MOBILITY AND AGENCY: PRIVATE SECTOR DEVELOPMENT IN RURAL CENTRAL CHINA

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Economic inequality is a continuing challenge for China. According to a recent World Bank report, China's Gini Coefficient rose to .47 in 2009, from .28 thirty years ago, indicating rising income inequalities. The rising rural—urban income gap is particularly challenging, as incomes of urban residents are now 3.3 times greater than rural incomes. In response to this, the goal of "inclusive growth" (growth which benefits all economic strata and regions) has become central to the design of China's 12th Five-Year Plan (FYP), in line with the commitment of President Hu Jintao and Premier Wen Jiabao to achieving a "harmonious society" in China.

To counter rising income inequality between urban and rural China and between coastal regions and the interior, Beijing has poured more than one trillion yuan into infrastructure and social welfare improvements, and has distributed these funds as part of its Western Development Program (since 1999), the Northeast Rejuvenation Initiative (after 2003) and the Central China Developmental Program (after 2005), along with a host of other developmental aid programs. While such government-led efforts may provide some benefit to remote regions, the state's ability to support the generation of private income is of paramount importance. Since 1998, when China privatized the majority of local state-owned enterprises (SOEs) (difang guoying qiye 地方国营企业), the private sector has played an ever more important role in employment, innovation and income generation. Yet, while a number of national policies and laws have improved the business environment for private enterprise over the past 30 years, there continue to be

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Global Times, "Wealth Concentration in China Exceeds US", 9 June 2010, http://business.globaltimes.cn/china-economy/2010-06/540373.html; Xinhua, "China Needs Binding Development Targets on Living Standards: Expert", 10 December 2010, http://news.xinhuanet.com/english2010/china/2010-12/10/c_13644038.html, last accessed 22 January 2011; World Bank, World Development Indicators.

David S. G. Goodman (ed.), *China's Campaign to 'Open up the West': National, Provincial and Local Perspectives (The China Quarterly* Special Issue, 2004); Hongyi Lai, "Developing Central China: A New Regional Programme", *China: An International Journal*, Vol. 5, No. 1 (2007), pp. 109-28.

significant institutional challenges inhibiting private sector development at the local level, such as weak rule of law, unfair competition and entrenched rent-seeking. Rural areas in interior China are at a particular disadvantage, as they have comparatively limited access to markets, poor infrastructure and a dearth of investment, skilled labor and advanced technologies. In the long run, addressing these barriers to private sector development will be key to boosting rural household incomes.

This study focuses on how political and business leaders in China's comparatively disadvantaged regions support private sector development. Previous studies of private sector development have primarily examined coastal regions' development models, leaving an empirical gap on the study of private sector development in central China. The "Wenzhou model" in Zhejiang, for example, is an oft-cited case of exemplary private sector growth in China, 4 as are the "Sunan model" and the "Guangzhou model". 6 While this literature has contributed greatly to understanding the determinants of private sector development in reform-era China, its regional bias limits the generalizability of the findings. China's coastal regions' privileged access to foreign markets and capital are significant external influences on economic growth.

Earlier studies have also found that, in the 1980s, the absence of pre-existing industrial structures tended to encourage officials to tolerate private activities; similarly, a remote location combined with a narrow range of economic alternatives led government officials in regions such as Wenzhou to encourage private sector development. The concentration of private sector growth in coastal areas suggests that proximity to the largest domestic markets and export markets shapes patterns of regional private sector development. In addition, the role of informal finance,8

See, for example, Zhang Renshou and Li Hong, Wenzhou moshi yanjiu (Study of the Wenzhou Model) (Beijing: Zhongguo Shehui Kexue Chubanshe, 1990); Alan P. L. Liu, "The 'Wenzhou Model' of Development and China's Modernization", Asian Survey, Vol. 32, No. 8 (1992), pp. 696-711; Kristen Parris, "Local Initiative and National Reform: The Wenzhou Model of Development", The China Quarterly, Vol. 134, No. 3 (1993), pp. 242-63; Susan H. Whiting, "The Regional Evolution of Ownership Forms: Shareholding Cooperatives and Rural Industry in Shanghai and Wenzhou", in Jean C. Oi and Andrew G. Walder (eds), Property Rights and Economic Reform in China (Stanford: Stanford University Press, 1999), pp. 171-200; Susan H. Whiting, Power and Wealth in Rural China: The Political Economy of Institutional Change (Cambridge: Cambridge University Press, 2001); Zuhui Huang, Xiaobo Zhang and Yunwei Zhu, "The Role of Clustering in Rural Industrialization: A Case Study of the Footwear Industry in Wenzhou", China Economic Review, Vol. 19, No. 3 (2008), pp. 409-20.

Xiaotong Fei, Small Towns in China: Functions, Problems, and Prospects (Beijing: Xin Shijie Chubanshe, 1986); Andrew G. Walder, "Local Governments as Industrial Firms: An Organizational Analysis of China's Transition Economy", American Journal of Sociology, Vol. 101, No. 2 (1995), pp. 263-301; Zhikai Wang, The Private Sector and China's Market Development (Oxford: Chandos Publishing, 2008).

Jonathan Unger, The Transformation of Rural China (Armonk: M. E. Sharpe, 2002).

Zhang Renshou and Li Hong, Wenzhou moshi yanjiu; Kellee S. Tsai, Back-Alley Banking: Private Entrepreneurs in China (Ithaca: Cornell University Press, 2002).

