (Yeung, 2001). It established the Dongguan External P&A (processing and assembling) Office in 1978 to centralize and simplify administrative procedures for foreign enterprises (Yeung, 2001). Rural areas around major coastal cities were progressively internationalized during the 1980s (Zweig, 2002). Compared with other cities in China, Dongguan has had a more decentralized growth pattern due to the administrative absence of district or county levels between the municipality and the city of Dongguan, which enhanced the importance of its towns and villages (DG629072014). As a result, local township and village governments participated directly in economic development and formed close relationships with enterprises in their jurisdictions (Xue & Wu, 2015). Through coalitions with foreign enterprises and the provision of favorable conditions for foreign investors, especially those from Hong Kong and later Taiwan, Dongguan’s local state played a successful entrepreneurial role during the first two decades of reform.

After starting out as a *local entrepreneurial state*, Dongguan transformed into a *local developmental state* in the 2000s. Competition from other Chinese cities coupled with rising

production costs pressured Dongguan to re-evaluate its policies to attract higher-value-added foreign investment and promote locally funded technological enterprises (DG529072014). One official explained, “We started to worry when we saw other parts of China and other countries become more competitive in producing manufactured goods. We saw that we had lost our earlier advantage as many foreign investors started moving to Suzhou. Companies were also complaining that they could not find sufficiently skilled labor for manufacturing (DG629072014).” In response to these trends, Dongguan implemented a Singaporean-style “pioneering industrial policy” with high-tech industrial zones (Yeung, 2001). To reduce the burden of demand for energy, land, and labor, it implemented the provincial government’s policy of “double relocation” (*shuangzhuanyi*) by moving low-tech industries and migrant workers to the inner regions of Guangdong (DG1030072014; Po, 2008). This policy aimed to retain more resources to develop high-tech production. However, efforts to attract foreign high-tech investment were not successful and Dongguan’s industrial cluster planning remained far behind that of Suzhou. Meanwhile, frustrated with local conditions, foreign companies in Dongguan tended to move elsewhere in China (DG1030072014). The general manager of a computer manufacturer claimed that problems with public security and bureaucracy caused the exodus of factories from Dongguan to Suzhou and Kunshan (Poon, 2002). Corruption compounded these problems (Yeung, 2001).

Although local officials recognized the need to develop locally funded, high-tech companies, they acted too late and the effect of their policies was negligible. By prioritizing foreign investment to the de facto exclusion of other developmental strategies, the Dongguan government failed to actively nurture local business innovation in the first two decades of reform. It was challenging to promote locally funded high-tech enterprises in the short term given that Dongguan had a weak base of human capital, coupled with a long history of reliance on foreign companies instead of developing local business. Without a pre-existing foundation of local businesses, Dongguan was less equipped to cope with the crisis. Dongguan did reinvent itself as a *local developmental state* in response to changes in the economic environment, but it was not very successful and experienced the sharpest drops in GDP and industrial output during the financial crisis.

As in Wenzhou, the factors that initially enabled Dongguan’s economic success later became barriers in an apparently path dependent manner. For example, its geographic location between Shenzhen and Guangzhou attracted foreign investment early on, but also led to environmental degradation due to lax environmental regulation and low-value-added foreign enterprise. Yet local policies that proved ineffective at one point may not remain so in the future. The local state still strives to attract foreign investment, but now aims for high-tech foreign companies instead of low-value-added processing and assembly works (DG730072014). Going forward, Dongguan could consider other policy options, such as taking more responsibility for the provision of social services. Its leaders seem receptive. As one explained, “Although we were hit hard by the 2008–09 crisis, I believe that we will be more resilient in response to future obstacles as we have been working on nurturing local talent, upgrading industries, and trying to reduce reliance on foreign capital. There’s still time for these policies to be implemented effectively before the next crisis (DG730072014).”

Table 4 summarizes the transformations in local state types in the three localities from the 1980s to the 2000s.

Table 4. *Local state adaptation in Suzhou, Wenzhou, and Dongguan*

Locality	1980s	2000s	Pattern of institutional adaptation
Suzhou	<p><i>Local developmental state:</i></p> <ul style="list-style-type: none"> – Strong state-led development, e.g., supporting and then restructuring TVEs; – Establishment of the Suzhou New District and the Suzhou Industrial Park through a collaboration with Singapore; – Providing favorable policies to large companies, state-owned companies, and enterprises with foreign investment 	<p>Better performing <i>local developmental state:</i></p> <ul style="list-style-type: none"> – Actively strove to win over central resources and opportunities; – Introduction of research institutions such as Higher Education Town to both attract external talents and nurture local human capital; – Concentration on developing high-tech industries to sustain its competitive advantage 	<i>Proactive</i>
Wenzhou	<p><i>Local liberal state:</i></p> <ul style="list-style-type: none"> – Tolerating early private entrepreneurship and commerce; – Indirect interventions in the economy to facilitate market activities; – Allowing local informal financial institutions to serve private businesses 	<p><i>Local developmental state:</i></p> <ul style="list-style-type: none"> – Inappropriate and ineffective increased interventions in the economy through oversight and economic strategizing (e.g., failed restructuring of family-based and low-tech firms); – Discrimination against smaller businesses due to prioritizing large-scale factories and “picking winners” in particular sectors 	<i>Reactive</i>
Dongguan	<p><i>Local entrepreneurial state:</i></p> <ul style="list-style-type: none"> – Close relationships between local state and business at different local government levels through deep and direct participation in economic development, including coalitions with foreign enterprises and providing favorable conditions for foreign investors 	<p><i>Local developmental state:</i></p> <ul style="list-style-type: none"> – Implementation of a Singaporean-style “pioneer industrial policy” with high-tech industrial zones (e.g. relocation of low-tech industries and migrant workers to the inner regions of Guangdong); – Attempt to attract high-tech foreign companies; – Cultivation of indigenous talents and innovative businesses; establishment of industrial clusters 	<i>Delayed</i>

7. FACTORS THAT CONTRIBUTED TO VARIATIONS OF INSTITUTIONAL ADAPTABILITY IN SUZHOU, WENZHOU AND DONGGUAN

Although structural factors influenced the opportunities available to the local state, the agent-centric factors of local leadership, trying new developmental ideas, and state capacity are pivotal in explaining variation in institutional adaptability among Suzhou, Wenzhou, and Dongguan. Whether localities could continuously adapt to changing economic contexts over the past three decades yielded different levels of crisis-coping abilities that were apparent prior to the global financial crisis.

