

Decentralization and Regional Disparities: Experiences of OECD Countries and Explorations of the Situation in China

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ABSTRACT

Decentralization as a method for tackling regional disparities has been implemented in countries throughout the world in the last two decades. Some scholars have noticed that decentralization is a multi-dimensional concept. However, there is still no consensus about the dimensions' selection. In this dissertation, based on the measurable and comparable principles, the relationships between three dimensions - fiscal, administrative and welfare decentralization – are considered, and the evolution of regional inequalities in OECD countries and in China are explored. Economic data of 26 OECD countries - 19 relatively rich countries, and 9 relatively poor countries - during the period from 1996 to 2009 was used to formulate regression models. It was found that fiscal decentralization, especially the decentralizing of tax authorities in relatively backward countries, has been associated with a significant rise in regional disparities. Moreover, according to the statistical results for the countries in the sample, welfare centralization and suitable local government size can lead to a reduction in regional disparities. In the case of China, data analysis and institutional analysis were paired in order to assess the dynamic relationships between decentralization and regional disparities (from the three dimensions mentioned above). An unstable, nonstandard and asymmetrical fiscal decentralization system directly results in regional disparities, which can be strengthened by a highly decentralized public service delivery system. In addition, rigid government size, segmented government structures and 'yardstick' competition mechanisms (used for creating competition among local governments) hinder coordination and cooperation in and among regions, and further exacerbate regional disparities.

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Chapter 1 Introduction

1.1 Reasons for the Research Project

Internal regional disparities are common challenges, which are faced by almost all countries. Specifically in China, as a large country, there are major differences between regions, such as in terms of population, level of economic development, resource endowments, social culture and developmental potential. Regional disparities always present challenges for China's policy makers. Since the foundation of the PRC (The People's Republic of China), regional balanced development has always been one of the most important strategic targets.

From the 1950s to the 1970s, the primary regional development strategy was based on heavy industry, which was learned and developed based on the Soviet Union model. The Chinese central government endeavored to redistribute industrial production, so as to reach a target of regional balance. Several resources were provided to the western regions and mountainous areas. One typical project was the Third Front Movement (三線建設).¹ In general, the efficiency of the regional developmental strategy led by the central government was inadequate. Much resource was wasted in the remote mountain areas; however, the factories, roads and other infrastructure improvements located in the western and mountainous regions laid the foundation for the future development of the less developed regions.

Because of these inefficiencies, the regionally balanced development strategy was changed to one targeting an imbalanced development. Mr. Deng Xiaoping proposed the idea of "two overall situations" (2 $\supset \mathcal{O}$ 戦略), which meant that most resources should be applied to the eastern region in order to establish firmly the development of the eastern region first. Afterwards, through the industrial gradient transfer, the eastern region should then be expected to

¹ Notes: "Third Front" is a geo-military concept. It was motivated by national defence considerations. The Third Front Movement was a massive industrial development by China in its interior which started in 1964. It involved large-scale investment in national defense, technology, basic industries (including manufacturing, mining, metal, and electricity), transportation and other infrastructure investments.

selflessly support the development of the western region. Led by this imbalanced development strategy, China's overall GDP grew rapidly; however, the regional development gap enlarged rapidly.

To ease the economic contradictions and in order to reduce the gap between the eastern and western regions, policy makers then decided to implement the "regional coordinated development strategy" at the beginning of the 21st Century. This is based on the "grand western development" (西部大開発) program, with the developmental focal point now being transferred from the eastern region to western and other regions. A significant amount of fiscal and other resources were transfused into the western region. Much strategic infrastructure was built in order to enhance the linkage between the eastern and western regions, including highways, railways, transmission lines and gas pipelines. Thus, the widening trend of regional disparities was successfully curbed.² Until now, the new coordinated development strategy has displayed some positive effects.

However, the regional convergence trend is slow compared to the rapid expansion which took place over the past three decades; these regional disparities reflect a longterm risk for China's future development. In addition to the regional economic development gap, various other new challenges have begun to appear. Firstly, the need for capital, human resources and other factors of production continues to increase in the eastern region. Secondly, even though the regional economic data reflects a trend of growth, the quality of public service has not significantly improved in drawback regions. Thirdly, there is an un-constructive competitiveness between different regions which wastes resources; also the coordinating mechanisms still exhibit no significant effects.

According to the regional governance experience of OECD countries in the 1980s, large-scale regional programs, financial transfer payments and infrastructure construction led by the central government may not produce the real and anticipated effects of regional balancing.³ The top-down regional intervention policy cannot be

² Wang, X., & Fan, G. (2004). Analysis on the Regional Disparity in China and the Influential Factors. *Economic Research Journal*, *1*, 33-44.

³ Roura, J. R. C. (2011). Regional development policies in OECD Countries. *Investigaciones Regionales*, (19), 205-208.

fully adapted to the diversity of different regional problems and the new and ongoing issues emerging in this globalized world. Thus, many OECD countries have attempted to move away from top-down regional intervention policy to a regional governance model, by decentralizing relevant powers to localities or regions. This decentralizing model is thought to have several advantages, such as encouraging innovation, maintaining a closer relationship with the citizenry, and promoting democracy. The aim is for the regional gap to be erased by the process of positive and progressive regional competition.

Overall, the regional challenges now faced by China are similar to the problems that were faced by OECD countries in the 1980s. An important question facing the Chinese scholars and policy makers is now whether China should extrapolate from the experience of OECD countries and so convert the centralized model to a decentralized model. Some scholars postulate that the decentralized regional governance model may tend to undermine the control of the central government, intensify the regional contradictions and eventually even threaten the unity and harmony of China.⁴ Some other scholars posit that decentralization can stimulate local governmental momentum by stimulating creative development, encouraging voluntary interaction and cooperation between local governments, and benefit the coordinated development strategy. ⁵

There is no consensus. Thus, based on the experience of OECD countries and the exploration of related issues in China, in this dissertation, possible answers are presented to the following questions: first, should China apply a decentralized model in order to more effectively manage increasingly complicated regional issues? Second, what category of powers should be decentralized, and what authority or powers should be centralized?

1.2 Literature Review

1.2.1 Theories about Regional Development: from Centralization to Decentralization

⁴ Wang, S., & Hu, A. (1999). The political economy of uneven development: The case of China. ME Sharpe.

⁵ Landry, P. F. (2008). Decentralized authoritarianism in China. Cambridge University Press, p31.

Regional development is often a focus of academic research. Natural resources and human activities are distributed across different places, which cause particular disparities between different regions. Before the industrial revolution, natural factors, such as the condition of the land, the distance from the transport hub and the distance between production sites and consumer sites, accounted for the main reasons for regional differentiation, which were determined by the actual cost of production, transportation and trade. Some regions became central, while others became the marginal areas, which eventually led to the "Regional Autocracy" and caused regional inequalities.⁶

After the industrial revolution, the effect of natural factors on regional issues was weakened, due to the increase in production efficiency, and the lower costs of production and improvements in transportation systems. However, the divisions in the production system and the expansion of industries became the novel factors which also affected various regional issues. In some regions, those where more industries were located, people, as well as capital, became the central players within these systemic divisions, while other regions became, more or less, vassals to the centre. Regional inequalities grew sharply during the industrial era. The "edge-central" structure became a nigh-universal phenomenon affecting most industrialized countries.

Currently, in today's globalized world, the older regional disparities have not disappeared, but have also spread all over the world with the expansion of transnational corporations, the international flow of capital and the development of an international division of labor. In the processes of global competition, only a few regions have the opportunity to succeed, such as the metropolitan areas, the new industrial areas, as well as scenic areas.⁷ The old transport hubs, industrial regions, agriculture areas and resource extraction areas have tended gradually to lose their competitiveness, while the polarization of regional development appears to be irreversible.

⁶ Pike, A., Pose, A. R., & Tomaney, J. (2006). Local and regional development. Routledge.

⁷ Taylor, P. J., & Walker, D. R. F. (2001). World cities: a first multivariate analysis of their service complexes. *Urban Studies*, *38*(1), 23-47.

From the industrial era to the age of globalization, there is ever a key question for scholars to investigate: that of regional disparities. Economists were among the first who have tried to answer this question and, in the beginning, they were not interested in the regions within the sovereign state. They regarded the state as a collective unity, where the factors relating to production could be assumed to flow freely. Thus, to them, there were no issues relating to differences between regions. The primary question, the one to which they paid close attention, was in the competition between countries; this was their primary concern.

Based on this understanding, David Ricardo proposed the theory of comparative advantage.⁸ Since the theory of comparative advantage could not be used to adequately explain the differences between the regions in a country, some scholars then tried to add the cost of transportation to the analysis and so they proposed the location theory.⁹ Although the location theory concentrates its attention upon regions, the focal point is on micro-enterprises, instead of on the macro-regional economy.

At the beginning of the industrial era, the most significant issue was on the optimal siting of industrial enterprises. However, with the advance of the industrial revolution, some old industrial bases in industrialized countries began to show signs of decline and various new industrial centers began to appear. Regional inequalities were aggravated, due to the Great Depression in the 1930s. Since the location theory could not either to explain or address the regional issues, scholars proposed regional theories systematically, by combining the space thought from location theory and other economic theories, such as trade theory, price theory, transaction cost theory, and so on. Thus, the focus of their studies transferred from micro-enterprises to macro-regions. Typical theories include the following:

(1) Regional balanced development theory, based on neoclassical economics.¹⁰ The theory assumes that the factors of production are able to flow freely between regions; thus, seeking a high return on investment, which can lead to a reverse flow of capital and labor force. The mechanism of reverse flow will drive towards regional

⁸ Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. *The Journal of Marketing*, *59*(2), 1-15.

⁹ North, D. C. (1955). Location theory and regional economic growth. *The Journal of Political Economy*, 64(2), 243-258.

¹⁰ Barro, R. J., Mankiw, N. G., & Sala-I-Martin, X. (1995). Capital mobility in neoclassical models of growth. *The American Economic Review*, 85(1), 103.

convergence in the long term. Thus, the methods utilized to promote regional equality are to reduce market regulation, and to encourage the free flow of labor through selective regional assistance.

(2) Regional unbalanced development theory is based on Keynesian economic theory. The theory argues that "regional income will tend to diverge, because of market forces, if left to their own devices, are spatially dis-equilibrating. Economies of scale and agglomeration of capital, labor, and output in certain regions at the expense of others: uneven regional development is self-reinforcing rather than self-correcting".¹¹ Regional convergence cannot completely rely on the market, but must rely on other factors, such as comprehensive regional aid and regional intervention from the central government. Active regional policy and large-scale infrastructure construction are seen as good policy choices.¹²

(3) Regional development theories of structural and temporal change. The theories are different from neo-classical and Keynesian theories, as they present regional development as being neither a convergent nor a divergent process, but as historical changing processes. "Theories have used metaphors of stages, cycles and waves to conceptualize the geographically uneven character of local and regional development."¹³ One of the leading theories of structural and temporal change is the regional development theory; based on Marxism. Uneven spatial division of labor and geographical fragmentation leads to the differences between core and peripheral regions.¹⁴ With the change of production structure and methods, the uneven spatial divisions change episodically, as is seen in the shifting of industry from the north eastern 'rustbelt' to the southern and western 'sunbelt' of the United States.

(4) Regional development theories are based on new institutionalism. Former regional development theories are primarily concerned with macro-spatial and macro-structural issues. These related studies have considered regions as units, which have no internal differences. Therefore, the specific and particular attributes of localities and regions become neglected in the longer term. Due to particular

¹¹ Martin, R., & Sunley, P. (1998). Slow Convergence? The New Endogenous Growth Theory and Regional

Development. Economic Geography, 74(3), 201.

¹² Armstrong, H., & Taylor, J. (2000). *Regional economics and policy* (3rd edn). Oxford: Blackwell, p211.

¹³ Pike, A., Pose, A. R., & Tomaney, J. (2006). *Local and regional development*. Routledge, p78.

¹⁴ Massey, D. B. (1995). Spatial divisions of labor: Social structures and the geography of production. Psychology Press.

drawbacks, some scholars have argued that it is the differences in institutional environments and arrangements between regions which results in the disparities in economic performance.¹⁵ Thus, the formal and informal institutions are taken as the foundation of local economic capabilities and potentials, and as the basis of local and regional competitiveness. The regional theories, based on institutionalism, have a clear microscopic orientation. Local networks, social trust, social capital, regional innovation, historical trajectories and institutions¹⁶ are key words used in the theories. The methods for correcting regional inequalities do not rely on central government's macro-control and comprehensive intervention, but instead they rely on decentralizing power to the localities and stimulating the innovation of institutions in order to foster momentum and inspire an enhanced innovation capacity.

(5) Throughout the last two decades, many other new theories have been introduced in response to increasingly complex regional issues. For example, endogenous growth theory does not consider factors of production as being external or exogenous, but as being endogenous and 'spill-overs'. Therefore, the regional development policy is no longer considered one of redistribution from rich regions to backward regions, but as the common development of both the growing and underperforming regions.¹⁷ Also, sustainable development has become an important idea and has had a significant impact on regional policy. By challenging the economiccentral notion of previous regional theories, sustainable development theory argues that social inequalities, ecological crises, and environmental problems are equally important as income inequality. "Local and regional quality of life can vary substantially even when places appear to have similar levels of GDP per capita and income".¹⁸ Therefore, the scholars who support sustainable development, not only seek economic growth, but also seek a more harmonious, equitable and sustainable relationship between person and person, region and region, people and environment, as well as the well-being of present and future generations.¹⁹ The key notions of

¹⁵ Martin, R. (2000). Institutional approaches in economic geography. A companion to economic geography, 77-94.

¹⁶ Cooke, P., Gomez Uranga, M., & Etxebarria, G. (1997). Regional innovation systems: Institutional and organisational dimensions. *Research Policy*, 26(4), 475-491.

¹⁷ Aufhauser, D. D. (2003). Terrorist financing: foxes run to ground. *Journal of Money Laundering Control*, 6(4), 301-305.

¹⁸ Pike, A., Pose, A. R., & Tomaney, J. (2006). Local and regional development. Routledge, p114.

¹⁹ Hudson, R., & Weaver, P. (1997). In search of employment creation via environmental valorization: exploring a possible eco-Keynesian future for Europe. *Environment and Planning A*, 29(9), 1647-1661.

regional sustainable policies are health, happiness, education, top-down, grass-root, localization, self-reliance and mutual aid.²⁰ Recently, post-developmentalism theory has challenged the popular notion of "development" based on capitalism. Contemporary "development" has posited that "eurocentrism" or western industrialization is the "one-best-way' or the only route to adequate development.²¹ The values, rights and diversities of backward regions and countries are neglected and constrained. Therefore, the aspirations by this theory aim toward dewesternization, decentralization, empowering, grass-root leadership, self-identity and locally appropriate forms of development.

Historically, the theories about regional disparities have undergone major change since the 1800s. Recently, scholars have begun not only to pay attention to regional economic issues, but also to those of social justice, environment crises, welfare inequality, human rights and diversified development paths. Policies to correct uneven regional development are not only reliant upon the use of top-down redistribution and intervention by central government, but also on local networks, regional partnerships, grass-roots democracy, citizen participation and multi-level governance. In general, the latest theories appear to be compatible with decentralization or devolving power to regional, local, civil society, citizens or to other lower-level organizations, as an effective method in order to confront the increasingly complicated regional issues, such as those mentioned above, including new institutionalism, sustainable development, post-developmentalism, and endogenous theories.

1.2.2 Models to Reach Regional Equality: centralization vs decentralization

Even though there are many theories about regional issues, contemporary nation states principally use the following methods to achieve regional balanced development.

(1) The model of allocation of productive forces is based on absolute centralization. Productive forces is a central idea in Marxism, which covers all the factors applied

²⁰ Chatterton, P. (2002). 'Be Realistic: Demand the Impossible'. Moving Towards' Strong' Sustainable Development in an Old Industrial Region? *Regional Studies*, *36*(5), 552-561.

²¹ Gibson - Graham, J. K. (2005). Surplus possibilities: post development and community economies. *Singapore Journal of Tropical Geography*, 26(1), 4-26.

by people in the production process, such as human labor, tools, machinery, land, infrastructure. In order to manage regional disparities, some countries - particularly the Soviet Union and other socialist countries - tried to evenly redistribute the productive forces nationwide, by means of a planned economy.²² The model has many remarkable features, such as absolute centralization, absolute obedience of local government of regional development plans enacted from the central government. By using the structure of the productivity model, many comprehensive resources can be gathered and redistributed in a short period of time. The backward regions can then gather sufficient labor force, capital, technology and other resources to sufficiently create the foundations for further development, without the need for cooperation by the wealthy regions.

However, the disadvantages of the model are distinct. The disciplines of the market, the differences between regions, the real needs of specific regions and the creativity of the local population are neglected. The subjective regional development plans cannot be used to fulfill the diverse needs of different regions, which may then lead to the waste of resources. According to the experiences in the Soviet Union and China during that economic period, the price of allocation of productive forces was too high to realize regional equality. Although this model had been proved to be ineffective, it had a significant impact on many countries' regional policies, including western capitalist countries. Before the 1980s, regional policy had been conducted as a top down instrument of central government in most of the developed countries. Financial aid, transfer payment, infrastructure construction and other large-scale public investments were the main methods used to correct regional disparities.²³ Since the 1980s, large allocations of money for regional programs became unaffordable in times of economic recession and financial austerity. Therefore, some countries began to change from a model of top-down intervention to the bottom-up approach. Although new forms of policy have proved to be more effective, the options of financial aid, investment in infrastructure and other classical methods of allocating productive forces, are still on the list of many countries' policy options. The methods

²² Dian-hua, W. (2006). Changes of theory in Russian productivity layout and meaning to china. *Economic Geography*, 26(6), 908-911.

²³ Author, S. (Ed.). (2009). *Regions matter: Economic recovery, innovation and sustainable growth*. OECD Publishing.

of redistribution and assistance have shifted from a planned economy to a market economy, from subjective decisions to scientific planning.

(2) The model of the welfare state, with the trend toward decentralization. The central idea of this model is welfare equality. The central government should formulate policies for universal welfare standards and supply the relevant support mechanisms, such as funding, justice, institutions, and human resources. This model presents a scenario where it is a near impossible task to realize equity of economic development levels. Therefore, the principal way to eliminate regional disparities is through welfare equality, which can offer the same rights and opportunities for each citizen, which can facilitate the elimination of locational differences. Otherwise, smoothing out the regional economic disparities may raise serious questions regarding efficiency losses, viciousness of competition, regional conflicts and other similar policy failures. By using the model of the welfare state, these questions can be avoided, and the state can strengthen national identity, maintain national unity, and promote democracy through welfare equality.²⁴ Generally, the welfare state is connected closely to the notion of centralization, where the central government dominates the policy process and distributes the resources equally, and local and regional governments are in a subordinate position.

In practice, many welfare states are federal states, such as Switzerland and Germany. Decentralization is a common trend for welfare countries. Though different countries' local governments have different functions and powers, most local governments implement the welfare policies established by the central government.²⁵ The autonomy of local governments are strictly constrained and supervised by the central government. The model of the welfare state employs a different approach, so as to avoid the pitfalls of reshaping the economic landscape. The effects of narrowing regional developmental inequalities are also clear; however, many scholars have concluded "regional productivity differences prove to be the main determinant behind observed welfare inequality in the European context."²⁶

²⁴ Pierson, P. (1994). *Dismantling the welfare state? Reagan, Thatcher and the politics of retrenchment*. Cambridge University Press, p3.

²⁵ Sellers, J. M., & Lidström, A. (2007). Decentralization, local government, and the welfare state. *Governance*, 20(4), 609-632.

²⁶ Ezcurra, R., Gil, C., & Pascual, P. (2005). Regional welfare disparities: the case of the European Union. *Applied Economics*, *37*(12), 1423-1437.

Though the welfare model is a positive one for promoting human equality, alleviating regional disparities and strengthening national identities, this model does not confront the differences in regional productivity, as it's focus is on the treatment of the symptoms and not the root cause. Moreover, the welfare state model is dependant on the ability to develop economic policies effectively, while redistributing resources fairly, and continually collecting high taxes. In an age of economic slowdown, aging populations, a high cost of supplying welfare, and with forces tending towards localisation, the welfare state model is facing many challenges. Indeed, many scholars have predicted that the golden age of the welfare state now is over.²⁷ The crises impacting upon the welfare state are not confined to financial crises, for there are also structural crises.²⁸ Furthermore, the justification, reasonableness and fairness of the welfare model are questioned by neo-liberalism and other -isms.²⁹

(3) The model of federalism. Sub-national units, such as provinces, states and cantons are the central component of this model. The sub-national units should have comprehensive autonomous powers, such as the direct election of leaders, independent administration, tax powers and a financial authority. These units are also responsible for promoting economic development, supplying public services, distributing resources and providing welfare, while the responsibilities of the central government are redistribution and coordination. The supporters of federalism argue that regional disparities are inevitable and also represent normal phenomena in the development of human society. ³⁰ Because of information asymmetry, the interventions from central government may intensify regional disparities and cause various other new problems. Therefore, the responsibilities of the central government are to guarantee the normal operation of the regional market and the free movement of production factors. The mechanisms of regional competition, market and voting will achieve the dynamic equilibrium of regional development.³¹ In contrast to the

²⁷ Pierson, P. (1994). *Dismantling the welfare state? Reagan, Thatcher and the politics of retrenchment*. Cambridge University Press.

²⁸ Wahl, A. (2011). *The rise and fall of the welfare state*. Pluto Press.

²⁹ Hong, Z. (2001). Where Will the Welfare States Go? Social Sciences in China, 3, 009.

³⁰ Oates, W. E. (1999). An essay on fiscal federalism. Journal of economic literature, 37(3), 1120-1149.

³¹ Martin, R., & Sunley, P. (1998). Slow Convergence? The New Endogenous Growth Theory and Regional Development. *Economic Geography*, 74(3), 201-227.

welfare state model, which advocates equality and universality, the federalism model stands for the values of diversity and efficiency.

Within the framework of federalism, the fiscal federalism theory, which can be used in unitary and centralized countries, has been widely discussed and considered since the 1970s.³² Fiscal federalism emphasizes the autonomy of power over tax and spending of the sub-national units; this is not a comprehensive autonomy. The financial competitions between regions not only enhance national economic efficiency, but also promote diversified development and supply, as well as diversified public services. The main functions of the central government are transfer payment and redistribution, which can guarantee that all regions have an approximate financial income per capita and equal access to public services.³³ Theoretically, the model of federalism has some of the above mentioned advantages; however, the preconditions of this model - such as free competition, free movement of people, equal development opportunities, and equal political rights - are difficult to achieve thus the issue of regional economic inequality is difficult to correct using this particular model. Furthermore, the issue of welfare disparity between regions may deteriorate, because of a weak central government and the lack of a redistribution capacity. Thus, centralization - particularly fiscal centralization - is now a common trend in federal countries.

There are no simple distinctions between the above models. Therefore, countries always use more than one model to control and manage regional issues during particular times. Historically, every model has had some positive effects on correcting regional disparities. However, as discussed above, the defects of each model are also clear and apparently insurmountable. In the era of globalization, regional development is not only affected by central and local governments, but also by individual entrepreneurs, enterprises, firms, NGOs, international organizations, multinational corporations and international financial institutions, which originate from both within and outside national boundaries.³⁴ A country cannot solely rely on

 ³² Ter-Minassian, M. T. (Ed.). (1997). *Fiscal Federalism in Theory and Practice*. International Monetary Fund.
 ³³ Oates, W. E. (2005). Toward a second-generation theory of fiscal federalism. *International Tax and Public Finance*, *12*(4), 349-373.

³⁴ Cheema, G. S., & Rondinelli, D. A. (2007). *Decentralizing governance: emerging concepts and practices*. Brookings Institution Press, p2.

central government or any other single body and policy to effectively deal with the increasingly complicated regional challenges. Moreover, because of successive economic recessions and budget restraints after the 1980s, large allocations for regional programs and subsidies have become unsustainable and effectively invalid.³⁵

The ambitious target of reducing regional disparities has been changed to a less distinct target - "regional competitiveness". Regional growth and regional coordination are more favored by many national governments over regional redistribution; this policy approach reflects a new trend of decentralization to regional and local levels. Decentralization is considered to be flexible, inclusive, effective and adaptive. Decentralization can be used to stimulate endogenous development, exploit regional potential, and foster innovation-oriented initiatives with a relatively low cost factor. "Decentralization for past one and half decade or so has become the most favored policy priority among the policy makers". ³⁶ The paradigm of decentralization is widely adopted by western developed countries, such as Finland, Sweden, Switzerland, Canada, Australia, Japan.³⁷ Some scholars have determined that "decentralization in high income countries has, if anything, been linked with a reduction of regional inequality".³⁸

However, some other scholars have argued that decentralization can increase regional disparities. They have determined that "the conclusion that emerges from both the analytical and empirical research is that national budgets tend to reduce regional disparities."³⁹ In general, most scholars and policy makers support this new and high-potential model, and increasingly more developing countries have begun the process of decentralization under the influence of international organizations and developed countries. "The phenomenon is geographically widespread, occurring simultaneously in Latin America, Africa, Asia, and Eastern Europe".⁴⁰ However,

³⁵ Roura, J. R. C. (2011). Regional development policies in OECD Countries. *Investigaciones Regionales*, (19), 205-208.

³⁶ Sharma, C. K. (2006). Decentralization dilemma: measuring the degree and evaluating the outcomes. *The Indian Journal of Political Science*, 67(1), 49-64.

³⁷ Author, S. (Ed.). (2009). *Regions matter: Economic recovery, innovation and sustainable growth*. OECD Publishing, p51.

³⁸ Rodr guez-Pose, A., & Ezcurra, R. (2009). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*, 619–644.

³⁹ Prud'Homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, 10(2), 201-220.

⁴⁰ Bardhan, P. K., & Mookherjee, D. (2006). Decentralization and local governance in developing countries: a

whether the model of decentralization can be used in order to ease the regional conflicts and reduce regional disparities in developing countries is still an unresolved question.

1.3 Tentative Academic Innovations

Through the literature review presented above, the global trend of decentralization is clear, not only according to theoretical research studies and reports, but also regional governance practices. However, there remains no general consensus on the relationship between decentralization and regional disparity, although much research has been done to investigate this relationship as a topic. For example, Calamai states that he had identified a clear relationship between the process of devolution and the reduction of spatial inequalities in a case study on Italy.⁴¹ In the case of the EU, the centralization trend has fostered a catching-up by lagging countries and has reduced the overall range of disparities.⁴² Other researchers have also presented the view that decentralization can reduce regional disparities; examples include Costa-Font's research on Spain,⁴³ and Albrechts' research on Belgium.⁴⁴

However, other researchers have denied finding a positive relationship between decentralization and regional disparities. Bonet's research on Colombia revealed strong evidence that the fiscal decentralization process has led to an increase in regional income disparities.⁴⁵ Chakravorty's research on India,⁴⁶ and Hill's research on Indonesia and the Philippines also supported this conclusion. As for China, most researchers state that a strong central government is the key factor in reducing regional disparities. For example, Fan et al. suggest that the fiscal decentralized

comparative perspective (Vol. 1). The MIT Press, p1.

⁴¹ Calamai, L. (2009). The link between devolution and regional disparities: evidence from the Italian regions. *Environment and Planning*. *A*, *41*(5), 1129.

⁴² Geppert, K., & Stephan, A. (2008). Regional disparities in the European Union: Convergence and agglomeration. *Papers in Regional Science*, 87(2), 193-217.

⁴³ Costa-Font, J. (2010). Does devolution lead to regional inequalities in welfare activity? *Environment and Planning. C, Government & Policy*, 28(3), 435.

⁴⁴ Albrechts, L. (2001). Devolution, regional governance and planning systems in Belgium. *International Planning Studies*, 6(2), 167-182.

⁴⁵ Bonet, J. (2006). Fiscal decentralization and regional income disparities: evidence from the Colombian experience. *The Annals of Regional Science*, *40*(3), 661-676.

⁴⁶ Chakravorty, S. (2000). How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India. *Economic Geography*, *76*(4), 367-394.

process, with the reforms and opening-up, may be an important reason for the increased regional disparities.⁴⁷ From the examples mentioned above, it can be seen that there is still no consensus regarding the relationship between decentralization and regional disparities based on case studies. Some scholars have presented a valid answer by using cross-countries' data.

However, the same conflicting conclusions are apparent across the different research studies. For instance, after analysing data collected from 14 developing and developed countries, Shankar and Shah ⁴⁸stated that decentralized countries perform better in restraining regional disparities. Ecurra et al. studied 26 developing and developed countries, and concluded "for the whole sample decentralization is completely dissociated from the evolution of regional disparities." ⁴⁹

One of the reasons why these studies came to different conclusions is directly related to the definitions of decentralization and inequalities. Scholars still have not reached a basic agreement on the meaning of and measurement methods for decentralization. Most scholars regard fiscal decentralization as the entire concept of decentralization. Even here researchers diverge on how to measure the "fiscal" issue. Some scholars use local expenditure as a proportion of total expenditure as a measure of fiscal decentralization, while others use local revenues as a proportion of total revenue as the same measurement task. Furthermore, there are confusion and conflicting views over the meaning of decentralization, such as the difference between decentralization; deconcentrating; and devolution and federalism.

Thus one of the tentative innovations of this study has been to define a clearer definition of decentralization, based on the rules on what is measurable, inclusive, and accurate. Specifically, in this dissertation, the opinion that decentralization is a multidimensional concept is presented. This concept includes basic structural

⁴⁷ Fan, S., Kanbur, R., & Zhang, X. (2011). China's regional disparities: Experience and policy. *Review of Development Finance*, *1*(1), 47-56.

⁴⁸ Shankar, R., & Shah, A. (2003). Bridging the economic divide within countries: A scorecard on the performance of regional policies in reducing regional income disparities. *World Development*, *31*(8), 1421-1441.

⁴⁹ Ezcurra, R., Gil, C., & Pascual, P. (2005). Regional welfare disparities: the case of the European Union. *Applied Economics*, *37*(12), 1423-1437. Ezcurra, R., & Pascual, P. (2008). Fiscal decentralization and regional disparities: evidence from several European Union countries. *Environment and Planning A*, *40*(5), 1185. Rodr guez-Pose, A., & Ezcurra, R. (2009). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*, lbp049.

dimensions such as fiscal decentralization, administrative decentralization, welfare decentralization, and political decentralization. Each of these dimensions can be evaluated by data collated in national statistics.

Another reason why scholars cannot reach a consensus on the relationship between decentralization and regional disparities is because of the complexity and diversity of each country's conditions. There are different effects of liberal democracy on different countries. Likewise, decentralization, as a recent development concept, in practice is based on different reasonings, and follows different evolutionary processes and targets towards different goals. For example, the decentralizing process in most of the developed countries is an active and ongoing adjustment which is used in order to meet the challenges of economic slowdown and centrally-set fiscal austerity. The aims of decentralization are to increase the effectiveness and competitiveness of regional development. However, in some developing countries, decentralization is a passive choice because the central government lacks adequate control over local governments or regions.

The goals of decentralization are to strengthen national identity and raise people's faith in central government. Due to the differences in levels of development and types of systems, decentralization will produce different results. The above case studies and transnational data analyses on this topic led to distinct conclusions. Therefore, another aim of this study was to draw conclusions after combining findings from transnational data analyses and case studies. First, the effects of decentralization in OECD countries was checked, based on transnational data. Then the results were tested via a comparative analysis of the situation in China. It should be noted that the case study of China was evaluated using both data analysis, and a study of the historical evolution of its decentralizing system.