Kellee S. Tsai, Back-Alley Banking.

joint ventures, overseas remittances9 and a higher share of trade also influence private sector growth. Furthermore, cluster formation helped rural private industries overcome the growth constraints of scarce capital and low-level technology. 10 Huang compares the policy environments shaping rural and urban private sector growth in the 1980s and 1990s, and argues that rural areas were more conducive to private entrepreneurship in the 1980s but that, since the 1990s, the state has funneled more resources towards SOEs in urban centers.¹¹

Turning to the migration and human resources literature, a number of studies stress low factor mobility, especially government limits on labor mobility, as a cause of economic inequalities in neighboring Chinese villages.¹² The literature emphasizes the significance of the household registration regime which, from 1959, prevented China's rural population from re-settling to urban areas and which is still in place. ¹³ Some studies have shown that this limited mobility has made migrants particularly influential players in spurring development in rural areas. Murphy, for example, finds that local cadres harnessed the resources brought by returning migrants and funneled them towards development goals. She also highlights the crucial role of these returning migrants in information transfer.¹⁴ On the other hand, other studies have begun to question the contribution of return migration to local economies. Wing and Fan, for example, argue that returning migrants are disproportionately "failure" cases, and that they contribute less to rural development than previously thought.¹⁵

This article shows that the variation in private sector outcomes in central China is the result of a complex mosaic of path dependencies, historical contingencies, government interventions, geography and the availability of non-local capital and skilled labor. Among these various factors, the roles of human resource mobility and local agency stand out. Given the competitive disadvantages of underdeveloped and remote regions, inflows of human and financial capital from more affluent areas are especially important in stimulating growth; accidents of history are often crucial in triggering these flows. Although rural residents could not easily settle down elsewhere during the 1970s and

Zhang Renshou and Li Hong, Wenzhou moshi yanjiu.

Zuhui Huang, Xiaobo Zhang and Yunwei Zhu, "The Role of Clustering in Rural Industrialization".

Yasheng Huang, Capitalism with Chinese Characteristics: Entrepreneurship and the State (Cambridge: Cambridge University Press, 2008).

John Knight and Li Shi, "Cumulative Causation and Inequality Among Villages in China", Oxford Development Studies, Vol. 25, No. 2 (1997), pp. 149-72.

Kam Wing Chan and Will Buckingham, "Is China Abolishing the Hukou System?", The China Quarterly, Vol. 195 (2008), pp. 582-606.

Rachel Murphy, "Return Migration, Entrepreneurship and Local State Corporatism in Rural China: The Experience of Two Counties in South Jiangxi", Journal of Contemporary China, Vol. 9, No. 24 (2007), pp. 231-47.

Wenfei Winnie Wang and C. Cindy Fan, "Success or Failure: Selectivity and Reasons of Return Migration in Sichuan and Anhui, China", Environment and Planning, Vol. 38 (2006), pp. 939-58.

early 1980s, this paper shows that they did in fact move and travel—voluntarily and involuntarily. The arrival of skilled "sent-down" (xiafang 下放) technicians during the Cultural Revolution and the exposure of local salespeople to business ideas during business travels are two important examples. 16 Yet, while human mobility catalyzed sorely-needed human and financial resources, ultimately the actions of local leaders, in both government and enterprise, were crucial in determining whether these temporary inflows were put to good use. Local leaders' motivations and capacities to capitalize on these opportunities explain in part why the private sector flourished in some areas and not in others.

Research Methodology

This article is the result of a three-year period of doctoral dissertation research from June 2006 to December 2009. During this period, I undertook three research trips to Anhui, each of which lasted three to four months. In all, 105 semi-structured interviews were conducted in Wuwei and Tianchang Counties in Chaohu and Chuzhou Municipalities.¹⁷ An additional 75 interviews were conducted in eight other counties in the same two municipalities, to place the experiences of the two selected counties in broader perspective. The majority of interviewees were officials from the Development and Reform Commission, the Industrial and Commerce Bureau and the Economic Commission, as well as managers from private and state-owned enterprises. Information is also drawn from government policy documents and reports, statistical yearbook data, local daily newspapers and on-site company visits.

Wuwei and Tianchang counties were chosen because they have a relatively large private sector. Wuwei and Tianchang are comparable to neighboring counties with respect to their natural resource endowments, geography and level of economic development prior to the 1970s; unlike their counterparts, these two counties experienced rapid industrial growth, beginning in the 1970s and continuing through the 2000s. While it is common practice to compare successful and unsuccessful cases, comparing these two examples illuminates the variety of pathways to private sector development and reveals the different economic and social consequences of developmental "success". The analysis also includes other counties in Chaohu and Chuzhou which were less successful in promoting an indigenous private sector.

The verb xiafang (literally, "send down") refers to the policy of transferring cadres and urban-educated youth to rural areas during the 1960s and 1970s. Approximately 16 to 18 million people, mostly urban intellectuals, were sent down to the countryside; more than 150,000 were sent to Anhui from Shanghai alone (Chris Bramall, The Industrialization of Rural China [Oxford: Oxford University Press, 2007], p. 148).

In August 2011, Chaohu Municipality was divided into three parts, which were absorbed by neighboring municipalities Hefei, Wuhu and Ma'anshan. Wuwei was merged with Wuhu Municipality.

Wuwei and Tianchang

Wuwei and Tianchang are remote counties in central Anhui, and their flourishing private sectors make them stand out among other comparable counties in Anhui and central China. Wuwei is located along the Yangtze River, but lacks a port or a bridge linking it to southern Anhui. The nearest highway is 90 kilometers away, the closest port 80 kilometers (Wuhu), and the nearest airport 150 kilometers away (Hefei or Naniing). Tianchang enjoys a somewhat more favorable location, as it is bordered on three sides by the more prosperous Jiangsu Province and is relatively close to both Yangzhou City (60 kilometers) and Nanjing City (90 kilometers). The National 205 Highway—linking Sugian City in northern Jiangsu with Yangzhou City in southern Jiangsu—runs through Tianchang from the northwest to the southeast. Many enterprises in Tianchang draw business ideas, start-up capital and operational and management practices from their managers' frequent journeys to and from Jiangsu. Tianchang also benefits from the practice of Jiangsu companies relocating to the border areas in Anhui to avoid the stricter environmental regulations and higher land prices in Jiangsu.