At the outset of reform, Suzhou and Dongguan leveraged their strategic geographical locations and abundant natural resources to become hubs for both trade and political attention. By contrast, Wenzhou’s lack of natural endowments and geographic limitations contributed to its indigenous pattern of petty commodity production based on family businesses. In the absence of strong leadership with the motivation and capacity to recognize the temporal limits of the initial Wenzhou model, familiar patterns of production generated “intergenerational lock-in” (Shi, 2004). Even as

other regional economies of China had developed labor-intensive manufacturing or moved to more knowledge-intensive sectors, Wenzhou’s firms continued to rely on shared local knowledge, commercial and cultural backgrounds, transaction modes, and market networks. Wenzhou’s businesses lagged in adopting new technology and lacked the knowhow to undertake basic research (Brusco, 1992). The once-thriving kinship enterprises later revealed serious problems with property rights, and were soon challenged by more competitive firms elsewhere in China (WZ219122014). Dongguan’s location attracted ethnic Chinese foreign investors from Hong Kong and Taiwan. By prioritizing FDI-led growth, however, the local state did not thwart environmental degradation or nurture indigenous businesses, which limited its capacity for institutional adaptability in subsequent decades.

Meanwhile, Suzhou benefited from central government assistance and high-profile collaborations with foreign partners to a greater extent than in Wenzhou and Dongguan. As a prefectural-level city, Wenzhou lacked access to national-level investment in higher education and research facilities, which limited chances for interaction with foreign experts (Liu, 2011). Although Wenzhou’s entrepreneurs traveled

abroad for new markets, few foreign investors brought innovative business projects to Wenzhou. Local businesses thus lacked opportunities to learn advanced technological and management skills. While Dongguan was an early beneficiary of China's opening to foreign capital, its economy became trapped in a low-value-added production system, and local leaders realized only belatedly the importance of nurturing its own experts and attracting overseas talent. Dongguan's reliance on unskilled rural migrants in low-end processing and assembly made it more difficult to develop locally funded high-tech industries later on.³

Finally, while Wenzhou and Dongguan both suffered from long-standing challenges in mobilizing fiscal revenues (Liu, 2011), Suzhou had well-funded public coffers. In this sense, the structural condition of fiscal resources affected the agent-centric factor of local state capacity. Suzhou's developmental trajectory was strongly led by a local state equipped with fiscal revenues. Unlike Wenzhou's bootstrapping household enterprises that operated in rural areas independent of local state support, Suzhou's indigenous businesses had closer relationships with the local state (SZ815102014). As a cadre from the Industrial and Commercial Management Bureau explained, "It is easier to collect tax revenues from a concentrated number of large enterprises with ties to the local state than from thousands of scattered, small private businesses (SZ815102014)." Although decentralizing reforms in China's fiscal system incentivized local economic growth (Montinola, Yingyi, & Weingast, 1995; Oi, 1992; Shirk, 1993), in the long run this decentralization put Wenzhou's local state in a more difficult position. The central government required it to collect its own revenues, yet Wenzhou's entrepreneurs complained about harassment by tax collectors and coerced "donations" (WZ219122014). To attract foreign investment, Dongguan's local state invested substantially in hard infrastructure early on. These capital-intensive projects were financed from three sources: (i) an infrastructure development fund established through government treasury funds, budgetary funds, bank loans, and public donations; (ii) revenue generated by township and village governments through toll roads, rental income, etc.; and (iii) the profits of SOEs (Ye, 1994). This strategy enabled the municipal government to reduce its financial dependence on the provincial government, and also decreased its fiscal responsibilities by relying on township and village governments and public donations (Yeung, 2001). However, problems emerged when the economy cooled, incomes declined, and township and village governments incurred debt, especially during the global financial crisis (DG830072014). For instance, rental income, an important source of revenue for township and village governments, declined rapidly due to the collapse of factories and a decrease in the number of migrant workers (Xue & Wu, 2015). The municipal government thus faced fiscal constraints in pursuing new projects. With sufficient revenue, the local state had more resources to build infrastructure and provide public goods to establish a favorable business environment, and vice versa.

While the structural factors discussed above present economic options, ultimately, an agent-centric perspective provides greater explanatory leverage for explaining the localities' varying levels of institutional adaptability. Local leadership, openness to new policy ideas, and state capacity can make all the difference in allocating available resources for local development. Geographical location and endowments alone cannot explain institutional adaptability. Agents need to decide what to do with those inheritances, and whether to redeploy them for alternative purposes. Entrepreneurial

political actors can also mobilize new resources (e.g., from higher levels of government, foreign investors, diasporic networks, and so on). Local state capacity for policy implementation is key for realizing these alternative visions for development.

(a) *Motivated and capable leadership*

Unlike Wenzhou and Dongguan, Suzhou has a distinguished history of well-educated and competent leaders—which in the Chinese context, is regarded as high leadership "quality" (*suzhi*). We collected information on top leaders' educational backgrounds, and can confirm that this trend has continued. As shown in Appendix B, Suzhou top leaders have much stronger educational backgrounds (5/14 have bachelor degrees, 2/14 have master degrees and 5/14 have PhDs) than Wenzhou (3/14 have bachelor degrees, 1/14 has a master degree and 1/14 has a PhD) and Dongguan (2/7 have bachelor degrees, 2/7 have master degrees and 2/7 have PhD degrees), which may play an important role in their policy making processes. Overall, Suzhou's party secretaries and mayors have higher levels of educational attainment, are assigned to Suzhou from other parts of the country, and are more likely to be promoted than counterparts in Wenzhou and Dongguan.