1.4 Key Concepts

1.4.1 Debates around Decentralization

Over the past two decades, decentralization has been a significant topic among scholars and policy makers: "Almost everyone has been in favor of it, from the centralized French to the already decentralized Germans; from the majoritarian British to the consensual Danes and Dutch; from the West (USA) to the East (Japan), and from the North to the European South (Italy) and, indeed global south (New Zealand)", ⁵⁰ among both developed countries and developing countries. ⁵¹ In addition, decentralization also has been supported by different political factions. In many countries, decentralization programs are supported by political coalitions of right-wingers in order to reduce the excessive intervention of the central government, to strengthen the role of market mechanisms, and to reduce the cost of various welfare programs.⁵² In other countries, such as Spain and the UK, decentralization is supported by left-wing parties since they seek an enhancement of regional autonomous powers, e.g. abolition of charges for social care.⁵³

There are many reasons presented in support of decentralization. The most common reason is that decentralization can be used to transfer power nearer to the people, promote the quality of democracy, and make the politicians more visible and accountable.⁵⁴ From the perspective of political administration, decentralization is able to significantly reduce the hierarchies of government, raise the responsiveness of policies, and inspire innovations.⁵⁵ Another common argument in support of decentralization is that a decentralizing system can increase the efficiency of resource allocation and the rate of economic growth.⁵⁶ Furthermore, since some countries are affected by localization forces, they have undergone a passive decentralization process. Some scholars have concluded that "it can promote a sense of autonomy in citizens, enhance social order by promoting the legitimacy of the state, and limit pressures for separatism by diverse regions or ethnic groups".⁵⁷ Supporters of decentralization argue that this system is able to curtail long-standing regional

⁵⁰ Pollitt, C. (2005). Decentralization. A central concept in contemporary public management. *The Oxford Handbook of Public Management*, 371.

⁵¹ Grindle, M. S. (2007). *Going local: decentralization, democratization, and the promise of good governance.* Princeton University Press.

⁵² Costa-Font, J. (2010). Does devolution lead to regional inequalities in welfare activity? *Environment and Planning*.

C, *Government & Policy*, 28(3), 435.

⁵³ Keating, M. (2002). Devolution and public policy in the United Kingdom: Divergence or convergence. *Devolution in Practice: Public Policy Differences within the UK*, 3-21.

⁵⁴ Kaufmann, D., Kraay, A., & Zoido-Lobat ´n, P. (2000). Governance matters. *Finance Dev*, 37(2), 10.

⁵⁵ Balaguer-Coll, M. T., Prior, D., & Tortosa-Ausina, E. (2010). Decentralization and efficiency of local government. *The Annals of Regional Science*, *45*(3), 571-601.

⁵⁶ Martinez-Vazquez, J., & McNab, R. M. (2003). Fiscal decentralization and economic growth. *World Development*, *31*(9), 1597-1616.

⁵⁷ Bardhan, P. K., & Mookherjee, D. (2006). *Decentralization and local governance in developing countries: a comparative perspective*. The MIT Press, p4.

inequalities.⁵⁸ Competitive and decentralized institutions tend to lead people to view regional inequalities and divergences as a "necessarily unjust"⁵⁹ feature in long historical processes.

Criticisms about decentralization abound. Prud'Homme⁶⁰ summarized the dangers of decentralization. First, decentralization can increase disparities, because of unequal development at the starting point, destructive competition, missing or limited redistribution capabilities, and failure of regional coordination systems. Second, decentralization can jeopardize macro-economic stability brought about by the selfishness and exclusiveness at a local government level and by various special interest groups. Third, decentralization can undermine efficiency, since there are too many players within the fragmented system, and each of them will do their best to deter any policy which may harm their interests, rather than enhance collective welfare. Fourth, decentralization may lead to widespread corruption. Elitist control is easier at local and regional levels than at the central level, where the politicians and bureaucrats can succumb to the pressures and inducements of local special interest groups. Also, stable interest networks are easier to establish at lower levels. Moreover, some scholars have argued that it is difficult to adequately define the location of responsibility in a decentralized system as there are too many reasons and opportunities offered for "blame-shifting".61

There remains no consensus about the specific functions of decentralization. One reason for this may be the complexity of the definition of decentralization. Historically, the conception of decentralization emerged after the Second World War, when most Western countries tried to centralize governmental power, so as to establish a universal welfare system and implement comprehensive economic projects. During this period, decentralization was not a popular concept. However, because of economic stagflation and financial austerity during the 1970s, most governments had to decentralize their hierarchical structures and transfer more

⁵⁸ Pollock, A. M. (1999). Devolution and health: challenges for Scotland and Wales. *BMJ: British Medical Journal*, *318*(7192), 1195.

⁵⁹ Costa-Font, J. (2010). Does devolution lead to regional inequalities in welfare activity? *Environment and planning*. *C*, *Government & Policy*, 28(3), 435.

⁶⁰ Prud'Homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, 10(2), 201-220.

⁶¹ Pollitt, C. (2005). Decentralization. A central concept in contemporary public management. *The Oxford Handbook of Public Management*, 381.

powers to local administrations, in order to reduce the cost of public services. The decentralizing process was focused on three methods during this time: deconcentration, devolution, and delegation.⁶²

"Deconcentration sought to shift administrative responsibilities from central ministries and departments to regional and local administrative levels by establishing field offices of national departments and transferring some authority for decision-making to regional field staff. Devolution aimed to strengthen local governments by granting them the authority, responsibility, and resources to provide services and infrastructure, protect public health and safety, and formulate and implement local policies. Through delegation, national governments shifted management authority for specific functions to semiautonomous or parastatal organizations and state enterprises, regional planning and area development agencies, and multi- and single-purpose public authorities."⁶³

After the 1980s, due to the rising effects of globalization and democratization, decentralization was met with a new and popular appeal, as people increasingly desired for an end to authoritarian control of central government; and wanted democracy, a market economy, privatization, and development of local government.⁶⁴ Decentralization had also been connected with other concepts, such as democracy and market reforms.⁶⁵ Moreover, there was a rising profile of some regional groups - such as ethnic, political, linguistic, religious and cultural groups - who began to fight for autonomous powers. Thus the drive towards decentralization was linked with local and regional autonomy. More importantly, in the age of globalization, powers now began to evolve into nation states with both international organizations and local organizations.

More activities were established and implemented at the local and regional levels.

⁶² Rondinelli, D. A., McCullough, J. S., & Johnson, R. W. (1989). Analysing decentralization policies in developing countries: a political - economy framework. *Development and Change*, 20(1), 57-87.

⁶³ Cheema, G. S., & Rondinelli, D. A. (2007). *Decentralizing governance: emerging concepts and practices*. Brookings Institution Press, p2.

⁶⁴ Bird, R. M., Ebel, R. D., & Wallich, C. (Eds.). (1995). *Decentralization of the socialist state: Intergovernmental finance in transition economies*. World Bank Publications.

⁶⁵ Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

Foreign Direct Investment (FDI), international aid, global production chains and transnational exchanges strengthened local power. Decentralization has therefore become a popular institutional framework where different facets can cooperate together and establish new types of governance networks; and so decentralization has come to be connected with good governance. On the one hand, the proliferation of practices in decentralization has allowed this concept to prosper. On the other hand, there are so many meanings attached to this concept that it is difficult to coin a clear definition of decentralization.⁶⁶ This is the reason why there are many opposing views over decentralization.

Scholars have taken a variety of different approaches in their attempts to redress the confusion associated with the different meanings of decentralization. However, researchers must first of all form a basic consensus on the meaning behind this concept. Schneider states that, "although there is disagreement about the meaning of decentralization, most would agree that transferring power and resources to national governments is not decentralization".⁶⁷ Macmahon investigated the meaning of decentralization from its Latin roots, which means "away from the centre".⁶⁸ Second, researchers must acknowledge the diversity of meanings associated with this concept, since decentralization describes a process of spreading a higher authority to a lower level.

In practice there are many different methods that can be used to decentralize powers. Any single dimension, such as fiscal decentralization, cannot be taken to represent all the various dimensions of this complex concept. For example, Cheema and Rondinelli discussed four forms of decentralization: administrative, political, fiscal, and economic. ⁶⁹ Treisman defined and distinguished six types of decentralization: vertical decentralization, decision-making decentralization, appointment decentralization, electoral decentralization, fiscal decentralization, and personnel decentralization.⁷⁰

⁶⁶ Treisman, D. (2002). Defining and measuring decentralization: a global perspective. Unpublished manuscript.

⁶⁷ Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

⁶⁸ Macmahon, A. W. (1962). *Delegation and autonomy*. Asia Publishing House, p15.

⁶⁹ Cheema, G. S., & Rondinelli, D. A. (2007). Decentralizing governance: emerging concepts and practices. Brookings Institution Press, p4.

⁷⁰ Treisman, D. (2007). *The architecture of government: rethinking political decentralization*. Cambridge University Press.

Third, the definition of decentralization should be one that is quantitative or measurable. A central reason for the conceptual confusion over decentralization is that there is no clear, reliable and commonly recognized measurement standard. In future research, "some basic questions about definitions and measurement need to be asked".⁷¹

In general, decentralization is a complex concept which is utilized in different fields, such as sociology, economics, management science, political economics, and political science. In different research studies, across different countries and even between different languages, it has different meanings. ⁷²At the most basic level, decentralization is a process of transferring power from the traditional center of power, such as the central government (versus local government), government (versus society), state (versus market), and top management of a company (versus lower levels of a company), to the lower level, in order to bring the focus closer to the people, citizens or work practices. In political science, scholars have not reached a generally accepted consensus, which has led to some conceptual confusion. For example, in some studies, democratization and market-oriented reform are included in the definition of decentralization,⁷³ but in other studies it is only taken to mean the more narrow definition of fiscal federalism theory, a system in which local expenditure is performed by the local government, and is based on local taxes.⁷⁴

For this research project and dissertation, the meaning of decentralization is confined to the relationship between the central and local governments. The report focuses on the powers transferred from a central government to a local government. Nonetheless, even when using this limited definition, it is difficult to confidently measure the degree of decentralization. This is because there are many and diverse conditions in different countries; so researchers in the field tend to adopt different indexes and methodologies in order to evaluate the different dimensions of

⁷¹ Rodden, J. (2004). Comparative federalism and decentralization: On meaning and measurement. *Comparative Politics*, 482.

⁷² Pollitt, C. (2005). Decentralization. A central concept in contemporary public management. *The Oxford handbook of public management*.

⁷³ Balaguer-Coll, M. T., Prior, D., & Tortosa-Ausina, E. (2010). Decentralization and efficiency of local government. *The Annals of Regional Science*, 45(3), 571-601. Fukasaku, K., & de Mello, L. R. (Eds.). (1999). *Fiscal decentralisation in emerging economies: governance issues*. OECD Publishing.

⁷⁴ Davoodi, H., & Zou, H. F. (1998). Fiscal decentralization and economic growth: A cross-country study. *Journal of Urban Economics*, *43*(2), 244-257.

decentralization. According to the literature surveys by some scholars, ⁷⁵ decentralization can always be reduced to fiscal decentralization, which then can be measured easily through economic statistics. The share of subnational expenditures and revenues in total are considered to be the best indicators.⁷⁶ However, other scholars have argued that this is problematic when used to describe decentralization by only using expenditure or revenue-based data.⁷⁷ Such data cannot be used to determine whether the economic rights are controlled by the local government. Therefore, some scholars argue that a multi-perspective view on the concept should be developed in order to overcome conceptual confusion.⁷⁸

Within recently published research, almost all the scholars agree on the limitation of using "classical" decentralization measures, which are based solely on fiscal data. However, there are other problems. What dimensions should be included? What standards should be adopted for selecting dimensions? Schneider suggested that political, administrative and fiscal dimensions should be considered, ⁷⁹but other scholars consider only the political and economic dimensions of decentralization. ⁸⁰ Lessmann states that the measures should reflect *de jure* and *de facto* decentralization. ⁸¹ The institutional factors should not be ignored in the analysis, for example, whether a federal constitution exists (1) or does not exist (0) in a country; or the number of tiers in the country's vertical structure.⁸²

Given these overall descriptions above, it can be viewed that an economic dimension is the baseline for evaluating the degree of decentralization, even though this cannot cover all aspects of decentralization. Therefore, in this research study, the economic dimension, or more precisely, the fiscal dimension was taken to be the primary factor used to assess the condition of decentralization of OECD countries

⁷⁵ Sharma, C. K. (2006). Decentralization dilemma: measuring the degree and evaluating the outcomes. *The Indian Journal of Political Science*, 67(1), 49-64.

⁷⁶ Voigt, S., & Blume, L. (2012). The economic effects of federalism and decentralization—a cross-country assessment. *Public Choice*, *151*(1-2), 229-254.

⁷⁷ Schakel, A. H. (2008). Validation of the regional authority index. *Regional and Federal Studies*, 18(2-3), 143-166.

⁷⁸ Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

⁷⁹ Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

⁸⁰ Rodr guez-Pose, A., & Ezcurra, R. (2011). Is fiscal decentralization harmful for economic growth? Evidence from the OECD countries. *Journal of Economic Geography*, 11(4), 619-643.

⁸¹ Lessmann, C. (2009). Fiscal decentralization and regional disparity: evidence from cross-section and panel data. *Available at SSRN 936874*.

⁸² Treisman, D. (2002). Defining and measuring decentralization: a global perspective. Unpublished manuscript.

and that of China. The remaining problem was this - what other measures should be used to remedy the defects of fiscal methods? Across a range of literature, there are primarily three principles which need be considered: testability, comprehensiveness and simplicity. Theoretically, these three principles are mutually exclusive. In one research report it was stated that it is almost impossible to meet each of these principles; therefore, researchers should maintain a careful balance in evaluating specific issues.

This research project was mainly focused on the decentralization conditions of OECD countries and China. China is always labeled as a highly centralized country; even as an authoritarian state. One of the reasons for this prejudice may be due to the stable communist party system which can control the promotion of local officials; second, the local leaders are not elected directly by local citizens. This form of system has remained stable since 1949, back when the People's Republic of China was founded. If the same political decentralization indexes are adopted to evaluate the situation in China (such as the indexes invented by Brancati⁸³), which includes subnational elections, subnational legislative control over policies, and subnational veto over constitutional amendments, the results will always state that China is a highly centralized country, and has been the past 60 years. These indexes cannot be used with regard to this research project, because these parameters are not variables in China. They cannot be used to establish the relationship between China's political decentralization with other variables, such as regional disparities for instance. In some research reports, China has been treated as a special case.⁸⁴

In addition, in most of the courtiers, political structure is relatively stable. In other words, political decentralization means constitutional change, which is a rarity in political life. For example, even though Japan started its decentralization process form 1995 which include many aspects,⁸⁵ such as breaking up central government's agency-delegated function system (*kikan i'nin jimu*) and setting up the conception of "legal authorized affairs" (*hotei jutaku jimn*) through which "60 percent of the

⁸³ Brancati, D. (2006). Decentralization: Fueling the fire or dampening the flames of ethnic conflict and secessionism? *International Organization*, *60*(03), 651-685.

⁸⁴ Enikolopov, R., & Zhuravskaya, E. (2007). Decentralization and political institutions. *Journal of Public Economics*, *91*(11), 2261-2290.

⁸⁵ Mochida, N. (2008). Fiscal decentralization and local public finance in Japan. Routledge, p4-20

relevant duties became autonomous duties of local governments", ⁸⁶ the constitutional structure of japan has not changed. Japan still remain the character of "Controlled Decentralization".⁸⁷ Some inaccurate dummies cannot detailed describe this process. Belgium is a special case which changed from a centralized unitary country to a decentralized federal state in 1995.⁸⁸ However, because of the limitation of data, this research use the data from 1996 to 2009. Therefore, based on the reasons and limitations mentioned above, the indexes of political decentralization were taken as invariants for this particular research project. The primary discussion will be on the fiscal, administrative, and welfare dimensions of decentralization. It should be noted that even though the indicators of political decentralization will not be included in this dissertation, political decentralization still is an important background knowledge. Especially in the chapters which concern Chinese decentralization, research into political institutions is used to supplement the knowledge gaps in quantitative research.

Dimensions	Indicators
Fiscal Decentralization	Subnational expenditures as a percentage of total expenditures
	Subnational revenues as a percentage of total revenues
Administrative Decentralization	Subnational taxes as a percentage of subnational revenues
	Transfers as a percentage of subnational revenues
	Subnational government expenditures of wage as a percentage of
	total Subnational expenditures
Welfare Decentralization	Subnational welfare expenditures as a percentage of total welfare expenditures

Table 1-1 Different Dimensions of Decentralization and Measurement Methods

Fiscal Decentralization: Most of the fiscal decentralization indices are calculated by relating the sum of sub-national expenditures (revenues) to total government expenditures (revenues). As discussed above, the classical fiscal indexes cannot be taken to represent the actual degree of decentralization. This was presented as an

⁸⁶ Shah, A. (Ed.). (2006). Local governance in industrial countries. World Bank Publications, p152

⁸⁷ Akizuki, K. (2001). Partnership in controlled decentralization: local governments and the Ministry of Home Affairs. *Local government development in post-war Japan*, 63-84.

⁸⁸ Swenden, W., Brans, M., & De Winter, L. (2006). The politics of Belgium: Institutions and policy under bipolar and centrifugal federalism. *West European Politics*, *29*(5), 863-873.

analysis in Schakel's research study: "[to say that] Scandinavian countries are as decentralized as federal countries would be wrong. Subnational governments in Scandinavian countries have less decision-making authority over policies, less taxation power, and they do not enjoy power-sharing." ⁸⁹ Despite these defects, because of the simplicity and ease of data collection, the classical fiscal decentralization indexes are still used by scholars. Moreover, subnational revenues as a percentage of total revenue are also used to measure regional disparity.

Administrative Decentralization. Political decentralization means constitutional change, which is a rarity in political life. Administrative decentralization means a normal administrative or managerial adjustment, which may change frequently during a certain historical period.⁹⁰ Some scholars have divided administrative decentralization into delegation and devolution: ⁹¹ the former is internal decentralization, by which the local institutions remain legally accountable to the central government, but have some autonomy; the latter is external decentralization, by which the central government transfers the autonomic powers to the local government. This classification creates many difficulties regarding the measuring of decentralization. The best way may be by "paying attention to the degree of autonomy granted by the central government".⁹² This simplification may neglect some interesting relationships between the central and local government, but it is enough to allow a measurement of the degree of decentralization.

According to the method defined by Schneider,⁹³ two indexes can be employed to measure the administrative decentralization. The only grammatically correct means by which to present these indexes is to compose the following questions:

Of local revenues, what percentage are local tax revenues? Subnational revenues include taxes, transfer payments, grants, loans, and charges for public services. Taxes offer the greatest degree of autonomy. If tax revenues account for a large portion of

⁸⁹ Schakel, A. H. (2008). Validation of the regional authority index. *Regional and Federal Studies*, 18(2-3), 143-166.

⁹⁰ Pollitt, C. (2005). Decentralization. A central concept in contemporary public management. *The Oxford handbook of public management.*

⁹¹ Rondinelli, D. A. (1990). Decentralization, territorial power and the state: a critical response. *Development and Change*, *21*(3), 491-500.

⁹² Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

⁹³ Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

local revenue, then the local government enjoys a significant level of autonomy, and *vice versa*.

Of local revenues, what percentage are transfer payments? If the income from transfer payments are accounted as being the greater part of the local revenue, then the central government has a significant impact on local government. However, the indexes of transfer payments are also, being a simplification, which cannot be used to illustrate the different types of transfer payments. For example, where the local government has total control over block grants, it may remain true that the local government has to obey the purpose and rules of earmarked transfers, which are enacted by the central government. However, the indexes of transfer payments are a straightforward way to evaluate the dependence of local governments on the central government.

The size of the local government is also related to, and in direct proportion to the power of the local government. According to "leviathan hypothesis" of traditional fiscal federalism,⁹⁴ decentralization can reduce the size of the government, because of the pressures from regional competition and local electoral oversight. However, some empirical research project have concluded that "decentralization leads to smaller national governments, [but] larger subnational governments". ⁹⁵ Decentralization can relax the personnel control of the central government and stimulate the expansion drive of the local governments. Generally speaking, an overly large or an overly small form of local government, implies that power is relatively concentrated in the country. In a decentralizing country, the size of the local government will maintain a reasonable and equitable level of authority. For the purposes of this research project local government expenditures of wages, as a percentage of total local expenditure, will be adopted to evaluate the degree and quality of a country's administrative decentralization.

Welfare or Public Service Decentralization: There is much controversy over the measurement of welfare or public service decentralization. One of the reasons is due to the complexity of deciding on the definition of welfare. In some countries, welfare

⁹⁴ Brennan, G., & Buchanan, J. (1985). Searching for Leviathan: An Empirical Study. *The American Economic Review*, *75*(4), 748-757.

⁹⁵ Jin, J., & Zou, H. F. (2002). How does fiscal decentralization affect aggregate, national, and subnational government size?. *Journal of Urban Economics*, *52*(2), 270-293.

means to direct payments specifically to vulnerable groups, such as the poor, unemployed, ill, disabled, and elderly. But in some other countries - especially in some European countries - welfare refers to the social programs, such as universal healthcare, education, etc. Because of the widespread idea of the welfare state, most countries use the broader definition of welfare. Thus, welfare decentralization, as presented in this paper, means the decentralizing of the supply responsibility for healthcare, basic education, pension, social assistances and other public services. In this dissertation, sub-national welfare expenditure as a percentage of the total welfare expenditures can be used to measure welfare decentralization.

1.4.2 Debates on Regional Inequalities

Inequality is an imprecise word, which can be used to trigger different ideas in different people's minds. At the basic level, inequality suggests a situation which exists in opposition to equality, which itself means two or more quantities of the same size. There are various disputations about the meaning of equality, and the conflict of opinions may have lasted now for thousands of years. Even though this research had its focus on the measurement by methods of inequality and an intention to avoid complex philosophical debates, the uncertainty of the definition of inequality still cannot be ignored. In addition to political and social inequality, economic inequality still remains a tangle of multiple meanings. According to the research by Rein and Miller, ⁹⁶ nine separate methods can be employed to interpret the meaning of economic inequality: One-hundred-percentism, the social minimum, equalization of lifetime profiles, mobility, economic inclusion, income shares, lowering the ceiling, avoidance of income and wealth crystallization, and international yardsticks.

Researchers have also created various measures to gauge and more accurately describe inequality, such as the Gini coefficient, the coefficient of variation, the Theil inequality index, and the Atkinson index. There also are different connotations which complicate relationships between the above methodologies. ⁹⁷ Thus, another challenging obstacle faced by research is to clarify the basic concept of regional inequality and then to determine what would be appropriate methods to estimate

⁹⁶ Cowell, F. (2011). *Measuring inequality*. Oxford University Press.

⁹⁷ Sen, A., & Foster, J. E. (1997). On economic inequality. Clarendon Press

regional inequality within the background of wider regional issues.

(1) The Range of Regional Inequality

Most scholars treat regional inequality as being regional economic inequality. There are three reasons for this: firstly, the economic data can be collected with relative ease, compared to the fragmented social data;⁹⁸ secondly, the economic indicators and data can be easily used in order to make international comparisons; thirdly, the measurement of economic inequality is a relatively mature and less controversial field, because of its widespread discussion during recent history.⁹⁹ Three kinds of data are primarily used to evaluate regional economic disparities: regional per capita income,¹⁰⁰ regional GDP per capita,¹⁰¹ and regional GDP per worker.¹⁰² Regional income per capita has the distinct disadvantage that "it also includes social security benefits"¹⁰³ and so it cannot be taken to reflect the overall conditions of economic development. Therefore, the GDP per capita (GDPpc) and GDP per worker (GDPpw) are better measurements for regional inequality calculations. GDPpw can avoid the distortion caused by inter-region commuting in metropolitan regions, such as around Berlin in Germany, Brussels in Belgium, Tokyo in Japan, Boston in the U.S., etc. However, different unemployment rates between regions may distort the results.

Another drawback of GDPpw is that the data are not able to be easily gathered and analysed in some countries; including China, Japan, Canada and the U.S. Alternately, the GDPpc can be collected with relative ease and it avoids distortion caused by unemployment rates. However, it cannot avoid the possibility of errors caused by population movements or migration. "Another disadvantage of GDP per capita is that

⁹⁸ Costa-Font, J. (2010). Does devolution lead to regional inequalities in welfare activity?. *Environment and Planning. C, Government & Policy*, 28(3), 435.

⁹⁹ Krugman, P., & Venables, A. J. (1995). *Globalization and the Inequality of Nations* (No. w5098). National Bureau of Economic Research.

¹⁰⁰ Shankar, R., & Shah, A. (2003). Bridging the economic divide within countries: A scorecard on the performance of regional policies in reducing regional income disparities. *World Development*, *31*(8), 1421-1441.

¹⁰¹ Martinez-Vazquez, J., & McNab, R. M. (2003). Fiscal decentralization and economic growth. *World Development*, *31*(9), 1597-1616.

¹⁰² Canaleta, C. G., Arzoz, P. P., & Garate, M. R. (2004). Regional economic disparities and decentralisation. *Urban Studies*, *41*(1), 71-94.

¹⁰³ Lessmann, C. (2009). Fiscal decentralization and regional disparity: evidence from cross-section and panel data. *Available at SSRN 936874*.

it is influenced by the age structure of the population and activity rates".¹⁰⁴ In other words, GDPpc may be distorted, because of the different occurrence of working people, housewives, children and the elderly in different regions. According to China's local conditions and following the main stream of academic research, the researcher selected GDPpc as a measure of regional economic inequality in this study and report.

Another important question is whether welfare inequality should be included in the analysis. The underlying objective of studies of regional inequality is to comprehend the differences in the state of development, which should include the economic development and welfare development. However, some scholars have suggested, "Welfare is difficult to measure, as it depends on personal valuations and is a function of a wide range of social, economic, and physical factors".¹⁰⁵ Therefore, it is difficult to aggregate various factors of welfare into a clear indicator system. Furthermore, unlike economic inequality, which can be more easily calculated, based on the results of economic data, the data of welfare expenditure cannot be assumed to accurately represent the welfare output, because of other complicating factors such as: government capacity, market systems, cultural traditions, *etc*. The straightforward method to manage these difficult problems is to assume that outputs of welfare are equal to inputs or expenditures on welfare.¹⁰⁶

In simple terms, the more welfare spending exists, the higher the level of benefits. This hypothesis may also be used ignore the capability difference of welfare provision in different regions, and so may affect the credibility of the results; however, it makes it possible for welfare to be both calculated and compared. Based on the research as reported by Costa-Fon,¹⁰⁷ the deflated per capita expenditure for education, health-care and long-term care activities was also utilized in this study to analyze the condition of regional welfare inequalities. Note however that, "per capita" expenditure of different components has various meanings: in the case of healthcare,

¹⁰⁴ Canaleta, C. G., Arzoz, P. P., & Garate, M. R. (2004). Regional economic disparities and decentralisation. *Urban Studies*, *41*(1), 71-94.

¹⁰⁵ Gustafsson, B. A., Shi, L., & Sicular, T. (Eds.). (2008). *Inequality and public policy in China*. Cambridge University Press.

¹⁰⁶ Atkinson, A. B., & Bourguignon, F. (Eds.). (2000). *Handbook of income distribution*. Elsevier.

¹⁰⁷ Costa-Font, J. (2010). Does devolution lead to regional inequalities in welfare activity? *Environment and Planning*. *C, Government & Policy*, 28(3), 435.

the whole regional population is used to divide the total regional expenditures on healthcare, as everyone can potentially enjoy the services of the healthcare system; in the case of education, the population of students is used, including primary education and higher education; in the case of the aged, the number of elderly people is used, which is an approach widely employed by scholars.

(2) Three Concepts of Regional Inequality

As mentioned above, for this study, GDPpc was adopted to calculate the degree of regional economic inequality. The researcher should also be careful what areas are precisely measured in a research study. There are three different concepts of regional inequality in scholarly research.¹⁰⁸ The first concept of regional inequality measures inequalities within the mean GDP between regions. Each region is treated equally and no weighting is involved. The formula for obtaining the mean GDP is that regional GDP is divided by the population of the region. Concept 1 is the clearest intuitional index of the regional developmental condition. Based on this concept, some coefficients were defined in order to calculate regional inequality, such as the coefficient of variation (CV). Where the country's average GDPpc, y_i is the GDPpc of region *i*, and *n* is the number of the sub-national units.

$$CV = \frac{1}{\bar{y}} \sqrt{\frac{1}{n} \sum_{i=1}^{n} (\bar{y} - y_i)^2}$$
(1.1)

The second concept of a measurement for regional inequality is also based on the regional mean GDP, but weighted by a region's population. In the model in Concept 1, all regions are given the same importance, but in Concept 2, regions with more population are given more importance. Concept 2 may reflect the feeling of inequality within a nation better than Concept 1. The population-weighted inequality is a beneficial way to explore the relationship between regional inequality and population or population growth rate. One coefficient, based on Concept 2, is the population-weighted coefficient of variation, or WCV. By comparing formula (1)

¹⁰⁸ Milanovic, B. (2005). Half a World: Regional inequality in five great federations. *Journal of the Asia Pacific Economy*, *10*(4), 408-445.

and formula (2), the difference between the two concepts can be clarified: in Concept 1, all regions are treated equally as 1/n, no matter the size of the population; in Concept 2, p_i is the share of the country's total population in region *i*.

WCV =
$$\frac{1}{\bar{y}}\sqrt{\sum_{i=1}^{n} p_i (\bar{y} - y_i)^2}$$
 (1.2)

Note that it is the inequality between individuals which is disregarded, both in Concept 1 and Concept 2, which implies that each person in a specific region has some rating for GDPpc. The third concept of inequality describes inequality between all the individuals in a specific region. However, in some countries, such as China, there are no detailed individual-level data relative to income inequality. Some scholars state that "concept 2 regional inequality can be used, if our partitioning is sufficiently fine, to approximate the evolution in Concept 3 inequality".¹⁰⁹ In other words, if a country can be divided into many regions with a similar development level, which are the main sources of inequality, then Concept 3 can be approximated by the calculation of Concept 2. Some researchers have adopted this method in order to study Concept 3 inequalities in some developing countries.¹¹⁰

In summary, the precise meaning of regional inequality in a specific research project must be described clearly; particularly in a comparative study. In this research, Concept 2, population-weighted inequality, was adopted as the primary focus in calculating China's and other countries' regional inequality. There were two reasons: first, most of the research on this topic selected population-weighted inequality; thus, it is simpler to compare it with other research results. Second, Concept 2 can be used to provide more information regarding the population.

(3) Measurement of Regional Inequality

Scholars have devised several methods to calculate regional inequality; however, the results obtained from the different methods may not be consistent. Different

¹⁰⁹ Milanovic, B. (2005). Half a World: Regional inequality in five great federations. *Journal of the Asia Pacific Economy*, *10*(4), 408-445.

¹¹⁰ Kanbur, R., & Zhang, X. (2005). Fifty years of regional inequality in China: a journey through central planning, reform, and openness. *Review of development Economics*, *9*(1), 87-106.

indices of inequality have different characteristics and scopes of application.¹¹¹ For instance, the Gini coefficient emphasizes the middle portion of the distribution; Theil index places greater emphasis on the tail of the distribution; the Atkinson family of indices have different characteristics, based on different parameters, A (ε) : A (1) for a low aversion to inequality, A (2) for a medium aversion, and A (3) for high inequality aversion. Furthermore, the indices have different degrees of sensitivity to transfer payments.¹¹² We can see the following formulas: \overline{y} is the country's average GDPpc; y_i is the GDPpc of region *i*; y_j is the GDPpc of region *j*; *n* is the number of sub-national units; p_i is the share of the country's total population in region *i*:

$$G = \frac{1}{\bar{y}} \sum_{i=1}^{n} p_i \sum_{j=1}^{n} p_j |y_{i-}y_j|$$
(1.3)

$$T = p_i \sum_{i=1}^{n} \frac{y_i}{\bar{y}} \log\left(\frac{y_i}{\bar{y}}\right)$$
(1.4)

$$A(\varepsilon) = 1 - \left[\sum_{i=1}^{n} p_i \left(\frac{y_i}{\bar{y}}\right)^{1-\varepsilon}\right]^{\frac{1}{1-\varepsilon}} \quad \text{(Where, } \varepsilon > 0, \, \varepsilon \neq 1\text{) if } \varepsilon = 1 \quad (1.5)$$

$$A(1) = 1 - exp\left[\sum_{i=1}^{n} p_i \log\left(\frac{y_i}{\bar{y}}\right)\right]$$
(1.6)

It should be noted that each of the indices satisfy the Pigou-Dalton transfer principle, that an arithmetical transfer from rich to poor regions will produce an inequality decrease. According to the research strategy adopted by Shankar and Shah (2003), these indices - WCV, Gini, Theil and Atkinson - were all utilized to calculate the degree of regional inequality.

1.4.3 Meaning of Region

The meaning of the word, region, is also a complex concept, which is used in a variety of fields, such as geography, transportation, computer science, mathematics, corporations, politics, economics, *etc*. In political science, region means a broad geographic area, distinguished by similar features. However, it has multiple

¹¹¹ Hao, L., & Naiman, D. Q. (2010). Assessing inequality (Vol. 166). Sage Publications.