Table 1: Population, GDP and Private Sector Shares (PSS) in Non-Agricultural Employment (NAE): Rural Chaohu and Chuzhou

	Pop.,	Annual	GDP, 2006				GDP	PSS in NAE		PSS in
	2006 (1,000 people)	GDP Growth 1996– 2006 (%)	(100 Mill. yuan)	Prim (%)	Sec (%)	Ter (%)	per capita, 2006 (yuan)	1997 (%)	2005	NAE Annual Growth 1997– 2005 (%)
Total Chaohu	4,500	21	344	23	39	37	8,319 ¹⁸	1.5	4.8	15.3
Lujiang	1,180	15	55	38	27	35	4,727	NA	3.0	NA
Wuwei	1,390	24	98	24	42	35	7,010	5.1	22.2	20.2
Hanshan	442	17	32	28	34	38	7,457	NA	4.6	NA
Hexian	650	16	44	29	35	36	6,733	0.8	3.3	19.0
Total Chuzhou	4,400	21	372	26	39	35	9,069	2.6	13.8	24.8
Nanqiao	270	NA	22	42	36	22	8,952	2.8	21.1	20.7
Tianchang	618	26	71	23	50	26	11,513	7.2	18.2	18.7
Mingguang	636	18	40	40	24	36	6,277	NA	10.8	21.7
Lai'an	490	20	39	25	43	32	7,888	4.1	17.9	24.1
Quanjiao	451	15	33	35	31	35	7,204	NA	12.9	22.2
Dingyuan	920	17	43	44	22	34	4,630	3.4	14.4	19.3
Fengyang	729	16	45	32	35	33	6,091	NA	10.8	21.2

Sources: Chuzhou Statistical Bureau, 2007; Chaohu Statistical Bureau, 2007; Anhui Tongji Nianjian (Anhui Statistical Yearbook) (Beijing: Zhongguo Tongji Chubanshe, 1997, 2006, 2007).

Figures for GDP per capita for Chaohu and Chuzhou Municipalities are high because total figures also include GDP per capita of urban districts (Juchao district in Chaohu and Lanya and Nangiao districts in Chuzhou).

Wuwei and Tianchang share with the other counties in Chaohu and Chuzhou a remote location, similar resource endowments, comparable levels of urbanization, low levels of foreign investment, poor infrastructure and a common municipal government leadership. Wuwei and Tianchang also share with the surrounding counties comparable legacies of state-led industrialization from the 1960s to the 1980s. In these counties, local state-run SOEs were small, and focused on standard sectors such as cement, chemicals, fertilizer, textiles, beer, machinery, construction materials, pharmaceuticals and water supply. Neither Wuwei nor Tianchang had SOEs in the cable or electronic component industries, the niche sectors that are the main engine for growth today. Table 1 summarizes key economic indicators for all the rural counties in Chaohu and Chuzhou.

Remote geography, a limited number of industrial SOEs and a lack of significant natural resources help to explain local government incentives to permit or promote private sector development in the 1960s and 1970s, but they are insufficient to explain why the private sector "took off" in Wuwei and Tianchang but not in similar neighboring counties.

Mobility and Agency in Wuwei

Events and developments shaping Wuwei's private cable industry today date as far back as the 1950s and 1960s, starting with private entrepreneurial activities in Gaogou Town next to the Yangtze River. A natural disaster contributed to the emergence of the private sector: in 1954, an unusually large flood broke Gaogou's dam and flooded the village and fields, resulting in total crop failure. 19 As a result of the flood, 165,000 people left the county, of whom 128,000 relocated from Wuwei to neighboring counties and provinces. 20 Some Gaogou locals displaced by the flood went to Wuxi in Jiangsu, where they learned how to run industrial workshops. Some of these flood refugees returned to Gaogou in the late 1950s to establish privately-owned workshops modeled on those in Wuxi, and in 1969 they set up the first factory in Gaogou—the Xingou Mould Factory. 21 As elsewhere in China, the factory was closed during the campaign to "cut off the capitalist tails" in early 1972. Despite the factory's short lifespan, its managers gained business knowledge and this group led the way in establishing new enterprises in the early 1980s.

The flow of migrants to economically advanced Wuxi in Jiangsu and their return also helped local officials to obtain valuable information about industrial practices and policy tools being used in the more advanced coastal areas. When a group of these early out-migrants and Wuxi immigrants returned to Gaogou in the 1960s, Gaogou government and enterprise leaders learned valuable production and

Chaohu City Local Annals Committee, Chaohu shi zhi (Chaohu City Annals) (Anhui: Huangshan Chubanshe, 1992); Wuwei County Local Annals Committee, Wuwei xian zhi (Wuwei Local Annals) (Beijing: Shehui Kexue Wenxian Chubanshe, 1993).

Chaohu City Local Annals Committee, Chaohu shi zhi, p. 29; Wuwei County Local Annals Committee, Wuwei xian zhi, p. 24.

Wuwei County Local Annals Committee, Wuwei xian zhi.

management practices. Building such horizontal and vertical information bridges is particularly important for governments in remote areas, where information gaps can make economic isolation and stagnation mutually reinforcing and where officials can arrive at a "wrong" understanding of a locality's opportunities. ²² Information about industrial activities in Jiangsu shaped Wuwei leaders' understanding of their county's opportunity set.

Imitation

In the late 1970s, village people established family workshops on a larger scale, starting with hand-made grinding tools and fire-resistant materials as their main products. The process of imitation was key to the spread of private firm ownership; once a few workshops were running, other villagers imitated them.²³ In the 1980s and 1990s, grinding stone production was replaced with electric heater appliances (reheat furnaces and temperature-control instruments). A critical juncture came in 1993, with the establishment of the first cable manufacturing enterprise in the village, the Huahai Special Cable Factory. While travelling to Jiangsu, the enterprise's founder. Mr Shen. discovered a market for cables which promised large profit margins. The technology and skills required were also relatively simple. On his return from his business trip, Mr Shen switched from producing electric heater appliances to cable production. In less than two years, he became a millionaire and, inspired by his achievement, most other private enterprises switched from electric heater to cable manufacturing.