The native origin of leaders has also been identified as a factor that impacts decision-making (Zang, 1991) because locals are expected to be more sympathetic to their native region's traditional or preferred mode of economic development. Based on this logic, a region with more non-local officials is more likely to have political entrepreneurs that are motivated to impress higher levels of government by making a mark on the local economy during their tenures. Conversely, a region with more local leaders may be less motivated to experiment with alternative economic strategies. We found that Dongguan has the highest ratio of locals among its top leaders (3 out of 8), while Suzhou (1 out of 15) has the smallest number of locals during its reform period. This helps to explain Suzhou's long-standing compliance with Beijing's instructions, as scholars have suggested that officials who believe they have a better chance of being promoted exhibit greater motivation and entrepreneurialism during their tour of duty (Donaldson, 2009). More top leaders in Suzhou have achieved Level 1 positions in their future careers (4 out of 13 in Suzhou, 3 out of 13 in Wenzhou, and 0 out of 7 in Dongguan).⁴ Suzhou's far-sighted policy decisions and competent leadership base was further reinforced by its interactions with Singapore. The sustained relationship between Singaporean companies and Suzhou's government officials brought enormous benefits in the form of exposure to modern management techniques, participation in holistic planning processes, and an expanded horizon in choosing developmental strategies. These skills were honed through intimate long-term interaction at a high level involving both foreign investors and local leaders at every step of planning and decision-making.

(b) *Openness to new ideas*

Suzhou's leaders demonstrated openness to new policy ideas at vital turning points. The first was the restructuring of TVEs into collectively owned enterprises and later into privately owned enterprises to overcome problems associated with unclear property rights (SZ1124062014). The second turning point occurred after several years of local processing for multinational corporations, when the local state realized the importance of cultivating local innovation and talent.

Table 5. *Variation in Crisis-Coping Ability in Suzhou, Wenzhou, and Dongguan*

Locality	Structural context	Agent-centric factors affecting institutional adaptability	Institutional adaptability	Crisis-coping ability and economic performance
Suzhou	Good geographical and historical conditions; Substantial opportunity of foreign cooperation; Good fiscal health	Well educated and competent leadership, non-local leaders with high promotion prospects; Far-sighted policies; Good administrative efficiency and government transparency	Strong	Good
Wenzhou	Poor geographical situation and lack of natural resources; Lack of opportunity for foreign cooperation; Poor fiscal conditions	Less educated and competent leadership, and less likely to be promoted; Inappropriate policies; Poor administrative efficiency and government transparency	Weak	Poor
Dongguan	Good geographical conditions and rich natural endowments (poorly maintained later); Low-end manufacturing with foreign companies; Over-decentralized fiscal arrangements	Less educated and competent leadership, more local leaders, and less likely to be promoted; Good policies applied too late; Poor administrative efficiency and government transparency	Weak	Poor

Unlike Suzhou, the static character of Wenzhou local officials' developmental views can be attributed to the lower degree of collaboration with foreign governments and foreign investors. Although Wenzhou had ample foreign exposure through its commercial diaspora, its FDI was dispersed and low-tech, and few foreigners opted to work and live in Wenzhou. Their officials thus had fewer opportunities to learn about modern industrial organization and strategic planning from more developed countries. Combined with parochial pride in the distinctive merits of the Wenzhou model, this lacuna limited the receptiveness of local leaders to select developmental strategies compatible with changing market conditions. For instance, despite a lack of R&D resources and FDI, few preferential policies were introduced to attract overseas professionals or foreign investment.

In a similar vein, the policy preferences of Dongguan's high-level leadership were circumscribed due to relative insulation from new ideas. Without Suzhou's high-level foreign collaboration, Dongguan's overseas Chinese investment during the reform era was mostly in low-end manufacturing, providing fewer chances to learn developmental strategies from advanced foreign companies. This affected their future decision-making. During later stages of reform, Dongguan's local state ultimately realized the necessity of promoting both foreign and local high-tech industries. However, they lacked judgment about the appropriate moment to implement this transformation. It was more challenging to attract high-tech foreign firms once other municipalities had surpassed Dongguan in terms of hard and soft infrastructure. Similarly, it was difficult to develop locally funded high-tech firms in the absence of prior efforts to cultivate experts and learn advanced management and technical skills.

(c) *Local state capacity*

As a local developmental state, Suzhou was more efficient in policy implementation than Wenzhou and Dongguan, which enabled Suzhou to retain and enhance its earlier developmental advantages. Suzhou's local state enacted policies to attract and nurture talent, and was proactive in securing resources from the central government. Its efforts included the successful establishment of a nanotechnology industry, which was facilitated by maintaining good communications with the central

government (Cao, 2014). When the Chinese Academy of Sciences finally agreed to set up the Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO) after lengthy persuasion by Suzhou in 2006, Suzhou's local state provided full support (Cao, 2014). When China's Ministry of Science and Technology (MoST) collaborated with the Finnish Funding Agency for Innovation to launch nanotechnology development in 2007, MoST nominated Suzhou for the National Nano-Tech International Innovation Park (Cao, 2014). Through such proactive efforts at advancement, Suzhou earned a reputation for innovative business projects.

Wenzhou's local liberal state was less effective in policy implementation. Improvements in government transparency and administrative efficiency were sluggish. Businesses complained that Wenzhou's government merely "shouted slogans," but failed to develop tertiary education and research (WZ502072014). Black-box transactions and rent-seeking activities were revealed through the tearing down of the tallest "corrupt building" in Zhejiang (Wei et al., 2007). Some officials helped businesses obtain land, electricity, bank loans, and state projects, and reduced their taxes and administrative fees illegally in exchange for personal benefits.

