Regional inequality in China

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Abstract: Regional inequality is one of the major subjects of research on China, and is a major concern to the Chinese government. This article reviews the copious research on regional inequality in China. It is proposed that recent research has significantly improved our understanding of regional inequality but that problems still exist. It is also argued that multiscale studies and investigations of the various mechanisms that affect inequality will further improve future research findings.

Key words: China, regional development, regional inequality.

1 Introduction

Regional inequality is an important aspect of academic inquiry and is one of the major concerns facing governments as it may threaten national unity and social stability. The trends and forces underlying regional inequality have been the subject of heated debates (e.g., Myrdal, 1957; Borts and Stein, 1964; Williamson, 1965; Friedmann, 1966; Coats et al., 1977; Alonso, 1980; Smith, 1984; Amos, 1990; Barrow and Sala-I-Martin, 1995). The issue is of particular importance to those developing countries that inherited regional imbalances as a result of colonialism, and to the so-called ‘Marxist-Leninist’ states (Sidaway and Simon, 1990) that demanded as a point of ideology a reduction in regional inequality (these will hereafter be referred to for the sake of simplicity as socialist countries; for definitions of socialist countries, see Forbes and Thrift, 1987; Sidaway and Simon, 1990). The questions of whether regional inequality was in fact reduced in socialist countries and of whether economic reforms have in effect intensified regional inequality have attracted considerable attention (e.g., Koropeckyj, 1972; Fuchs and Demko, 1979; Forbes and Thrift, 1987; Liebowitz, 1987; Ozornoy, 1991; Smith, 1996). (For Marxist perspectives on regional inequality under socialism, see Peet, 1980.)

Several articles have reviewed the research on regional inequality in the former USSR and eastern Europe (Fuchs and Demko, 1979; Bahry and Nechemias, 1981; Turnock, 1984; Schiffer, 1985) and the urban geography of China (Ma and Noble, 1986; Pannell,
Regional inequality has been an important issue in China since the establishment of the People’s Republic of China (PRC) in 1949, mainly as a result of its role in debates concerning the nature of socialism, central control and local autonomy, and resource allocation among the regions (Bo, 1993; Fan, 1995a; Wei, 1997). When the PRC was established, Chairman Mao Zedong and the Chinese Communist Party engaged themselves with the problems of poverty and the substantial coastal–interior imbalances in China. Influenced by socialist ideology and egalitarian ideas, Mao tried to develop the backward inland areas and to reduce regional inequality. Indeed, the appropriate allocation of resources to the regions has since become an important part of China’s national planning (Wei, 1993a), and was one of the major components of China’s First Five-Year-Plan (FYP) (1953–57). The interaction between the coast and the interior was one of the ‘ten great relationships’ proposed by Mao (1956). In this he stressed developing the interior without, at the same time, neglecting the coastal region. Researchers generally agree that some effort was expended to develop economically lagging regions but there is disagreement over the extent and consequences of this. Most maintain that regional inequality declined as a result of the implementation of distributive policies, especially inter-regional resource transfers to interior regions through centralized fiscal and investment systems (Lardy, 1975; 1978; 1980; Paine, 1981; Wu, 1987; Guo, 1988; Pannell, 1988; Yang, 1990). For example, Lardy (1975; 1978; 1980) maintains that central control over financial resources and income redistribution among the regions reduced regional inequality. In contrast, Donnithorne (1972; 1976) argues that Mao’s policy of decentralization and self-reliance produced regional autarky and a ‘cellular economy’ that weakened the effectiveness of resource transfers and, as a result, regional inequality continued to be pronounced for a long period of time. The Lardy–Donnithorne debate represents two theoretical perspectives on China that have evolved to the present day: the totalitarian approach and the fragmentation approach. Others have argued that Chinese regional inequality persisted or even increased under Mao as a result largely of regional autarky and localism, poor returns of interior investment and an unfair price structure (Cole, 1987; Kueh, 1989; Cannon, 1990; Tsui, 1991; Yang, 1991a; Wei and Ma, 1996; Wei, 1997). Wei (1998a) shows that regional inequality in industrial output declined during the 1950s but that it still persisted for the next one-and-a-half decades.