Agential Risk-taking

The private initiatives of Huahai Special Cable Factory and other enterprises could only flourish because local government officials allowed and sometimes actively supported these private enterprises in the 1970s and 1980s, in defiance of central policy. Gaogou Town officials in Wuwei adopted practices that flouted official policy in a number of ways. First, Gaogou's officials reassigned sent-down intellectuals to work as technicians, and even provided financial rewards to sent-down technicians for their work with local workshops. These policies raised the ire of farmers, but

Vertical linkages refer to relationships within the state and government apparatus. In planned economies, vertical linkages are the main information channels, as central decision-making relies on these channels for the creation of national production plans. In market economies, effective vertical linkages are important for the co-ordination and integration of government organizations to achieve policy goals (Guy B. Peters, "Managing Horizontal Government: The Politics of Co-ordination", Public Administration, Vol. 76 [1998], pp. 295-311). Horizontal linkages refer to connections between town officials and non-state actors (for example, migrants, sent-down intellectuals, SOE engineers). In market economies, horizontal linkages are important mechanisms for governments to obtain full information about markets which they are supposed to regulate.

This imitation process is a case of what Granovetter calls the "tipping point" or "threshold". He argues that, once a certain idea has reached a network, all the nodes in the network join in the behavior or phenomenon (Mark S. Granovetter and Roland Soong, "Threshold Models of Diffusion and Collective Behavior", Journal of Mathematical Sociology, Vol. 9 [1983], pp. 165-79).

spurred development of these new enterprises. In describing the popular dissatisfaction with these decisions, a retired mayor of Wuwei County commented:

At that time, this action of payment was very controversial, because the reward was higher than the wages of farmers. Furthermore, sent-down intellectuals were supposed to do manual labor. As a result, there were disputes within the government and complaints from the farmers about whether the government should pay or not, but the town continued to give them financial rewards for their expertise.

Second, local governments tolerated the existence of red-hat enterprises, ²⁴ as did many other localities in China. In Gaogou, more than 90 per cent of all enterprises in 1992 wore a red hat. Importantly, town officials usually left business decisions to the discretion of enterprise managers. For example, in the early 1990s Gaogou's enterprises shifted from electronic heating appliances to cable, but the local officials did not intervene, even though cable production was not approved in the locality's Five-Year Plan. After 1997, approximately 50 cable manufacturing collectives which operated as red-hat enterprises—simply took off their red hats and declared themselves private enterprises.

Other Information Inflows

The majority of cable enterprises in Wuwei were started by salespeople who had come from local electric appliance workshops. In 2008, there were more than 4,000 salespeople in Gaogou, approximately one-third of the labor force—a reflection of the importance of marketing activities to promote products of enterprises located in remote areas. The sizeable local sales force played a key role in private sector development in Wuwei. First, Wuwei's cables have done well in the market, not only because of their quality but also because of effective marketing techniques; for instance, a network of salespeople across China ensured that Wuwei's cable products were advertised at the Three Gorges project and the 2008 Beijing Olympics. More importantly, salespeople serve as knowledge conduits, providing an invisible "information highway" between enterprises and markets and sharing their knowledge about the latest technologies and information drawn from places all across China. Salespeople have also introduced new management and incentive structures which they observed in Jiangsu and elsewhere. One important change was a new organizational structure, making salespeople independent agents for the company ("profit centers"). Although this seemed a normal business practice in 2008, its introduction was revolutionary in central Anhui in the mid-1990s. By 2009, many successful Gaogou people had settled elsewhere in Tongling Municipality, Hefei or Beijing, strengthening links to companies' external markets.

Red-hat enterprises are private companies that register officially as collective or stateowned enterprises. See Susan H. Whiting, Power and Wealth in Rural China; Kellee S. Tsai, Back-Alley Banking.

Local Agents' Adaptive Sector-Tailored Practices

Once workshops were successfully up and running in Gaogou, county officials mounted efforts to support the emerging cable industry further. Local authorities in Wuwei selected the electric wire and cable industry over seven other larger sectors outlined in Wuwei's 10th Five-Year Plan. 25 Wuwei's big-four commercial banks eventually stopped backing large loss-making textile SOEs in the late 1990s and instead provided loans to cable enterprises, many of which had grown significantly. More recently, in 2006, of the 1.2 billion yuan of bank loans allocated by the four commercial banks to industrial enterprises in Wuwei, more than 70 per cent went to the cable industry.²⁶ The Industrial and Commercial Bank of China provided its biggest single loan of 42 million yuan to Hualing Cable Company for a technology upgrade to tap the high-end cable market. These loan decisions were heavily influenced by the county mayor and Party secretary who, during quarterly meetings with bank managers, recommended that particular enterprises be given loans. A manager at the People's Bank of China described the process through which the government indirectly influenced loan allocation, despite the bank's independence:

The bank and the county mayor and Party secretary meet every three months. They bring with them a report about towns' or enterprises' borrowing needs. and make recommendations. The bank then decides on the loan allocation, based on its own analysis and the government's recommendation.

With the rise of the local cable industry, Wuwei's government agents increasingly took on roles that went beyond the use of administrative tools. When the market for low-end cable became saturated in 2007, the Party secretary of Gaogou, with the help of county officials, established the "Fund for Commercialization of Research Findings" and the "Fund for Scientific and Technological Development", prescribing that a minimum 1.5 per cent of Gaogou's annual fiscal expenditures should be allocated to foster innovation in the high-end cable market. Top leaders in Wuwei initiated a conference on research and innovation, inviting experts to present the latest innovations in the high-end cable market.²⁷ Government officials also undertook their own market studies and risk analyses. Officials increasingly feared the risk of overdependence on one sector but, after conducting a detailed market analysis in 2005, the top leadership decided to continue with a cable-focused strategy. County officials also helped enterprises by simplifying bureaucratic

The seven sectors are: chemicals, textiles, pharmaceuticals, shipping, feather and down, construction materials and food processing.

²⁶ By comparison, the local cable industry accounts for approximately 35 per cent of local GDP and 82 per cent of local Gross Volume Industrial Output (GVIO) in Wuwei.