Similar to Wenzhou, Dongguan lacked administrative transparency and efficiency in implementing policy. Their flexible bureaucracy provided fertile ground for rent-seeking activities by local officials (Yeung, 2001). Exacerbated by lax enforcement of laws and regulations, illegal miscellaneous charges not only increased transaction costs for foreign investors, but also gave the impression that local officials were abusing their power (Yeung, 2001). This deepened the determination of foreign capital, including firms owned by ethnic Chinese, to relocate to areas with more transparent administrative governance.

8. CONCLUSION

Drawing on national census data, local statistical data, and in-depth field interviews, this paper examined the Suzhou, Wenzhou, and Dongguan models to explain why previously well-developed economic models varied in economic performance, adaptive governance, and capacity to withstand the global economic downturn of the late 2000s. We propose that

variation in the institutional adaptability of local states throughout the course of their developmental experiences had a defining effect on how these cities fared under crisis. Factors accounting for their variation in institutional adaptability were influenced by structural conditions, but ultimately, agent-centric factors involving local state leadership capacity were key in determining whether a locality was able to redirect its developmental trajectory prior to an economic shock. This paper sheds light on the extent of adaptive adjustment to altered circumstances in the service of continuous reproduction of existing systems, and shifts the focus on state capacity for adaptation from the national to the sub-national level in China. Table 5 summarizes the causal mechanisms that led to variation in the crisis-coping ability and economic performance of the three cities.

Suzhou possessed stronger institutional adaptability than did Wenzhou and Dongguan, which we conceptualize as the extent to which local state transformation matched the changing economic circumstances at opportune turning points. We identify Suzhou's *adaptive governance* as *proactive* because it successfully sustained its competitive advantage by acting as a *local developmental state* that adapted to the dynamic economic environment over multiple phases. Wenzhou and Dongguan developed along different trajectories. To be sure, both achieved remarkable economic growth, but their local states revealed weak crisis-coping abilities and declining economic performance during the financial crisis, albeit for different reasons. Wenzhou's local liberal state displayed *reactive adaptive governance*. It played an effective role at the beginning of reform by allowing private enterprise to serve as the growth engine of its economy, well before other parts of China. However, Wenzhou's attempted transformation into a *local developmental state* failed when the economic environment changed, as inappropriate interventionist measures resulted in weak crisis-coping ability during the global financial crisis. Despite success as a *local entrepreneurial state* during the first two decades of the reform era, Dongguan also exhibited limited institutional adaptability in response to the dynamic economic environment by transforming too late into a *local developmental state*. Therefore, we identify Dongguan as an example of *delayed adaptive governance*.

Agent-centric factors mediated structural factors in shaping the institutional adaptability of the three local states. While a certain degree of path dependency affected the options for change, agent-centric factors were critical in the formulation of local state responses. Structurally, Suzhou, Wenzhou, and Dongguan were all affected by their *natural endowments and historical legacies*; *external resources and opportunities*; and *fiscal conditions*. First, geographical conditions and natural endowments provided Suzhou with opportunities and resources, but decreased Wenzhou's attractiveness to foreign investment and external talent; and obstructed its transformation from family-based to modern corporations. Dongguan's location was conducive to foreign investment, but the latter was accompanied by an influx of low-skilled migrants and environmental degradation. Second, differential exposure to international influences brought economic benefits and management skills to Suzhou, but limited Wenzhou's exposure to foreign interaction and trapped Dongguan in low-tech production. Third, long-term fiscal conditions resulting partly from past developmental patterns facilitated Suzhou's transformation, but restrained Wenzhou's adaptive capacity and adversely affected Dongguan's future development.

More importantly, however, from an agent-centric perspective, the combination of *highly motivated and capable leadership*, *openness to new policy ideas*, and *local state capacity for*

policy implementation fundamentally affected local institutional adaptability. Above all, Suzhou's leadership base was more highly motivated, better educated, and more competent than in Wenzhou and Dongguan. A long-term partnership with Singapore brought spillover benefits that shaped the developmental views of local officials, steering them toward more innovative policies. Finally, compared with the lack of bureaucratic transparency and inefficiency in Wenzhou and Dongguan's administrative apparatus, Suzhou's local state consistently demonstrated capacity to implement policies effectively.

Although structural conditions provided each of the localities with certain opportunities at the outset of the reform era, in the end, capable leadership was instrumental in leveraging those benefits and making policy adjustments as economic conditions changed. A broader observation is that under dynamic market conditions, factors that promote economic success at one point can become barriers later on. Although we refrain from judging the future performance of particular developmental patterns, exploring a region's institutional adaptability and analyzing factors that account for this provides a more nuanced means for understanding the dynamics of a region's evolving developmental patterns and performance—during normal times, as well as more challenging periods.

Going forward, these insights have potential implications for the institutional adaptability of localities in western and central provinces. To be sure, they face different structural conditions, including the absence of some of the geographic and infrastructural advantages of the three eastern localities discussed in this paper. Localities in China's central and northeastern rustbelts have also grappled with the challenges of state sector restructuring and accompanying social dislocations. Nonetheless, our findings suggest that agent-centric factors can enhance or inhibit the institutional adaptability of these areas. Indeed, China's party-state recognizes that appointing highly capable, politically promising cadres to inland provinces can serve as a testing ground for their ability to devise and implement new developmental strategies.⁵ Similar dynamics can be observed at the sub-provincial level. Within Sichuan, for example, under the leadership of ambitious local officials, Chengdu's growth rate surpassed that of Chongqing during the 1990s even though Beijing had a vested interest in Chongqing's strategically important position (Hong, 1999). Despite having limited resources at their disposal, Chengdu's leaders exerted greater autonomy in tailoring national policies to suit local conditions. Further comparative research focusing on the expressions of local state agency in west and central China would yield additional insights about the possibilities of institutional adaptability under structural conditions that are apparently more constrained for market-oriented development.