¹¹² Canaleta, C. G., Arzoz, P. P., & Garate, M. R. (2004). Regional economic disparities and decentralisation. *Urban Studies*, *41*(1), 71-94.

meanings within other specific contexts. For example, according to different spatial levels, it can be divided into global regions, continental regions, national regions and state regions; according to the different types of borders, it can also be divided into historical regions, natural regions, cultural regions and administrative regions. In practice, the borders of different types of regions do not always coincide. For example, a natural region may be managed by several administrative regions.

(1) Region and Local

In this research, the scope of region was confined to that of a sovereign state. Before defining the region in a specific country, the relationships between regional and local must be made clear first. In political theory, local always has some connection with the local government, which means "a large number of relatively small governments wielding power over such critical matters as local land use regulation, local taxation, and the financing of local public services".¹¹³ Before the 1920s, politicians and scholars were mainly concerned with the relationship between local government and the state or central government. But with the change of economic and social life in the background of the formation of Fordism, the old central-local system could not be used to follow the needs of society. Louis Wirth stated that the old arrangements of political and administrative units were "obstacles rather than aids in social life".¹¹⁴

Scholars began to find some alternative methods to balance localism and centralization. Region is considered to be an appropriate space, in which different local organizations can coordinate with each other, without the excessive intervention of the central government. And so region means the space where some local governments cooperate together because of common problems or common interests.¹¹⁵ In other words, region can now be taken with a broader definition, which may thus contain some other similar local regions.

Note that, according to Webster's Dictionary, the word "region" is taken from the Latin *regio* (derived from *regere*, to rule), which means an administrative area,

¹¹³ Briffault, R. (1999). Localism and regionalism. *Columbia Law School, Public Law and Legal Theory Working Paper*.

¹¹⁴ Wirth, L. (1937). Localism, regionalism, and centralization. *American Journal of Sociology*, 493-509.

¹¹⁵ Reynolds, L. (2007). Local Governments and Regional Governance. *The Urban Lawyer*, 483-528.

division, or district. Many countries use the term as the formal name for a type of subnational entity, such as England, Italy (*regione*) and France (*région*). Thus, in different research contexts, region may refer to a unit containing many localities or only a single locality; however, it is the first meaning that has been used in most of the related research projects and reports.¹¹⁶ In this dissertation, the meanings of region may be changed according different context.

(2) Size of Region

A further problem is the size of regions. Based on different sizes, economic traditions, and the historical factors of the country, different standards are employed to divide regions. The regions of the USA are based on metropolitan areas, such as the metropolitan regions of New York, Portland, and Oregon. Historical and economic factors both had effects on the regional division of Japan. Most scholars studying Japanese regional problems have adopted the traditional standard, which divides Japan into Kanto, Toukai, Hokuriku, Kinkim, Chugoku, Hokkaido, Tohoku, Shikoku, Kyushu, and Okinawa. However, some other scholars have argued that there are mainly two kinds of regions in Japan, metropolitan areas (Tokyo MA, Osaka MA and Nagoya MA), and non-metropolitan areas.¹¹⁷ In the EU, the NUTS (Nomenclature of Territorial Units for Statistics) system is used for the collection, development and harmonization of EU regional statistics.¹¹⁸ There are three levels of NUTS: NUTS 1, major socio-economic regions; NUTS 2, basic regions for the application of regional policies; and NUTS 3, small regions for specific diagnoses.

In summary, the standards used for regional analysis should consider both the academic standards adopted by the majority of scholars and the specific conditions within the countries. Because this research was mainly focused on OECD countries' and China's regional problems, the official standard, the academic standards and also the research topic were thoroughly considered. Specific to China's official statistics, there are three methods for the process of region dividing: Coastal-Inland (1949-

¹¹⁶ Griffith, J. C. (2005). Regional Governance Reconsidered. JL & Pol., 21, 505.

¹¹⁷ Fujita, M., & Tabuchi, T. (1997). Regional growth in postwar Japan. *Regional Science and Urban Economics*, 27(6), 643-670.

¹¹⁸ Casellas, A., & Galley, C. C. (1999). Regional definitions in the European Union: a question of disparities?. *Regional Studies*, *33*(6), 551-558.

1985); East, Central, and West (1986-2005); East, Central, West and Northeast (2006-Now). In academic research, most of scholars have adopted the East-Central-West approach because of the convenience of data collection and the significance of regional disparities.¹¹⁹

1.5 Structure of the Dissertation

The core question driving this study was on the relationship between regional disparities and decentralization. By summarizing the experiences of OECD countries and the explorations of China, this paper presents answers to the questions of whether China, as well as other developing countries should adopt the decentralizing system, so as to handle the increasingly complex regional challenges. In the first place, the multiple connotations of decentralization are clarified, which are divided into fiscal decentralization, administrative decentralization and welfare decentralization. Then, how the three dimensions of decentralization affect one country's regional development are discussed, based on the experiences and practices of OECD countries and China.

Firstly, the transformations of OECD countries' regional policies are discussed. Overall, there are three stages: the comprehensive intervention stage, in order to achieve equality of regional income, the focused intervention stage, so as to reduce regional unemployment, and the regional governance stage, for upgrading the regional competitiveness and coordinated development between regions. During this transformation process, the powers of the central government become gradually decentralized toward the local government, regional organizations and other governing bodies. However, whether the decentralization system can ease the regional challenges is still a controversial issue. Based on the panel data from 1996 to 2009 of OECD countries, this project investigated the effects of three dimensions of decentralization on regional disparities, and also the various effects on relatively rich and relatively poor OECD countries.

Some preliminary conclusions are presented: firstly, the higher degree of a

¹¹⁹ Xie, Y., & Hannum, E. (1996). Regional variation in earnings inequality in reform-era urban China. *American Journal of Sociology*, *101*(4), 950-992.

country's expenditure on decentralization, the lower the degree of the country's regional disparities. However, during the last decade, the decentralizing process of expenditure has led to the further deterioration of regional disparities. Secondly, taxation decentralization may also cause the escalation of regional inequalities. Thirdly, if the costs of the salaries of civil servants exceed one third of the total local expenditure, the degree of a country's regionally imbalanced development may be exacerbated. Fourthly, welfare decentralization may not have the desired effects on reducing regional disparities.

Secondly, the relationships between fiscal decentralization and regional disparities of China are discussed from a historical perspective. Before the processes of Reform and Opening up (改革開放), which were led by the regional balanced development strategy, China had experienced two stages of fiscal decentralization to stimulate the development initiatives of the local government. Although the purposes of the policy were good, the policy implementation had become chaotic, because of the contradiction caused by the planning system of the central government and the inward looking stance of the local governments. In the process of local government's internecine competitiveness, even though there was a significant increase in the number of firms and investments, neither the production efficiency nor the business efficiency grew significantly. During the ensuing process of the economic crisis and power adjustment, the backward regions suffered greater losses and the regional disparities grew sharply.

At the beginning of the process of Reform and Opening up, after an adjustment, policy makers continued the implementation of fiscal decentralization, so as to act in concert with the regional unbalanced development strategy. According to the previous experience, the weak central financial and control capabilities should lead to the increase of regional disparities; however, the situation of regional inequalities showed a decrease. The reason for this anomaly was because of the process of rural reform. The "Household Contract Responsibility System" (生產責任制) reform released the developmental potentials of rural areas, increased the income of farmers and stimulated the emerging of township enterprises. The convergence between the rural and the urban in turn led to convergence between regions. During this time, the central government's fiscal revenue, accounting for total revenue, reached historic

lows of around 22%. In response to the collapse of the central government's capacities, fiscal power was recentralized by the reform named "Revenue-sharing" (分税制).¹²⁰ This reform was considered to have the characteristics of fiscal federalism, which afforded a clearer distribution of fiscal resources between the central and local governments. By this system, regional fiscal disparities enlarged significantly. In the meantime, reasonable and effective transfer payments and the financial aid system had not been established; therefore, regional disparities demonstrated a trend of increase.

Thirdly, the relationships between administrative decentralization and regional disparities are discussed, based on the experiences of China. It is difficult to establish a clear definition of administrative decentralization, along the lines of fiscal decentralization. Using the reported experience of OECD countries, this study analyzed administrative decentralization from three perspectives. Firstly, how the structure of the Chinese government affects the implementation of regional policies. The structure of the Chinese government can be summarized as an "overall isomorphic structure"(职责同构), which demonstrates that all levels of government have exactly the same institutional settings. On the one hand, this rigid and aligned structure can guarantee control by the central government of the process of regional policy implementation. On the other hand, it promotes a rigid and expansive form of government, regardless of the economic conditions of specific regions, which leads to contradictory messages from the central and local governments, resulting in the conflicts between local governments and gives rise to the segmentation between central departments. Each of these issues harm the effective implementation of regional coordination policies. Secondly, how does the size of the local government affect regional balanced development? The size of the local government in China reflects the significant regional disparities. Both the number of government officials and administrative expenses of relatively backward regions are too large to stimulate the economic and social development which are the root cause of the regional development gap. Thirdly, how do the incentive mechanisms of the Chinese

¹²⁰ Notes: The "revenue-sharing" reform is thought as a reform with features of fiscal federalism. In the Western context, fiscal federalism means fiscal decentralization. However, in the early 1990s, Chinese central government was on the verge of "bankruptcy". So, the "revenue-sharing" reform means fiscal recentralization with a western institutional tool. It just like a "recentralization body" wearing a "decentralization coat".

government affect the execution of regional policies. Scholars regularly use the terms "Political Championship" and "Yardstick Competition" to generalize the incentive mechanisms of the Chinese government, which are thought of as the secret of China's economic miracle. However, intense competition between local governments has led to a series of contradictions in the processes of regional development, such as unfair competition between the rich and poor regions, vicious competition for resources, and the plight of the cause of regional cooperation.

Fourthly, the relationships between public service decentralization and regional disparities are discussed, based on the practices of China. In general, 95% of the basic public services are supplied by the local government; particularly the sub-provincial government. Fiscal centralization and public service decentralization causes an inversion effect between financial resources and expenditure responsibilities. This situation leads to diverse problems. Firstly, the economic and financial regional disparities convert to regional public service disparities, which in turn establish and solidify the inequalities between regions. Secondly, in order to avoid a region becoming a "welfare magnet", it is hard to break down the welfare barriers between regions, such as the Household Registration System, which causes issues of unequal citizenship and other injustices. Thirdly, with respect to the background of regional welfare barriers, China's floating population cannot enjoy equal public services across the working and living regions.

In practice, though developed regions enjoy the benefits of the human capital brought in and are enhanced by a floating population, these regions do not have to undertake the cost of training and culturing the human capital. This situation causes the subsidies from backward regions effectively to be transferred to developed regions, this is called reverse subsidies, which worsen and encourage regional inequalities.

Chapter 2 Decentralization and Regional Disparities: Experiences of OECD Countries

In the era of globalization, the regional disparities of sovereign states are common challenges faced by most countries. Even though the uneven distributions in economy are inevitable results of an economic market, industrial agglomeration, and global division of labor, which can benefit one country's development, there are only a few countries who adopt laissez-faire policies for regional disparities. Moreover, most countries employ active intervention policies to ease the regional developmental gaps, since regional disparities are not only economic issues, but also political and social issues, which may lead to regional conflicts, ethnic antagonism, civil war and even national secession in many developing countries.¹²¹ Developed countries also face the same challenges. For example, the problems of Spain's Catalonia, Belgium's North-South confrontation and the Scottish independence referendum, which are all caused directly and indirectly by regional disparities.

2.1 The paradigm shift of regional governance in OECD countries

Regional disparities are the "chronic illness" that concerns the development of OECD countries. To manage the problems, countries have attempted to employ a number of different theories and models. Several regional development theories have been postulated, such as the regional convergence theory based on neo-classical economics, regional invention theory based on Keynesian, theories of structural and temporal change based on Marxism, *etc.*¹²² Meanwhile, many countries, such as the USA, UK, Belgium, Spain, Germany, Italy, and Japan have tried different methods to coordinate regional development due to their different regional issues.¹²³ Even though the theories and experiences are complex, a primary trend can be identified - decentralization. Most OECD countries' regional policies have transferred from

¹²¹ Østby, G., Nord å, R., & Rød, J. K. (2009). Regional inequalities and civil conflict in sub-saharan Africa. *International Studies Quarterly*, *53*(2), 301-324.

¹²² Pike, A., Pose, A. R., & Tomaney, J. (2006). Local and regional development. Routledge.

¹²³ Roura, J. R. C. (2011). Regional development policies in OECD Countries. *Investigaciones Regionales*, (19), 205-208.

those of a regional balanced development led by the central government to regional coordinated development based on the cooperation of and competition between the local or regional development area. Overall, the power of regional development has gradually been transferred from central government to local actors since the Second World War.

2.1.1 The stage of pursuing regional income equality based on comprehensive intervention of central government

After the Second World War, most OECD countries regarded regional income inequalities as the target of regional policies. They confidently employed ambitious projects, which originated from the high speed of economic growth, sufficient fiscal revenue, and significant reduction of unemployment from the 1950s to 1960s which is known as the golden age of western development. At the same time, large-scale industrial upgrading and transformation under the effects of Fordism caused the appearance of a highly concentrated production system, the decline of old industrial bases, and the widening gap between the rural and urban areas, which eventually led to the expansion of regional development. In this context, due to the impact of Keynesianism, most OECD countries attempted to achieve a spatial balanced distribution of economic activities and regional income equality through large-scale regional developmental programs, fiscal transfer payments, and infrastructure construction led by central government.

For example, in the inter-war period,¹²⁴ some old industrial bases of the UK declined sharply, such as those in south-western Scotland, south Wales and northeast England. Though this terrible situation had obtained relief during the Second World War, because of the demands for iron, coal, ships and weapons, the regions fell into fiscal difficulty during peace-time. In 1945, the Labour government enacted a series of regional developmental policies, such as The Distribution of Industry Act 1945 to provide assistance to the backward regions. Several measures were taken by the UK government to more effectively manage increasing regional issues, such as building factories for rental to private enterprises, improving the infrastructure, and establishing regional development agencies - like the Board of Trade, which had the

¹²⁴ Note: The period between the end of World War I and the beginning of World War II.

right to attract and coordinate investment from public and private sectors. Later, a second act, Distribution of Industry Act 1950, was passed by Parliament, which strengthened the power of the Board of Trade.

"The Board of Trade (make) further provision for the acquisition of land, creation of easements and carrying out of work in development areas...to make grants, in exceptional cases in connection with the establishment in, or transfer to, development areas of industrial undertakings, and to make grants or loans to housing associations for the provision of dwellings in development areas."¹²⁵

Another example is that of the U.S. As a country advocating a free market and local autonomy, and though many politicians and interest groups were opposed regional policies which were dominated by the federal government, the regional comprehensive governance policies and organizations were established by the New Deal. These included such as the Tennessee Valley Authority, which was designed to provide navigation, flood control, electricity generation, fertilizer manufacturing, and to further the economic development of this backward region. The regional intervention policies remained and were renewed after the Second World War. Further, a series of new regional policies were implemented to ameliorate the issue of regional disparities. A familiar form of the policies in action was the Area Redevelopment Administration (ARA) which was established in 1961.¹²⁶ As a branch of the Department of Commerce, the ARA was empowered to fund small businesses and infrastructure development. The Public Works Acceleration Act of 1962 was an enabler for the supply of more money to the ARA to further the programs, since the financial support from the ARA had been criticized as lacking an appropriate strategy, which caused a significant waste of federal funds. In 1965, a more comprehensive regional program was enacted. The ARA was replaced by the Economic Development Administration (EDA) to help the backward regions by the Public Works and Economic Development Act. Meanwhile, another typical regional developmental program was presented, called the Appalachian Regional

¹²⁵ Carter, C. F., & Roy, A. D. (1954). British economic statistics. Cambridge University Press, p14.

¹²⁶ Hall, P., & Tewdwr-Jones, M. (2010). Urban and regional planning. Routledge, p193.

Development Act of 1965. The Appalachian Regional Commission was established to help this failing region. Infrastructure developments - particularly by highway construction - were the main method to improving the accessibility of the region to and from other richer regions. Also, the total package of the program also included plans to increase the common welfare provision, by such as education, medical care and housing.

Not only the UK and USA, but most of the developed countries have attempted several methods to reduce their regional disparities over the period. For example, to handle the country's regional inequalities, the Japanese government formulated the "Comprehensive National Development Plan (全国 総合開発計画)" in 1962 based on the Multiple Purpose Land Development Law 1950 (国土総合開発法). Many specific policies were established to limit regional disparities, such as by land reform, subsidies for agriculture, funds for local public works of developing areas and the building of roads, which have increased the accessibility of rural and undeveloped regions. ¹²⁷ The "Comprehensive National Development Plan" was renewed in 1969 and some specific industrial distribution policies were established to balance the country's economic structure.¹²⁸ The French also enacted ambitious regional development plans after the Second World War. A new central bureaucracy, the General Planning Commission (*Commissariat g én éral au plan*) was empowered to be responsible to tackle the issues of regional unbalanced development in 1955. In parallel, the implementation of regional and national planning began to be integrated. France was divided into twenty-one economic planning regions in 1955. The economic regions helped formulate the regional developmental plan, together with the central planning agency, called the Inter-ministerial Delegation for Territorial Planning and Regional Attractiveness (DATAR) ¹²⁹which was directly responsible to the Prime Minister.¹³⁰ The administrative structure can be seen in the following Figure 2-1.

¹²⁷ Mutlu, S. (1991). Regional disparities, industry and government policy in Japan. *Development and Change*, 22(3), 547-586.

¹²⁸ Fujita, M., & Tabuchi, T. (1997). Regional growth in postwar Japan. *Regional Science and Urban Economics*, 27(6), 643-670.

¹²⁹ Note: The French name is "D & égation Interminist érielle à l'Am énagement du Territoire et à l'Attractivit é Régionale".

¹³⁰ Hansen, N., Higgins, B., & Savoie, D. J. (1990). Regional policy in a changing world. Springer.

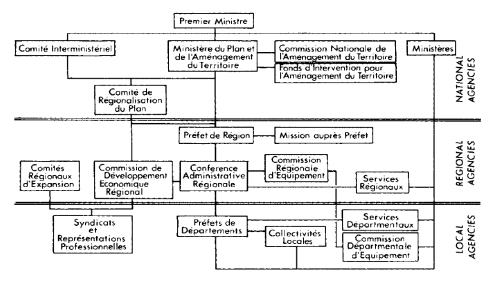


Figure 2-1 The administrative structure of the French regional planning Resource: Hall, P., & Tewdwr-Jones, M. (2010). *Urban and regional planning*. Routledge, p154.

Even though they were confronting different regional issues and had different political systems, most of the developed countries regarded the tackling of regional equalities as one of the most important regional development strategies, through applying regional subsidies, improvement for regional employment, and infrastructure construction being the main policy instruments. In the regional intervention process, central government played the key role. The UK's Board of Trade, the Area Redevelopment Administration of the U.S., and the Inter-ministerial Delegation for Territorial Planning and Regional Attractiveness of France were each controlled by central or federal development. Local governments and autonomous organizations were empowered in a relatively more passive position. However, because of the asymmetry of information, the central or federal government could not entirely determine all the needs of the local government. The effects of the centralized regional policies were limited to reducing regional disparities, as otherwise, the centralized provision of public goods could create a conflict of interest between different jurisdictions.¹³¹ Objectively speaking, though the policy's

¹³¹ Besley, T., & Coate, S. (2003). Centralized versus decentralized provision of local public goods: a political economy approach. *Journal of Public Economics*, 87(12), 2611-2637.

efficiency during this period was not high, ambitious regional programs and large scale infrastructure construction did reshape the spatial patterns in most of the developed countries, which laid the foundation for regional balanced development in the future.

2.1.2 The stage of reducing regional unemployment, based on focused interventions of the central government

From the late 1960s to the early 1980s, because of the effects of the economic crisis caused by high oil prices and industrial restructuring, many old industries lost their competitiveness in OECD countries including those pertaining to coal mining, the textile industry, etc. This is because most of the old industries belonged to an era of Fordist systems which resulted in a specific industry being gathered in a particular area. The decline of one industry then caused a localised gathering of unemployment, which then led to a series of social and political issues. Meanwhile, most OECD countries were facing financial pressures, because of economic slowdown and an increasing need for social welfare. The former comprehensive regional intervention policies became heavy burdens, as they pursued many ambitious targets, and included a number of expensive and inefficient programs. The target of regional policy refocused quickly on the then urgent challenge, and so employment creation became the key point for regional policies. The traditional ambitious targets of regional redistribution were replaced by fewer specific aims, such as strengthening regional competitiveness, creating enhanced investing environments, and improving the quality of human capital. All the targets were aimed to attract outside and inside investors to participate in regional development, to create employment and to improve regional competitiveness. The limited resources from the central government were used to subside local public sectors, and also to assist companies, labor and other micro-economic entities. The regional intervention strategy changed from "blood transfusion" to "hematopoiesis".

A typical example of a country's approach during this period was the UK. During the 1970s, the policies for regional industry controls were loosened and the regional development funds were reduced sharply due to the background of economic stagnation, fiscal imbalances and a new incoming conservative form of government. Acceding to the Office for National Statistics of the UK, the expenditures of regional policies reduced from 0.5% of national income during the 1970s, to 0.25% during the 1980s.¹³² The primary regional developmental goal was changed from being a broad "Regional Balanced Development" to a specific "Regional Equal Employment Opportunity". ¹³³ The policy tools were transferred from being regional comprehensive subsides to enterprise grants. For example, the government accepted the "Regional Employment Premium (REP)" to encourage investment in the backward regions in 1976. According to the REP, the manufacturing industry was not required to pay any tax in the backward areas and could receive subsidies from the government, according to the number of employees, about £100 per annum per worker.¹³⁴ The REP became a powerful tool used to attract industry and investment to the backward regions. Moreover, the policy could reduce the government's administrative costs and enhance the efficiency of the regional policy. In 1970, the incoming Conservative government attempted to cut the investment grant of REP further in order to save on financial expenditure; however, the conservative policy did not last long, because of the sharp increase of regional unemployment.

During this period, the U.S. also suffered from the challenges of regional unemployment; regional policy still continued to be implemented according to the principles of the Area Redevelopment Act (ARA) of 1961. The main tasks included the following:¹³⁵ providing communities with technical assistance grants, planning for industrial expansion, extending loans when sufficient private credits were unavailable, attracting new industries by providing loans and grants for the modernization of public facilities, *etc.* The regional policy aimed at creating larger employment was cut a lot by the Nixon administration in 1973, due to the lack of efficiency, diversity and the targeted regions. Though the regional policy appeared to be bankrupt, other new challenges allowed the above employment assistance program to have its life extended. During this time, the migration of African Americans from the southern to northern cities, and the movement of white middle

¹³² Taylor, J., & Wren, C. (1997). UK regional policy: an evaluation. *Regional Studies*, 31(9), 835-848.

¹³³ Taylor, J. (2002). The evaluation of UK regional policy: how much progress has been made? *Regional Policies and Comparative Advantage*, 173-207.

¹³⁴ Hall, P., & Tewdwr-Jones, M. (2010). Urban and regional planning. Routledge, p153-155.

¹³⁵ Dillon, C. H. (1963). Area Redevelopment Act—What Has It Accomplished? *Challenge*, 21-24.

class from the city to its suburbs led to a series of problems; particularly the decline of the city centres. The poor gathered in city centres, which did not provide sufficient job opportunities, education or medical care. These poor social conditions further induced an increase in violent crime, drug abuse, and illegitimate births. Because of the relocation of the middle class and businesses, city governments did not have adequate financial income to effectively manage the emerging issues. To deal with the urban/suburban problems, the federal government saw that it had no choice, but to strengthen direct financial assistance to the cities. According to some estimates, direct federal aid rose from 1% to about 47.5% of income for the administration of several large cities.¹³⁶ Further, in order to address the problem of urban decline and unemployment, some older policies were re-adopted,

The first was public–private partnerships, in which cities allied with private developers with major injections of federal and state money in the form of grants for public works, subsidies linked to private leverage, and tax exemptions including the designation of enterprise zones, as well as new institutional forms such as development corporations to regenerate a major part of their decayed inner-city area, often an old port area or an abandoned railroad freight yard, via a major construction-plus-rehabilitation project.¹³⁷

In general, regional policies during this period also continued to apply previous regional strategies. There were a few minor changes: regional development objectives were more focused on the problem of unemployment; the central or federal government still played a leading role, but the roles of the local government, enterprises and other macro-organizations had more attention paid to them; regional development and coordination agencies maintained with the previous settings, while a few functions were adjusted to adapt to the new regional plans.

2.1.3 The stage of promoting regional competitiveness based on regional governance

¹³⁶ Hall, P., & Tewdwr-Jones, M. (2010). Urban and regional planning. Routledge, p200.

¹³⁷ Hall, P., & Tewdwr-Jones, M. (2010). Urban and regional planning. Routledge, p200.

The regional development model at this stage was different from those of previous periods. There had previously been deeply held doubts about the role of the market; the policy makers and scholars thought that regional disparities could not be corrected by using market mechanisms. Furthermore, the polarization effects of the free market were stronger than the diffusion effects. It was considered that, if the government did not lead the control of flow of production-related factors, then regional inequalities would unceasingly expand.¹³⁸ Based on this above judgment, the mainstream flow of regional policies in OECD countries consisted in public investment and financial aid by the central or federal government, which was targeted to distribute and redistribute resources to backward regions up until the 1980s. However, the degree of regional disparities did reflect clear trends of a narrowing of the gaps in most OECD countries during this period.¹³⁹ The reasons for regional policy failures are: firstly, the ambitious regional programs did not have sufficient and sustained financial and other support mechanisms, because of economic slowdown and financial austerity; secondly, the top-down regional intervention model was not able to cope with the variety of complex regional issues; thirdly, the goals of regional policy were too wide in relation to the centralized resources.

From the late 1970s, Conservatism began to sweep the western world; reducing government intervention and returning to the market economy which became the panacea intended to cure all forms of government failure, including regional policies. During this period, many governments began to cut the programs and budgets related to regional issues. In the UK, the population affected by regional policies reduced from 43% to 25%. In the U.S., regional policies were redesigned mainly to manage the suburb/urban issues. However, regional inequality was not relieved by these neoliberal policies. In most OECD countries, regional inequalities displayed a widening trend. In the plight caused by the double failure of government and market, some countries and scholars began to explore new models to pragmatically deal with complex regional issues.

Regional development goals were altered from focussing in on regional income or

¹³⁸ Martin, R., & Sunley, P. (1998). Slow Convergence? The New Endogenous Growth Theory and Regional Development. *Economic Geography*, 74(3), 201.

¹³⁹ Author, S. (Ed.). (2009). *Regions matter: Economic recovery, innovation and sustainable growth*. OECD Publishing.

employment equality to those related to enhancing regional competitiveness. ¹⁴⁰The related policies not only covered the backward regions, but also the rich regions where their regional competitiveness also had to be refreshed in the era of globalization. Regional development standards changed from one-size-fit-all to being flexible, responding to local conditions. The most important change was due to the failure of the top-down government intervention model, which was then replaced by the regional endogenous growth and regional innovation model with the core strategy of effecting a gradual decentralization.¹⁴¹ Regional governance, based on decentralization, became a widely accepted idea, not only by western developed countries, but also in many developing countries, such as India, Brazil and China.¹⁴² New Regionalism and Multilevel Governance were considered as two successful regional governance models.

Though the nature and sources of the models of regional governance vary significantly between societies and nations, they each share the common belief that the regional scale is the ideal space for the formulation and implementation of economic policies. The regions more easily can recognize their advantages and disadvantages, can better sense the changing industry trends both domestically and internationally with greater sensitivity, and can maintain relatively stable coalitions across class and by a locally-based alliance of social and political actors.¹⁴³ Further, the coalition and cooperation of different members - such as of the central government, local governments, enterprises, NGOs and citizens - can enhance the suitability and efficiency of regional policies, and also ensure its legitimacy.¹⁴⁴

Characteristics	Traditional top-down	New model bottom-up
Organization	National	Regional
	Government department	Semi-autonomous body
		(agency, partnership)

Table 2-1 Traditional top-down and new model bottom-up policies and institutions

¹⁴⁰ Boudreau, J. A. (2003). The politics of territorialization: regionalism, localism and other isms... The case of Montreal. *Journal of Urban Affairs*, 25(2), 179-199.

¹⁴¹ Jessop, B. (1997). Capitalism and its future: remarks on regulation, government and governance. *Review of International Political Economy*, 4(3), 561-581.

¹⁴² Keating, M. (1998). *The new regionalism in Western Europe: Territorial restructuring and political change*. Cheltenham,, UK: E. Elgar.

¹⁴³ Scharpf, F. W. (1991). Crisis and choice in European social democracy. Cornell University Press, p120.

¹⁴⁴ Griffith, J. C. (2005). Regional Governance Reconsidered. JL & Pol., 21, 505.

	-				
	Bureaucracy	Business-led			
	Generalist qualifications	Specific expertise			
	Administrative hierarchy	Task-led projects and teams			
	and infrastructure				
Political control	Directly through	Indirectly through sponsor			
	government department and	government departments and weak			
	ministerial	accountability structures			
	responsibility				
Operational freedom	Limited	Arm's length earned autonomy and			
		target-based flexibility			
Economic objectives	Inter-regional equality	Inter-regional competitiveness and			
		raising economic performance			
	Growth of national economy	Growth of regional economy			
	Redistributed growth	Indigenous/imported growth			
Mode of operation	Non-selective	Selective			
	Automatic/discretionary	Discretionary			
	Reactive	Proactive			
Policy instruments	Bureaucratic regulation	Financial inducements			
	Financial inducements	Advisory services			
	Advisory services	Public provision			
	Public provision				

Source: Pike, A., Pose, A. & Tomaney, J. (2006). Local and regional development. Routledge, p134.

During this period, the central government was no longer the only and leading policy maker, but RDAs (regional development agency) assumed an important role in regional development. For example, in Bologna, Italy, ERVET¹⁴⁵, which was established by the regional government of Emilia Romagna in 1973, is thought of as the key factor behind the rapid economic growth of this area.¹⁴⁶ The secret of ERVET's success belonged to the social networks which linked the unions, the cooperative movement, artisan associations and employers, in order to coordinate and encourage them toward a common goal.¹⁴⁷ The relationship between regional government and ERVET is both close and different. The macro decision-making responsibility was assumed by the regional government, and the micro policy-implementation responsibility was assumed by ERVET, which constituted experts and representatives from all walks of life. In this model, the advantages of the

¹⁴⁵ Note: In Italian language, *Ente Regionale per la Valorizzazione Economica de Territorio*.

¹⁴⁶ Pike, A., Pose, A. R., & Tomaney, J. (2006). Local and regional development. Routledge, p134-137.

¹⁴⁷ Cooke, P. (1996). Building a twenty - first century regional economy in Emilia - Romagna. *European Planning Studies*, 4(1), 53-62.

different bodies were given full play.

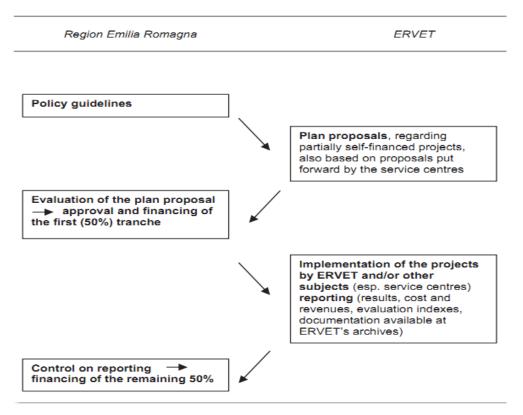


Figure 2-2 The relationship between the regional government and ERVET Source: Pike, A., Pose, A. R., & Tomaney, J. (2006). *Local and regional development*. Routledge, p138.