By 2007, only the largest four enterprises undertook independent research in Wuwei, and the majority of companies struggled to move from imitation to innovation. When in 2006 an oversupply of low-end cables hit the Chinese market, independent R&D centers became necessary for local companies to develop high-tech products with a longer life-span and more stable performance, and to give Wuwei enterprises access to the more profitable high-end cable market.

procedures. In the late 1990s, Wuwei—like many other counties—introduced "one-stop services", which halved enterprise registration times to less than one week, and in most cases to only two or three days.

Access to Insider Information and Contracts

County cadres in Wuwei also helped local business to obtain information on and access to upcoming national SOE purchasing contracts. In Wuwei, customers for the majority of the cable enterprises are large state-owned or shareholding enterprises in key infrastructure sectors (electric power, telecommunication, construction) in which a handful of players dominate the market. Government assistance in obtaining contracts with these buyers was thus especially important. Access to insider knowledge was particularly valuable if enterprises wanted to make timely market predictions on national construction plans and to collect large-scale orders. One cable company, for example, received an insider tip about the central government's plan to establish new nuclear power stations, and responded quickly by leasing additional land and investing 110 million yuan for a cable assembly for nuclear stations. Another company received county officials' help to join the National Electric Power Equipment Supplier Network in 2002 and, as a result, became a listed supplier to Sinopec and Sinopec Chemicals. By 2007, the company's sales had increased 16-fold to 800 million yuan, with Sinopec accounting for 80 per cent of total sales volume. In both cases, the local government was an integral part in promoting the expansion of these enterprises.²⁸

Not all elements of this growth are transparent. It is, for example, also possible that the Wuwei government received some investment funds from outsiders who knew that the cable industry would be likely to take off and wanted a share in the profits through their connections in the locality. The sudden increase in company sales points in this direction. Further, in Gaogou, two of the five private logistic companies in 2007 were owned by the previous Party secretary's relatives.

The existence of possibly dubious undertakings could explain why research became increasingly difficult in Wuwei. My initial research entry point through the Wuwei Foreign Affairs Bureau (waishi ju 外事局) dried up after my second field visit. Interviews resumed using personal connections to the Wuwei Propaganda Office (xuanchuan bu 宣传部) as an alternative entry point, but after two interviews this research was also terminated by four government officials who arrived at the hotel and stated that no other persons would be available for interviews. The Propaganda Office was very nervous, even asking to be informed whenever I left the hotel. During the second interview with a cable manager, local government

As noted by an anonymous reviewer (whom I thank for this insightful comment), the Wuwei cable sales methods are similar to those of Township and Village Enterprises (TVEs) elsewhere during the 1980s and 1990s. TVEs also tended to rely on personal connections, customer loyalty and bribes, rather than on brand name recognition and product standardization. Wuwei's sales force further brings with it the great costs and inefficiencies which at times characterized the TVEs. It would seem that these "grey" marketing costs continue to be necessary investments for some enterprises in central China.

officials asked him to step quickly outside the room; when the interview resumed, the manager would share only very general information.

The growth of the national cable sector decided the ultimate success of private sector development in Wuwei. Wuwei entered the cable sector in the early 1990s, at a time when the market for low-end cable was booming. The annual growth rate of the cable sector during 1995–2005 was 16 per cent, driven by nationwide investments in power grids, telecommunication network upgrades and railway expansion. The central government also supported the cable industry by channeling bank loans and capital into infrastructure and construction, all of which indirectly drove the demand for low-end cable. By 2006, the wire and cable sector's national output value totaled 240 billion yuan, second only to the automotive industry.²⁹

Mobility and Agency in Tianchang

While in Wuwei a few large cable enterprises acted as suppliers to domestic SOEs in key infrastructure sectors, Tianchang developed into an export enclave based on small workshops. In Tianchang, most private enterprises originate from and are based in Qinlan, a bustling commercial town located on Jiangsu's border, filled with family workshops also known as "shop in the front, factory in the back" (gianmen shedian houmen banchang 前门设店后门办厂). In Qinlan, more than 80 per cent of all the enterprises produced electronic components, while the remaining 20 per cent produced toys, plastics, cables and broadband components. The production process of low-end electronic components involves mainly microassembly; hence, production is labor-intensive. Most of Oinlan's private enterprises produce solely for export markets in Europe, the US, Japan and India, and only a few bigger enterprises cater to the domestic market.

Just as the Huahai Cable Group was of key importance to Gaogou, a company called Tianhua Wireless Factory, set up by a non-local from Jiangsu, was the spark for the development of the electronic components sector in Qinlan. Tianhua's founder, Li Yunchao-who once worked as a technician in Changzhou in Jiangsu—had been sent down to Qinlan during the 1970s, where he was assigned to the local collective Tianchang Qinlan All-Purpose Processing Factory. The factory head appreciated Li's talent, and deployed him as a technician rather than as a worker. When the collective split into separate factories in the early 1980s, Li set up a privately-led collective called Tianhua Wireless Factory. Li returned to Jiangsu in 1985 to become manager of a large electronic components factory, Changshu Konka Company, but remained chairman of the board of Tianhua and continued to influence key business decisions. To improve knowledge transfer to the company further, Tianhua's former marketing and sales manager also hired a so-called "Sunday engineer" from Suzhou—an employee of a state-owned enterprise who came to Qinlan only on weekends. Thus, in the case of Qinlan, sent-down intellectuals

People's Daily Online, "Wire Cable Industry Brews Huge Opportunities", Beijing, 13 September 2006 (http://english.people.com.cn/200609/13/eng20060913 302215.html), last accessed 28 November 2011

did contribute to skill diffusion: the fortuitous event of a sent-down intellectual arriving with useful technical skills triggered a wave of business start-ups. According to the head of the local Industrial and Commercial Bureau:

Li Yunchao is called "headmaster" by electronics big businesses, since all the big bosses previously worked in his company. Several of his technicians, sales persons and even drivers went on to open their own companies.