From a policy perspective, the mixed experiences of Suzhou, Wenzhou, and Dongguan hold lessons for politically motivated leaders appointed to western, central, and northeastern localities. As Guangdong relocates pollution-producing factories to less-developed areas such as Anhui, northern Jiangsu, and western Shandong (Zhu, He, & Liu, 2014), receiving inland localities should negotiate terms for environmental and labor protection given that Dongguan neglected to do so with ethnic Chinese FDI. By contrast, Suzhou's assertive engagement with the central government and foreign capital succeeded in fostering an ecosystem that supports innovation and attracts skilled labor. In geographically insulated areas such as Wenzhou that are less attractive to foreign investment and talent, local states can still formulate creative solutions to

repurpose existing resources and develop new opportunities. Wenzhou's Association of Overseas Chinese Affairs, for example, recently launched an initiative to engage its diasporic scientists, professionals, and engineers to advise the locality on upgrading its health care, higher education, and business development institutions (WZ1910816). These are just a few examples of the types of strategies that inland localities could pursue.

Since the commencement of liberalizing reforms in the late 1970s, China's economic topography has shifted in an unexpectedly redistributive and uneven manner. Socialist-era

beneficiaries of state industrial investment have lagged behind eastern localities that were neglected during the Mao era, but subsequently developed vibrant market economies due to local political and economic entrepreneurship. Within the latter category, Suzhou, Wenzhou, and Dongguan charted three different developmental "models" that flourished for decades, but then diverged in their institutional adaptability under changing market conditions. The capacity of their respective leaders to recognize and respond proactively to evolving challenges proved to be critical before a major economic shock forced the issue.

NOTES

1. Following Oi (1992), this paper refers to local governments as "local states" to capture the set of sub-national political and economic institutions that exercise administrative authority over a given territory.

2. Note that Bo Xilai became acting mayor of Dalian in 1992 and mayor in 1993. As party secretary of Chongqing (2007–12), Bo Xilai attracted national attention for his revival of Mao-era principles, policies, and cultural symbols. He was subsequently charged with corruption, expelled from the Communist Party, and sentenced to life imprisonment.

3. Chen (2014) reached an opposite conclusion from conducting a comparison study between Shenzhen and Suzhou, arguing that local governments allied with large multinational corporations at the top of the value chain squeezed domestic firms to the bottom of the value chain while

alliances with small foreign invested firms at the bottom facilitated local learning and innovation.

4. Level 1 refers to leading roles of ministries or equivalents, or of provinces or equivalents; Level 2 refers to assisting roles of ministries or equivalents, or of provinces or equivalents; and Level 3 refers to leading roles of departments or equivalents, or of prefectures or equivalents. The positions of Party secretaries and mayors in Suzhou, Wenzhou, and Dongguan are all Level 3.

5. For example, China's current Premier, Li Keqiang, served as Governor of Henan province (1998–2004) in central China and Party Secretary of Liaoning province (2004–07) prior to his appointment on the Standing Committee of the Politburo in 2007.

REFERENCES

- Airriess, C. (2008). The geographies of secondary city growth in a globalized China: Comparing Dongguan and Suzhou. *Journal of Urban History*, 35(1), 134–149.
- Ang, Y. Y. (2016). *How China escaped the poverty trap*. Ithaca, NY: Cornell University Press.
- Blyth, M. (2001). The transformation of the Swedish model: Economic ideas, distributive conflict, and institutional change. *World Politics*, 54(1), 1–26.
- Blyth, M. (2003). Structures do not come with an instruction sheet: Interests, ideas, and progress in political science. *Perspectives on Politics*, 1(4), 695–706.
- Breznitz, D., & Murphree, M. (2011). *Run of the red queen: Government, innovation, globalization, and economic growth in China*. New Haven: Yale University Press.
- Briguglio, L., Cordina, G., Farrugia, N., & Vella, S. (2009). Economic vulnerability and resilience: Concepts and measurement. *Oxford Development Studies*, 37(3), 229–247.
- Brusco, S. (1992). Small firms and the provision of real services. In F. Pyke, & W. Sengenberger (Eds.), *Industrial districts and local economic regeneration* (pp. 176–196). Geneva: International Institute for Labor Studies.
- Cao, X. (2014). Strategic new industry development in China: A critical analysis of the role of local government. In *Stockholm conference on industrial upgrading and urbanization*.
- Chen, L. (2014). Varieties of global capital and the paradox of local upgrading China. *Politics & Society*, 42(2), 223–252.
- Chen, X. (2000). Both glue and lubricant: Transnational ethnic social capital as a source of Asia–Pacific subregionalism. *Policy Sciences*, 33, 269–287.
- Chung, J. C. (Ed.) (1999). *Cities in Post-Mao China: Recipes for economic development in the reform era*. London: Routledge.
- Donaldson, J. A. (2009). Why do similar areas adopt different developmental strategies? A study of two puzzling Chinese provinces. *Journal of Contemporary China*, 18(60), 421–444.
- Dongguan Statistical Bureau (various years). *Dongguan statistical yearbooks* (in Chinese), Beijing: China Statistical Press.
- Essletzbichler, J., & Rigby, D. (2007). Exploring evolutionary economic geographies. *Journal of Economic Geography*, 7, 549–571.
- Fan, C. C. (2002). The elite, the natives, and the outsiders: Migration and labor market segmentation in urban China. *Annals of the Association of American Geographers*, 92(1), 103–124.
- Hall, P., & Soskice, D. (2001). An introduction to varieties of capitalism. In P. Hall, & D. Soskice (Eds.), *Varieties of capitalism: The institutional foundations of comparative advantage* (pp. 50–51). Oxford University Press.
- Heilmann, S., & Perry, E. J. (2011). Embracing uncertainty: Guerrilla policy style and adaptive governance in China. In S. Heilmann, & E. J. Perry (Eds.), *Mao's invisible hand: The political foundations of adaptive governance in China* (pp. 1–29). Cambridge, MA: Harvard University Asia Center.
- Hong, L. (1999). A tale of two cities: A comparative study of the political and economic development in Chengdu and Chongqing. In J. H. Chung (Ed.), *Cities in China: Recipes for economic development in the reform era* (pp. 183–214). London: Routledge.
- Inkpen, A., & Pien, W. (2006). An examination of collaboration and knowledge transfer: China–Singapore Suzhou Industrial Park. *Journal of Management Studies*, 43(4), 779–811.
- Johnston, L. (Ed.) (1993). *Cities of Jiangnan in late imperial China*. New York: State University of New York Press.
- Knight, J. B. (2014). China as a developmental state. *The World Economy*, 37(10), 1335–1347.
- Liu, Y. (2011). Responsive strategies and institutional divergences in economic transformation: Wenzhou and Wuxi. *Taiwan Sociology*, 22, 59–110 (in Chinese).
- Liu, Z., & Zhen, X. (1992). *Investment handbook in Dongguan*. Dongguan: Guangdong Higher Education Publisher (in Chinese).
- Mahoney, J. (2000). Path dependence in historical sociology. *Theory and Society*, 29(4), 507–548.