RDAs have also been established in many other countries, such as in the North-East of England, the Ontario Province of Canada, Silicon Valley in the U.S., *etc.* Moreover, the effective coverage of RDAs has begun to go beyond national boundaries. An example is the establishment of the cross-border Oresund region, which combines the regions of Sk åne of Sweden, and Zealand of Denmark linked by the Oresund Bridge. In addition to the spatial connection, a new Oresund Committee was established to manage the economic and social affairs of this cross-national region. According to the review by OECD, "The committee is composed of local and regional political bodies from both sides of the sound and – which is quite exceptional for transnational regionalism – by the two national ministries . . . The process of integration in Øresund is therefore achieved not through the setting up of an additional government layer but through the voluntary coordination of the policies

of its members."¹⁴⁸ Though the governments still play an important role in this region, the complex and sophisticated regional social networks, including universities, research institutions and industrial organization have become the main driving force of the regional innovation systems (RIS) of this region.¹⁴⁹

There is yet no consensuses about the effects of regional governance with respect to the character of decentralization. Some scholars argue that regional governance is basically the continuation of neo-liberal policies, which attempt to evade the responsibilities of the regional redistribution of government.¹⁵⁰ However, generally speaking, there are success stories across the world, which instill confidence in the scholars and policy makers regarding regional governance as being within the core of decentralization.

2.2 Decentralization and Regional Inequality : Literature review

The relationship between decentralization and inequality is a relatively new topic of discussion in recent years. Theoretically, the discussions of decentralization and regional disparities originated from fiscal federalism. The representatives of federalism, Wallace E. Oates¹⁵¹ and Charles Tiebout¹⁵² argue that contrary to the central government, local governments can obtain more information about the diverse local public needs and enhance the efficiency of the supply of public goods; citizens can self-supervise and motivate behaviors, and decision-making is more conveniently located with local officials than with centrally-located officials. The accountability and responsiveness of the local government's behavior can be enhanced in a decentralized system; citizens can vote with their feet and select different public services in different regions, which can maximize the allocation of public goods and social welfare. In short, the aim is for regional disparities to be

¹⁴⁸ OECD (2003), OECD Territorial Reviews: Oresund, Denmark/Sweden 2003, OECD Publishing, p160.

¹⁴⁹ Hansen, T. (2013). Bridging regional innovation: cross-border collaboration in the Øresund Region. *Geografisk Tidsskrift-Danish Journal of Geography*, 113(1), 25-38.

¹⁵⁰ Lovering, J. (1999). Theory led by policy: the inadequacies of the 'new regionalism' (illustrated from the case of Wales). *International Journal of Urban and Regional Research*, 23(2), 379-395.

¹⁵¹ Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37(3), 1120-1149.

¹⁵² Tiebout, C. M. (1956). A pure theory of local expenditures. *The Journal of Political Economy*, 64(5), 416-424.

erased through decentralized systems, by market mechanisms and local competitions. However, some scholars argue that the fiscal federalism theory is too idealistic. In practice, there is a foundation of demanding assumptions, such as adequate market information, fully rational citizens, free migration, and regional public goods without spillovers which are difficult either to achieve or to sustain.¹⁵³

Moreover, some scholars argue that a decentralized system may drive the inequality between regions. In a decentralized country, rich regions can provide high quality public services with a lower tax rate, because of larger tax bases. In this context, rich regions will attract more investment and other resources into the future, which allow these regions to continue to become more affluent, while the central government lacks sufficient redistributive powers in order to coordinate the lessening of inequalities between regions.¹⁵⁴ On the contrary, the centralized system may possess more inspiration and better resources to manage and control the difficulties caused by regional disparities. However, other scholars, such as Qian and Weingast¹⁵⁵ argue that the territorial competition in the decentralized system would stimulate less developed regions to offer more favorable conditions to attract more investment and other resources, such as lower tax rates, less welfare burdens, land use facilities, *etc.* The pressure of competition then will encourage the poor regions to catch up with rich ones, without the need for mandated coordinating programs.

Apart from these theoretical disputes, some case studies were investigated and reported on the relationship between decentralization and regional inequality. In a case in the U.S., Akai and Sakata showed that decentralization could be advantageous for economic growth and regional equality.¹⁵⁶ In another case regarding China, Fan, anbur and Zhang proposed that the fiscal decentralized process, together with reform and opening up, may be one of the important reasons of the enlarged regional disparities.¹⁵⁷ In a case on Italy, Calamai identified a clear link between the process

¹⁵³ Prud'Homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, 10(2), 201-220.

¹⁵⁴ Sewell, D. O. (1996). "The Dangers of Decentralization" According to Prud'homme: Some Further Aspects. *The World Bank Research Observer*, 143-150.

¹⁵⁵ Qian, Y., & Weingast, B. R. (1997). Federalism as a commitment to preserving market incentives. *The Journal of Economic Perspectives*, *11*(4), 83-92.

¹⁵⁶ Akai, N., & Sakata, M. (2002). Fiscal decentralization contributes to economic growth: evidence from state-level cross-section data for the United States. *Journal of Urban Economics*, *52*(1), 93-108.

¹⁵⁷ Fan, S., Kanbur, R., & Zhang, X. (2011). China's regional disparities: Experience and policy. *Review of Development Finance*, *1*(1), 47-56.

of devolution and the reduction of spatial inequalities.¹⁵⁸ Finally, regarding a case of the EU, the centralized trend was seen to have fostered the catching-up of lagging countries and the reduction of the overall disparities.¹⁵⁹ There are several other case studies, which can be divided into two groups: the first concluded that decentralization would enlarge regional disparities (such as Bonet for Colombia,¹⁶⁰ Chakravorty for India,¹⁶¹ Hill for Indonesia and the Philippines¹⁶²), the second group argued that decentralization is related to the decrease of regional disparities (such as Costa-Font for Spain,¹⁶³ and Albrechts for Belgium.¹⁶⁴) Taken as a whole, these case studies depict a confusing picture about the relationship between decentralization and regional disparities.

By overcoming the defects and limitations of using single case studies, other researchers have attempted to develop a comparative research model by applying cross-country data sets. By utilizing data collected from 14 developing and developed countries, Shankar and Shah¹⁶⁵ propose that decentralized countries have performed better in restraining regional disparities, because of the greater political risk that these disparities have posed for such countries. One of the defects of this research was that decentralization, which was measured by the dummy variable of federalism, was too simplistic to effectively evaluate the actual conditions of decentralization. Moreover, the number of samples in the study was also too small to reach a clear conclusion. Canaleta, Arzoz and Garate¹⁶⁶, by using a sample of 17 OECD countries, state that they had found a positive influence from decentralization; particularly that of fiscal decentralization on regional convergence. The concept of

¹⁵⁸ Calamai, L. (2009). The link between devolution and regional disparities: evidence from the Italian regions. *Environment and Planning*. *A*, *41*(5), 1129.

¹⁵⁹ Geppert, K., & Stephan, A. (2008). Regional disparities in the European Union: Convergence and agglomeration. *Papers in Regional Science*, 87(2), 193-217.

¹⁶⁰ Bonet, J. (2006). Fiscal decentralization and regional income disparities: evidence from the Colombian experience. *The Annals of Regional Science*, *40*(3), 661-676.

¹⁶¹ Chakravorty, S. (2000). How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India. *Economic Geography*, 76(4), 367-394.

¹⁶² Hill, H. (2008). Globalization, Inequality, and Local - level Dynamics: Indonesia and the Philippines. *Asian Economic Policy Review*, *3*(1), 42-61.

¹⁶³ Costa-Font, J. (2010). Does devolution lead to regional inequalities in welfare activity? *Environment and Planning. C, Government & Policy*, 28(3), 435.

¹⁶⁴ Albrechts, L. (2001). Devolution, regional governance and planning systems in Belgium. *International Planning Studies*, 6(2), 167-182.

¹⁶⁵ Shankar, R., & Shah, A. (2003). Bridging the economic divide within countries: A scorecard on the performance of regional policies in reducing regional income disparities. *World Development*, *31*(8), 1421-1441.

¹⁶⁶ Canaleta, C. G., Arzoz, P. P., & Garate, M. R. (2004). Regional economic disparities and decentralisation. *Urban Studies*, *41*(1), 71-94.

decentralization in this study was divided into a political dimension and a fiscal dimension, which then were evaluated by various indicators. However, the correlations between the different indicators were not then tested and the use of control variables also were not considered in the study. In a series of cross-country analyses performed by Rodr guez and Ezcurra¹⁶⁷ the panel data from 26 developing and developed countries were used to overcome the shortcoming of the sectoral study, which could not be analyzed through the lack of sufficient control variables. However, the measurement of fiscal decentralization was simplistic, reached only by applying subnational governmental expenditure as a percentage of the overall governmental expenditure. A recent study, by Lessmann¹⁶⁸, utilized cross-section and panel data for 23 OECD countries from 1982 to 2000 and concluded that decentralization can decrease the degree of regional disparities. The study overcomes drawbacks of previous studies; however, it was flawed in that the different effects of decentralization on developing and developed countries had not been considered in the study.

2.3 Measurement of Decentralization and Regional Inequality

Based on the experience of and defects in previous studies regarding this topic, this study endeavored to revisit the linkage between decentralization and regional disparities, based on the panel data collected from a sample of 26 OECD countries.¹⁶⁹ Attentions was also paid to a careful examination of the different effects of decentralization on relatively rich and poor countries.¹⁷⁰

¹⁶⁹ Notes: The data of GDP per capita, revenue, expenditure are all collected form the OECD Statistics,

¹⁶⁷ Ezcurra, R., Gil, C., & Pascual, P. (2005). Regional welfare disparities: the case of the European Union. *Applied Economics*, *37*(12), 1423-1437. Ezcurra, R., & Pascual, P. (2008). Fiscal decentralization and regional disparities: evidence from several European Union countries. *Environment and Planning A*, *40*(5), 1185. Rodr guez-Pose, A., & Ezcurra, R. (2009). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*, lbp049.

¹⁶⁸ Lessmann, C. (2009). Fiscal decentralization and regional disparity: evidence from cross-section and panel data. *Environment and Planning A*, *41*, 2455-2473.

http://stats.oecd.org/. It should be noted that the reliability of OECD is widely recognized by academia. This is one of the reason that this research take OECD countries as the studying object. In addition, most of the data are mutual confirmed with the data form IMF Government Finance Statistics Yearbook.

¹⁷⁰ Rodr guez-Pose, A., & Ezcurra, R. (2009). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*, lbp049.

2.3.1 Measurement of Regional Disparities

As mentioned above (in the discussion of the introductory section) there are several different definitions of regional disparities, and also several indexes used to evaluate regional disparities. In this section, the GDP per capita was used to define regional disparities, as is common in the literature. The Gini coefficient, Theil index, the Atkinson family of indices and Coefficient of Variation were all employed to estimate the level of regional disparities. That is because each of them has both distinct advantages and disadvantages.

Table 2-2 Different measurement of regional mequanties of OECD countries. 1990-2000														
Countries	GINI	R	CV	R	GE1	R	GE2	R	A0.5	R	A1	R	A2	R
Austria	0.12	11	0.23	12	0.03	12	0.03	12	0.01	12	0.02	13	0.05	13
Australia	0.04	25	0.07	25	0.00	25	0.00	25	0.00	25	0.00	25	0.00	25
Belgium	0.17	7	0.37	6	0.06	6	0.07	6	0.03	6	0.05	7	0.09	8
Canada	0.08	20	0.14	21	0.01	21	0.01	21	0.01	21	0.01	20	0.02	20
Chile	0.19	4	0.37	5	0.06	5	0.07	5	0.03	5	0.06	5	0.12	4
Czech Republic	0.11	14	0.31	8	0.04	9	0.05	8	0.02	9	0.03	9	0.06	9
Denmark	0.09	19	0.17	19	0.01	19	0.01	19	0.01	19	0.01	19	0.03	19
Finland	0.09	17	0.18	18	0.02	18	0.02	18	0.01	18	0.02	18	0.03	17
France	0.12	10	0.26	10	0.03	10	0.03	10	0.01	10	0.03	10	0.05	10
Germany	0.10	15	0.20	17	0.02	16	0.02	17	0.01	16	0.02	16	0.04	15
Greece	0.07	24	0.14	22	0.01	22	0.01	22	0.00	22	0.01	22	0.02	22
Hungary	0.18	6	0.34	7	0.05	7	0.06	7	0.03	7	0.05	6	0.10	6
Ireland	0.22	3	0.42	4	0.08	3	0.09	4	0.04	3	0.07	3	0.13	3
Italy	0.16	8	0.28	9	0.04	8	0.04	9	0.02	8	0.04	8	0.09	7
Japan	0.08	21	0.13	23	0.01	23	0.01	23	0.00	23	0.01	23	0.02	23
Korea	0.03	26	0.06	26	0.00	26	0.00	26	0.00	26	0.00	26	0.00	26
Mexico	0.29	2	0.57	2	0.14	2	0.17	2	0.07	2	0.12	2	0.21	2
Netherlands	0.07	23	0.13	24	0.01	24	0.01	24	0.00	24	0.01	24	0.02	24
Poland	0.12	13	0.22	15	0.02	15	0.02	15	0.01	15	0.02	14	0.04	14
Portugal	0.12	12	0.25	11	0.03	11	0.03	11	0.01	11	0.03	11	0.05	12
Slovakia	0.18	5	0.43	3	0.07	4	0.09	3	0.03	4	0.06	4	0.11	5
Slovenia	0.46	1	0.98	1	0.42	1	0.48	1	0.21	1	0.44	1	0.75	1
Spain	0.13	9	0.22	14	0.03	13	0.03	14	0.01	13	0.03	12	0.05	11
Sweden	0.09	18	0.20	16	0.02	17	0.02	16	0.01	17	0.02	17	0.03	18
UK	0.10	16	0.23	13	0.02	14	0.03	13	0.01	14	0.02	15	0.04	16
USA	0.07	22	0.16	20	0.01	20	0.01	20	0.01	20	0.01	21	0.02	21

Table 2-2 Different measurement of regional inequalities of OECD countries: 1996-2000

Note: R means Rank. Source: Calculated by author.

Table 2-2 displays the different indices of inequality for the GDP per capita of 26 OECD countries, and a five year average was used to compensate for the influence of the economic cycle. Because of the different characteristics of the indices, the rank of a specific country may vary, such as Chile, Austria, Slovakia and the UK. Overall, the countries that display the largest regional inequality are Slovenia, Mexico, Ireland, and Chile. The countries that show the least regional inequality are South Korea, Australia, the Netherlands, Japan and the U.S.A. Given the above description, it was concluded that the regional inequality in relatively developing countries is more severe than that in relatively developed countries.

Further, the researcher should be careful about what precisely is to be measured in a research study. Specifically for this study, there were two different concepts of regional inequality under research.¹⁷¹ The first concept of regional inequality measured inequalities in the mean GDP between regions. Each region was treated equally and no weighting was involved. The formula for obtaining the mean GDP was for the regional GDP to be divided by the population of the region. Concept 1 was the most intuitional index of the regional developmental condition. Based on this concept, some coefficients were invented to calculate regional inequality, such as the coefficient of variation (CV). Where this is the country's average GDPpc, y_i is the GDPpc of region *i*, and *n* is the number of sub-national units.

$$CV = \frac{1}{\bar{y}} \sqrt{\frac{1}{n} \sum_{i=1}^{n} (\bar{y} - y_i)^2}$$
(2.1)

$$CVp = \frac{1}{\bar{y}} \sqrt{\sum_{i=1}^{n} p_i (\bar{y} - y_i)^2}$$
(2.2)

The second conception of regional inequality was also based on the regional mean GPD, weighted by the region's population. So, in Concept 1, all regions were given the same importance, but in Concept 2, regions with a higher population were given greater importance. Concept 2 may reflect the feeling of inequality within a nation better than Concept 1. The population-weighted inequality was useful in exploring

¹⁷¹ Milanovic, B. (2005). Half a world: Regional inequality in five great federations. *Journal of the Asia Pacific Economy*, *10*(4), 408-445.

the relationship between regional inequality and population or the population growth rate. One coefficient based on Concept 2 was the population-weighted coefficient of variation, or CVp. By comparing formula (2.1) and formula (2.2), the difference between the two concepts was evident: in Concept 1, all the regions were equally treated as 1/n, regardless of the size of the population; in Concept 2, p_i was the share of the country's total population in region *i*.

Countries	CVp	Rank	CV	Rank	Countries	CVp	Rank	CV	Rank
Australia	0.0778	25	0.1411	24	Italy	0.2754	9	0.2664	11
Austria	0.2131	14	0.2053	16	Japan	0.1315	24	0.1150	25
Belgium	0.3590	6	0.3709	6	Korea	0.0555	26	0.0933	26
Canada	0.1663	20	0.2512	12	Mexico	0.6213	1	0.7825	1
Chile	0.3575	7	0.4871	3	Netherlands	0.1345	23	0.1655	21
Czech	0 2720	~	0.2920	5		0.0472	10	0.0170	15
Republic	0.3739	5	0.3829	5	Poland	0.2473	13	0.2172	15
Denmark	0.1674	18	0.1626	22	Portugal	0.2529	11	0.1970	17
Finland	0.1670	19	0.2190	14	Slovakia	0.4713	3	0.4729	4
France	0.2704	10	0.1763	19	Slovenia	0.6102	2	0.5448	2
Germany	0.1926	17	0.2776	10	Spain	0.2120	15	0.1905	18
Greece	0.1437	22	0.1487	23	Sweden	0.1990	16	0.1712	20
Hungary	0.3932	4	0.3519	8	UK	0.2508	12	0.2353	13
Ireland	0.3320	8	0.3103	9	USA	0.1643	21	0.3525	7

 Table 2-3 Regional inequalities of 26 OECD countries measured by population weighted CV

 and CV: 1996-2009

Source: OECD statistic, calculated by author.

Table 2-3 illustrates that the condition of regional inequality of a specific country may be measured by CVp or CV. For example, the CVp of the U.S.A. was approximately 0.15, which ranked the country at 21st in relation to the other countries; however, the CV was approximately 0.352 which produced a relative rank of 7th. The phenomenon demonstrated that a larger number of the population lived in rich regions and the developmental gap between the rich and poor regions was relatively large. Another notable case was France, in which the value of CVp was much higher than the CV value. This revealed that the developmental levels between the regions were relative small, but also that fewer people resided in the affluent regions and most of the people lived in relatively poor regions.

Another important issue that should be noted is that of the correlations between various indices. From table 2-4, nearly all the indices were highly correlated (the coefficient of correlation was greater than 0.8) except for the CVp and GE0.1 values. Because of the high correlations, for the convenience of the research and comparable to most of the related researches, the CVp was utilized as the primary index to evaluate the degree of regional inequality. Other indices were evaluated for robustness.

	Tuble = 1 Correlations Section anterent inclusives of inclusives								
	GINI	CVp	GE0.1	GE0	GE1	GE2	A0.5	A1	A2
GINI	1.0000								
CVp	0.9759	1.0000							
GE0.1	0.9759	0.6879	1.0000						
GE0	0.9759	0.8448	0.9660	1.0000					
GE1	0.9759	0.9342	0.8915	0.9760	1.0000				
GE2	0.9759	0.9414	0.8396	0.9356	0.9832	1.0000			
A0.5	0.9759	0.9095	0.9202	0.9898	0.9964	0.9675	1.0000		
A1	0.9759	0.8836	0.9381	0.9955	0.9874	0.9488	0.9972	1.0000	
A2	0.9759	0.8585	0.9282	0.9846	0.9661	0.9154	0.9823	0.9922	1.0000

Table 2-4 Correlations between different measures of inequality

Source: OECD statistic, calculated by author.

2.3.2 Measurement of Decentralization

As stated at the outset (see introduction), decentralization is a highly complicated and controversial concept. As Aaron Schneider states,

The proliferation of meanings and measures erodes precision and impedes our ability to assess types of decentralization. The problem is worsened by the evaluative nature of the decentralization concept, which leads researchers to conflate decentralization with other concepts, especially those that are also imbued with positive value, such as democracy or market reforms. The result is that there is little agreement about what constitutes an example of decentralization, what causes decentralization, or what effects it is likely to have.¹⁷²

¹⁷² Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

To overcome the confusion between related research studies, some scholars argue that the conception of decentralization should be quantified. Because of the complexity of decentralization, Sharma suggests that, "... in fact, a true assessment of the degree of decentralization in a country can be made only if a comprehensive approach is adopted and rather than trying to simplify the syndrome of characteristics into the single dimension of autonomy, interrelationships of various dimensions of decentralization are taken into account."¹⁷³ Based on the indexes adopted by the majority of scholars, three dimensions of decentralization were evaluated: Fiscal decentralization, administrative decentralization and welfare decentralization (See table 1-1). Moreover, six indexes were utilized in order to quantify these three dimensions.

It should also be noted that the six indexes used for measuring decentralization may have had correlations which would cause the issue of multicollinearity and so distort the result of the regression, or enlarge the standard error. There are two techniques which can be used to manage the problem: increasing the sample size, or deleting one of the two collinear variables (where the coefficient of correlation>|0.8|). When limited by the data capture resources, it is difficult to increase the sample size; thus, the unnecessary variable should be located and deleted. From table 2-5, it can be seen that expenditure decentralization was highly correlated with revenue decentralization (coefficient of correlation=0.9922), which means that the subnational revenues and expenditures in all OECD countries were at a state of balance. One of the two should be excluded from the analyses, and in order to conform to other researches, it was decided that the expenditure decentralization index should be adopted. Furthermore, tax decentralization and transfer payment decentralization were highly correlated negatively (coefficient of correlation=-0.854). The result was consistent with the above hypothesis that tax decentralization can prompt the autonomy of a subnational government, and grant decentralization can strengthen the control of the central government. Based on the analysis above, four of the six variables were adopted for use in this research project: *expedec*, *taxdec*, empldec and welfdec.

¹⁷³ Sharma, C. K. (2006). Decentralization dilemma: measuring the degree and evaluating the outcomes. *The Indian Journal of Political Science*, 49-64.

	empldec	expedec	revedec	taxdec	trandec	welfdec
empldec	1.0000					
expedec	-0.1426	1.0000				
revedec	-0.1539	0.9922	1.0000			
taxdec	-0.2356	0.6364	0.6395	1.0000		
trandec	0.3117	-0.3286	-0.3249	-0.8584	1.0000	
welfdec	-0.1440	0.7503	0.7647	0.3675	-0.0338	1.0000

Table 2-5 Correlation of decentralization measures based on OECD countries

Source: OECD statistic, calculated by author.

2.3.3 Control Variables

In order to accurately determine the real effect of decentralization on regional inequality, it was decided that some related variables should be controlled in the regression model. In searching the literature, these were:¹⁷⁴ the control variables in the research include country wealth, which is measured by the GDP per capita; country size which is evaluated by population; the degree of openness which is estimated by trade as a percentage of the GDP and FDI; the development speed which is calculated by the grow rate of the GDP; urbanization which is tested by the urban population as a percentage of the total population; unemployment which is reflected by the unemployment rate; the agglomeration which is reflected by the population of the metropolitan areas (more than 1 million) as a percentage of the total population; the size of the GDP, and the degree of the welfare country which is reported by the expenses of health and education as a percentage of the GDP.

2.4 Regression Model

In order to make the result more convincing, both the sectorial regression and panel regression were paired to allow inspection of the links between decentralization and regional disparities.

¹⁷⁴ Note: The data of FDI and Urban population are collected from Word Bank. http://data.worldbank.org/.

2.4.1 Sectorial Regression

To examine whether the results of this research would be consistent with other scholars' research, such as Shankar and Shah,¹⁷⁵ and Lessman,¹⁷⁶ the correlation coefficient between regional fiscal decentralization (expedec) and inequality (CVp) was computed, which was -0.4881 and is statistically significant. This means that fiscal decentralization has a negative effect on regional inequality. However, the result may be distorted by the simple definition of decentralization and omission of certain control variables; therefore, the following model was adopted:

$$RI_i = \alpha + \beta DEC_i + \gamma C_i + \varepsilon_i \tag{2.3}$$

Where RI_i denotes the regional inequality in country *i*, *DEC* represents the condition of the different dimensions of decentralization, C_i contains the control variables and ε is the error term. Because of the limited sample, it was not possible to contain all the variables in the model; thus, some variables with a high correlation with regional disparity were selected as control variables, including *gdppc*, *population* and *trade*. In order to lower the effect of reverse causality, an average of 10 years (1996-2005) was taken; independent variables were employed. Furthermore, considering the lag effect of decentralization on regional disparity, the average disparity from 2006 to 2009 was adopted to create a lag structure.

L		1	
Variables	Coef.	Std. Err.	t-value
empldec	-0.018	0.178	-0.100
expedec	-0.311*	0.179	-1.740
taxdec	0.211*	0.116	1.820
welfdec	0.039	0.083	0.470
gdppc	-4.670E-06**	1.830E-06	-2.560
population	6.150E-10 ^{**}	2.830E-10	2.170
trade	0.004***	0.001	4.150
constant	0.197	0.093	2.120
Adjust R ²	0.6312	Observations	22
	•		

 Table 2-6 The impact of decentralization on regional inequality: cross-section regression

¹⁷⁵ Shankar, R., & Shah, A. (2003). Bridging the economic divide within countries: A scorecard on the performance of regional policies in reducing regional income disparities. *World Development*, *31*(8), 1421-1441.

¹⁷⁶ Lessmann, C. (2009). Fiscal decentralization and regional disparity: evidence from cross-section and panel data. *Environment and Planning A*, *41*, 2455-2473.

F(7, 14) 6.13 Prob > F 0.0020	
-----------------------------------	--

Notes: the dependent variable is the CVp, the population-weighted coefficient of the variation of the regional GDP per capita. *Significant at 10%; **significant at 5%; ***significant at 1%. Source: *OECD statistic*, calculated by author.

As presented in table 2-6, the expenditure decentralization had a negative effect on regional inequality and was significant at a 10% level; tax decentralization had a positive effect on regional inequality and was significant at a 10% level; the effect of employment decentralization and welfare decentralization were not significant. The results indicated that regional inequality was smaller in the country with a higher percentage of subnational expenditures; that regional inequality was larger in the country transferring more taxing power to the subnational government. Furthermore, the effects of each of the control variables were all significant; however, the effect was not large. The results demonstrated that big countries had a larger regional inequality; rich countries had smaller regional inequality; trade or openness may have increased the degree of regional inequality of a specific country. The findings of the research generally conform to that reported in other scholars' studies.

2.4.2 Panel Regression

Compared to cross-sector data, panel data not only provides a large number of observations which can include more variables in the regression model, but also allow researchers to inspect internal country effects and capture the unobserved time-invariant factors.¹⁷⁷ Therefore, in this section, the panel regression was used to test the preliminary results obtained from cross-sector regression. There are three basic stationary panel regression models: pooled regression, which treat the case *i* measuring in different times as a new case and neglects the specific relationships of the same cases; fix-effect model, which treats the individual effects as fixed factors; and, the random-effect model, which treats the individual effects as random factors. Many methods have been devised to help the researcher make a selection between the fixed effect and random effect model, and the most commonly used method is the Hausman test. For this research project, the Hausman test supported the fix-effect model, which related research studies. Therefore, the pooled

¹⁷⁷ Xie, Y., & Hannum, E. (1996). Regional variation in earnings inequality in reform-era urban China. *American Journal of Sociology*, 950-992.

regression model and fix-effect model were adopted for the research in order to inspect the relationship between decentralization and regional inequality.¹⁷⁸

In this section, the panel data of 26 OECD countries from 1996-2009 were used. Following the approach of Rodr guez-Pose and Ezcurr,¹⁷⁹ the different effects of decentralization on regional inequality between rich and poor countries were to be tested. Due to the limited sample size and also the average high economic level of OECD countries, the standard used by the World Bank to divide rich and poor countries were not appropriate for this research. Therefore, the countries' average GDP per capita for 14 years was divided by 20 000 dollars (the value of 2005). Countries above the standard were treated as 'rich', and *vice versa*. Specifically, the relatively poor countries included Chile, the Czech Republic, Greece, Hungary, South Korea, Mexico, Poland, Slovakia and Slovenia. Also, on consideration of the lag effect of decentralization on regional disparity, the one year lagged CVp was defined.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
ampldag	0.083	0.434***	0.184***	0.292***	0.648***	-0.093
empldec	(0.059)	(0.104)	(0.063)	(0.074)	(0.097)	(0.093)
expedec	-0.304***	-0.363**	0.055	-0.007	0.308**	0.069
expedec	(0.075)	(0.169)	(0.115)	(0.095)	(0.122)	(0.123)
taxdec	0.254***	0.506***	0.242***	-0.030	0.102*	-0.025
laxuee	(0.043)	(0.108)	(0.047)	(0.052)	(0.057)	(0.076)
weldec	-0.012	0.101	0.014	0.107***	0.179**	0.096**
weldee	(0.024)	(0.144)	(0.024)	(0.039)	(0.079)	(0.041)
adparow	-0.002	-0.002	-2.0E-04	0.001	-0.004***	0.003**
gdpgrow	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
adama	-4.3E-07	8.1E-07	8.8E-07	-4.9E-07	-1.1E-07	-1.0E-06***
gdppc	(4.8E-07)	(1.7E-06)	(5.7E-07)	(3.4E-07)	(1.1E-06)	(3.7E-07)
governovnon	0.002	0.001	0.010***	0.003**	0.003**	0.004**
governexpen	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.002)
noninmatro	0.000	-0.005***	0.004***	0.003	-0.033***	0.014**
popinmetro	(0.001)	(0.001)	(0.001)	(0.006)	(0.012)	(0.006)

Table 2-7 The impact of decentralization on regional inequality: panel regression

¹⁷⁸ Lessmann, C. (2012). Regional inequality and decentralization: an empirical analysis. *Environment and Planning A*, *44*, 1363-1388.

¹⁷⁹ Rodr guez-Pose, A., & Ezcurra, R. (2009). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*, lbp049.

population	4.3E- 10*** (1.4E-10)	-4.7E-09* (2.4E-09)	1.1E-09*** (2.0E-10)	-8.2E-10 (1.3E-09)	-5.4E- 08*** (7.4E-09)	9.1E-10 (1.4E-09)
aduarnan	-0.019***	0.048***	-0.014**	-0.001	0.006	-0.011
eduexpen	(0.006)	(0.018)	(0.005)	(0.008)	(0.009)	(0.010)
haalthavnan	-0.003	0.007	-0.029***	0.002	-0.009	0.003
healthexpen	(0.005)	(0.013)	(0.007)	(0.005)	(0.006)	(0.006)
trada	0.003***	-0.001	0.004***	0.001**	0.001***	-2.8E-05
trade	(3.4E-04)	(0.001)	(0.000)	(4.3E-04)	(4.5E-04)	(0.001)
unamplay	0.006***	-0.001	0.009***	-1.8E-04	-0.002	0.002
unemploy	(0.002)	(0.003)	(0.002)	(0.001)	(0.001)	(0.002)
urban	0.001	0.007***	-0.002***	0.003	0.007**	0.005**
urban	(0.001)	(0.002)	(0.001)	(0.002)	(0.004)	(0.002)
2026	0.083	-0.510**	-0.195**	-0.279	1.331***	-0.644***
cons	(0.066)	(0.200)	(0.089)	(0.214)	(0.374)	(0.235)
Adjusted R ²	0.546	0.911	0.597	0.2340	0.6379	0.0990
Obs/Group	228	67	161	228/13	67/9	161/20
Sample	all	poor	rich	all	poor	rich

Notes: *Significant at 10%; **significant at 5%; ***significant at 1%. Source: OECD statistic, calculated by author.

In table 2-7, column (1), (2) and (3) were the results of pooled regression, and column (4), (5) and (5) were the results of Fixed-effects (within) regression. The result of pooled regression of all countries was approximately the same, as the result of cross-sector regression (Table 2-6); expenditure decentralization had a negative effect and tax decentralization had a positive effect on regional inequality. Regarding rich and poor countries, employment and tax decentralization both had positive effects on regional inequality; however, the negative effect of expenditure decentralization on poor countries was not significant relative to the case of the rich ones. Welfare decentralization was not significant in the pooled regression. Some interesting outcomes can be seen in the controlled variables. Population gathering in the metropolitan may have decreased the regional inequality of poor countries, but may have increased it in the rich countries; these opposite directional affections also existed in education expenditure, population, and urbanization. Otherwise, the trade and unemployment rate may have fostered a regional inequality of rich countries, and health expenditure restrained it, while these variables did not display a significant effect in relatively poor countries.