With the availability of newly released regional statistics, publications in the 1990s significantly improved our previous fragmented understandings of regional inequality. These publications have provided overwhelming evidence to support the persistence or
widening of regional inequality under Mao. First, China’s coastal region possesses better physical and human resources for development than does the interior and, historically, Chinese regional development has been extremely uneven – created partially as a result of the penetration of colonial forces after the 1840s. Secondly, the need for urban-centered industrialization and a national defense system limited the resources that were available for the development of poor areas (Cannon, 1990; Jian et al., 1996; Wei and Ma, 1996; Zhou, 1996; Ma and Wei, 1997). Thirdly, inefficiency in interior investment has contributed significantly to the persistence of regional inequality. A large amount of the capital that was invested in the interior was for defense purposes under the ‘third front’ (san xian) program, which tied up great amounts of investment and yielded poor economic results (Naughton, 1988; Linge and Forbes, 1990; Wei, 1995b; Ma and Wei, 1997). Fourthly, decentralization policies in the late 1950s and early 1970s facilitated, to a certain extent, localism, and they improved the economies of coastal provinces. In the early 1970s, China’s development policy was reorientated more toward the coastal region as a consequence of China gradually opening its door to the outside world. Lastly, China, as other socialist countries (Kornai, 1992), was troubled by political turmoil, social unrest and economic mismanagement. The interior did not have the resources and favorable macroconditions for economic growth. In short, the legacy of history, an uneven geographic distribution of resources, an emphasis on industrialization and national defense, decentralization and policy changes, and political and social unrest, have all contributed to the persistence of regional inequality in China.

Some of the early writings on inequality were based on propaganda produced by the Chinese government, and hence were unaware of what had really happened in China. Publications since the 1980s, and especially since the 1990s, have used more reliable data, so researchers are now able to investigate the issue of regional development more critically and carefully. However, as is discussed in the next section, problems in methodology have also contributed to differing views on inequality.

III Regional inequality in post-Mao China

Since the launch of the economic reforms in 1978, China’s dominant development policies have changed from being ones based on self-reliance to open-door policies and policies of comparative advantages. Following the ‘ladder-step theory’ (tidu lilun) – a Chinese version of the growth pole and inverted-U theories – the government encouraged certain regions to ‘get rich quick’. It also emphasized the development of coastal regions (Yang, 1991b; Fan, 1997; Wei, 1997). Hence China’s reform policies in the 1980s were very favorable to some coastal areas of the country.

After a short period of stagnation following the Tiananmen incident in 1989, the 1990s witnessed the implementation of bolder reforms aimed toward transforming China into a socialist market economy. During the 1990s, some regions of China (particularly some coastal areas such as southern Jiangsu) recorded dramatic growth while some interior areas were lagging far behind. Millions of rural workers migrated to coastal cities in pursuit of employment, which generated considerable concern about migration and urbanization policies and their impact. Regional ‘resource wars’ erupted in many localities, in which regions used illegal administrative and military measures
to protect their local markets and to restrict inter-regional resource flows (Wademan, 1995). Bargaining between central and local government over resource allocation and development policies became extremely intense as a consequence of China’s poorer areas considering themselves to be less favored by central government (Wong, 1991; Wei, 1996). These problems – intensified by inflation and corruption – prompted many to consider regional inequality a root cause of China’s regional problems and hence an important issue in government policy (Fan, 1997; Wei, 1997). The Ninth FYP (1996–2000) sees polarization as a serious threat to China’s prosperity, stability and unity; it has therefore made reducing regional inequality a top policy priority.

Researchers disagree once more over whether regional inequality has intensified and over the forces that have contributed to the change in regional inequality in post-Mao China. Some maintain that economic reforms, especially coastal development strategies and open-door policies, have stimulated the growth of coastal provinces and have intensified regional inequality (Lakshmanan and Hua, 1987; Wu, 1987; Aguignier, 1988; Kueh, 1989; Cannon, 1990; Yang, 1990; 1991a; Kato, 1992; Keresford and McFarlane, 1995; Chai, 1996). Government policy that favors the coast has often been blamed for the rise of regional gaps and conflicts. Researchers have argued that more resources should be committed to the development of the poorer interior regions to reduce regional inequality.

However, not all authors have embraced the notion that regional inequality has widened in the post-Mao period. They argue instead that regional inequality has actually declined since the initiation of economic reforms, mainly as a result of diffusion, inter-regional resource transfer and rural industrialization (Pannell, 1988; Denny, 1991; Lyons, 1991; Tsui, 1991; Huo, 1994; Chen and Fleisher, 1996; Jian et al., 1996). Denny (1991), for example, argues that economic reforms and trickle-down effects have stimulated the rapid growth of the poorer regions (his account of the diffusion of foreign investment to the interior, however, is overstated). The reduction of interprovincial inequality, however, is mainly due to the declining status of China’s traditional industrial bases (especially Shanghai and Liaoning) and the emergence of the coastal provinces of Guangdong, Fujian, Zhejiang, Jiangsu and Shandong (Fan, 1995a; Wei and Ma, 1996; Wei, 1997; 1998a).