- McGee, T., Lin, G., Wang, M., Marton, A., & Jiaping, W. (2007). *China's urban space: Development under market socialism*. London: Routledge.
- Montinola, G., Yingyi, Q., & Weingast, B. (1995). Federalism, Chinese style: The political basis for economic success in China. *World Politics*, 48(1), 50–81.
- Naughton, B. (1995). China's macroeconomy in transition. *The China Quarterly*, 144, 1083–1104.
- Ngo, V. (2011). *Globalizing Suzhou: Exogenous growth and Chinese urban development*. Geography 352: Urbanization in the Global South.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. New York: Cambridge University Press.
- North, D. C. (2005). *Understanding the process of economic change*. Princeton, NJ: Princeton University Press.
- Oi, J. C. (1992). Fiscal reform and the economic foundation of local state corporatism in China. *World Politics*, 45(1), 99–126.
- Ou-yang, D. (1994). Modernization in 15 Years. In G. Li, & J. Yin (Eds.), *From village to city: The road of modernization in Dongguan* (pp. 67–84). Beijing: The People's Publisher (in Chinese).
- Parris, K. (1993). Local initiative and national reform: The Wenzhou model of development. *China Quarterly*, 134, 242–263.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of Politics. *American Political Science Review*, 94(2), 251–267.
- Po, L. (2008). Redefining rural collectives in China: Land conversion and the emergence of rural shareholding cooperatives. *Urban Studies*, 45(8), 1603–1623.
- Poon, C.-S. (2002). *A comparative study of the pattern and model of economic development between Dongguan and Shunde* (Dissertation). The University of Hong Kong.
- Freeman, J. R. (1982). State entrepreneurship and dependent development. *American Journal of Political Science*, 26(1), 90–112.
- Qian, Y., & Wu, J. (2000). *China's transition to a market economy: How far across the river?*, Working Paper No. 69. Center for Research on Economic Development and Policy Reform.
- Richardson, G., & Bogart, D. (2008). *Institutional adaptability and economic development: the property rights revolution in Britain, 1700 to 1830*. National Bureau of Economic Research, No. W13757.
- Sheingate, A. (2003). Political entrepreneurship, institutional change, and American political development. *Studies in American Political Development*, 17(Fall), 185–203.
- Shi, J. (2004). A historical institutional analysis of the Wenzhou model. *Zhejiang Social Sciences*, 2, 16–20 (in Chinese).
- Shirk, S. L. (1993). *The political logic of economic reforms in China*. Berkeley: University of California Press.
- Sikkink, K. (1991). *Ideas and institutions: Developmentalism in Brazil and Argentina*. Ithaca, NY: Cornell University Press.
- Smart, A., & Lin, G. (2007). Local capitalisms, local citizenship and translocality: Rescaling from Below in the Pearl River Delta Region, China. *International Journal of Urban and Regional Research*, 31(2), 280–302.
- Streeck, W., & Thelen, K. (2005). Introduction: Institutional change in advanced political economies. In W. Streeck, & K. Thelen (Eds.), *Beyond continuity: Institutional change in advanced political economies* (pp. 1–39). Oxford University Press.
- Suzhou Statistical Bureau. (various years). *Suzhou statistical yearbooks* (in Chinese), Beijing: China Statistical Press.
- Taleb, N. (2010). *The black swan: The impact of the highly improbable fragility*. New York: Random House.
- Tsai, K. S. (2002). *Back-alley banking: Private entrepreneurs in China*. Ithaca, NY: Cornell University Press.
- Tsai, K. S. (2006). Debating decentralized development: A reconsideration of the Wenzhou and Kerala models. *Indian Journal of Economics & Business*, 47–67.
- Vogel, E. (1990). *One step ahead in China: Guangdong under Reform*. Harvard University Press.
- Wei, Y. (2002). Beyond the Sunan model: Trajectories and Underlying factors of development in Kungshan, China. *Environment and Planning A*, 34(10), 1725–1747.
- Wei, Y., Li, W., & Wang, C. (2007). Restructuring industrial districts, scaling up regional development: A study of the Wenzhou Model, China. *Economic Geography*, 83(4), 421–444.
- Wei, Y., Yuqi, L., & Chen, W. (2009). Globalizing regional development in Sunan, China: Does Suzhou Industrial Park fit a neo-marshallian district model? *Regional Studies*, 43(3), 409–427.
- Wenzhou Statistical Bureau. (various years). *Wenzhou statistical yearbooks* (in Chinese), Beijing: China Statistical Press.
- Womack, B., & Zhao, G. (1994). The many worlds of China's provinces: Foreign trade and diversification. In D. S. G. Goodman, & G. Segal (Eds.), *China deconstructs: Politics, trade and regionalism* (pp. 148–149).
- Wu, X., & Jiang, Y. (2010). The formation process towards a more inclusive system: Comparison study on Suzhou and Wenzhou. In *Malaysia: 8th international conference, making innovation work for society: Linking, leveraging and learning*.
- Xie, J. (2000). *Research on Wenzhou private economy: A study to understand the Wenzhou model through exploring private economy*. Beijing: Zhonghua Gongshanglian Press (in Chinese).
- Xue, D., & Wu, F. (2015). Failing entrepreneurial governance: From economic crisis to fiscal crisis in the City of Dongguan, China. *Cities*, 43, 10–17.
- Ye, X., & Wei, Y. (2005). Geospatial analysis of regional development in China. *Eurasian Geography and Economics*, 46(6), 445–464.
- Ye, Y. (1994). The socio-economic development strategy in the 21st century. In G. Li, & J. Yin (Eds.), *From village to city: The road to modernization in Dongguan* (pp. 85–103). Beijing: People's Publisher (in Chinese).
- Yeoh, C., C. Cai, C., & Koh, C.-S. (2003). Creating an environment for enterprise: The Singapore experience in East Asia. Lee Kong Chian School of Business, Academy of International Business, 2003 Annual meeting: The power of ideas and international business.
- Yeung, G. (2001). *Foreign investment and socio-economic development in China: The case of Dongguan*. Palgrave Macmillan.
- Yeung, W.-C. (Ed.) (2013). *Globalizing regional development in East Asia: Production networks and entrepreneurship*. London: Routledge.
- Zang, X. (1991). Provincial elites in post-Mao China. *Asian Survey*, 512–525.
- Zhang, J. (2007). Business association in China: Two regional experiences. *Journal of Contemporary Asia*, 37(2), 209–231.
- Zhou, D., & Zhang, J. (2011). *Understanding Wenzhou entrepreneurs*. Beijing: People's Press (in Chinese).
- Zhou, D., & Tang, C. (2012). *Wenzhou's big change*. World Books Press (in Chinese).
- Zhou, W. (2009). Bank financing in China's private sector: The payoffs of political capital. *World Development*, 37(4), 787–799.
- Zhu, S., He, C., & Liu, Y. (2014). Going green or going away: Environmental regulation, economic geography and firms' strategies in China's pollution-intensive industries. *Geoforum*, 55, 53–65.
- Zweig, D. (2002). *Internationalizing China: Domestic Interests and global linkages*. Cornell University Press.