The results of fixed-effects (within) regression presented a different picture. For

every countries, the affection of employment decentralization and welfare decentralization were positively significant, while the affection of expenditure and welfare decentralization, which were significant in pooled regression, were not significant. Also, fixed-effects (within) regression primarily were evident on the within-group variation in different times and neglected the between-group variation. Thus, the results reflected the diachronic effects during the 14 years. For relatively poor countries, all dimensions of decentralization had a positive effect on regional inequality. Government expenditure, trade and urbanization may also have contributed to regional inequality.

Contrariwise, the growth of GDP and population in the metropolitan areas may have helped correct regional disparity. For relatively rich countries, only welfare decentralization had a significant effect on regional inequality, whereas the effects of other dimensions were not significant. In contrast to relatively poor countries, a higher GDP growth rate and more population in the metropolitan areas may have led to the growth of regional inequality. Government expenditure and urbanization were also seen to be reasons for regional inequality.

As a next step to extract more information from the data, the researcher devised a quadratic equation, which could be used in order to determine whether there was an impact caused by decentralization upon regional development. According to the calculation, local government welfare spending accounted for 51.81% of the total local expenditure, which was an important indicator where regional disparities reached their maximum. Typical examples were Mexico (53.1%) and Belgium (52.8%). In OECD countries, when the expenses of government employment accounted for 35.55% total financial expenses, the degree of regional disparities may have reached the lowest values. The countries with relatively small regional inequalities had maintained the level of government expenses, such as in South Korea, Japan, the U.S., Greece and Canada. A ratio either too large or too small may have led to the exacerbation of regional disparities. Another indicator was that the local tax revenue accounted for 47.69% of the total revenue. At this point, the country's regional disparity may have reached a low level. Typical countries are Japan (46.2%) and Denmark (47.5%).

2.5 Results and Advice

Decentralization has become an important agenda for many developing and developed countries. Scholars and policy makers not only discuss the benefits of decentralization to economic development, social justice and democratization, but also the attempts to take advantage of decentralization to control the long lasting regional inequalities; particularly in OECD countries.¹⁸⁰ During an extended period, most OECD countries have adopted top-down regional intervention policies in order to correct regional disparities; however, the effects of these regional policies, when led by the central government were not ideal. In many countries, the degrees of regional disparities did not only decrease, but they have also enlarged sharply against the background of the economic slowdown and financial austerity. The laissez-faire policies guided by neo-liberalism also did not demonstrate the ability to cure uneven regional development.

Faced with the dilemma, many countries began to decentralize developmental power to local and regional governments. The measures have included dividing the taxing and expenditure responsibilities between the central and subnational government, transferring welfare responsibilities to the subnational government, establishing a regional government, electing local officials, constricting "soft" cooperation mechanisms between subnational governments, *etc*. Countries have endeavored to utilize these measures in order to exploit the potential of endogenous assets and local networks and to promote entrepreneurship, local innovation, and sustainable development, and finally to narrow the spatial developmental inequality.

However, an agreement between scholars and officials, regarding the actual effects of decentralization on regional disparity, has not been reached. Coming from a base of reports in the related literature, this research used panel data of OECD countries from 1996-2009 to test the relationships between decentralization and regional disparities. In addition, the study presents two further innovations: First, decentralization which was interpreted from multiple dimensions, including fiscal decentralization, administrative decentralization and welfare decentralization;

¹⁸⁰ Roura, J. R. C. (2011). Regional development policies in OECD Countries. *Investigaciones Regionales*, (19), 205-208.

second, the different effects of decentralization on relatively rich and poor countries were considered and presented. However, this research project does not reach the conclusion that there is evidence of a clear and uniform conclusion to be drawn on the link between decentralization and regional inequality. This is in concord with other related studies.

HOWEVER, Based on the policy analysis and regression model above, some preliminary conclusions can be drawn. First, for relatively backward countries, the decentralization of financial expenses and tax authority should be treated with caution, so as to prevent the unintended effect of a rapid expansion of regional disparities. Second, the concentration of welfare authority can be used in order to help reduce regional disparities. Third, since an overbearing proportion of the local government's employment expenses might enlarge regional disparities, if national transfer payment could not balance regional financial capacity completely, appropriate restrictions on the number of local civil servants might be seen as a suitable method to be used to coordinate regional development. Otherwise, and perhaps contrary to common sense, repaid economic development and a moderate concentration of population is conducive to alleviating regional disparities. Therefore, for relative backward countries and for developing countries, promoting economic development and urbanization is an important method to be used in order to achieve a balanced regional development.

Note also that the conclusions given above are based on the limited dataset from OECD countries; data which are not available for every country. However, given this, there remain useful inferences which can be drawn. First, even though decentralization is a worldwide trend, which is considered to contribute to a regional balanced development, this judgment - that decentralization leads to regional balanced development - has not been confirmed, whether through case studies or cross-national data analyses. Even in the case of developed and federal countries, policy makers have not given up the use of regional intervention measures by central government. Second, decentralization is a highly complex and controversial concept which includes many dimensions, such as political decentralization, fiscal decentralization, administrative decentralization, welfare decentralization, *etc*. Different aspects of decentralization have different effects on regional development.

Third, for relatively backward countries, the process of decentralization should proceed with caution. The case studies reported of Mexico, Chile, Peru, the Philippines and India all demonstrated that decentralization may not only be unable to reduce regional disparities, but may also lead to several other problems, such as regional conflicts, social unrest, *etc*.¹⁸¹ In summary, the distribution of power between the central and local government is a long running and continual process for every country with its different conditions and targets. There remains no universal or perfect model. Suspicions relating to centralization and decentralization are not conducive to the coordinated development of the regions; therefore, the policy makers should conduct the decentralization process through trial and, inevitably, error.

Specific considering China, regional disparity is a major challenge for policy makers. After 1949, China experienced several rounds of powers redistribution between the central and local governments, yet regional disparities have not been limited during this period. Since 1994, the central government began again to centralize the power and to attempt to implement a regional redistribution program, such as the grand western development program. Up until 2010, though the regional growing gap remained under control, regional disparities still showed no significant convergence. The question remains as to whether China should adopt the decentralization model, as OECD countries have done, in order to promote a regional coordinated development. Following on from the analysis presented above, the relationship between decentralization and regional disparities of China will be discussed in the following chapters.

¹⁸¹ Grindle, M. S. (2007). *Going local: decentralization, democratization, and the promise of good governance*. Princeton University Press.

Chapter 3 Fiscal Decentralization and Regional Disparities: an Exploration of China

Introduction

The relationship between fiscal decentralization and regional unbalanced development is one of the focuses of regional problem research. Scholars adhering to a new liberalism hold that fiscal decentralization is in favor of narrowing regional disparity. For this reason, without the support from the central government's subsidy or coordination in the system of power decentralization, the pressure of competition forces less developed regions to spontaneously chase after more developed regions. The governments of less developed regions always provide a variety of favorable conditions, such as issuing preferential tax policies, cutting down enterprises' welfare burdens and offering cheap land, so as to attract more capital and external resources to achieve transcendental economic growth. In the circumstance of local competition, the free flow of production factors; especially the reverse flow of capital and human resources contributes to realizing the nation's overall balanced development.¹⁸²

However, scholars upholding Keynesianism, point out that the institutional arrangement of fiscal decentralization may aggravate the regional development disparity.¹⁸³ Regarding the reason, in a competitive fiscal decentralization system, developed regions with a large tax base can provide high-quality public services at a relatively lower tax rate; thus, they can effectively attract the inflow of external capital, labor and other resources. Within this process, affluent regions become more affluent, while, instead of making a profit, poverty-stricken regions become places supplying the production of raw materials, human capital and other resources to the more developed regions, namely, the phenomenon that less developed regions provide "reverse subsidy" for developed regions, which further solidifies and widens regional development

¹⁸² Qian, Y., & Weingast, B. R. (1997). Federalism as a commitment to preserving market incentives. *The Journal of Economic Perspectives*, 11(4), 83-92.

¹⁸³ Sewell, D. O. (1996). " The Dangers of Decentralization" According to Prud'homme: Some Further Aspects. *The World Bank Research Observer*, 143-150.

disparity.

When it comes to China's specific situation, issues about the relationship between fiscal decentralization and regional balanced development have not yet been concluded. Generally speaking, most Chinese studies are focused on the importance of the central government's financial centralization. For instance, studies of scholars like Fan Shenggen have revealed that trade openness and financial decentralization are significant reasons for the widening of regional disparity in China.¹⁸⁴ Studies of scholars like Wang Shaoguang have also determined ¹⁸⁵ that China's regional unbalanced development degree and the central government's financial absorbing ability are negatively correlated, i.e. when the central government's financial absorbing ability lowers, the disparity of regional development widens, and vice versa. Based on introspecting the restriction of the system – "serving meals to different diners from different pots" over the central government's financial capacity, they proposed that "the central government should bear the principal responsibility for narrowing regional disparity it must intensively and uniformly arrange the distribution of transfer payment in every province".¹⁸⁶

Scholars like Zheng Yongnian, neither advocate applying the traditional means of financial centralization to achieve a regional balanced development, nor agree to completely rely on a spontaneous effect to solve the development disparity among regions, but attempt to explore an eclectic or new regional coordination mode, i.e. "they emphasize that the central government should comply with the market rules to give play to the central coordinator's particular effect, so as to strengthen its roles in economic balanced development and national integration".¹⁸⁷ In other words, these scholars stress that the exchange and cooperation between the central government and local government; as well as exchanges among local governments should be achieved by the central

¹⁸⁴ Fan, S., Kanbur, R., & Zhang, X. (2011). China's regional disparities: Experience and policy. *Review of Development Finance*, 1(1), 47-56.

¹⁸⁵ Wang, S., & Hu, A. (1999). The political economy of uneven development: The case of China. ME Sharpe.

¹⁸⁶ Notes: Scholars like Wang Shaoguang did not support completely centralization. They argued that centralization is the premise and foundation of decentralization. See, Wang, S. (1997). The bottom line of decentralization. *Strategy and Management*, 2.

¹⁸⁷ Wu, G., & Yongnian, Z. (1995). On Central-Local Relations. Oxford Press, p40-55.

government's policy guidance and platform construction. Besides, there are some scholars that uphold and support "asymmetry financial decentralization". For instance, scholars like Shen Kunrong have argued that "financial decentralization can promote economic growth... it is essential to constantly improve the system of financial decentralization especially the level of financial decentralization to less developed areas, so as to further enhance the overall efficiency of investment in public goods", for the specific purpose of narrowing the development disparity among regions.¹⁸⁸

It can further be determined from the simple summarization above that the research regarding the relationship between fiscal decentralization and regional balanced development is still in the debating stages, and scholars have reached different conclusions, according to different case studies and different time intervals. Based on the study above, this paper attempts to analyze China's fiscal decentralization course and its changing trend of regional disparity, as well as further exploring their relationship.

3.1 Fiscal Decentralization under the Strategy of Regional Balanced Development

To narrow the regional development disparity and achieve a national balanced development, coordinated development has been an important subject and challenge since the founding of the People's Republic of China, and it not only relates to the nation's economic development and social stability, but also affects national unity and national defense security. Hence, at the beginning of the founding of the People's Republic of China, the new China utilized the strategy of a regional balanced development and continued it until the reform and opening-up.

According to the effect, China's interprovincial development disparity began to decrease from 1953 and reached a relatively low point in 1955, but it then began to ascend and reached the highest point in 1960; then, it started to decrease again and reached a relatively low point in 1967. After that, China's

¹⁸⁸ Kunrong, S., & Wenlin, F. (2005). The Relationship Between China's Decentralized System in Finance and her Regional Economic Growth. *Management World*, *1*, 005.

regional development disparity basically exhibited an ascending trend, and large development disparity appeared after the Cultural Revolution ended (see Figure 3-1). In other words, the strategy of a regional balanced development, at that time, did not reach the purposed goal of effectively narrowing the regional development disparity as expected by the decision makers at that time. Some complex reasons, such as the strategy of developing heavy industry,¹⁸⁹ mistaken leftist ideals, a planned economic system, frequent political movement, and a complex international environment lead to dissatisfactory results of relevant strategies and policies.

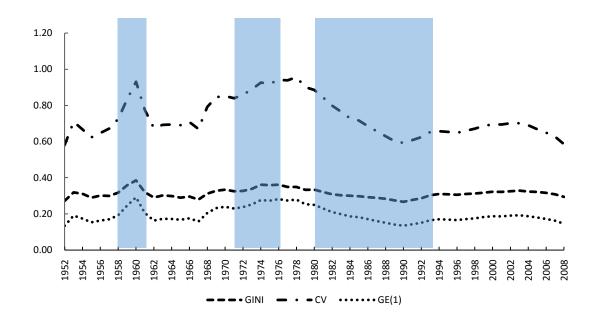


Figure 3-1 Regional disparities and decentralization (shadow) of china, 1952-2008 Notes: GINI means GINI coefficient; CV means the coefficient of variation; GE (1) means Theil index. Source: Calculated by author.

In the planned economic system, the nation had limited means to coordinate regional development, which was mainly reflected in the distribution of national industrial investment and resources – the core was the distribution of financial resources. In the system with highly centralized political power, although the central government controlled and distributed most financial resources, it did

¹⁸⁹ Fan, S., Kanbur, R., & Zhang, X. (2011). China's regional disparities: Experience and policy. *Review of Development Finance*, 1(1), 47-56.

not mean that the nation's industry development plan and finance distribution plan could be perfectly implemented, while totally being in line with the central government's design. As direct absorbers of financial resources, local governments always minimized fees and taxes paid to the central government, so as to protect local interests. The central government's development plan not only needed to be implemented by local governments, but also required the financial support paid by local governments; thus, it must allow financial autonomy to local governments within a certain range, creating room for competition between local governments and the central government. Therefore, during the period of the planned economic system, the central government's ability regarding regional coordination depended on its ability of effectively absorbing and allocating financial resources, while they both relied on the degree to which local governments were controlled by the central government.

In the face of China's vast territory and unique national condition, the decision makers then did not advocate the complete copying of the Soviet-style central planning system, which featured a highly centralized power and vertical bureaucratic control system, but focused on granting some limited autonomy to the local governments, on the basis of the central government's unified plan; thus, arousing both the central government and local governments' enthusiasm. The relationship between the central government and local governments is a contradiction. To solve this contradiction, it is essential to expand the local governments' power base and allow more independence to local governments, on the premise of consolidating the central government's unified leadership, which is in favor of constructing a powerful socialist country. As a result of China's large national geographic area, huge population, and complex national condition, both the central government and local governments' shared enthusiasm is certainly superior to that of a one sided enthusiasm.

However, due to the lack of experience in fiscal decentralization, as well as the fundamental contradiction between a planned economic system and decentralization system, fiscal decentralizing to local governments may directly cause the nation's overall development plan to fail in receiving sufficient

¹⁹⁰ Mao, Z. (1975). Selected works of Mao Zedong (Vol. 5). People's Publishing House, p237. (In Chinese)

financial support and be actively implemented by the local governments, and of course, it may also directly affect the achievement of the nation's strategic planning goal of a regional balanced development. Based on the above considerations, this paper attempts to explore and analyze the influence of fiscal decentralization on regional development disparity during the period of planned economy.

It's noteworthy that China has experienced two large-scale fiscal decentralizations before the reform and opening-up: one was revenue and expenditure power decentralization, focusing on "revenue and expenditure decentralization, planned contract responsibility system, regional regulation and sharing in the total revenue" during the period of the Great Leap Forward, while the other was revenue and expenditure power decentralization, focusing on "fixed revenue and expenditure, contract responsibility system for revenue and expenditure, ensured turning over (or deficiency payment), surplus retention and yearly setting" since 1971. The fiscal decentralization in 1971 greatly expanded the scope of local financial revenue and expenditure. Except for the tariff revenue of enterprises directly under the central government, as well as expenditures of capital construction, national defense, external assistance and reserve directly under the central government, all the remaining revenue and expenditures were covered by the local governments.

3.1.1 The First Fiscal Decentralization and Regional Disparity

According to the trend of regional development in the early years of the new nation, China was faced with an overall backward economy and extremely unreasonable distribution of regional economy. At that time, the gross industrial output value was only about 14 billion yuan.¹⁹¹ The low industrial production capacity was inferior to not only developed capitalist countries, but also developing countries that had just become independent, such as India. In the corresponding period, most of the Chinese industries were distributed in the eastern coastal region of China. For example, in 1952, "inland GDP covering 88.7% of national territorial area accounted for only 54.6% of national GDP,

¹⁹¹ Xu, D., & Wu, C. (1993). *History of capitalism in China*, People's Publishing House, p742. (In Chinese)

and coastland covering 11.3% of national territorial area accounted for 45.4% of national GDP".¹⁹² This extremely uneven distribution of productivity not only resulted in the separation of production in the eastern region from raw materials and markets in the central and western areas, but was also counter-productive to the development and stability in the central and western regions. From the perspective of the international environment, the Soviet-pattern's radiation, constantly worsened the international situation and the pressure of national security issues were important external factors influencing China's regional development strategy.

Facing this situation, China's strategic idea of giving priority to develop heavy industry, which was introduced around 1953, was not only incorporated into the general strategy during the CPC's transition period, but was also accepted by the first meeting of the First National People's Congress. Zhou Enlai clearly pointed out, in his government work report, "To achieve industrialization, China must rely on the construction of new industries especially heavy industry."¹⁹³ Combining the strategy of developing heavy industry and the idea of balancing regional productivity, China entered the period of balanced regional economic development under the specific guidance of a heavy industry development strategy.

(1) Regional Strategic Background for the First Fiscal Decentralization

The "1st Five-Year Plan" explicitly stipulated that "the nation should properly distribute industrial productivity throughout the country so that the industry is close to production/consumption area and satisfy the condition of consolidating national defense for the purpose of primarily improving the unreasonable state and enhancing economic level in less developed areas". Based on "156" projects (actually 150 projects were launched), which were constructed with the Soviet Union's aid, and 694 projects with an investment of more than 10 million yuan; China began re-allocating its productivity. Regarding the regional distribution

¹⁹² Xiaobin, S. Z. (1996). Spatial Disparities and Economic Development in China, 1953 - 92: A Comparative Study. *Development and Change*, 27(1), 131-164.

¹⁹³ Zhou, E. (1984). Selected Works of Zhou Enlai (Vol. 2). People's Publishing House, p135. (In Chinese)

of investment, inland and along the coastal regions; the investment accounted for 46.8% and 36.9% respectively during the "1st Five-Year Plan"; regarding the number of investment projects, 472 projects with an investment of more than 10 million yuan were distributed within China's inland area, accounting for 68% of the all the projects. Moreover, as regarding the growth ratio, China experienced an average industrial growth rate of 15.5% from 1952 to 1957; 17.8% in the inland regions and 14.4% in the coastal regions. In summary, the disparity between the central, western regions and the eastern regions was obviously narrowed, with regional disparity reaching its lowest point in around 1956 (figure 3-1).

It is noteworthy that the basic premise for effective implementation of the industrial layout strategy during that period was the nation's highly centralized fiscal distribution. Under the financial system of "unified leadership and graded responsibility" established in 1951, the central government controlled most financial resources. Throughout the entire period of the "1st Five-Year Plan", the central government's financial revenue accounted for about 80% of the total budget revenue, while provincial and county-level governments' revenue accounted for about 20%; ¹⁹⁴ thus, the central government's financial expenditures (including direct expenditure and expenditure turned over by local organizations) accounted for 74.1% of the total expenditures, while local financial expenditure accounted for only 25.9%.¹⁹⁵ The central government's powerful financial resource absorbing ability and distribution ability enabled the central government to intensively utilize resources in the areas which were in the greatest need of development, according to the national strategic plan, so as to effectively narrow regional development disparity and balance the distribution of productivity more evenly.

(2) Regional Development Trend during the Period of the First Fiscal Decentralization

¹⁹⁴ Wang, S. (1997). The bottom line of decentralization. *Strategy and Management*, 2.

¹⁹⁵ Zhou, C., & Song, Z. (1988). A Brief History of China's socialist finance,

China Financial and Economic Publishing House, p215.

In view of the sound momentum of regional coordinated development during the "1st Five-Year Plan", and the "2nd Five-Year Plan", reviewed and adopted by the Eighth National Congress of the CPC, in line with Mao Zedong's spirit in *On the Ten Major Relationships*, not only focused on continuing to strengthen the construction of a new inland industrial base, but also explicitly pointed out, "China must actively, fully utilize and properly develop original industries in the coastal region, which will not only meet the nation and people's increasing demand but also contribute to supporting inland construction."¹⁹⁶

Meanwhile, according to domestic and foreign experience in construction, central leaders put forward the conception of constructing a basically independent and complete industrial system; however, "basically complete system does not mean total self-sufficiency... something also cannot be found in America or the Soviet Union".¹⁹⁷ To cooperate with the concept of constructing an independent and complete industrial system, the central government proposed several concrete strategies. One strategy was to establish an economic zone with a relatively complete industrial system and strengthen inter-provincial/inter-municipal "information exchange, experience exchange, mutual cooperation, mutual support, contradiction adjustment and detailed appraisal through comparison".¹⁹⁸ In February of 1958, the central government issued Provisions on Holding Regional Collaboration Meeting, and pointed out that "for more, faster, better and economical construction of socialism and implementation of national economic plan, the whole country needs to be divided into 7 collaborative regions", ¹⁹⁹ namely, northeast China, northern China, eastern China, southern China, central China, southwest China and northwest China.

The other strategy was to "walk on two legs", i.e. the central industry and local industry should be combined and "local governments should find a way to

¹⁹⁶ Note: The Second Five Year Plan (1958-1962).

¹⁹⁷ Zhou, E. (1984). Selected Works of Zhou Enlai (Vol. 2). People's Publishing House, p232. (In Chinese)

¹⁹⁸ CCP Literature Research Center (1995).*Selected Important Documents since founding of PRC (Vol 11)*. Central Party Literature Press, p157. (In Chinese).

¹⁹⁹ CCP Literature Research Center (1995).*Selected Important Documents since founding of PRC (Vol 11)*. Central Party Literature Press, p157-p158. (In Chinese).

establish independent industrial system".²⁰⁰ However, with "the Great Leap Forward" (大躍進) the developing local governments began to blindly and impatiently strive for the speed of economic construction; thus, leading to a deviation in the central government's exploration toward establishing a complete industrial system. All regions, provinces, cities and counties devoted themselves to the construction of large-size and small-size self-system industrial structures, regardless of the local economic foundation and industrial efficacy.

The construction of local industrial systems evolved into a "commune industrialization" movement, causing star-studded small-size iron & steel industries, small-size chemical fertilizer industries, small-size machine industries and small-size cement industries, which helped to create a nationwide industrial investment policy which was out of control. As a result, "the investment in national infrastructure was about 99.6 billion yuan during 1958-1960, 1.8 times that during the '1st Five-Year Plan".²⁰¹

What followed after the Great Leap Forward was the decentralization of the fiscal distribution from the central government to the regional. The central government intensively controlled all special appropriations from the central government's provision; however, the financial management system for infrastructure investment did not entirely adapt to the comprehensive leap forward of production construction and decentralization of most industrial and commercial enterprises, economy, culture and educational undertakings attached to the central government. The State Council issued *Provisions on Further Improving Financial Management System and Correspondingly Improving Bank Credit Management System*, which stipulated that, "regarding revenue, except for central enterprises' revenue and national revenue (such as railway, posts and telecommunications, foreign trade and customs), all other tax revenue and corporate revenue should be categorized into local revenue; regarding expenditure, except for the central administration, economy, diplomacy and military technology expenditures, all other expenditures should

²⁰⁰ CCP Literature Research Center (1995). *Selected Important Documents since founding of PRC (Vol 11)*. Central Party Literature Press, p223. (In Chinese).

²⁰¹ Bowen G (2004). *Regional Economic Thought of Chinese Communist Party*. CPC History Publishing House, p144.

be categorized into local financial expenditures".

In this system, the national economic development plan and key construction projects were still determined by the central government. Furthermore, on the principle of "one change a year", the central government could determine the financial revenue and expenditure indicators, by sharing ratio and subsidy figures every year and in every area. However, since most power of investment in capital construction had been decentralized to the local governments, and concrete institutional constraint and political pressure were lacking; once the local governments controlled the fiscal resources, they blindly enlarged the scale of infrastructure, for the sake of their own benefit by ignoring cost; causing the national finance to fail in balancing their fiscal budget from 1958 to 1961, with the total financial deficits reaching 14.8 billion yuan.

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Year	Central	Central	Central/National	Surplus of central	Central Self-
	Revenue	Expenditure	Revenue	Government	sufficiency Rate
1953	177.02	162.05	83.01%	14.97	109.24%
1954	187.72	183.7	76.57%	4.02	102.19%
1955	193.44	201.05	77.60%	-7.61	96.21%
1956	222.1	210.02	79.27%	12.08	105.75%
1957	222.94	210.03	73.53%	12.91	106.15%
1958	305.26	177.22	80.41%	128.04	172.25%
1959	118.78	249.34	24.38%	-130.56	47.64%
1960	142.8	278.63	24.95%	-135.83	51.25%
1961	76.65	160.32	21.53%	-83.67	47.81%
1962	93.07	181.64	29.68%	-88.57	51.24%
1963	78.92	192.31	23.06%	-113.39	41.04%
1964	100.81	224.86	25.23%	-124.05	44.83%
1965	156.07	284.17	32.97%	-128.1	54.92%
1966	196.49	339.11	35.17%	-142.62	57.94%
1967	132.44	269.94	31.58%	-137.5	49.06%
1968	107.11	219.49	29.65%	-112.38	48.80%
1969	171.1	319.16	32.48%	-148.06	53.61%
1970	182.95	382.37	27.60%	-199.42	47.85%

 Table 3-1 Financial conditions of national and central government during the first fiscal decentralization (Billion Yuan)

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

During that period, the central government's macroeconomic control ability

was substantially weakened. It can be determined from Table 3-1 that since the decentralization of revenue and expenditure power, central financial revenue was sharply reduced from 30.526 billion yuan in 1958 to 11.878 billion yuan in 1959, and it was as low as 7.665 billion yuan in 1961. The ratio of central financial revenue to national financial revenue also fell from 70% to 20%. At the same time, central financial expenditure did not reduce correspondingly; thus, directly resulting in the expansion of the deficit in the central budget. Not only could the central government not control the developmental pattern of the macro economy, but also failed to control the implementation of relevant policies, which relied heavily on local governments. According to the investment in infrastructure, the ratio of investment in the coastal and inland infrastructure was 42.3% and 53.9% respectively.²⁰² The ratio of the inland industrial output value to the national industrial output value increased from 33.5% to 35.5%; however, the increased amount of investment did not translate into the enhancement of the developmental level. Large-size and small-size factories, as well as complete industrial structures resulted in regional selfclosing and industrial structure convergence; thus, causing a tremendous waste of capital and resources.

Additionally, as a result of an absent rigorous argument and scientific management, as well as local government's excessively pursuing quantity, but overlooking quality; even heavy investment did not generate the increase in enterprise revenue. This phenomenon was particularly obvious in the central and western regions; like Henan Province, Anhui Province, Jiangxi Province, Guangxi Province, Guizhou Province, Yunnan Province and Gansu Province. Take Henan Province for example (see Table 3-2).

In 1957, there were 4,561 industrial enterprises; with the decentralization of fiscal and investment power, the number of industrial enterprises increased sharply by nearly 5 times, to 22,442 in 1958, but the total industrial output value merely increased from 1.663 billion yuan to 3.317 billion yuan, an increase that only doubled the previous value. However, instead of sharply increasing, the number of industrial enterprises might decrease in some eastern provinces, but

²⁰² Lu, D. (2007). Urbanization process and spatial sprawl in China. Urban Planning Forum, 4, 47-52.

due to a series of advantages within the industrial foundation, such as technological accumulation and industrial location, enterprise benefit increased rapidly. For another example, the number of industrial enterprises in Beijing reduced from 4,234 in 1957 to 2,084 in 1958, but enterprise benefits increased from 2.2 billion yuan to 4.28 billion yuan. To summarize, in this process of power decentralization, the increase in the amount, ratio of investment, as well as the number of industrial enterprises in the central and western regions, did not convert into a direct economic benefit. Therefore, as a matter of fact, the disparity between the eastern region and the western region was not narrowed, but was further expanded.

rovinces,	1957-1959							
	Province	1957	1958	1959	Province	1957	1958	1959
Amount	Beijing	4234	2084	2890	Zhejiang	12558	-	-
Output	Beijing	22	42.8	63.3	Zhejiang	20.88	-	-
Amount	Tianjin	2507	2376	2169	Anhui	1596	8652	15103
Output	Tianjin	40.44	61.94	85.15	Anhui	15.4	31.8	49.33
Amount	Hebei	1076	3708	7605	Fujian	6127	-	7561
Output	Hebei	25.86	39.63	63.84	Fujian	8.57	12.94	19.56
Amount	Shanxi	4509	5016	7388	Jiangxi	5853	10753	11733
Output	Shanxi	14.84	23.95	38.77	Jiangxi	11.7	18.96	24.84
A	Inner	2110			Chandana			
Amount	Mongolia	2110	-	-	Shandong	-	-	-
Output	Inner	6.33			Shandana	12 21	60 57	02.08
Output	Mongolia	0.55	-	-	Shandong	43.31	69.57	92.98
Amount	Liaoning	5629	42928	6992	Henan	4561	22442	15429
Output	Liaoning	94.4	138.9	198.6	Henan	16.63	33.17	50.16
Amount	Jilin	3093	4281	5470	Hubei	8424	-	-
Output	Jilin	20.8	30.88	41.84	Hubei	24.31	34.93	49.57
Amount	Heilongjiang	4256	3865	9416	Hunan	8107	12971	12216
Output	Heilongjiang	35.03	61.81	89.68	Hunan	16.99	32.41	42.63
Amount	Shanghai	16316	14240	12205	Guangdong	25510	-	-
Output	Shanghai	118.82	176.44	254.68	Guangdong	37.92	-	-
Amount	Jiangsu	2322	5868	4809	Guangxi	13610	46348	9719
Output	Jiangsu	41.01	75.22	96	Guangxi	9.2	12.15	17.43
Amount	Chongqing	2879	-	-	Shaanxi	5458	3656	4964
Output	Chongqing	31.08	44.64	61.96	Shaanxi	11.34	19.9	29.49
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Table 3-2 Amount of industrial enterprises and industrial output (100 million Yuan) ofprovinces, 1957-1959

Amount	Sichuan	-	-	-	Gansu	1724	17895	9807
Output	Sichuan	21.29	-	-	Gansu	6.35	9.22	15.6
Amount	Guizhou	3683	68333	14963	Qinghai	356	677	929
Output	Guizhou	6.05	9.42	13.42	Qinghai	1.04	1.79	4.96
Amount	Yunnan	3866	23110	7281	Ningxia	310	1755	830
Output	Yunnan	11.19	17.64	24.45	Ningxia	0.46	0.92	1.79
Amount	Tibet	-	-		Xinjiang	1396	2669	3056
Output	Tibet	0.04	0.45	0.43	Xinjiang	4.75	7.1	15.99

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

After realizing the explicit dangers of excessive fiscal decentralization, the central government set about centralizing fiscal management. In 1961, it decided to centralize fiscal management at three levels; including the central government, grand regions and provinces, and properly maintain tighter control of special administrative regions, counties (cities) and communes' fiscal authority; thus, the state carried out "one account from top to bottom" and "one board of chess throughout the nation" in terms of finance, i.e. it strictly required a balanced revenue and expenditure and forbade deficit budgets in every region. With the economic adjustment, the central government then effectively controlled the investments in infrastructure, adjusted the ratio of the national economic construction, constrained extra-budgetary funds and achieved a basic financial balance; however, what followed was the shrinkage of numerous businesses and the failure of a large number of enterprises, which were managed by the commune and brigade. As a consequence, the scale of commune-run industry was severely reduced from 6 billion yuan in 1958, to 420 million yuan in 1963.²⁰³ The shrinking of industry managed by the communes and brigades directly impacted agricultural production. Moreover, together with natural disasters in 1962, every region's per capita GDP generally lowered, and basically recovered to its previous level of 1956. A nationwide low-level development also led to a low-level balance of development among regions. During 1961-1967, China's interprovincial regional development disparity reflected an obvious declining and leveling-off tendency.

²⁰³ Wang, H. (1998). Industrial Economic History of People's Republic of China. Shanxi Economic Press, p305.