Numerous examples illustrate how local leaders in Tianchang either allowed or actively supported private enterprises. For instance, Yu Zegang—Qinlan's mayor and Party secretary during the 1970s and 1980s—played an important role in facilitating the development of the private sector. The mayor's extensive network of overseas relatives could explain why, in the 1970s, he allowed a sentdown technician to set up the first electronic component workshops in Qinlan. Qinlan's town government also shielded local private enterprises by deferring tax collection and easing the regulation burden for private enterprises. For instance, in 1993, Qinlan's Party secretary, Ye Gongming, decided unilaterally to reduce the tax collection target set by the county government from ten million to eight million yuan. More recently, officials in Tianchang have adopted a pragmatic attitude towards some bureaucratic procedures. Although some of the town's 800 getihu (个体户) have outgrown their getihu status, they have been able to retain it and benefit from simplified taxation and annual registration procedures. Though aware of this, the Qinlan Town mayor expressed his willingness to overlook minor infringements in the interests of production: "We do not care [about bureaucratic procedures]; what matters is the value of output".

In recent years, support for private enterprises has also been provided in a very proactive way. Since county officials are constrained in their ability to provide bank loans, county cadres instead often offer direct support and time for targeted enterprises. For example, in early 2007, the county mayor and Party secretary went to neighboring Fengyuan County to recruit recent graduates from the Fengyuan Scientific College and University to make up for shortages of skilled labor in Qinlan. The officials made similar efforts to recruit unskilled labor. After the Spring Festival in 2007, the town officials learned from the website Anhui Nongwang (安徽农网) that Changfeng County had an excess of unskilled labor, and organized a trip to Changfeng to recruit 500 workers. During another mission in Hefei in 2005, Tianchang government officials secured an additional 150 million yuan in loans from the Provincial Agricultural Bank of China for small electronics workshops, resulting in more than 50 small local enterprises receiving loans.

In the 2000s, Tianchang's county government started to strengthen regulations, after local entrepreneurs complained that low-quality producers in Qinlan were causing dissatisfied foreign customers to switch to electronic component producers in Guangdong. The existence of a handful of low-quality producers was especially harmful, because Qinlan's many small electronic components workshops lacked the scale to establish widely recognizable brands. Tianchang government's response was to create a new regulatory agency. In 2003, the Tianchang Technology

Supervision Bureau opened a Product Quality and Supervision Station in Qinlan, devolving powers from the county to the township level. This station was the first of its kind in Anhui at the township level.³⁰ Its main task was the supervision of product quality in the highly fragmented electronic components market, as town officials believed that "bad quality products will bring shame on Qinlan". 31 In 2006, the government withdrew the licenses of two workshops as a result of product quality issues.

Similarly, in early 2000, 12 enterprises founded the Electronics Trade Association (ETA) (dianzi tongve shanghui 电子同业商会) at the initiative of the town and county government. By 2007, the association had more than 180 member enterprises, and was one of only a few county-level business associations in Anhui. The ETA in Qinlan actively assisted the government in carrying out its mandated tasks of fostering industry self-regulation and "managed competition" (youxu jingzheng 有序竞争), and promoted product quality through rules agreed on by its certified members. More specifically, the member enterprises set a minimum price for key products such as controllers and transformers, to limit dumping practices, and established a credit guarantee fund (danbao 担保) of 100 million yuan. 32 While the Product Quality and Supervision Station had been given some authority, the ETA relied on its members' voluntary self-regulation. Despite the ETA's limited regulatory authority, the association was able to play an effective role in promoting quality standards and price regulation.

As in Wuwei, sectoral growth ultimately decided the success of private sector growth in Tianchang. Tianchang has benefited from the fast growth of the electronic components sector since the 1990s. By 2007, China was one of the largest producers of electronic components, with sales accounting for 17 per cent of the global market. The industry grew by an average of 20 per cent from 1996 to 2001, and export sales amounted to 64 billion yuan (or 9 billion USD) in 2007.³³ The electronics and cable sectors have benefited not only from local support but also from national preferential policies: over the last ten years Qinlan's enterprises have been assisted by national tax rebates and import tariffs, which protect China's domestic electronic market.

Anhui Daily, "Qinlan zhen gesi jingji jishi: dongfeng cuidai huaqianshu" (The Blossoming of the Private Economy in Oinlan), 10 August 2004 (http://ah.anhuinews.com/system/ 2004/08/10/000708206.shtml, accessed 28 November 2011); Informant 143, March 2007, Director of Industry and Commerce Bureau.

Anhui Daily, "Qinlan zhen gesi jingji jishi: dongfeng cuidai huaqianshu".

Informant 144, March 2007, Director of Town Industry and Commerce Guidance Station.

Laura Wood, China Stock Listed Electronic Components Companies Report, 2006–2007 (Dublin: Research and Markets, Business Wire, 2008).

A Comparison With Neighboring Counties: Explaining Slow Private Sector Growth

Historical contingencies triggering human resource mobility have not, of course, been limited to Wuwei or Tianchang. Other places have had similar opportunities, but either lacked pre-existing structures or simply did not take advantage of them. For example, other counties in Chaohu and Chuzhou experienced floods as Wuwei did, but these floods did not lead to the development of private workshops. Similarly, Wuwei and Tianchang were not the only counties to see the arrival of particularly skilled sent-down technicians, nor was Wuwei the only county where migrants were driven away by poverty before returning with new skills. Moreover, other towns such as Wuyi in Nanqiao District (Chuzhou) and Tongda in Lujiang (Chaohu) were also producing electronic components, but started later and did not develop similar clusters.

These contrasts suggest that human resource mobility is a necessary but not sufficient factor to explain the development of a private sector in Wuwei and Tianchang. Local officials in these less successful counties lacked the robust incentives and outside social ties necessary to take informed risks in support of private enterprise. In some places, a dominant state-owned sector inhibited innovation. For example, one county in Chuzhou receives regular tax revenue from a local state-owned salt mining enterprise, so officials were not under any pressure to promote private sector development and only started to focus on it much later.