APPENDIX A. INTERVIEWS

Interview Number	Interview Location	Interview Date	Interviewee
SZ113102014	Suzhou, Jiangsu	13/10/2014	Vice director of the finance department at Company A
SZ213102014	Suzhou, Jiangsu	13/10/2014	Vice president at Company B
SZ313102014	Suzhou, Jiangsu	13/10/2014	Director of overseas department at Company C
SZ414102014	Suzhou, Jiangsu	14/10/2014	General manager at Company D
SZ514102014	Suzhou, Jiangsu	14/10/2014	Vice president at Company E
SZ615102014	Suzhou, Jiangsu	15/10/2014	General manager at Company F
SZ715102014	Suzhou, Jiangsu	15/10/2014	Vice president at Company G
SZ815102014	Suzhou, Jiangsu	15/10/2014	Local official A at the Industrial & Commercial Management Bureau
SZ915102014	Suzhou, Jiangsu	15/10/2014	Local official B at the Industrial & Commercial Management Bureau
SZ1024062014	Suzhou, Jiangsu	15/10/2014	Local official C at the Industrial & Commercial Management Bureau
SZ1124062014	Suzhou, Jiangsu	15/10/2014	Local official D at the Development and Reform Bureau
DG128072014	Dongguan, Guangdong	28/07/2014	Vice president at Company A
DG228072014	Dongguan, Guangdong	28/07/2014	Director of finance department at Company B
DG328072014	Dongguan, Guangdong	28/07/2014	General manager at Company C
DG429072014	Dongguan, Guangdong	29/07/2014	General manager at Company D
DG529072014	Dongguan, Guangdong	29/07/2014	General manager at Company E
DG629072014	Dongguan, Guangdong	29/07/2014	Local Official A at the Development and Reform Bureau
DG730072014	Dongguan, Guangdong	30/07/2014	Local Official B at the Development and Reform Bureau
DG830072014	Dongguan, Guangdong	30/07/2014	Local Official C at the Economy and Information Technology Bureau
DG930072014	Dongguan, Guangdong	30/07/2014	Local Official D at the Economy and Information Technology Bureau
DG1030072014	Dongguan, Guangdong	30/07/2014	Local Official E at the Statistics Bureau
WZ119122014	Wenzhou, Zhejiang	19/12/2014	Vice president at Company A
WZ219122014	Wenzhou, Zhejiang	19/12/2014	General manager at Company B
WZ319122014	Wenzhou, Zhejiang	19/12/2014	Director of finance department at Company C
WZ419122014	Wenzhou, Zhejiang	19/12/2014	General manager at Company D
WZ502072014	Huzhou, Zhejiang	02/07/2014	General manager at Company E
WZ602072014	Huzhou, Zhejiang	02/07/2014	Vice president at Company F
WZ718122014	Wenzhou, Zhejiang	18/12/2014	Local official A at the Development and Reform Bureau

APPENDIX A (continued)