3.1.2 The Second Fiscal Decentralization and Regional Balanced Development

(1) Regional Strategic Background for the Second Fiscal Decentralization

Generally speaking, the second fiscal decentralization was closely related to "the third-line construction". National defense security had always been an important principle for the new China's industrial layout. Mao Zedong explicitly proposed an important principle of "favor of preparing for the war" for the industrial layout in *On the Ten Major Relationships*. In the 1960s, as the international situation and the peripheral environment of China deteriorated, China changed its industrial development strategy from "favoring of preparing for the war" to "focusing on preparing for the war" for the sake of national security. In September of 1965, the *Outline of Report on Arrangement for the 3rd Five-Year Plan (Draft)* explicitly proposed that "the 3rd Five-Year Plan must base on war by preparing for a big fight and actively preparing for the war, put national defense construction first, accelerate the third-line construction and gradually change industrial layout."²⁰⁴

Apart from "preparing for the war", the central government also took the third-line construction as an important part of the long-term national economic development and an important link in the process of constructing an independent industrial and national economic system, as well as achieving an equitable and balanced distribution of productivity. Zhou Enlai very clearly pointed out that the government initiated its target from the 3rd Five-Year Plan with the aim of constructing an independent and complete industrial system, as well as a viable national economic system throughout China, via the three Five-Year Plans.²⁰⁵ From the perspective of arousing the central and local governments' enthusiasm, as well as the idea of a people's war; the first-line and second-line regions had to focus on rear construction and intensify the "small third-line" construction, in addition to strengthening the "large third-line" construction. Thus, during the

²⁰⁴ CCP Literature Research Center (1998). *Selected Important Documents since the Twelfth National Congress of CCP*. Central Party Literature Press, p360-361. (In Chinese).

²⁰⁵ Bowen Gao (2004). *Regional Economic Thought of Chinese Communist Party*. CPC History Publishing House, p193.

3rd and 4th Five-Year Plans, the small third-line construction became the focus of investment in each province and city.

(2) Regional Development Trend during the Period of the Second Fiscal Decentralization

After experiencing the turmoil at the beginning of the Cultural Revolution, China's economic situation tended to be stable during the early 1970s. However, affected by the strategic background of "concentrating on large third-line construction" and Mao Zedong's criticism on "vertical departments' dictatorship", China started a new round of fiscal decentralization. In March of 1971, the Ministry of Finance issued a Notice on the Implementation of Contract System on Revenue and Expenditure with the attachment, Trial Scheme of Contract System on Revenue and Expenditure, which stipulated that "fixed revenue and expenditure, contract responsibility system for revenue and expenditure, ensured turning over (or deficiency payment), surplus retention and yearly setting" should be implemented in every provincial administrative region: thus, the scope of local financial revenue and expenditure was expanded, and except for tariff revenues of enterprises directly under the central government, as well as expenditures of capital construction, national defense, external assistance and reserves directly under the central government, all the remaining revenues and expenditures were covered by the local governments. The degree of this fiscal decentralization even surpassed that of 1958, that is to say, "during this power decentralization, the central government indiscriminately and hurriedly decentralizes most central enterprises including large-scale backbone enterprises like Anshan Iron and Steel Group Corporation, Daqing Oil Field, Changchun Automobile Manufacturer and Kailuan Coal Mine relating to national welfare and the people's livelihood to local governments".²⁰⁶

Table 3-3 Financial conditions of the national and central government, during the firstfiscal decentralization (Unit: Billion Yuan)

²⁰⁶ Mao, Z. (1980). *Mao Zedong and the political economy of the border region: a translation of Mao's economic and financial problems*. CUP Archive.

Vaar	Central	Central	Central/National	Surplus of Central	Extra-budgetary
Years	Revenue	Expenditure	Revenue	Government	Revenue
1966	19.649	33.911	35.17%	-142.62	8.113
1967	13.244	26.994	31.58%	-137.5	8.361
1968	10.711	21.949	29.65%	-112.38	7.744
1969	17.11	31.916	32.48%	-148.06	8.742
1970	18.295	38.237	27.60%	-199.42	10.094
1971	11.936	43.567	16.03%	-316.31	11.856
1972	10.581	43.14	13.80%	-325.59	13.424
1973	11.986	44.933	14.80%	-329.47	19.129
1974	13.477	39.784	17.21%	-263.07	21.972
1975	9.663	40.94	11.85%	-312.77	25.148
1976	9.891	37.763	12.74%	-278.72	27.532
1977	11.385	39.37	13.02%	-279.85	31.131
1978	17.577	53.212	15.52%	-356.35	34.711

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

The most direct influence of that fiscal decentralization was to reduce central financial revenue and add the burden to central finance. According to Table 3-3, central financial revenue lowered from 18.295 billion yuan in 1970 to 11.936 billion yuan in 1971; even reducing to 9.663 billion yuan in 1975; the ratio of the central financial revenue to national financial revenue also sharply reduced from 27.60% in 1970 to 11.85% in 1975; correspondingly, the central financial deficit increased and remained around 30 billion yuan during the period of 1971-1975. Besides, extra-budgetary revenue also started to inflate during this period.

From 1970 to 1976, the national budgetary financial revenue increased only by 17.1%, but during that same period extra-budgetary financial revenue increased from 10.1 billion yuan to 25.1 billion yuan, a margin of 173%. The ratio of the extra-budgetary fund to the budgetary fund increased from 15% in 1970, to 35% in 1976. As the central financial resource's absorbing ability decreased and the extra-budgetary fund inflated, the central government's ability of controlling the overall economy was furthered weakened. Local governments' pursuit of narrow interest began to be stronger than their implementation and compliance of the central government's strategic plan and indicator adjustments.

From the perspective of national investment, China focused on the

construction of the national defense industry and intensively utilized more capital to construct the third-line projects in the southwest and northwest regions during the "3rd Five-Year Plan". During that period, the investment targeted for inland construction reached 63.121 billion yuan; accounting for 64.7% of the investment in national infrastructure, and the investment in the third-line regions reached 48.243 billion yuan, which accounted for 52.7% of the overall investment in infrastructure.²⁰⁷ At that time, a total population of 145,000 and 38,000 production devices relocated from the coastal region to the third-line region,²⁰⁸ constructing important railways like the Chongqing-Guiyang railway, Hunan-Guizhou railway, Guiyang-Kunming railway and the Chengdu-Kunming railway, as well as important industrial bases in Panzhihua and Jiuquan; during the "4th Five-Year Plan", apart from continuing to strengthen the construction of the national defense industry, China began to actively promote the overall development of basic industry, turned the focus of the third-line construction to "three western regions" (western Henan, western Hubei and western Hunan), and expanded the scope of investment to the basic industry and civil industry.

Throughout that period, the total investment in the third-line region reached 69.098 billion yuan, accounting for 41.1% of total investment in national infrastructure and a reduction of 11.6% compared with that in the "3rd Five-Year Plan". In the late "4th Five-Year Plan" and early "5th Five-Year Plan", China began to adjust its national investment structure, along with a change in the international situation. In addition to attaching more importance on the investment in the construction of civil industry and the agricultural industry, the state gradually transferred the focus of investment toward the eastern coastal region, and, at that time, "most imported devices are used in the coastal region".²⁰⁹

It is undeniable that the third-line construction was a process of

²⁰⁷ Bo, J. (2009). *Role of Government in the Process Regional Economic Coordinated Development*. Economic Science Press, p66. (In Chinese)

²⁰⁸ Zhao, D. (1989). *The Economic History of PRC form 1967-1984*. Henan People's Publishing House, p183. (In Chinese)

²⁰⁹ Zeng, P. (1999). 50 Years of New China Economy. China Planning Press, p393. (In Chinese)

"unprecedented large-scale inland economic development and construction".²¹⁰ The state compulsorily adjusted the regional economic layout, through investment and administrative means, which had an important influence on China's regional economic development. After intensive construction of the three "Five-Year Plans", the central and western regions constructed a heavy industry system, and a series of emerging industrial centers that were complete in range and large in size, which not only laid the foundation of infrastructure, talent, technology and resources for further development of the inland economy, but also controlled or contained the expansion of regional disparity to some extent. It can be seen from Table 3-4 that the number and industrial output value of industrial enterprises in every province and region increased to some degree. According to the division of the three regions, the industrial output value in the eastern region increased by 52%, from 1970 to 1976, that of the central region increased by 45% and that of the western region increased by 53%.

It is noteworthy, that an important reason why regional development disparity could be controlled and key projects of third-line construction could be successfully implemented, was directly related to the central government's control over the power of financial expenditure. Thus, being different from the first fiscal decentralization process, in which financial revenue and financial expenditure decreased in large scale at the same time, this reform resulted in the central financial revenue decreasing to less than 20%, lower than that during the Great Leap Forward period, but the central financial expenditure was basically controlled at over 55%; thus, enabling the central government's relevant strategic plan to gain basic financial support.

Table 3-4 Amount of industrial enterprises (shadow) and industrial output (100 millionYuan) of provinces, 1970-1976

East			Central			West		
Province	1976	Grow	Province	1976	Grow	Province	1976	Grow
Beijing	3877	113.14%	Shanxi	8429	72.73%	Inner Mongolia		-

²¹⁰ Gao, B. (2004). *Regional Economic Thought of Chinese Communist Party*. CPC History Publishing House, p225. (In Chinese)

Beijing	141.2	45.42%	Shanxi	66.2	15.75%	Inner Mongolia		-
Tianjin	3718	32.50%	Jilin	7324	38.11%	Guangxi	9148	49.04%
Tianjin	135.6	31.95%	Jilin	103.4	62.90%	Guangxi	56.7	106.90%
Hebei	12246	53.13%	Heilongjiang	12031	34.97%	Chongqing	8489	67.21%
Hebei	157.3	75.76%	Heilongjiang	186.6	36.36%	Chongqing	65.3	23.01%
Liaoning	12740	62.21%	Anhui	11201	49.83%	Sichuan	33201	0.02%
Liaoning	341.2	50.71%	Anhui	90.5	99.16%	Sichuan	-	-
Shanghai	8798	-10.53%	Jiangxi	9215	44.35%	Guizhou	6798	72.85%
Shanghai	423.5	35.64%	Jiangxi	48.1	15.62%	Guizhou	23.1	11.22%
Jiangsu	22105	199.12%	Henan	12668	67.21%	Yunnan	6499	-4.68%
Jiangsu	247.6	82.76%	Henan	108	46.57%	Yunnan	32.6	5.78%
Zhejiang	17556	44.17%	Hubei	14511	32.04%	Tibet	-	-
Zhejiang	82.1	23.12%	Hubei	114.8	33.12%	Tibet	1.1	205.25%
Fujian	7357	61.59%	Hunan	18438	82.45%	Shaanxi	8951	75.75%
Fujian	43.6	78.41%	Hunan	104.5	51.61%	Shaanxi	71.5	38.47%
Shandong	-	-	-	-	-	Gansu	4701	67.35%
Shandong	220	55.79%	-	-	-	Gansu	68.2	61.42%
Guangdong	-	-	-			Qinghai	1158	89.84%
Guangdong	-	-	-	-	-	Qinghai	10.3	86.57%
						Ningxia	918	53.77%
						Ningxia	10.4	108.76%
						Xinjiang	3238	42.27%
						Xinjiang	24.1	33.04%

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

However, it cannot be denied that, although regional disparity was controlled, it did not reflect a declining trend. In some cases, the regional disparity, after 1970, was even larger than that during the Great Leap Forward period. In other words, the central government's strategic target of regional balanced development failed to be completely achieved, and the investment in the central and western regions did not generate proportional returns of investment. After being affected by the complex international situation and "leftist" thought; the third-line construction was implemented at an excessively high cost and many problems were left unresolved. The most important problems, included excessive emphasis on "relying on mountains, scattering and entering caves", the absence of scientific, reasonable and logical input for a large number of problems, and relatively low input-output from the third-line construction. It can be determined from Table 3-5 that the third-line region's capital profit rate and accumulation rate were far lower than those in the eastern coastal region, but their production cost and occupied current capital were far higher than those of the eastern coastal region. Thus, it can be seen that, although more resources were invested in the central and western regions than the eastern region, it could only minimally prevent the developmental disparity among other regions from further expansion.

 Table 3-5 Comparison of state-owned industrial enterprises between the coastal regions and third-line regions in 1978 (Unit: Yuan)

	Nation	Coastal	Third-line
	wide	regions	regions
Output value per 100 yuan	102.6	141.4	70.4
Occupying liquidity per 100 yuan output value	32.0	24.6	40.7
Cost per100 yuan output value	67.4	64.8	77.4
Profit rate	15.5%	23.4%	9.2%
Accumulation rate	24.2%	35.4%	14.1%

Source: Liu, Z (1995). *The study on productivity distribution of China*. China Commodity price Publishing House, p19.

3.1.3 Historical Experience in Fiscal Decentralization and Regional Development

In general, the fiscal decentralization system before the reform and openingup failed to cooperate effectively with the strategy of a regional balanced development, causing regional disparity to constantly expand during that period. Lessons can be learned from these experiences as follows:

In the first place, it is difficult for the planned economic system with an excessively decentralized power to effectively control the unbalanced development among regions. Regional development is not just a simple issue of productivity space layout, but a complex issue involving geographical location, production level, human resources, industrial structure, historical culture and governmental capacity. Due to the contradiction between the central government's limited capacity and complex regional conditions, compulsively changing the layout and flow of production factors, only with the central government's plan and command, may result in the loss of production efficiency.

Besides, for effective implementation of the planned economy, it is essential to strengthen vertical bureaucratic management agencies' power and weaken the local government's power, which will not only result in "vertical departments' dictatorship" and weaken the local government's enthusiasm for development, but will also lead to departmental and regional fragmentation; thus, making it more difficult to form an effective regional coordination mechanism.

In the second place, it is also difficult for the system to excessively decentralizing fiscal disbursements to effectively control unbalanced development among regions. According to various countries' experience, although coordinated development among regions does not need a powerful central government centralizing everything, it still requires the central government to have some coordinating and planning ability. As specific economic subjects, local governments have their own independent benefit orientation. If local governments are endowed with excessive independent power, they may damage other regions and nations' overall benefit, for the sake of their own benefit. The out-of-control macro economy and sharp expansion of regional disparity during the Great Leap Forward period were typical negative case examples.

In the third place, "large-scale centralization and decentralization" of the fiscal power is not in favor of narrowing regional disparity. Power distribution, between the central government and local governments, requires the continuing support of a stable system. Only in this way can the central government extend "credible commitment" to local governments, on the basis of maintaining its central ability of regulation and control, so as to provide effective and stable encouragement for local governments. Excessively using political and administrative power to adjust the distribution of the fiscal power between the central governments; for local governments always adjust their behavior according to the changing political wind, instead of being guided by economic laws or national development strategies; thus, finally causing the situation that "decentralization leads to chaos and centralization leads to deadlock". An unstable macro economy is bound to result in the disorder of the regional

economy; thus, eventually expanding the development disparity among regions.

3.2 Fiscal Decentralization under the Strategy of Regional Unbalanced Development

In 1978, the Third Plenary Session of the Eleventh Congress of the CPC began a new exploration regarding the developmental path of socialism with unique Chinese characteristics. China's strategy related to regional development gradually transformed from a balanced development to unbalanced development, which was a turning point with historical significance, and was formed on the basis of Chinese communists' judgment of the prevailing domestic and international situation.

From the perspective of the domestic environment, over the past three decades, since the founding of the new China, the Chinese Communist Party had been faced with the old China's backward productivity and the unreasonable distribution of productivity. As required by the national defense security at that time, it attempted to direct priority to the development of heavy industries and balance the allocation of productivity between the coastal regions and the inland region, for the purpose of narrowing regional disparity and achieving equitable and common prosperity. Nevertheless, depending mainly on administrative instruction and national investment to balance productivity distribution was so advanced, subjective and blind that it tended to lower the efficiency level of various production processes.

Moreover, faced with the complex national situation and serious doubt about the Soviet pattern, the decision makers desired to arouse local governments' enthusiasm for development, by means of fiscal decentralization, so as to rapidly achieve the nation's sustainable development strategy. However, because of the inherent contradiction between the national planning and power decentralization, it was most difficult for China's development to escape from the repetitive circle that "decentralization leads to chaos and centralization leads to deadlock". Moreover, the difference in the industrial foundation, industrial environment, geographical location and management level among regions, as well as the unevenness in scientific inquiry and execution of the micro-level plan, prevented the state's input and output from being directly proportional, which not only lowered the development efficiency of the overall economy, but also failed to substantially narrow the development disparity among regions.

Therefore, based on a full understanding of the arduous and long-term regional balanced development, Chinese communists realized that the regional balanced development, at the cost of sacrificing efficiency, was not compatible with China's national condition, so "it should make some regions get well-off first instead of adhering to egalitarianism".²¹¹ From the perspective of the international environment, despite obvious risk factors, the world situation tended to be easing off, i.e. "peace and development are the two major themes in the world today". Since then, the influence relating to national defense factors have gradually lowered in China's economic layout, which has created a sound and sustainable environment for the development within the eastern coastal region.

In the meantime, "the world scientific and technical revolution flourishes and the position of economy, technology becomes increasingly prominent in international competition",²¹² which required China to seize opportunities and meet challenges, incorporate China's economic development layout into a general pattern compatible with the world economy, enhanced the degree of opening-up, and attached particular importance to the development of the eastern coastal region. Affected by both domestic and foreign factors, China's strategy of regional development transformed from a balanced development to an unbalanced development.

3.2.1 Basic Content of the Regional Unbalanced Development Strategy

The regional unbalanced development strategy mainly ran through the "6th Five-Year Plan" and the "7th Five-Year Plan".

The Strategy of Giving Priority to the Development of the Eastern Coastal Region during the "6th Five-Year Plan". After "adjustment, reform, rectification

²¹¹ Deng, X. (1994). Selected Works of Deng Xiaoping: Volume 3. People's publishing house, p19. (In Chinese)

²¹² Deng, X. (1994). Selected Works of Deng Xiaoping: Volume 3. People's publishing house, p354. (In Chinese)

and enhancement" at the end of the "5th Five-Year Plan", the national economy began to exhibit significant improvement. The "6th Five-Year Plan" pointed out that China should actively promote the enhancements of the coastal region's existing economic foundation, give full play to their specialties, "facilitate industrial construction of energy, traffic, raw material (in the inland region), and support economic development in the coastal region".

Apart from providing preferential policies on investment, taxation, credit loans and prices in the coastal regions, the state gradually determined the strategy of vigorously developing the external-oriented economy in the coastal regions. The central government required that coastal regions should give full play to their comparative advantages, seize the opportunity of the international economic industrial adjustment, and take an active role in international competition, so as to "transform internal-oriented economy to external-oriented economy".²¹³ In 1984, the State Council approved 14 coastal cities; including Dalian, Qinhuangdao, Tianjin, Yantai, Qingdao, Lianyungang, Nantong, Shanghai, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhanjiang and Beihai as the earliest cities opening up to the outside world; indicating that the strategy of external-oriented development in the eastern coastal region began to be fully implemented (see Table 3-6). The state's focus of investment in infrastructure also turned to advantageous regions; thus, the ratio of investment in the eastern coastal region surpassed that of the central and western regions for the first time, reaching 47.7%, but the western region was reduced to 17.2%.²¹⁴ According to the developmental trend of regional disparity, China's provincial regional disparity leveled off and then declined.

Year	Opening regions
1979	Guangdong province and Fujian province
1980	Special Economic Zones: Shenzhen, Zhuhai, Xiamen, and Shantou
1984	14 costal opening cities
1985	Expanding of coastal economic opening zones, including 239 counties and cities
Source: C	ollected by author.

²¹³ Deng, X. (1994). Selected Works of Deng Xiaoping: Volume 3. People's publishing house, p133. (In Chinese)

²¹⁴ Lu, D. (2006). Theory and Practice of China's Regional Development. Science Press, p112. (In Chinese)

The Strategy of Giving Priority to the Development of the Eastern Coastal Region, under the Strategy of Industrial Gradient Transfer during the "7th Five-Year Plan" explicitly put forward that "China's economy shows an objective trend of gradually advancing from the east to the west in the three regions like the eastern region, the central region and the western region, it is essential to accelerate the development in the eastern coastal region, focus on the construction of energy and raw material in the central region, and make active preparations to further develop the western region, including the eastern region, the central region and the whole nation into three economic regions, including the eastern region, the central region and the western region for the first time, and the state established a development plan taking the three regions' gradient development as a main context under the guiding idea of priority in efficiency and unbalanced development.

In that same period, the state continued to strengthen the opening-up in the eastern coastal region, clearly proposed the continuing of consolidating and developing the established opening-up pattern, gave full play to the function of a coastal open region, and "gradually establish a more open external-oriented economic structure",²¹⁶ "to make this region gradually become China's base of foreign trade, its base of training and providing senior technology and management talents for the whole country, and its base of delivering new technology and providing consultation, information for the whole country",²¹⁷ thus, finally driving comprehensive and further development of China's reform and opening-up. Guided by this idea, the state constructed the Hainan Special Economic Zone in 1988 and Pudong New District of Shanghai in 1990 respectively. After that, the Central Committee of the CPC and the State Council decided to implement the policy of a coastal open city in 5 cities along the Yangtze River, 13 border cities and counties in the northeast region, the

²¹⁵ CCP Literature Research Center (2011). *Selected Important Documents since the Twelfth National Congress of CCP*. Central Party Literature Press, p810. (In Chinese).

²¹⁶ CCP Literature Research Center (2011).*Selected Important Documents since the Twelfth National Congress of CCP*. Central Party Literature Press, p161. (In Chinese).

²¹⁷ CCP Literature Research Center (2011). *Selected Important Documents since the Twelfth National Congress of CCP*. Central Party Literature Press, p810. (In Chinese).

southwest region and the northwest region, and 11 inland provincial (capital) cities.

According to the distribution of fixed asset investment (see Table 3-7), the investment further turned to the eastern coastal region during the "7th Five-Year Plan". From 1986 to 1990, the ratio of fixed asset investment in the coastal region to that in the central and western regions sharply increased from 1.12:1 to 1.53:1. In 1990, the ratio of fixed asset investment in the eastern region was 2.28 and 3.91 times respectively that in the central and western regions. The interprovincial disparity in per capita GDP did not ascend significantly during the "7th Five-Year Plan".

	Year	East	Central	West	
	1986	52.3	27.6	14.4	
	1987	55.9	26.6	14.0	
7 th five-year plan	1988	57.7	25.2	13.9	
	1989	57.5	24.3	14.4	
	1990	56.8	24.9	14.5	
	1991	57.0	24.2	14.7	-
	1992	59.7	22.9	13.8	
8 th five-year plan	1993	61.7	21.5	13.0	
	1994	63.3	20.8	12.0	
	1995	63.8	21.0	11.9	
	1996	62.2	22.2	12.5	-
	1997	61.0	22.4	13.0	
9 th five-year plan	1998	59.6	22.3	14.7	
	1999	61.8	22.7	15.5	
	2000	60.6	23.4	16.0	

Table 3-7 The distribution of investment in fixed assets during 7th, 8th and 9th five-year plan (%)

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

3.2.2 Basic Information regarding the Third Fiscal Decentralization

Since the Third Plenary Session of the 11th Central Committee of the CPC, the breakdown of the planned economic system provided a new institutional framework for the adjustment of the financial relationship between the central government and local governments. To support the national strategy, reduce the resistance of reform, dilute the cost of reform and break through the bottleneck of reforms, the central government strived to drive the overall development of the market economic system by adjusting the financial system, and in particular, it gave priority to the development of the eastern coastal regions for the purpose of achieving a breakthrough of Chinese economic development in a short time. To achieve the above goals, it basically structured the financial reform along two paths: one was power decentralization, i.e. the state designated the revenue and expenditure boundary between the central government and local governments, and gave local governments greater financial independence, all of which were called "*fen zao chi fan* (serving meals to different diners from different pots)"; the other was to surrender part of the profits, i.e. the state gave more autonomy to enterprises. Given that state-owned enterprises were major subjects of tax payments, the expansion of each enterprise's autonomy, in a sense, represented the decentralization of fiscal power from the central government to local governments. This reform of power decentralization could be generally divided into three phases.

Firstly, it was the stage of "division of revenue and expenditure and management at different levels" (1980-1984). Its basic principle was to divide the revenue and expenditure boundary between the central government and local governments, according to the subordinate relationship among enterprises and public institutions. In terms of revenue, it was divided into central financial fixed revenue²¹⁸, local financial fixed revenue²¹⁹, fixed ratio shared revenue²²⁰ and central & local adjusted revenue. With regard to expenditures, it was divided into central financial expenditure, local financial expenditure and expenditure for a few special projects. To ensure that the central government and local governments acted within the scope of their competence and functions, the state also made the following stipulations: local financial arrangement should be made on the basis of a comprehensive consideration to the nation's unified strategy and local places' actual condition, so as to maintain an appropriate

²¹⁸ Note: Including income of central-owned enterprises, tariff revenues and other income.

²¹⁹ Note: Including income of central-owned enterprises, Salt tax, agricultural tax, business income tax, local taxes and other local revenues.

²²⁰ Note: The enterprises managed directly by central government must submit 80% of income to central government, 20% to local government.

balance between revenue and expenditure; the local financial budget should be made by local governments, reviewed by the Ministry of Finance, and then submitted to the State Council for approval; central government departments would no longer arrange expenditure for various items that should be arranged by local governments or distribute indicators of financial expenditure to local governments. Moreover, to reduce the resistance of reform and adapt to the development at every place, China established a different financial contract system for different provinces in that period. To relieve the central government's financial pressure, China adjusted its financial system in 1983. Specifically, instead of distinguishing local fixed revenue from local adjusted revenue, it changed the "division of revenue and expenditure and contracting at different levels" to "sharing in total revenue and proportionate sharing of the revenue". At the same time, it changed industrial-commercial tax on tobacco and wine from adjusted revenue to central revenue, and returned it to local governments by the base.

Secondly, it was the stage "division of tax category and designation of revenues and expenditures" (1985-1988). Compared with previous stages, the most significant change at this stage was that the state started to transform revenue distribution between the central government and local governments, from a subordinate relationship among enterprises and institutions, to a system of division. This division was according to the tax category after the completion of the second step - "replacement of profit by tax", i.e. it divided tax set in "replacement of profit by tax" into central financial fixed revenue, local financial fixed revenue, central & local financial shared revenue. However, financial expenditure was still divided according to the subordinate relationship; into central financial expenditure, local financial expenditure and expenditure for special projects unsuitable for the contract system. As a result of many difficulties in the transition of the new and old systems, both the subordinate relationship among enterprises and the tax category were utilized to divide revenue during that period. Furthermore, from 1985-1987, "sharing in the total revenue" was implemented for the time being, i.e.; except for central fixed revenue, local fixed revenue and central & local shared revenue which were linked to local expenditure, so as to determine the ratio of revenue sharing.

Thirdly, it was also the stage of improving the financial contract system (1988-1993). The improvement of the financial contract system during that period was mainly manifested in the implementation of different contract systems in different regions. Specifically, there were "contract of increased revenue", "sharing in the total revenue", "sharing in the total revenue", "sharing in the total revenue", "contract of increased turned-over amount", "fixed turned-over amount" and "fixed amount of subsidy" (see Table 3-9). Moreover, 13 small tax categories were distributed to local governments as local revenue, and the foundation of local expenditure was reduced, according to the amount of central loans in 1987.

Types	Applicable regions	Incentives and Risks
Contract of increased revenue	Beijing, Hebei, Liaoning (exclude Shenyang and Dalian), Harbin, Jiangsu, Zhejiang,	Strong Incentives and Middle Risk
Sharing in the total revenue	Henan and Chongqing Tianjin, Shanxi, and Anhui	Weak Incentives and Small Risk
Sharing in the total revenue and proportionate sharing of increased revenue	Dalian, Qingdao, and Wuhan	Middle Incentives and Middle Risk
Contract of increased turned- over amount	Guangdong, and Hunan	Strong Incentives and Middle Risk
Fixed turned-over amount	Shanghai, Shandong, and Heilongjiang	Strong Incentives and Small Risk
Fixed amount of subsidy	Jilin, Jiangxi, Gansu, Shaanxi, Fujian, Inner Mongolia, Guangxi, Tibet, Ningxia, Xinjiang, Guizhou, Yunnan, Qinghai, and Hainan	Strong Incentives and Small Risk

Table 3-9 Different financial contract systems

Source: collected by author.

Generally speaking, the transformation of the Chinese financial system from "egalitarianism (eating in big pot)" to "*fen zao chi fan* (serving meals to different diners from different pots)", as well as the gradual improvement of the financial

contract system provided a basic institutional guarantee for China's fiscal distribution. Firstly, it avoided the previous method of fiscal distribution – "large-scale centralization and decentralization", designated the revenue and expenditure boundary between the central government and local governments, and directly combined local governments' revenue with local enterprises' efficiency, tax administration system and financial expenditure management, so as to increase local governments' enthusiasm for increasing revenue and reducing expenditure, as well as maintaining local financial balance. Secondly, the system "fen zao chi fan (serving meals to different diners from different pots)" eliminated the central vertical competent departments' vertical financial intervention in corresponding local departments, as well as their improper intervention in micro economic behavior; therefore, local governments could arrange financial expenditure, according to the central development strategy and local objective circumstances. Thirdly, it increased the stability of the financial system, i.e. the system was transformed from the previous "one change a year" or "random change" to "remaining unchanged for 3 or 5 years"; thus, helping local governments arrange plans for local economic and social development. Fourthly, it changed the financial system that "one size fits all", i.e. according to the state's development strategy, historical tradition and development status; thus, China implemented a different financial contract system for different provinces or regions.

3.2.3 The Third Fiscal Decentralization and Regional Disparities

Based on the description above, it can be determined that this reform of fiscal decentralization designated the revenue and expenditure boundary between the central government and local governments, and increased institutional stability and extensibility, which, to some extent, improved the mess that "the central government balances various local governments' expenditure" before the reform and opening-up. Therefore, central financial revenue steadily increased from 28.4 billion yuan in 1980, to 66.5 billion yuan in 1984, at the beginning of the reform, and the ratio of central financial revenue to overall financial revenue also increased from 24.52% to 40%. Meanwhile, the central financial

expenditure also increased sharply, accounting for above 50% of the national financial expenditure for recent years. The data above visually indicated the improvement of the central government's financial condition and the enhancement of its ability to control the macro economy. With the completion of the second "replacement of profit by tax", the financial system "*fen zao chi fan* (serving meals to different diners from different pots)" also improved correspondingly. However, within the adjusted financial system, although the central government's amount of financial revenue increased; its ratio of financial revenue to national financial revenue gradually reduced from 38% in 1985, to 22% in 1993, and the ratio of financial expenditure also reduced from 40% to 28%, which indicated that the central government's financial and control mechanism was weakened.

 Table 3-10 The financial condition of the national and central government during the third wave of fiscal decentralization (Unit: Billion)

Year	National revenue	National expenditure	Central revenue	Central expenditure	Surplus of central government	Rate of central revenue	Rate of central expenditure
1980	115.993	122.883	28.445	66.681	-38.236	24.52%	54.26%
1981	117.579	113.841	31.107	62.565	-31.458	26.46%	54.96%
1982	121.233	122.998	34.684	65.181	-30.497	28.61%	52.99%
1983	136.695	140.952	49.001	75.96	-26.959	35.85%	53.89%
1984	164.286	170.102	66.547	89.333	-22.786	40.51%	52.52%
1985	200.482	200.425	76.963	79.525	-2.562	38.39%	39.68%
1986	212.201	220.491	77.842	83.636	-5.794	36.68%	37.93%
1987	219.935	226.218	73.629	84.563	-10.934	33.48%	37.38%
1988	235.724	249.121	77.476	84.504	-7.028	32.87%	33.92%
1989	266.49	282.378	82.252	88.877	-6.625	30.86%	31.47%
1990	293.71	308.359	99.242	100.447	-1.205	33.79%	32.57%
1991	314.948	338.662	93.825	109.081	-15.256	29.79%	32.21%
1992	348.337	374.22	97.951	117.044	-19.093	28.12%	31.28%
1993	434.895	464.23	95.751	131.206	-35.455	22.02%	28.26%

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

According to the experience of the two previous fiscal decentralizations, the reduction of central fiscal distributions and the weakening of its control ability might mean the widening of regional development disparity. Meanwhile, given

that the central government preferred an unbalanced development strategy in the eastern coastal region and a financial contract system which was relatively in favor of eastern provinces, the disparity of industrial production efficiency and total output value was supposed to expand during that period.