In other cases, uninformed or misguided choices significantly harmed local development trajectories. In these cases, decisions were not based on new information or the collective wisdom of an informed and integrated business community, but instead on the unsubstantiated or unilateral plans of powerful decision-makers. In one rural county in Chaohu, with one of the lowest GDP per capita levels in the municipality, the existence of SOEs in textiles encouraged private firm ownership to be concentrated in the textiles sector. The county government promoted the textile sector despite early signs of stagnation. It also planned 19 industrial parks (three times more than any other county in Chaohu), the majority of which were still empty by 2007. While this was a boon to local construction companies, which won lucrative contracts for infrastructure projects, it was overall a waste of financial resources and land.

There are also numerous examples of township cadres' picking "losers". ³⁴ In one case, township officials developed plans to become a major tourist attraction in Anhui, and built an artificial nature park in the early 1990s to draw visitors. The plan was unrealistic, as the town was remotely located, with poor infrastructure and completely lacking in tourist attractions, except for one solitary hot spring. It also had insufficient financial resources to construct tourist sites and increase their marketing campaigns. Township officials also built a mansion for the town government in 2006 as part of this project, claiming that this was part of tourism promotion. By 2006,

See, for example, Chalmers A. Johnson, MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975 (Stanford: Stanford University Press, 1982).

the town's growth was stagnating, with a GDP of 160 million yuan, a per capita GDP of 3,300 yuan, and only 28 small private enterprises (amounting to a private sector share of 4 per cent, compared to the average of 32 per cent). There were widespread resignations and a drop in morale among officials who struggled to undo previous plans and failed practices.³⁵

In another town in the same county, officials also adopted an unsuitable development strategy. The town's economy is centered on a steel company, which was established by a returning migrant. The company struggled, because the costs of long-distance transportation made it difficult to compete with similar enterprises located closer to highways and markets. Town cadres directed their resources towards this company, creating a Steel Industrial Park focusing on heavy steel. During 2005–06, this steel industrial park had the lowest output growth rate of all industrial parks in Chaohu, the private sector was stagnating, and the town mayor admitted in an interview that large mistakes had been made and would require correction.

Private Sector Development—A Tool for "Inclusive Growth"?

It is important to consider at this stage whether the "success" of the private sector can be considered beneficial in the wider socio–economic context. The newly emerged private sectors in Wuwei and Tianchang have had different effects on employment and per capita GDP, as is evident in Table 1. With regard to GDP per capita, Tianchang ranked 4th in Anhui in 2006, with GDP per capita of 11,512 yuan, while Wuwei ranked only 28th, with GDP per capita of 7,010 yuan. ³⁶ Also, while the gross volume industrial output was almost the same in Wuwei and Tianchang, the private sector in Tianchang generated more than three times as much employment, in a county with a population half the size. ³⁷

These discrepancies can be explained largely by differences in the composition of the counties' industries. Gaogou's private sector growth was concentrated in the electric wire and cable sectors, which constituted 90 per cent of all sales volume, while the remaining 10 per cent were sales of electric heater devices and electrical products. In total, 35 large-scale enterprises engaged in the production of wire and cables. The cable sector was not very labor-intensive, and created comparatively less employment with few spillovers to other sectors, so that the benefits accrued

This is not a unique case as, for instance, Jonathan Unger and Anita Chan describe how a township government in Guangdong also undertook a wasteful tourist project, creating an artificial lake and bronze statues. Yongshun Cai describes numerous other instances of "prestige projects", characterizing local governments as an "irresponsible state". See Jonathan Unger and Anita Chan, "Inheritors of the Boom: Private Enterprise and the Role of Local Government in a Rural South China Township", *The China Journal*, No. 42 (1999), pp. 45-74; Yongshun Cai, "Irresponsible State: Local Cadres and Image-Building in China", *The Journal of Communist Studies and Transition Politics*, Vol. 20 (2004), pp. 20-41.

Anhui tongji nianjian (Anhui Statistical Yearbook) (Beijing: Zhongguo Tongji Chubanshe, 2007).

Wuwei and Tianchang Statistical Bureaus, 2007.

mainly to a small group of investors. Other towns in Wuwei did not focus on a particular sector but instead tried to establish supplier relations with Gaogou's cable enterprises. However, spillovers from Gaogou's cable enterprises were limited, because the large cable enterprises neither developed production networks with smaller local firms nor operated on a sufficiently large scale to build resources to engage in innovative activities. Instead, they preferred to adopt a short-term strategy, importing machinery and lowering their prices in order to increase their market share. Only very recently did enterprises in towns near Gaogou begin to produce cables on their own. On the development of his locality's own cable sector, the mayor of neighboring Yaoguo noted:

At first we served only as component suppliers for the big Gaogou enterprises. In 2002, some of our enterprises received an independent license for cable production. This was very late, so we are behind, and it is hard for our enterprises to catch up with Gaogou's enterprises, as they have more skilled technicians and better technology.

In contrast, in Tianchang more than 80 per cent of all enterprises produced electronic components, while the remaining 20 per cent produced toys, plastics, cables and broadband components. The production process of low-end electronic components involves mainly micro-assembly and is labor-intensive, creating extensive local employment opportunities. In addition to contributing to the local GDP, the development of small workshops in Qinlan increased incomes and spread opportunities for capital accumulation more widely across its society. As enterprises imitated one another in Tianchang, local supply chains grew, along with the overall expansion in production. For example, when local enterprises expanded their production to remote controls, they created a new local demand for silicone rubber keypads and special glue to attach the rubber keypads to the plastic remote controls. Unlike Wuwei and most of central China, Tianchang's out-migration rate has become relatively low. The Vice Director of the Tianchang County Development and Reform Commission estimated that there are approximately 100,000 out-migrants in Tianchang (162 people per 1,000) compared to 420,000 out-migrants (301 people per 1,000) in Wuwei. In fact, in some towns such as Qinlan, the number of out-migrants (2,000 workers) was outstripped by the number of immigrants (12,000 workers).