Interview Number	Interview Location	Interview Date	Interviewee
WZ818122014	Wenzhou, Zhejiang	18/12/2014	Local official B at the Development and Reform Bureau
WZ918122014	Wenzhou, Zhejiang	18/12/2014	Local official C at the Development and Reform Bureau
WZ1018122014	Wenzhou, Zhejiang	18/12/2014	Local official D at the Economy and Information Technology Bureau
CN114132014	Cangnan County, Wenzhou, Zhejiang	13/4/2014	Local official of the Construction Bureau, provincial CCP, and director of a business association
YW14142014	Yiwu County, Zhejiang	14/4/2014	Private entrepreneur and vice director of a business association
WZ24152014	Wenzhou, Zhejiang	15/4/2014	Manager at a state-owned commercial bank
WZ1910816	Wenzhou, Zhejiang	8/1/2016	Chairperson, Wenzhou Association of Overseas Chinese Affairs

APPENDIX B. PROFILES OF PARTY SECRETARIES AND MAYORS IN SUZHOU, WENZHOU AND DONGGUAN

Suzhou party secretaries	Time period in position	Career prospects (highest position level achieved)	Local?	Educational background
高德正 Gao Dezheng	1987–89	From Level 3 to 2	No	Associate Degree
王敏生 Wang Mingsheng	1989–94	From Level 3 to 2	No	II*
杨晓堂 Yang Xiaotang	1994–98	From Level 3 to 1	No	Bachelor Degree
梁保华 Liang Baohua	1998–2000	From Level 3 to 2	No	Bachelor Degree
陈德铭 Chen Deming	2000–02	From Level 3 to 1	No	PhD
王珉 Wang Min	2002–04	From Level 3 to 1	No	PhD, Professor
王荣 Wang Rong	2004–09	From Level 3 to 1	No	PhD, Professor
蒋宏坤 Jiang Hongkun	2009–14	From Level 3 to 2	Yes	Associate Degree
石泰峰 Shi Taifeng	2014–present	NA**	No	PhD, Professor
Suzhou Mayors	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
段绪申 Duan Xushen	1984–86	From Level 3 to 2	No	Bachelor Degree
俞兴德 Yu Xingde	1986–89	From Level 3 to 2	No	Bachelor Degree
章新胜 Zhang Xinsheng	1989–97	From Level 3 to 2	No	Master Degree

(continued on next page)

APPENDIX B (continued)

Suzhou Mayors	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
陈德铭 Chen Deming	1997–2000	From Level 3 to 1	No	PhD
杨卫泽 Yang Weize	2001–04	From Level 3 to 2(corruption)	No	Master Degree
阎立 Yan Li	2004–12	From Level 3 to 3	No	PhD
周乃翔 Zhou Naixiang	2012–present	NA**	No	Bachelor Degree
Wenzhou Party Secretaries	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
董朝才 Dong Zhaocai	1985–90	II*	No	II*
刘锡荣 Liu Xirong	1990–91	From Level 3 to 2	No	Bachelor Degree
孔祥有 Kong Xiangyou	1991–93	From Level 3 to 2	No	Technical Secondary School
张友余 Zhang Youyu	1993–98	From Level 3 to 2	No	Technical Secondary School
蒋巨峰 Jiang Jufeng	1998–2002	From Level 3 to 1	No	Bachelor Degree
李强 Li Qiang	2002–04	From Level 3 to 1	Yes	Master Degree from Party School of CCP
王建满 Wang Jianman	2004–08	From Level 3 to 2	No	Master Degree from Party School of CCP
邵占维 Shao Zhanwei	2008–10	From Level 3 to 2	No	Bachelor Degree from Party School of CCP
陈德荣 Chen Derong	2010–13	From Level 3 to 1	Yes	Master Degree
陈一新 Chen Yixin	2013–present	NA	Yes	Master Degree from Party School of CCP
Wenzhou Mayors	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
卢声亮 Lu Shengliang	1983–88	From Level 3 to 3	Yes	Associate Degree
刘锡荣 Liu Xirong	1988–90	From Level 3 to 2	No	Bachelor Degree
陈文宪 Chen Wenxian	1990–96	From Level 3 to 3 (corruption)	II*	II*
钱兴中 Qian Xingzhong	1996–2003	II*	No	Associate Degree
刘奇 Liu Qi	2003–06	From Level 3 to 2	No	PhD
邵占维 Shao Zhanwei	2006–08	From Level 3 to 2	No	Bachelor Degree from Party School of CCP
赵一德 Zhao Yide	2008–11	From Level 3 to 2	No	Master Degree from Party School of CCP

APPENDIX B (continued)

Wenzhou Mayors	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
陈金彪 Chen Jinbiao	2011–15	From Level 3 to 3	No	Master Degree from Party School of CCP
徐立毅 Xu Liyi	Candidate	NA**	No	Bachelor Degree
Dongguan Party Secretaries	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
欧阳德 Ou Yangde	1988–94	From Level 3 to 2	II*	II*
李近维 Li Jinwei	1994–2001	From Level 3 to 2	Yes	Associate Degree
佟星 Tong Xing	2001–06	From Level 3 to 2	No	Bachelor Degree
刘志庚 Liu Zhigeng	2006–11	From Level 3 to 2	No	PhD
徐建华 Xu Jianhua	2011–present	NA**	No	Bachelor Degree
Dongguan Mayors	Time Period in Position	Career Prospects (highest position level achieved)	Local?	Educational Background
叶耀 Ye Yao	1991–94	From Level 3 to 3	Yes	II*
李近维 Li Jinwei	1994–97	From Level 3 to 2	Yes	Associate Degree
佟星 Tong Xing	1997–2001	From Level 3 to 2	No	Bachelor Degree
黎桂康 Li Guikang	2001–04	From Level 3 to 2	Yes	Master Degree
刘志庚 Liu Zhigeng	2004–06	From Level 3 to 2	No	PhD
李毓全 Li Yuquan	2006–11	From Level 3 to 2	No	PhD
袁宝成 Yuan Baocheng	2011–present	NA**	No	Master Degree

Sources: Biographical information taken from <http://www.baidu.baik.com.cn>.

Note: II*: insufficient information, NA**: not applicable.

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