This adjustment is confirmed by the number of industrial enterprises and total industrial output value in various provinces as reflected in Table 3-11. The number of industrial enterprises and output value tended to increase in some eastern provinces. For example, the number of enterprises increased by 39% from 1980 to 1993 in Jiangsu Province, but its total output value increased by more than 14 times; the output value increased more than 17 times in Zhejiang Province, Guangdong Province and Fujian Province; at the same time, industry grew slowly in the central and western provinces, where the total industrial output value increased 7 times or below in provinces like Jilin, Heilongjiang, Hunan, Chongqing, Guizhou, Tibet, Shaanxi, Gansu and Qinghai. On the whole, the number of industrial enterprises increased by 4.4 times and the output value increased 11.3 times in the eastern region; the number of industrial enterprises increased by 3.5 times and the output value increased by 7.8 times in the central region; while the number of industrial enterprises increased by 1.3 times and the output value increased by 7 times in the western region. To sum up, the disparity of industrial development among the three regions was significantly widened in that period.

East			Central			West		
Province	1993	Grow	Province	1993	Grow	Province	1993	Grow
Beijing	10320	176.5%	Shanxi	11853	24.3%	Inner Mongolia	9485	23.4%
Beijing	1166.6	446.7%	Shanxi	743.9	545.9%	Inner Mongolia	520	775.6%
Tianjin	12454	198.6%	Jilin	13698	24.7%	Guangxi	12736	18.5%
Tianjin	1401.8	615.4%	Jilin	1033.3	667.3%	Guangxi	902.9	1048.3%
Hebei	21137	38.7%	Heilongjiang	17924	20.4%	Chongqing	13430	3.1%
Hebei	2624	999.7%	Heilongjiang	1394.3	471.1%	Chongqing	532.7	291.5%
Liaoning	28297	77.0%	Anhui	24119	60.9%	Sichuan	34526	1.4%

 Table 3-11 Amount of industrial enterprises (shadow) and industrial output (100 million

 Yuan) of provinces, 1980-1993

Liaoning	2610	487.9%	Anhui	1558.2	1101.8%	Sichuan	1819	884.3%
Shanghai	13699	91.6%	Jiangxi	17236	34.1%	Guizhou	7544	-2.2%
Shanghai	3327	455.7%	Jiangxi	974.1	936.1%	Guizhou	381.2	743.6%
Jiangsu	45554	39.4%	Henan	21556	35.9%	Yunnan	7919	3.5%
Jiangsu	7096.5	1416.9%	Henan	2434.4	1063.5%	Yunnan	690.1	956.0%
Zhejiang	508237	1715.9%	Hubei	22600	36.1%	Tibet	278	9.5%
Zhejiang	3812.4	1791.0%	Hubei	1992.3	773.7%	Tibet	6	302.0%
Fujian	258904	1998.4%	Hunan	544080	2561.8%	Shaanxi	13229	31.6%
Fujian	1522.4	1769.1%	Hunan	1438.9	709.1%	Shaanxi	793.8	621.9%
Shandong	27976	46.4%	-	-	-	Gansu	7010	54.0%
Shandong	4713.5	1285.0%	-	-	-	Gansu	505.2	555.4%
Guangdong	33790	61.9%	-			Qinghai	18235	1331.3%
Guangdong	5237.4	2006.1%	-	-	-	Qinghai	75.1	426.4%
						Ningxia	1903	73.5%
						Ningxia	121.5	772.9%
						Xinjiang	6970	71.6%
						Xinjiang	448.4	1001.5%

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

According to Figure 3-1, it can be clearly shown that China's inter-provincial development disparity did not expand, but reflected a declining trend throughout that period. The variable coefficient lowered from 0.885 in 1980, to 0.592 in 1990, and then began to rebound; reaching 0.652 in 1993. Gini coefficient and Theil index also presented a similar development trend. It indicates that the change of other factors offset the intensifying effect of fiscal decentralization and the national unbalanced development strategy on regional development disparity during 1980-1990.

During that period, in addition to the reform and opening-up, the reform of the market economic system and the reform of the financial system, the most important reform was the reform of the rural production and operation system, namely, the reform of "household contract responsibility system with remuneration linked to output". In the early 1980s, the reform of rural management system, which focused on the household contract responsibility system, with remuneration linked to output, greatly enhanced farmers' enthusiasm for production and agricultural production efficiency; thus, promoting the rapid growth of the farmers' income. Moreover, the increase in the procurement price of agricultural and sideline products, finally, successfully brought about a substantial increase in rural residents' income, and the narrowing of rural-urban disparity, which offset the expansion of regional disparity.²²¹ Meanwhile, the release of the agricultural labor force, local governments' desire for increase in financial income and the relaxation of a relevant national policy also promoted the development of labor-intensive township enterprises. During 1980-1995, the ratio of township enterprises increased from 14.3% to 37.5%.²²² To some extent, the rapid development of township enterprises lowered the rural-urban development disparity, and the narrowing of rural-urban disparity also directly converted into the narrowing of regional disparity.

Without GDP data in urban and rural areas, this paper is based on research methods adopted by scholars, like Fan Shenggen,²²³ i.e. it uses the per capita income of urban and rural residents in various provinces as the indicator measuring the Theil index of inter-provincial development disparity. After that, it resolves the Theil index into development disparity between urban and rural areas and development disparity inside urban and rural areas. Figure 3-2 depicts the result of this measurement.

In 1979, income disparity between urban and rural areas stood at 0.081, accounting for 76% of the overall disparity; after 1980, the development disparity between urban and rural areas was rapidly narrowed, and the Theil index dropped to 0.024 in 1984; after that, it began to increase; however, in 1990, it increased to 0.052. According to the measurement, it can be ascertained that the coefficient of correlation between the change of overall development disparity and urban-rural development disparity during 1980-1990 reached 95%. In other words, the narrowing of urban-rural disparity to a large extent. However, after 1990, the development disparity between urban and rural areas and the

²²¹ Fang, C. (2008). Thirty Years of Rural Reform in China: an Analysis from the Perspective of Institutional Economics. *Social Sciences in China*, *6*, 009.

²²² Xu, C., & Zhang, X. (2009). The evolution of Chinese entrepreneurial firms: township-village enterprises revisited. *Ifpri Discussion Papers*, 1-33.

²²³ Fan, S., Kanbur, R., & Zhang, X. (2011). China's regional disparities: Experience and policy. *Review of Development Finance*, *1*(1), 47-56.

development disparity in urban and rural areas, reflected an expanding trend, and their combination resulted in the on-going expansion of regional development disparity after 1990.

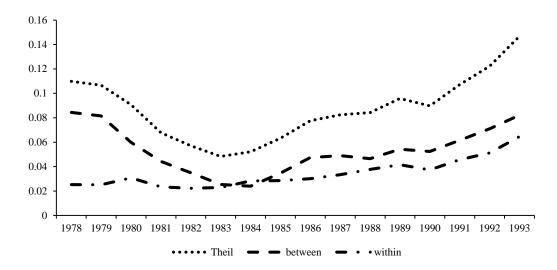


Figure 3-2 The Theil index of China's urban and rural development during the *fen zao chi fan* period

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

Some new information can be acquired by observing the evolution of development disparity among rural areas in different provinces or urban areas in different provinces (see Figure 3-3). At the beginning of the rural reform period from 1980 to 1983, farmer's income among different provinces showed a converging trend; however, after 1984, this disparity began to expand from 0.03 in 1983, to 0.065 in 1990. After 1990, the development disparity among rural areas sharply increased to 0.122 within only three years.

Obviously, this sharp expansion of disparity was unlikely derived from agriculture, with an average production efficiency, but likely resulted from the expansion of disparity in the degree of rural industrialization among different areas. The income disparity of urban residents among different provinces always remained steady prior to 1990, but after 1990, it suddenly began to expand. On the whole, the development disparity among rural areas and urban areas in

different provinces was also an important part of the overall development disparity. Before 1993, the development disparity among rural areas had a significant effect on the overall disparity.

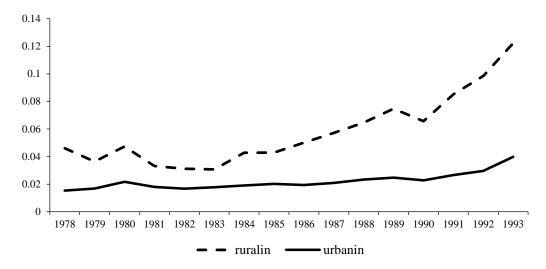


Figure 3-3 The Theil index of China's urban and rural development disparity between regions during the *fen zao chi fan* period

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

3.2.4 Historical Experience in Fiscal Decentralization and Regional Development

In general, the fiscal decentralization policy makers learned a lesson from the experiences before the reform and opening-up and began to guide development towards institutionalization, standardization and stabilization. Although "*fen zao chi fan*" awarded local governments with huge autonomy relating to financial revenue and expenditure; nevertheless, the macro economy did not exhibit a wide range of disorder during that particular period. It should be noted that the system of fiscal decentralization still, unavoidably, led to the decline of the central government's finance and the weakening of its macro-control ability. Besides, the one-by-one negotiation between the central government and various provincial governments objectively fostered self-interest and closing trend at various places.

Theoretically speaking, the shift of the central government and local governments' power might not contribute to the narrowing regional

development disparity. The description of continuously expanding industrial production efficiency as well as the efficiency disparity above, also verifies the theoretical judgment above. However, rural production efficiency released by the "household contract responsibility system with remuneration linked to output" rapidly narrowed the rural development disparity among different areas; thus, driving the convergence of overall regional disparity.

This interesting phenomenon indicates, from one side, that balanced development among regions is not only related to spatial layout of productivity or industry and commerce, but also the coordinated development of the entire social economy, which also includes industry and agriculture. Therefore, to coordinate the further development among regions, it is essential to pay close attention to the centralization and decentralization of fiscal distribution, as well as the adjustment of comprehensive power including politics, economy and society.

3.3 Fiscal Decentralization under the Strategy of Regional Balanced and Coordinated Development

To overcome problems like excessive decentralization of fiscal distribution, the decline of central control ability, mismatch of rights and responsibility, an overly complex system, poor policy continuity and confusion relating to financial management of the contract system on revenue and expenditure, China had initiated the reform of the revenue-sharing system, whose main feature was the dividing of the revenue and expenditure boundary between the central government and local governments. The establishing of a separate central and local taxation authority since 1994, relied on the principle of a socialist market economy, based on summarizing successful experiences and lessons from failure in the reform of the financial system since the founding of new China and thoroughly investigating beneficial achievements of the financial systems in various countries around the world.

The reform of the revenue-sharing system reflected China's fiscal distribution between the central government and local governments; thus, introducing the period of institutionalization and stabilization. To some degree, the implementation and precision of the revenue-sharing system improved the situation of the central government's fiscal decentralization, aroused local governments' enthusiasm for economic development and altered the institutional environment of a market economy.

Overall, most scholars accept that China's reform of the revenue-sharing system belongs to the category of fiscal federalism. Supporters of fiscal federalism believe that fiscal decentralization not only structures and coordinates the appropriate use of power to better meet the public demands, so as to enhance the supply efficiency and improve the quality of public products; but this also narrows regional development disparity under the dual action of local competition and voting with their feet.²²⁴ However, many scholars take a skeptical attitude towards this point of view,²²⁵ for in a competitive local decentralization system developed regions that have substantial tax base and first mover advantage can maintain the government's efficient operation and provide high-quality public services, via a relatively low tax rate. Public services with low tax rates and high quality can effectively attract the inflow of foreign capital and other valuable resources.

Obviously, in this process, developed regions become richer, but less developed regions encounter a completely opposite situation and must maintain a high tax rate to promote and guarantee the government's minimal operational standards. At the same time, instead of attracting the inflow of foreign resources, less developed regions squeeze local people and enterprises' living space, so as to force an outflow of resources and cause poverty-stricken regions to constantly lose development potential. As the rich become richer and the poor become poorer, regional development disparity will naturally continue to expand. Meanwhile, in the system of fiscal decentralization, it is difficult for the central government to draw sufficient financial resources from rich or poverty-stricken areas, so as to promote the balanced development among regions.

In a word, there is not yet a consistent viewpoint regarding the relationship

²²⁴ Tiebout, C. M. (1956). A pure theory of local expenditures. *The journal of political economy*, 64(5), 416-424.

²²⁵ Prud'Homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, 10(2), 201-220.

between the reform in fiscal federalism and regional development disparity in the academic circles. Thus, based on financial data after 1994, this paper explores the influence of the reform of the revenue-sharing system on regional development disparity from two perspectives – financial revenue and financial expenditure.

3.3.1 Regional Disparity in Financial Revenue after the Revenue-sharing System

The reform of the revenue-sharing system made the protocols for the revenue and expenditure boundary between the central government and local governments relatively clear. See Table 3-12 for clarified content. It should be noted that the central government established a tax return among local governments with amounts verified, by taking 1993 as the base year, so as to ensure local vested interest and reduce resistance of reform. After 1994, the tax return was linked to the growth rate of value-added-tax (75%) and consumption tax ("two taxes" for short) turned over to the central government, namely, the return based on increase, that is to say, whenever "two taxes" increase by an average of 1% all over China, the central finance provided an increase of 0.3% tax return for local governments. Besides, to properly solve problems left by the original system and achieve a successful transition from an old to a new system, China temporarily implemented a "double-track system", with a revenuesharing system and a contract responsibility system paralleling each other; thus, gradually realizing standardization after an appropriate transition period.

 Table 3-12 The division of the revenue and expenditure boundary between the central government and local governments in the revenue-sharing system

 The Control Covernment's Local Covernments' Fixed Control covernment's Shared

The Central Government's	Local Governments' Fixed	Central and Local Shared	
Fixed Revenues	Revenues	Revenues	
Tariff, value-added-tax	Business tax, corporate	Value-added-tax (excluding the	
withheld by the customs,	income tax paid by local	part converted into central	
consumption tax,	enterprises, urban	revenue), with 75% shared by the	
corporate income tax paid	maintenance and	central government and 25%	
by central enterprises,	construction tax (all of the	shared by local governments,	
corporate income tax paid	three above exclude the	according to the resource variety	
by local banks, foreign-	part converted into central	of resource tax revenue; most	

funded banks and non-	revenue), profit paid by	resource tax revenue is						
bank financial institutions,	local enterprises,	categorized as local revenue, and						
revenues (including	individual income tax,	offshore petroleum resource tax						
business tax, corporate	profit paid by local	revenue is categorized as central						
income tax, profit and	enterprises, individual	revenue; as for securities						
urban maintenance and	income tax, urban land use	transaction tax, the central						
construction tax) paid by	tax, regulation tax of fixed	government and local						
railway, various bank	asset investment, real	governments share 50% of it						
headquarters and various	estate tax, vehicle and	respectively.						
insurance headquarters,	vessel use tax, stamp tax,							
profit paid by central	butchery tax, agricultural							
enterprises, etc. foreign	tax, animal husbandry tax,							
trade enterprises and all	farmland occupation tax,							
export rebates are covered	deed tax, inheritance and							
by central finance.	gift tax, land value							
	increment tax, revenue of							
	compensable use for state-							
	owned land, etc.							
	6 1004							

Gradually Adjusted Content after 1994

Individual income tax was changed to central and local shared tax (with regard to present distribution ratio, 60% of revenue was stipulated to the central government and 40% of revenue was stipulated to local governments); most corporate income tax was no longer categorized as central revenue and local revenue, according to the subordinate relationship among enterprises, but distributed in specified proportions (similar to individual income tax); the state did not begin to collect securities transaction tax, and repeatedly adjusted the distribution ratio of stamp tax revenue; collected by the stock exchange, that is, according to the existing provision, 97% of it was categorized to the central government and 3% of it was categorized to local governments; butchery tax, agricultural tax and animal husbandry taxes were abolished; the collection of regulation tax of fixed asset investment was stopped; the revenue of newly increased vehicle purchase tax was categorized to the central government; export rebates started to be covered by the central government and local governments respectively, and the collection of offshore petroleum resource tax, inheritance and gift tax did not begin.

Source: collected by the author

(1) Disparity in the Amount of Financial Revenue after the Revenue-sharing System

Local per capita financial revenue was an important indicator to measure and judge the degree of financial balance among regions. Before the reform of the revenue-sharing system, due to the frequent changes of China's financial system, inconsistent financial system in various regions, unstable local revenue sources and unclear local expenditure items, it was very difficult to conduct an objective and horizontal comparison of financial revenue and expenditure in various regions. The reform of the revenue-sharing system not only clearly defined the scope of local revenue and expenditure, but also attempted to universally establish a consistent financial system throughout China.

Moreover, after 1994, the revenue-sharing system merely adjusted the existence or abolishment, category and sharing ratio of individual taxes; however, the entire institutional framework basically remained unchanged. Such universality and stability enabled the data of financial revenue and expenditure to be utilized for inter-provincial and inter-regional comparisons, so as to discover and monitor the disparity among provinces or regions, as well as any other significant or relevant information.

Table 5-15 China per capita revenue gap between provinces arter revenue-sharing system						
Year	GINI	Theil	coefficient of variation			
1990	0.434642	0.374997	1.148838			
1991	0.426662	0.34289	1.063868			
1992	0.411254	0.323975	1.050503			
1993	0.399546	0.293143	0.991924			
1994	0.435477	0.352175	1.083728			
1995	0.398739	0.327069	1.02929			
1996	0.401142	0.338624	1.056518			
1997	0.411847	0.366169	1.117164			
1998	0.414361	0.365201	1.105531			
1999	0.422875	0.379591	1.12496			
2000	0.434821	0.398519	1.1544			
2001	0.455923	0.436018	1.212307			
2002	0.465372	0.459739	1.259553			
2003	0.473324	0.478535	1.302645			
2004	0.477661	0.4936	1.334391			
2005	0.481439	0.496992	1.33979			
2006	0.469149	0.458048	1.257003			
2007	0.470547	0.463398	1.269113			
2008	0.457223	0.434271	1.211102			

Table 3-13 China per capita revenue gap between provinces after revenue-sharing system

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

According to the change, the trend relating to per capita financial revenue in

each province (see Table 3-13), and the disparity of financial revenue among various provinces depicted a declining trend and the Gini coefficient dropped from 0.43 in 1990, to 0.399 in 1993; before the reform of the revenue-sharing system. After the reform of the revenue-sharing system, the disparity of interprovincial per capita financial revenue began to slowly increase. The Gini coefficient increased to 0.48 in 2005 and began to decline in 2006. On the whole, the disparity of per capita financial revenue and expenditure among various provinces was smaller than the disparity of per capita financial revenue; the Gini coefficient basically stabilized between 0.33 and 0.36 after 1994, and began to decline after 2005. It can be determined from the data above that, under the strategy of a central unbalanced development, the expansion of economic development disparity among various regions directly converted into the disparity of financial revenue.

(2) Disparity in the Structure of Financial Revenue after the Revenue-sharing System

Although the reform of the revenue-sharing system designated the revenue and expenditure boundary between the central government and local governments; according to tax categories, the tax base and tax rates were still uniformly made by the central government, which did not necessarily mean that all regions of China used the same tax standard. As a result of the state's change of development strategy and development of an industry support policy, different regions actually enjoy different tax rates and tax bases. For example, the state provided a series of preferential policies for emerging industries, hightech industries and foreign-invested enterprises, and high-tech enterprises enjoyed a 15% preferential tax rate of corporate income tax.

In this way, it actually might cause regions with concentrated enterprises and industries enjoying tax preference to actually enjoy a lower tax rate, and most enterprises and industries of this kind were extensively located in the eastern coastal region. Lower tax rates and preferential policies would attract more foreign investment; thus, driving the prosperity of the regional economy, the improvement of regional finance and the enhancement of regional public service levels. Meanwhile, sufficient industrial & commercial tax sources and relatively lower taxation costs also prevented local governments from imposing tax of excessive fees upon agriculture with high taxation cost, but a small tax base. In the presence of many benefits brought about by low tax rates and tax preferences, the governments of the above regions was more likely to become the "helping hand" to support local industry, commerce and agriculture.²²⁶ Such a virtuous circle could encourage the regional economic development in the direction of a healthy development and profitable interaction.

Table 3-14 The FDI comparison between cities with preferential tax policy and other cities,1984-1991

	Average	Median	Maximum	Standard
				deviation
18 cities with a preferential tax policy	7042	2233	42212	9753
18 neighboring cities without a preferential tax	1505	294	17799	2989
policy				
18 non-opening cities	402	146	4161	694

Source: Le,w., & Sun, P. (2002). An Empirical Analysis of the Effectiveness of China's Regional Tax Policy. *Shanghai Economic Research*, (6).

As for less developed regions, with very few enterprises enjoying a preferential tax policy, instead of providing various preferential policies for existing enterprises, they would impose excessive taxes and fees upon local enterprises and tend to impose taxes and fees upon agriculture with high taxation cost, so as to maintain the government's normal operation. Local governments of less developed regions were also very likely to become the "grabbing hand" to hinder and inhibit economic development.

According to the above analysis and relevant scholars' studies, it can be generally assumed that within the system of fiscal decentralization, there is most likely the existence of an industrial and regional preferential tax policy²²⁷, which might make developed regions' financial revenue more reliant on industry and commerce, while both of their industrial and commercial tax rates and

²²⁶ Zhang, X. (2006). Fiscal decentralization and political centralization in China: Implications for growth and inequality. *Journal of Comparative Economics*, 34(4), 713-726.

²²⁷ Qian, Y., & Roland, G. (1998). Federalism and the soft budget constraint. American economic review, 88(5).

agricultural tax rates were relatively lower; it might also force the less developed regions' tax structure to target and rely more on agriculture, while both of their industrial and commercial tax rates and agricultural tax rates were relatively higher. This disparity in the structure of financial revenue further widened the disparity of economic development among different regions.

1998-2008					
West average	8.65%	East average	4.67%	Central average	7.30%
Inner Mongolia	6.96%	Beijing	4.35%	Shanxi	7.79%
Guangxi	6.85%	Tianjin	3.93%	Jilin	7.37%
Chongqing	6.48%	Hebei	5.95%	Heilongjiang	9.38%
Sichuan	6.64%	Liaoning	5.10%	Anhui	6.84%
Guizhou	10.31%	Shanghai	4.69%	Jiangxi	6.26%
Yunnan	19.89%	Jiangsu	3.75%	Henan	5.69%
Tibet	10.74%	Zhejiang	4.73%	Hubei	6.00%
Shanxi	7.24%	Fujian	4.32%	Hunan	9.05%
Gansu	6.56%	Shandong	4.55%		
Qinghai	7.86%	Guangdong	3.75%		
Ningxia	5.92%	Hainan	6.22%		
Xinjiang	8.40%				

 Table 3-15 The average tax rate of industrial enterprises within each region and province,

 1998-2008²²⁸

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

It can be determined from Table 3-15 that the average tax rate of the abovescale industrial enterprises was 4.67% in the eastern provinces; far lower than the 7.3% in the central region or the 8.65% in the western region. In the eastern region, the lowest industrial tax rate was 3.75% for Guangdong Province and Jiangsu Province, and it was below 5% in most other provinces; however, it was generally above 6% in the central provinces, with the highest reaching 9.38% in Heilongjiang Province; it was generally close to 7% or above in the western provinces, with the highest reaching 19.89% in Yunnan Province. According to Figure 3-4, it can be seen that the higher the per capita GDP is (the more developed the province is), the relatively lower the industrial tax rate will be. The above data basically proves the assumption mentioned before, i.e. in the

²²⁸ Note: The industrial tax rate in this paper means the total amount of all kinds of related industrial tax, such as Business tax and VAT accounted to the total value of industrial production.

revenue-sharing system, the more developed the region is, the lower its industrial tax rate; thus, contributing to the attraction of heavy external investment and promoting sustainable economic prosperity.

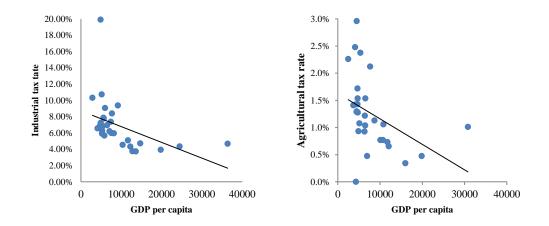


Figure 3-4 The relationship between the industrial tax rate, agricultural tax rate and GDP per capita of China

Source: calculated by author.

With regard to the agricultural tax rate, it was similar to the industrial tax rate. It can be determined from Table 3-16 that the average or mean agricultural tax rate was the lowest at 0.79% in the eastern region, seconded by the central region at 1.35%, and in the western region, it was an average of 1.64%; doubling that of the eastern region. The lowest tax rate in the eastern region was 0.34% in Tianjin City; it was higher than 1% in only a very few provinces. The lowest tax rate in the central region was 0.93% in Henan Province and Jilin Province, but it was higher than 1% in all the remaining provinces; the lowest tax rate in the western region was in Sinkiang, where it was 1%, while the agricultural tax rate was over 1.4% in all the western provinces, except for Sinkiang and Sichuan Provinces.

It can be discovered from Figure 3-4 that the lower the provincial per capita GDP, the relatively higher the agricultural tax rate, and vice versa. The above data also proves the assumption mentioned before that, due to their single tax revenue source, the high industrial tax rate and small tax base, the relatively less

developed provinces tend to impose taxes and fees upon agriculture with high taxation cost and small tax elasticity. However, this method of financial collection further constrained less developed provinces' development potential. In a competitive financial system, the development disparity among these three regions was bound to expand.

	er age agrica		8	F	
West average	1.64%	East average	0.79%	Central average	1.35%
Inner Mongolia	2.38%	Beijing	0.47%	Shanxi	1.28%
Guangxi	1.42%	Tianjin	0.34%	Jilin	0.93%
Chongqing	1.41%	Hebei	0.48%	Heilongjiang	2.12%
Sichuan	1.29%	Liaoning	0.77%	Anhui	1.54%
Guizhou	2.26%	Shanghai	1.01%	Jiangxi	1.43%
Yunnan	2.96%	Jiangsu	0.77%	Henan	0.93%
Tibet	0.00%	Zhejiang	0.66%	Hubei	1.54%
Shanxi	2.48%	Fujian	1.06%	Hunan	1.08%
Gansu	1.41%	Shandong	1.13%		
Qinghai	1.72%	Guangdong	0.73%		
Ningxia	1.30%	Hainan	1.22%		
Xinjiang	1.04%				

Table 3-16 The average agricultural tax rate for each region and province of 1999²²⁹

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

3.3.2 Regional Disparity in Financial Expenditure after the Revenuesharing System

The reform of the revenue-sharing system clearly defined the revenue boundary between the central government and local governments, but, by contrast, it did not definitely divide the expenditure boundaries between the local governments. With regard to local governments' expenditure responsibility, *The State Council's Decision on the Implementation of Revenue-sharing Financial Management System* issued in 1993, ambiguously provided that "local finance mainly covers the expenditure required by local political power organs' operation as well as local economic and career development, and specifically, it includes local administrative expense, public security organs' expense, armed police's expense, militia's operating expense, local planned infrastructure

²²⁹ Note: The agricultural tax rate in this paper means the total amount of all kinds of related agricultural tax accounted to the total value of agriculture production.

investment, expense for local enterprises' technical innovation and trail production of new product, expense for supporting agriculture, urban maintenance and construction expense, operating expense for local culture, education and health, expense for price subsidy as well as other expenses."

Moreover, after this, the State Council also made a corresponding supplement for local governments' expenditure responsibility,²³⁰ but, on the whole, it did not clearly define the expenditure responsibility boundary between the central government and local governments. Central and local expenditure responsibilities continued the basic trend of the planned economic era, i.e. local governments took a broad expenditure responsibility for maintaining local government departments, developing the local economy and providing the basic local public services. According to scholars' statistical data, "in 1999, local governments' expenditure accounted for 99% of overall social welfare expenditure, which had never changed since 1978."²³¹ Given that financial revenue was extremely different among various regions, local governments of various regions also had their own preferences in terms of financial expenditure, under the conditions and background of undefined financial expenditure responsibility.

(1) Disparity in the Amount of Financial Expenditure after the Revenuesharing System

With regard to the variation trend of per capita financial expenditure in each province, it reflected a wavelike rising trend and the Gini coefficient increased, from 0.292 in 1990, to 0.327 in 1994. The reform of the revenue-sharing system did not reduce the disparity of per capita financial expenditure among provinces, and the disparity of inter-provincial financial expenditure fluctuated between 0.327 and 0.360; reaching its peak in 2003, and later began to decline. In 2008, the Gini coefficient of the inter-provincial per capita financial revenue disparity was 0.310; lower than that in 1994. In general, the variation trend of inter-

²³⁰ Wong, C., & Bhattasali, D. (2003). China: national development and sub-national finance. World Bank Other Operational Studies.

²³¹ Fu, Y., & Zhang, Y. (2007). Chinese style decentralization and structural bias of fiscal expenditure: Price of competition for growth. *Management World*, *3*, 4-11.

provincial per capita financial revenue and that of inter-provincial per capita financial expenditure was inconsistent.

Furthermore, it was calculated that their correlation coefficient was 0.7766; indicating that the disparity of the per capita financial expenditure among regions did not completely change in conjunction with the change of per capita revenue, and most particularly the inter-provincial per capita financial expenditure disparity converged ahead of revenue disparity. For this reason, while conducting the reform of the revenue-sharing system, China was also trying to establish a financial transfer payment system, so as to balance the fiscal equity among various regions. For example, The State Council's Decision on the Implementation of Revenue-sharing Financial Management System in 1993 provided that "the state should support the development of less developed regions and the transformation of old industrial bases through local tax returns and transfer payment provided by central finance". The efforts of balancing regional finances brought about some effect, i.e. the disparity of financial expenditure among various provinces was obviously smaller than the disparity of financial revenue. Nevertheless, it should be admitted that the disparity of per capita financial expenditure among various regions was still high.

5			
Year	GINI	Theil	Coefficient Variable
1990	0.29212	0.139512	0.564546
1991	0.292359	0.139391	0.56219
1992	0.288712	0.137749	0.562583
1993	0.296096	0.143624	0.573412
1994	0.326829	0.188133	0.694007
1995	0.341432	0.210433	0.74776
1996	0.33701	0.213256	0.767908
1997	0.34433	0.232731	0.824541
1998	0.341197	0.226234	0.80638
1999	0.341529	0.22622	0.802968
2000	0.335713	0.220354	0.793046
2001	0.344573	0.222845	0.778386
2002	0.351484	0.233334	0.801882
2003	0.359236	0.252092	0.851094

 Table 3-17 China per capita financial expenditure gap between provinces after revenuesharing system

2004	0.350271	0.246728	0.859103	
2005	0.347855	0.241296	0.843284	
2006	0.327423	0.210955	0.775549	
2007	0.321676	0.204135	0.757756	
2008	0.309367	0.186136	0.713469	

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

(2) Disparity in the Structure of Regional Financial Expenditure after the Revenue-sharing System

After the revenue-sharing system, local governments were allowed huge autonomy of expenditure. As the central government further relaxed its "vertical" intervention regarding local financial expenditure, local governments could arrange expenditure related to the actual developmental aspects within various regions. Theoretically speaking,²³² given that local revenue was linked to local expenditure, economically developed regions would invest most funds in highreturn infrastructure construction and investment production environment improvement. At the same time, they would strengthen the expenditure in fields such as science, education, culture and health, so as to enhance local human capital, promote local development and increase local tax; while less developed regions with a backward economy and poor tax base would invest most funds in "maintaining" the normal operation of local political and economic life. For example, they would increase the expenditure for government administration and social security, and, correspondingly, decrease the expenditure for improving the production investment environment and human capital, for the purpose of further weakening the potential for regional development.

Table 3-18 reveals the financial expenditure structure of China's three regions after the revenue-sharing system reform. Regarding the expenditure for agriculture, an average of 8% of financial revenue was utilized for agriculture in the western region; 7.48% in the central region and 5.2% in the eastern region. In terms of expenditure for science, education, culture and health, the lowest was 21.47% in the western region, 22.29% in the central region, and the highest was 23.16% in the eastern region.