It is also worth asking to what extent Wuwei's and Tianchang's success can be replicated in other counties. In the early 1970s, the leadership at the township level in both localities grasped early opportunities to develop a private sector, despite an unsupportive national policy environment. Both counties also supported the formation of clusters in fast-growing sectors, and utilized various outside networks to access market information. Forming clusters in these rural areas was difficult, but may also have been particularly effective. A manager of Tianfu Group commented:

In Qinlan, we have formed a cluster in remote controls and transformers. Jiangsu and Zhejiang cannot compete with us in these segments, as our supply chain is matured and costs are low. Being close to Jiangsu offers transportation advantages and interlinkage of economies. We learn from business operations and management in Jiangsu, but also make use of cheaper land and labor in Oinlan and of local clustering.

These clusters were dissimilar, and produced different outcomes. The Qinlan cluster was diffuse, and produced a number of spillovers into other areas of the local economy, while the Gaogou cluster was a concentration of large enterprises catering to a small number of large state-owned buyers who maintained a relatively short supply chain. However, with regard to GDP growth, both could be considered highly successful, especially in comparison to the stagnation prevalent in surrounding areas.

Effective local leadership in Wuwei and Tianchang also distinguishes them from less successful neighboring counties. County governments in the "failure" locales were either unwilling or unable to shift resources towards small, privately owned workshops and, as a result, their private sectors did not develop. In both Wuwei and Tianchang, government officials switched quite early to industrial policies which advantaged private enterprises. This informed risk-taking by top county cadres stands in contrast to the lukewarm or uninformed support of private enterprise observed in many other rural counties in Anhui at that time. These actions ensured that the early, bottom-up experiments with private workshops were not stifled. However, it is important to note again that this risk-taking was a necessary, but not sufficient, factor in the development process. As the "failure" cases show, many attempts to create artificial clusters in rural areas may be misguided and wasteful. Additionally, the cadres in "successful" locales drew on established social ties to take informed risks in the best interests of their constituencies.

Conclusion

Private sector development is not a mono-causal process, and many factors combine to determine its success or failure. This research on private sector development in central China reveals many similarities to coastal developmental models, but also some differences. One similarity is that private enterprises first emerged in central China in localities which lacked economic alternatives in agriculture. This factor, combined with their remote location and lower levels of scrutiny from the central government, gave local officials incentives to take risks. Once private family workshops had been set up, they were quickly imitated by others, a growth pattern very similar to industrial clusters elsewhere, such as shoemaking in Wenzhou.³⁸

Despite these similarities, however, some specific characteristics of private sector growth distinguish central China from its coastal counterparts. Throughout most of the reform period, Foreign Direct Investments were concentrated in the coastal areas, and only started to flow to the non-coastal regions at a later stage and

Zuhui Huang, Xiaobo Zhang and Yunwei Zhu, "The Role of Clustering in Rural Industrialization".

at a lower rate. Before 2000, 86 per cent of all accumulated FDI went to the coast, 9 per cent to central China and 5 per cent to western regions.³⁹ Therefore, while FDI was a driving force behind strong private sector development near the coast, in China's inland areas private sector development *preceded* both large-scale foreign and coastal investment inflows and SOE reform.

In both counties analyzed in this study, human resource mobility triggered by historical accidents shaped the evolution of new private entrepreneurship. Mobility resulted from out- and in-migration after natural disasters, the arrival of sent-down intellectuals with technical expertise, and a large "floating" sales force. This mobility integrated rural areas into external information networks, and transferred valuable, up-to-date technical expertise and business knowledge. This knowledge and expertise informed the decisions of government officials and enterprise managers. Government and enterprise agency further explains the successful cases: informed and integrated government officials willing to take risks encouraged the diversification of ownership in the 1980s. In the 1990s and 2000s, county cadres tailored government interventions and practices to sector-specific business needs, illustrating the need for local agents to redefine their roles and adapt to changing institutional environments.

In both counties, officials adapted their tactics to the industrial organization and customer markets of pre-existing private industry. In Wuwei County, a tight government—business alliance emerged between a few large private cable companies and the county government officials serving the main cable customers. In contrast, the county government in Tianchang acted as a regulator, and set up institutions to guide the numerous smaller, export-oriented private enterprises. This regulatory activity was triggered by foreign customers' complaints about unreliable product quality.

Human resource mobility played a particularly important role in local economic and social development, given the scarcity of FDI and overseas remittances in central China. Such mobility triggered the diffusion of skills and information from more industrially advanced regions to remote towns in central Anhui. In particular, the mobility of social and human capital provided an important link to the more developed coastal region. In Gaogou, out-migrants invited experts from Jiangsu to assist with setting up workshops, while in Qinlan the growth of rural enterprises relied heavily on the technical expertise and skills of a sent-down intellectual. This action stimulated knowledge and technology transfer, and encouraged local citizens to establish start-up companies in niche sectors. The case studies suggest a conclusion that differs from the existing literature, which stresses low human resource mobility as a general cause of economic inequalities in neighboring Chinese villages: the down-to-the-countryside policy is an example of how, during the Maoist era, the town government in Qinlan explicitly made use of limited mobility to harness the

Organization for Economic Co-operation and Development (OECD), Foreign Direct Investment in China—Challenges and Prospects for Regional Development (Paris: OECD Publications, 2002), p. 55.

township's potential. Finally, enterprises in both towns engaged a large sales force to promote their products beyond the local market. Such salespeople served as knowledge conduits, conveying market knowledge and technical know-how from the coastal areas.

The case studies on Wuwei and Tianchang highlight the forms of human resource mobility and agency which were central to economic success in the difficult circumstances prevailing in these localities. Some of these factors can be replicated, such as local agents' tailoring of practices and policies and managerial support to regional circumstances and sector-specific business needs. Other factors cannot. However, the critical importance of human capital inflows suggests that, through social connections to developed areas, remote and advanced regions can compensate in part for the lack of human resources, technology and knowledge inflows which has historically hindered growth in central China. This suggests that, while investment programs aimed at disadvantaged regions are important, improving or expanding exchange programs that build social linkages from central and western China to coastal regions may merit increased attention.