This debate is also intense in the Chinese literature. Influenced by the growth pole and inverted-U theories, some consider that widening regional gaps are inevitable because China should pursue the goal of economic efficiency, and that diffusion would facilitate the development of poorer regions and would reduce regional inequality (Lu, 1991; Wei, 1992). These ideas were largely reflected in China’s official view of regional development in the 1980s. Some researchers have shown a trend toward regional convergence (Liu et al., 1994; Yang, 1994); others argue that economic reforms have not intensified regional inequality but have generated economic prosperity and opportunities for all; they defend uneven development policies and argue for the continuation of coast-orientated development (Yang, 1992). Still others suggest there has been a dramatic increase in regional inequality and they argue for a shift of policy emphasis from the coast to the interior (Chen et al., 1993; Hu and Kang, 1995). This view had some impact on China’s regional policy in the mid-1990s, as reflected in the Ninth FYP (1995–2000). But what roles the government will play in regional development and how many resources will be committed to developing the interior remain questions to be answered.
Empirical studies of regional inequality have long been troubled by problems of methodology. First, regional inequality is sensitive to geographical scale (Gore, 1984). The well-known modified areal unit problem points to the fact that regional analysis depends on geographical scale. Regional inequality may increase at one scale but may decrease at another. In other words, different geographical scales of observation may lead to controversial findings. Secondly, the methods adopted to measure regional inequality also affect the findings. Absolute measures (e.g., standard deviation) and relative measures (e.g., coefficient of variation, the Gini index) often lead to dramatically different results. Lastly, regional inequalities in income, industrial production and social services may differ greatly. These problems are well documented but they still trouble researchers.

The discourse surrounding China’s regional inequality suffers from methodological problems. First, the scale of observation has created much confusion as the patterns of change in the nation’s macrogeographical regions (coastal versus interior regions, or eastern, central and western regions) are different from those in the provinces (Wei and Ma, 1996). Secondly, the lack of reliable time-series regional data on social and economic development is perhaps the most important factor contributing to the diverse findings. Publications before the mid-1990s used only very limited data – even those of Lyons (1991) and Tsui (1991). These studies showed systematically and for the first time the trend of regional inequality in China from the 1950s to the 1980s, but their conclusions are difficult to compare because of data constraints and differences in geographical units. Thirdly, fewer studies have been undertaken to explain the forces responsible for regional inequality (Tang et al., 1993; Wei and Fan, 1997). Some progress has been made in understanding the politics of central control and local autonomy (for a review of China’s central–local relations, see Goodman, 1989; Chung, 1995), local state corporatism (e.g., Oi, 1992), market transition and income distribution (e.g., Nee, 1989) and foreign direct investment (e.g., Leung, 1993), but this has not been incorporated sufficiently into research on regional inequality. Lastly, the implications of analyses are often misinterpreted, due largely to a limited understanding of regional development theories and the difference in geographical scale. Policy options are often based on findings from one geographical scale, which may not be applicable to other scales.

IV Multiscale approaches and multi-mechanisms: a new direction

The studies published in the mid-1990s used more comprehensive data than those published previously, and adopted a multiscale approach to improving our understanding of China’s regional inequality. Inequality at the inter-regional scale across China’s eastern, central and western regions differs from inequality at the interprovincial scale across the provinces. Analysts and the Chinese government have used both these scales, but only a few researchers are sensitive to the issue of geographical scale and have hence differentiated among the patterns that emerge when using different scales (e.g., Fan, 1995a; Wei and Ma, 1996; Zhao, 1996; Wei, 1993b; 1997; 1998a). It has been found that inter-regional inequality rose during both Mao’s era and the reform period; interprovincial inequality, however, rose under Mao but declined during the period of reform. As in east European countries (Smith, 1996), a complex mosaic of
Regional inequality in China has emerged, and scale seems to be an important feature when considering regional inequality in China.

Economic reforms, particularly coastal development strategies and open-door policies, have contributed to the rapid growth of the coastal region while the interior has lagged behind. The rapid growth, in particular, of the coastal provinces of Guangdong, Jiangsu, Zhejiang, Fujian and Shandong has contributed greatly to the development of the coast as a whole. These provinces have been favored by state policy and global investors; local initiatives and favorable local conditions have also contributed to their dramatic growth (Wei, 1997). Global, state and local forces, rather than state policy alone, have influenced the changing inequality in the regions of China.

In addition, the growth rates of the traditionally richest provinces (including Shanghai, Beijing and Liaoning) that found favor under Mao’s industrialization policy were among the lowest during much of the reform period. This is largely the result of strict central control, the late opening up of China to foreign investment, the dominance of state-owned enterprises and an overburdened urban infrastructure (Tian, 1996; Wei, 1998b). The slow growth of these provinces has also led to a decline of interprovincial inequality in post-Mao China. Thus, regional inequality in post-Mao China cannot be described simply as either convergence or divergence; it is related to geographical scale. In addition, the trend in regional inequality for the last four and half decades shows no clear divergent, convergent, inverted-U or cyclical patterns.

Three major geographical scales have been adopted for the analysis of China: inter-regional, interprovincial and intraprovincial. The inter-regional and interprovincial scales are the most important to many researchers and government organizations as these are the focus of regional problems and government policies. But substantial inequalities also exist within the provinces, and hence the level of analysis at an intraprovincial scale improves our understanding of the detailed local processes that shape uneven development (Fan, 1995a; Wei and Fan, 1997). In other words, a multiscale approach is fundamental when studying regional inequality in China, and we should not exaggerate or ignore the significance of any one dimension of inequality (Wei, 1997).

Within a specific province, inter-regional and intercounty inequalities differ dramatically. While researchers have focused on intercounty inequality, the patterns of change among countries also vary significantly. Fan (1995a) shows that, between 1982 and 1990, intercounty inequality increased enormously in Guangdong, remained about the same in Fujian and declined in Zhejiang, Anhui and Hunan. She attributes the increase in Guangdong to preferential government policies and foreign investment.

Among China’s provinces, Jiangsu has attracted considerable attention. Rozelle (1994) has found that rural intercounty inequality increased between 1984 and 1989, while Fan (1995b) – based on all county-level units – argues that intercounty inequality declined between 1982 and 1990 and that township and village enterprises (as major forces of regional development) have contributed to the trend of balanced development. Studies by Wei (1997) and Wei and Fan (1997) show that intercounty inequality (based on all county-level units) declined during the post-Mao period, while the north–south divide in Jiangsu has been intensified. They argue that the interplay of the three dominant forces – state policy, foreign investment and local initiative – is critical to an understanding of regional inequality in Jiangsu. In short, multiscale and
multi-mechanism approaches can improve our understanding of the complexity of regional inequality in provincial China.

The multi-mechanism approach may have captured the fundamental features of the Chinese transitional economy (Wei, 1997; Wei and Fan, 1997). Since the launch of reforms in 1978, China has experienced profound changes: while the state still plays an important role, its control of the nation’s economy and its capacity to control the nation’s economy have been steadily declining. Meanwhile, specific localities and global investors have emerged as important agents in shaping China’s regional development as a consequence of global restructuring and China’s economic reforms (which emphasize decentralization, marketization and globalization – an open-door policy). The three dominant agents – the central state, the locality and the global investor – act simultaneously and interactively to shape regional inequality. This conceptual framework seems to be in line with recent geographical research that has identified the world economy, the nation-state and specific localities as critical to geographical inquiry (Brown, 1991; Taylor, 1993; Agnew and Corbridge, 1995). Wei (1997) argues that this framework can be extended to the study of regional inequality in other transition economies that are similarly undergoing processes of decentralization, marketization and globalization, and it may also prove to be useful for other developing countries that are experiencing similar processes.

V Conclusion

Regional inequality has been a major concern of the Chinese government and is an important issue for academic inquiry. Earlier research on Mao’s China was largely based on fragmented and unreliable data. With the opening up of China to the outside world and the availability of regional statistics, researchers are now equipped with better data sources. Recent efforts have significantly improved our understanding of China’s regional inequality, although problems with methodology have thrown doubt on some of the findings. Multiscale and multi-mechanism approaches may also improve our understanding of regional inequality in China.

Economic reforms and dramatic changes in China have provided researchers with further opportunities for study. China’s importance in geographical inquiry will rise even further now that China and the Asia-Pacific region are playing an increasingly important role in the global economy. Research on China’s regional inequality tends to be empirically orientated, and more efforts should be made (including those by systematic geographers) to develop theories that will improve our understanding of China’s regional development. Moreover, China’s experience with regional development can be used to test theories, and it can also provide some useful reference points for other developing countries and transition economies. Comparative studies of China with economies such as these (e.g., Russia and India) are needed in order to improve our understanding of how globalization, the nation-state and local initiatives shape the dynamics of regional inequality.

Future research should analyze further the impact of economic reforms, international investment and trade, as well as local states and agents, in shaping China’s regional development. As investment is a particularly important factor of the Chinese government’s production and investment policy, more work is needed to identify
investment processes and patterns. China is also experiencing a transition from state socialism to market socialism in which markets and nonstate enterprises are playing an emerging role. The impact of liberalization and ownership transformation on regional inequality also merits further investigation. While recent research has greatly improved our understanding of regional income inequality, inequalities in consumption, education and healthcare have attracted much less attention. Moreover, China's provinces differ greatly, and substantial inequality exists between them. More attention should be paid to the crucial discrepancies experienced in these diverse regions (Solinger, 1996), although intraprovincial data are often limited. Last but not least, the policy implications of research should be welcomed.

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