²³² Zhang, X. (2006). Fiscal decentralization and political centralization in China: Implications for growth and inequality. *Journal of Comparative Economics*, 34(4), 713-726.

affairs, the highest was 14.46% in the western region, second by the central region -10.93%, and the lowest was 9.99% in the eastern region; with regard to the expenditure for social security, the lowest was 5.46% in the eastern region, second by the western region -6.98%, and the highest was 9.47 in the central region. The expenditure in other areas mainly included those related to economic development, like infrastructure construction, i.e. it was as low as 49.83% and 50.09% respectively in the central and western regions, while it was as high as 56.20% in the northeast region.

 Table 3-18 Differences of regional financial expenditure structure after revenue sharing reform

	West	East	Central
Rate of agriculture	8.00%	5.20%	7.48%
Rate of education and research	21.47%	23.16%	22.29%
Rate of public administration	13.46%	9.99%	10.93%
Rate of social security	6.98%	5.46%	9.47%
Rate of others	50.09%	56.20%	49.84%

Source: National Bureau of Statistics (2010): China Compendium of Statistics. China Statistics Press.

It can be easily determined from the above description that the expenditure for science, education, culture and health, as well as other expenditures related to economic development in the eastern region, which was obviously higher than those in the central and western regions, and the ratio of expenditure for agriculture, administration and social security was obviously lower than that in the central and western regions. This kind of expenditure structure was in favor of sustainable economic growth in the eastern region. On the contrary, the ratio of "maintenance" expenditure was excessive, while "development" expenditure was slightly insufficient for the central and western regions, which further weakened their development potential.

3.3.3 Regional Financial Transfer Payment after the Revenue-sharing System

Theoretically speaking, one of the important factors for successful fiscal federalism is a fair and reasonable transfer payment system. As an institutional

mode, featuring fiscal federalism, the revenue-sharing system was bound to result in the disparity of financial capacity among governments, while encouraging competition among local governments. To prevent the expansion of regional disparity, caused by different financial levels, the damage to less developed regions' development potential, the inequality of civil rights and the weakening of national identity, the state was required to balance developed regions and less developed regions' financial revenue by fiscal means.

In 1994, the initial goal of the revenue-sharing system was to "enhance central financial capacity and intensify, improve macro control". To reduce the resistance of reform, the state postponed establishing the fair financial transfer payment system, by taking it as a task at the second stage. Meanwhile, to ensure local governments' vested interest and strive for their support, the reform of the revenue-sharing system subsidized local finance through tax returns.²³³ In brief, it "returned more to rich provinces and less to poor provinces", according to the amount of tax paid by them. After the reform of the revenue-sharing system in 2002, China's financial transfer payment system gradually developed and improved, forming an institutional system composed of tax returns, general transfer payments and special transfer payments (see Table 3-19).

	Provide compensation for local governments for the part that was			
Tax Return	categorized to the central government, but originally belonged to			
	local governments			
	Balancing transfer payment: to balance financial disparity among			
	regions			
	Transfer payment in minority regions: to support the development			
General Trans	of minority regions			
Payment ²³⁴	County-level basic financial guarantee capital: to maintain the			
Payment	operation of county-level agencies			
	Transfer payment for wage adjustment: to compensate for			
	retirement pension and wage in old industrial bases and central &			
	western regions			

 Table 3-19 Overview of China's Transfer Payment System after the Reform of Revenuesharing System

²³³ Note: the formula for the tax return: $T_t = T_{t-1}(1+0.3)$, T is the tax return in year t. R is the growth rate of consumption tax and value-added tax.

²³⁴ Note: the detailed types of transfer payment can be find at the website of Chinese financial administration. http://www.mof.gov.cn/zhuantihuigu/czjbqk2011/cztz2011/201208/t20120831_679750.html

		Transfer payment for the reform of the rural taxation system: to
		compensate for the reduced basic finance, by reason of the reform
		of the rural taxation system
		Financial transfer payment as compensation for resource-exhausted
		cities
		Transfer payment for industry and the commerce department's
		cessation of two tax collections: to compensate for the reduced
		revenue, because of industry and the commerce department's
		cessation of two taxation collections
		Transfer payment for the reform of taxes and fees for refined
		petroleum products: to compensate for local governments' reduced
		revenue, due to the reform of taxes and fees for refined petroleum
		products
		Transfer payment for compulsory education, transfer payment for
		the new rural cooperative medical system, and the new rural
		transfer payment
		Special financial subsidy for the central government's powers and
		responsibilities: to subsidize affairs related to central powers and
Special Payment		responsibilities, but implemented by local governments
	Transfer	Transformed financial subsidy for the central government and local
	Transfer	governments' common powers and responsibilities: to subsidize
		commonly involved powers and responsibilities
		Special subsidy for local powers and responsibilities: to subsidize
		local powers and responsibilities, in line with the target of central
		control

Source: Collected by the Author

In general, before the reform of the income tax sharing system in 2002, China's transfer payment was mainly focused on tax returns, which accounted for 75.3% of the overall transfer payments in 1994. Since the amount of tax return depended on the local government's tax contributions to the central government, it was unrelated to every province's GDP, financial revenue, per capita financial expenditure, public service level and geographical and natural environment, which caused "the equalization effect of tax return to be totally reverse – aggravating but not narrowing the disparity of financial capacity and basic public service among regions".²³⁵

For example, in 1995, regions receiving the most central financial subsidy

²³⁵ An, T., & Ren, Q. (2007). Equity of Public Service: Theory, Problem and Policy. *Finance & Trade Economics*, 8, 010.

included Guangdong, Shanghai, Shandong, Jiangsu, Liaoning and other eastern coastal developed regions, with the amount of subsidy reaching 81.9 billion yuan; those receiving the least subsidy were Tibet, Ningxia, Qinghai, Hainan, Gansu and other economically less developed regions, with the amount of subsidy reaching 12.66 billion yuan. From the perspective of a subsidizing effect, before subsidizing, the top five provinces' disposable income was 13.8 times that of the last five provinces, and after subsidizing, it decreased to 9.4 times, without any real reduction of disparity. According to the specific analysis of scholars like Ma Shuanyou, "more than 80% of transfer payment was to widen regional disparity" during that period.²³⁶

Top 5	Local	Central	Available	Last 5	Local	Central	Available
	revenues	subsidies	finance		revenues	subsidies	finance
Guangdong	382.3	191.8	574.1	Tibet	2.2	31.3	33.5
Shanghai	219.6	180.2	399.8	Qinghai	8.6	19.1	27.7
Shandong	179	130.5	309.5	Ningxia	9	16.2	25.2
Jiangsu	172.6	163.2	335.8	Hainan	28.5	13.3	41.8
Liaoning	184.4	153.3	337.7	Gansu	33.9	46.7	80.6
Total	1137.9	819	1956.9	Total	82.2	126.6	208.8

Table 3-20 The conditions of provincial revenue and transfer payment acceptation in 1995

Source: Collected by the Author

After the reform of the income tax sharing system in 2002, the ratio of general transfer payments and balancing transfer payments to central transfer payment continued to increase, and the ratio of tax returns constantly declined. In 2011, the central government provided a total of 3.731 trillion yuan transfer payments for local governments, including 1.7336 trillion yuan general transfer payments, composed of 660.9 billion yuan balancing transfer payments and 506.8 billion yuan tax returns. Generally speaking, the equalized transfer payments greatly improved the financial disparity among regions. For example, in 2010, the ratio of the three regions' per capita general budget revenue was 1: 0.36: 0.41 before transfer payment, and the ratio of their per capita financial revenue was 1: 0.67:

²³⁶ Ma, S., & Yu, H. (2003). Inter-Governmental Transferment and Regional Economic Convergence in China. *Economic Research Journal*, *3*, 26-33.

0.8 after transfer payment.²³⁷

Although balancing transfer payments distributed financial resources, according to the standard of financial equalization, which was highly normalized and transparent; nevertheless, according to studies of scholars, like Jia Xiaojun, except for regions like Beijing and Shanghai that did not accept a balancing transfer payment, in provinces accepting transfer payments, the "per capita transfer payment fund and financial level are significantly positively correlated, that is to say, the stronger the fiscal is, the more the per capita value of transfer payment fund will be".²³⁸ For this reason, it was because present balancing transfer payments took "maintaining institutions' normal operation and guaranteeing civil servants' normal payment" as the basic principle; thus, making economically developed provinces, with large populations being supported by finance and receiving more balancing transfer payments. To some extent, this principle deviated from the basic target of financial equalization.

Moreover, special transfer payments gradually became a part of the transfer payment system. In 2011, the special transfer payment was 1.4905 trillion yuan, accounting for 40% of the overall the transfer payment. There were as many as 110 kinds of special transfer payments and a corresponding fund distribution which involved 37 central departments. Being different from the tax return and general transfer payment system, the special transfer payment was from a subsidy fund the central government provided for local governments' specific items, where a special fund was required to be used for a specific purpose, and in most cases local governments were required to provide a supporting fund.

The special subsidy had a series of drawbacks; such as excessive expenses, too many items, a wide coverage of departments, a defective disbursement system and unclear standards, which not only challenged the central government's monitoring capability, but also possibly resulted in its excessive intervention in local governments. From the perspective of region distribution of the special subsidy, most special transfer payments flowed into developed

²³⁷ Xie, X. (2011). China's Public Finance Management. Chinese Fiscal Economics Press, p38.

²³⁸ Jia, X., & Yue, X. (2012). Distribution of Equalization for Intergovernmental Transfer in China. *Economic Research Journal*, *1*, 004.

regions, rather than less developed regions. Since most central subsidies required a supporting fund, economically developed regions could apply for and support more special subsidies, but it was difficult for less developed regions to apply for more funds, due to their limited financial funds.

3.4 Introspections on Fiscal Decentralization and Regional Development Based on the Exploration of China

According to the theory of fiscal federalism, the fiscal aspect is mainly decentralized for the purpose of increasing local governments' independence and responsiveness to the supply of public services. At the initial stage of development, relevant theories of fiscal decentralization are not associated with regional balanced development. Balancing regions and reducing disparity among regions is the central government's exclusive function and responsibility. As western countries' economic growth slowed and central financial pressure increased in the 1980s, many countries began to reflect on the rigidity and low level of efficiency of regional policy led by the central government and tried to encourage local governments' autonomous development and mutual competition, via further power decentralization, so as to achieve the efficient dynamic balance, instead of a low-efficiency static balance among regions. On the whole, the experiment of power decentralization, in the process of western countries' regional development, was still developing, but an experimental consensus was never reached.

However, fiscal decentralization, in the course of China's regional development, experienced nearly six decades of practice. In Chinese regional policies, excluding several years of witnessing the imbalance of the macro economy, the decentralization of fiscal power was always regarded as an important means to encourage local governments' enthusiasm for development, establish a relatively independent industrial system and achieve regional balance. Although the reform of the revenue-sharing system in 1994 enhanced the central government's ability of absorbing financial resources, nevertheless, due to the institutionalization and legalization of financial relationships between the

central government and local governments, this reform was considered by many scholars as a reform of a fiscal federalism type with significant characteristics of power decentralization. In China's nearly six decades of fiscal decentralization practice, the degree of regional balanced development at different stages exhibited different characteristics, which provided rich materials for analyzing the relationship between fiscal decentralization and regional balanced development.

3.4.1 Explorations on Fiscal Decentralization in the Process of Regional Development

Theoretically speaking, fiscal decentralization in the process of regional development is mainly to solve the incentive problem, i.e. the state arouses local governments' development initiative, motivation and innovation by endowing local governments with relatively independent fiscal attributes, to prevent regional development from falling into a low-level static balance. Moreover, the decentralization of fiscal authority is bound to encourage local governments' autonomous and independent trends, which may not only weaken the central government's control and coordination ability, but also result in the combination of financial resources and a series of uncontrollable variables; such as local resource endowment, industrial structure, development foundation and developmental potential; thus, aggravating the tendency of a regional unbalanced development in a short time frame, whereby the state must adopt a relevant system or policy to control the potential pitfalls within the process of fiscal decentralization. Thus, for the implementation of national regional policy and the realization of regional balanced development, it is essential to establish a dynamic balance point between local incentive and central control, so as to "arouse both the central government and local governments' enthusiasm". China's relevant explorations can be concluded as follows.

(1) Insisting on Providing Economic Incentive for Local Development via Fiscal Decentralization

Theoretically, the first-generation theory of fiscal federalism holds that in the

system of fiscal decentralization, the competition among regions can force local governments' expenditure arrangement to better reflect the local people's preference, so as to enhance the efficiency of public service supply.²³⁹ However, as for the reason why local governments have an incentive to enhance the quality of public services and maintain a market order, the first-generation theory does not provide a plausible or definite explanation. On this basis, the secondgeneration fiscal federalism breaks the government's "redeemer" image in the previous generation's discussion and holds that both local governments and local officials are self-serving subjects of special interests, and they would launch competition and innovations driven by special interests, such as protecting their own power, enhancing government payment and enlarging government scale, and the result of competition is most compatible with the local people's welfare.²⁴⁰ In general, most relevant theories hold that the decentralization of fiscal authority can provide a strong economic incentive for local governments, so as to enhance the efficiency of public product supply and achieve a balanced development among regions through the course of horizontal or vertical competition.²⁴¹

With regard to China's specific situation, studies of scholars, like Qian Yingyi, have found that the M-type government structure established before 1979 awarded local governments with considerable fiscal independence, which enabled the central government to encourage competition among local governments by means of index assessment, so as to strengthen the excessive constraint of local budgets and local governments' active intervention in economic development²⁴². Therefore, the incentive mechanism, focusing on fiscal decentralization, became an important secret catalyst for China's economic enhancement.

According to the specific exploration process, after stabilizing the economy

²³⁹ Oates, W. E. (1968). The theory of public finance in a federal system. *The Canadian Journal of Economics*, *1*(1), 37-54.

²⁴⁰ Montinola, G., Qian, Y., & Weingast, B. R. (1995). Federalism, Chinese style: the political basis for economic success in China. *World Politics*, *48*(01), 50-81.

²⁴¹ Breton, A. (1998). *Competitive governments: An economic theory of politics and public finance*. Cambridge University Press.

²⁴² Qian, Y., & Roland, G. (1998). Federalism and the soft budget constraint. *American economic review*, 88(5), 1143-1162..

and society, via centralization at the beginning of the founding of the new China, the decision makers then realized the low efficiency of a totally centralized bureaucratic system. Thus, the central authority began to encourage local governments by decentralizing most financial revenue and expenditure power to establish a relatively independent industrial system for the purpose of promoting a balanced plan of productivity. In the political atmosphere of that period, financial incentives had an immediate effect, and local governments all over China strived to enlarge the scale of investment and infrastructure (see Table 3-2). Afterwards, when economic loss was caused by a lack of control over "the Great Leap Forward", via central decentralization, Mao Zedong proposed the idea "xu jun gong he" (also called constitutional monarchy) in 1966 and argued that economic authority and fiscal power should be distributed to local governments. Furthermore, he carried out the second large-scale fiscal decentralization movement in the early 1970s. Similarly, this decentralization of fiscal distribution greatly aroused local governments' initiative and selfinterest; thus, greatly solidifying local interest and forming a series of "independent closed systems".²⁴³

Since the reform and opening-up, as the country needed to be rebuilt, and central financial capacity was weak, the decision makers had to continue to arouse local governments' development initiative and support for the reform by "decentralizing power and surrendering part of the benefits" on the basis of maintaining existing central financial capacity. In the system of "fen zao chi fan", the central government conducted a one-by-one negotiation with local governments, so as to determine the revenue and expenditure boundary between them and gave "credible commitment" to ensure the relative stability of the fiscal decentralization system. It should be noted that, being different from previous fiscal decentralization, this fiscal decentralization reflected obvious asymmetric characteristics. Guided by a national unbalanced development strategy, the eastern coastal provinces obviously enjoyed more financial autonomy and tax privileges. The incentive of fiscal decentralization gives local governments strong impetus to drive economic development and local officials

²⁴³ Wang, S. (1997). China's 1994 fiscal reform: an initial assessment. Asian Survey, 801-817.

can directly benefit from local economic development.²⁴⁴

Although the reform of the revenue-sharing system in 1994 strengthened the central government's ability to absorb financial resources, nevertheless, the financial relationship between the central government and local governments became more legalized. Local government had legal revenue and expenditure parameters, which, to some extent, intensified the "credible commitment" in the process of fiscal decentralization; local governments could develop a relatively fair "yardstick competition" in line with basically consistent standards, which greatly encouraged local governments' development initiative, achieved rapid development of China's overall economy, and created a basic institutional environment for a regional dynamic balanced development.

In a word, providing an economic incentive for local governments through fiscal decentralization has always been an important characteristic of China's regional development pattern. To some extent, fiscal decentralization enhanced local governments' development autonomy and initiative, laying a foundation for the achievement of China's regional balanced development. In some sense, the practice of encouraging local development, by means of fiscal decentralization, not only created China's unique regional development pattern, but also confirmed the mainstream practice of worldwide regional development. From the perspective of effect, fiscal decentralization inevitably resulted in a dynamic expansion of regional development disparity, and asymmetric decentralization, after the reform and opening-up further aggravated this tendency. Therefore, for China, it is difficult to achieve the purpose of a regional balanced development, by providing economic incentives for local governments, which reinforces the idea that the central government's authority and control is still indispensable.

(2) Trying to Control Local Self-interest via Central Planning

Due to its long-term implementation of a planned economic system, China controlled local governments' self-interest behavior and regional development disparity mainly through central planning. In different periods, central planning

²⁴⁴ Wu, G., & Zheng, Y. (1995). On Central-Local Relations. Oxford Press, p33-39.

has varying degrees of control, due to the shifting variables of regional development.

Faced with an extremely unbalanced regional pattern and economic structure, in desperate need of restructuring, China firstly imitated and referred to the Soviet pattern and used a planned economy to balance the limited productivity, which greatly improved China's overall development. Thus, without having a socialist state's mature experience and corresponding theoretical guidance, during the first power decentralization, the central government decentralized all power, including financial and taxation autonomy, enterprise management power and planned management power to local governments. Consequently, it lost the methods and resources to effectively control local governments. With powerful economic incentives, local governments' self-interest quickly awakened and their development goals also rapidly deviated from the state's overall development strategy. The imbalance of the macro economy greatly damaged less developed regions, while the central government did not have sufficient financial resources to support them, which led to the failure of the regional balanced development strategy and deteriorated the trend of regional unbalanced development.

In this circumstance, the central government had no choice, but to control local governments' behavior by the central government's totally centralized planned economy mode. With the control of central planning, the national economy recovered in a short time; however, local development evolved to the difficult position, whereby "centralization leads to deadlock". To encourage local governments to coordinate with the central government's regional balanced development strategy, focusing on the "third-line" construction, fiscal and planned management power were decentralized again to local governments. Differentiating from the first power decentralization, in the second power decentralization process, the central government reserved considerable financial expenditure power and attempted to control the orientation of investment, so as to restrict the local governments' excessive self-interest behavior. Although this control model prevented the "Great-Leap-Forward" imbalance of the Chinese economy to some extent, nevertheless, given that planning, management and

revenue power was held by local governments, it sharply increased the central government's deficit and made the central government's control continuously passive. The competition between local governments and the central government resulted in low-efficiency implementation of the regional balanced development strategy.

After the reform and opening-up, due to the change in the regional development strategy, the central government relinquished absolute control over local governments, but began to focus on giving economic incentives to local governments in exchange for China's reform and opening-up, as well as its overall development. The central government collaborated with local governments mainly through negotiation, for the purpose of ensuring local government did not hold independent financial resources and absolute planning rights, its macro control ability was bound to be greatly weakened, and the central government also held a relatively disadvantageous position in negotiations. To prevent the reduction of state capacity from exerting an adverse impact upon economic development, national identity and social stability, the reform of the revenue-sharing system in 1994 began to strengthen the central government's financial absorbing ability.

However, in order to win local governments' support, the central government continued to protect local governments' vested interest by means of a tax return. While the control power of central planning was absent, a balancing mechanism of modern central financial transfer payments had not yet been established, which caused China's regional development disparity to expand after 1994. Since the reform of the income tax sharing system in 2002, China's financial transfer payment system was gradually established and improved to coordinate with the state's regional balanced development strategy, but, in general, the modern transfer payment system, aimed at balancing financial capacity and public services, has yet to be improved. As a result of the long-term existence of a planned economy philosophy, the central government continued to intervene in local development, through a plan-featured special transfer payment system in the process of regional coordination. In summary, in the process of regional development, China's long-term control over fiscal decentralization, through national planning, may cause local self-interest that might inhibit the state's overall regional policy. However, the irreconcilable contradiction between planned control and economic incentive always creates a deterrent to fully implementing China's regional development policy.

3.4.2 Reflections on Fiscal Decentralization in the Process of Regional Development

According to incentive theory, the problem regarding incentives among governments at multiple levels resulted from information asymmetry among different governments and their inconsistent development target. Since local governments have a series of advantages; such proximity to the market, closeness to people and a flexible management operation cannot be matched by the central government. Therefore, national development and regional balance is essential to providing economic incentives for local governments through fiscal decentralization, which, to some extent, reflects that local governments have a self-interest. Thus, the central government's major task is to constrain and control various risks, which are possibly caused by local self-interest in a variety of ways according to the regional development strategy within a specific period. It can further be determined from the above description that the Chinese central government has balanced the drawbacks of power decentralization, mainly by means of planned control for an extended period of time.

Theoretically speaking, on the one hand, the planned control model can force local governments to maintain a consistent development target along with the central government, by means of central planning. On the other hand, the central government can intervene in local micro economic activities through vertical agencies, so as to reduce information asymmetry between the central government and local governments. However, according to the practice of regional development, there is an irreconcilable contradiction between central planning control and the local economic incentive.

In the first place, central planning control and fiscal decentralization are

certainly not compatible. According to the practice of socialist states, like the Soviet Union, the implementation of a planned economic pattern requires the central government to centralize all powers; including planning authority or power, fiscal power, personnel power, implementation power and supervision power. Among them, fiscal authority is an important guarantee for effective implementation of a specific plan. The advantage of the planned control model is that it can centralize essential human resources, material resources and financial resources throughout the entire society for key constructions, adjust the key structure of the national economy and reasonably distribute productivity in a short time. As for its disadvantages, since it cannot hold sufficient information regarding micro economic activities; it cannot reasonably adjust the economic interest relationship among various economic entities; thus, it easily inspires short-term motivation, low efficiency and a lack of vitality. In some sense, although power decentralization can overcome certain disadvantages, the decentralization of specific power is bound to result in the overall failure of the planned control model. For example, once fiscal distribution is decentralized to local governments, local governments have the ability to refuse to implement central planning directives; faced with local governments' refusal to cooperate, the central government can temporarily constrain their behavior through political punishment or personnel adjustment, but it still does not possess the economic resources to adjust the macro economy.

In the presence of such a dilemma, the central government has to maintain its planned control by continuing fiscal decentralization. Practice has proven that there is a trade-off relationship between central planning control and fiscal decentralization and a balance point that cannot only protect central authority, but also arouse local enthusiasm for development between them. However, this balance point has yet to be attained, causing a vicious circle, whereby "centralization leads to deadlock and decentralization leads to chaos". Therefore, this model cannot achieve the "two enthusiasms" required by a regional balanced development.

In the second place, central planning control aggravates information asymmetry. The most significant characteristic of the central planning model is its direct control over local micro behavior. Due to the complexity of micro economics, it is difficult for the central government to fully understand micro economic activities and the complex and changing social demands.

In general, the central government has two methods to cope with this dilemma: one is to enhance the number and power of vertical departments attached to the central government, establish central government departments according to every category of the micro economic area, and directly collect relevant information from vertical departments in local micro economic activities; the other is to collect relevant information, via local governments and provide feedback to the central government. According to practice, the first model is bound to cause the so-called "vertical departments' dictatorship", which not only stimulates bureaucratic organizations to expand sharply, but may also result in an imbalance of resource distribution and low economic efficiency, due to the low efficiency of the information delivery process and the information interruption among horizontal departments. Although the second model has high efficiency of information collection, nevertheless, due to the narrowmindedness of local interests, local governments always deliver relevant information according to their own interest demand. For example, affluent areas would try every means to hide the achievements of economic development, so as to reduce the amount of finance paid to the central government and obtain corresponding subsidies from the central government; as for poverty-stricken areas, in order to qualify for the central government's reward, they would always exaggerate the achievements of economic development, causing a gross distortion of information. In view of this, it is difficult for the central government to obtain complete and accurate information, so as to make sound and effective regional policies with either model. The above description of China's failed financial transfer payment system is an important illustrative example.

In the third place, central planning control intensifies financial inequality among regions. Regarding the central planning control model; since the central government holds most resource distribution power, resource distribution power is always held by different central government departments, which establishes

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central-level resource distribution, based on fuzzy or faulty principles without specific rules or formulas. Central government departments always create different rules for resource distribution, according to their own work mode or departmental interest; thus, making it difficult for the central government to implement the plan of regional coordination, and, as a result, a large amount of resources are consumed in the process of internal friction and disputes among departments.

Moreover, without a clearly established set of rules, the process of resource distribution is inundated with "rent-seeking" space. For the sake of their special interests, local governments scramble for relevant resources in a non-institutional way; thus, causing the so-called "getting fund by interpersonal relationship net". Studies have shown²⁴⁵that regions with a strong economic foundation always have more lobbying resources and greater policy influence; therefore, the relatively affluent regions always become beneficiaries of resource distribution, which substantially aggravates financial inequality among local governments and goes against a balanced development among regions.

3.4.3 Improvement of Decentralization in the Process of Regional Development

According to the brief description above, it can be found that there is an irreconcilable contradiction between central planning control and local economic incentives in the process of regional development. As the problem of regional unbalanced development becomes more complex, if the state continues to apply a control model with a planning feature, it will not only be difficult to solve existing regional problems, but may also provoke new contradictions between regions. According to existing relevant theories, the central control model compatible with the decentralization of fiscal power is mainly balanced through the transfer payment system, i.e. it redistributes national financial resources through a clear and definite formula, based on the principle of local financial equality and public service equality, for the purpose of ensuring

²⁴⁵ Ma, S., & Yu, H. (2003). Inter-Governmental Transferment and Regional Economic Convergence in China. *Economic Research Journal*, *3*, 26-33.

roughly equivalent developmental conditions and the developmental potential among regions.

Theoretically speaking, the central macro control model is based on the balanced transfer payment and local incentive model, which are complementary, and are focused on fiscal decentralization, First of all, the balanced transfer payment and fiscal decentralization are totally compatible. Fiscal decentralization is aimed at creating more financial resources, while ensuring the achievement of local interests, by arousing local governments' development initiative, so it belongs to the category of "primary distribution"; while the balanced transfer payment belongs to the category of "redistribution" and it does not intervene in local governments' micro economic activities. However, there is not a trade-off relationship between them, and by giving play to local initiatives not only contributes to increasing the total amount of financial resources, but also indirectly supports the increase of the transfer payment fund. Thus, the effective utilization of a balanced transfer payment fund will not only ease local governments' redistribution burden, but will also create an excellent competitive environment for local development.

Secondly, a balanced transfer payment system will not aggravate information asymmetry. Given that the balanced transfer payment does not involve the collection of concrete information about local behavior, and resource distribution mainly relies on macro-economic data relating to every region's financial revenue and expenditure as well as its basic public services, the central government needs only to strengthen the vertical management of statistical and audit agencies. This would be done, so as to overcome the disadvantage of dependence on the central departments or local governments to acquire information.

Thirdly, a balanced transfer payment will not aggravate the financial inequality among regions. Since the balanced transfer payment always has definite rules and formulas for resource distribution, and its operation is seldom affected by local government departments and local governments' lobbying ability; thus, it can increase the procedure, transparency and fairness of the resource distribution process, while reducing "rent-seeking" space, so as to

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reach the goal of bridging regional financial disparity.

From a historical perspective, since the reform of the income tax sharing system in 2002, the central government's financial capacity has gradually increased and the system of transfer payment has begun to gradually develop and improve. However, due to the long-term existence of planned control thought, the distribution power of transfer payment resources was held by more than 20 central government departments and definite, consistent rules for transfer payment fund distribution had not yet been formed. For this reason, the Third Plenary Session of the 18th Central Committee of the CPC clearly proposed "cleaning, classifying and standardizing special transfer payment items, gradually abolishing special and local supporting funds in competitive fields, strictly controlling directive, economic and emergency special items, screening reserved special items, and dividing local affairs into general transfer payment". This policy indicates that the central government has begun to gradually reduce planned control and increase the orientation of macro-control reform. However, it should be noted that, as a result of the macro characteristics of the balanced financial transfer payment model, how to ensure that the transfer payment fund really serves to enhance the quality of public services, improve the environment of economic development and bridge the disparity of regional development has become an important subject in future development.

According to various countries' practice, a balanced transfer payment fund should be effectively utilized on the basis of the following conditions: firstly, the state should establish the domain and target of the transfer payment fund use and strengthen the monitoring and effect appraisal of fund use in a legal and institutional way.²⁴⁶ Secondly, the state should simplify the government scale of assisted areas, so as to prevent the transfer payment resources from being consumed by oversized public organizations.²⁴⁷ Thirdly, the state should intensify the public's supervision over transfer payment fund use, reduce the central government's information distortion in the monitoring process, and

²⁴⁶ Le Grand, J. (1975). Fiscal equity and central government grants to local authorities. *Economic Journal*, 85(339), 531-547.

²⁴⁷ Jia, X., & Yue, X. (2012). Distribution of Equalization for Intergovernmental Transfer in China. *Economic Research Journal*, *1*, 004.

ensure that the fund is really used to supply public products and improve the public's life.

In a word, controlling fiscal decentralization through balanced transfer payments may result in many drawbacks; thus, not only should the existing fiscal distribution model be adjusted, but it also needs the cooperation, support and adjustment of the administrative power and the public service power.

Chapter 4 Administrative Decentralization and Regional Disparities: an Exploration of China

Introduction

Decentralization not only refers to the decentralization of fiscal power in the context of fiscal federalism, but also encompasses multiple dimensions such as political, administrative and welfare power.²⁴⁸ In general, most literatures probe into relevant issues in the context of fiscal decentralization, but very few involve administrative Conceptually, the research of power. administrative decentralization refers to the process of transferring planning power, organizing power, coordinating power and controlling power from the central government (or superior government) to the local government (or inferior government), which is inclusive of the government's internal management power, as well as economic and society management power. Since the latter extensionally overlaps fiscal decentralization and public service decentralization, administrative decentralization mentioned here only refers to the distribution of control and incentive power among different levels of state administrative organizations.

According to scholars' studies, administrative decentralization contributes to reducing a governmental hierarchy, enhancing the efficiency of information delivery among governments and improving the government's response to the public's requirements; thus, lessening the difficulty of policy implementation. Moreover, administrative decentralization is in favor of simplifying and confining the government's power, improving the market and the public's initiative in respect of public product supply, encouraging government innovation, enhancing the adaptability of government work, boosting government staff's morale and sense of belonging, and promoting the quality and efficiency of government service.

With regard to the relations between administrative decentralization and regional balanced development, most researches are developed in the context of

²⁴⁸ Schneider, A. (2003). Decentralization: conceptualization and measurement. *Studies in Comparative International Development*, *38*(3), 32-56.

regional governance, i.e. regional government or regional cooperative organizations are built to cope with regional problems across administrative boundaries. Naturally, most researches of regional governance are aimed at achieving the accumulation of social capital and the aggregation of production factors in a region by emphasizing local governments' voluntary cooperation, well as transnational organizations, private organizations, social as organizations and individual citizens' active participation. Hence, some scholars highlight that the federalist system is the best carrier of regional governance, which is not only because local governments in the federalist system have substantial decision-making and enforcement power, but also because regional interest groups and citizen groups have a powerful capacity for action and can play their flexible and effective roles in public affairs; thus, creating a basic premise for the efficient cooperation among multiple subjects. Some scholars have found from case analyses that in a federalist system, it is difficult to shake local governments' decision-making power, and it is hard for the central government to effectively restrain their power. Driven by shallow local interest, local interest groups always treat common interest with a narrow mind, which makes it difficult to reach multiple subjects' voluntary cooperation in practice.

Some scholars have discovered, by sorting out cases of regional governance in the USA, that there is not sufficient evidence supporting the view that "federalism system is beneficial to regional governance"²⁴⁹. Instead, many studies have indicated that under the background of rapid economic and social reform, a federalist system tends to result in low efficiency of regional development policy implementation,²⁵⁰ thus, damaging the effective operation of regional governance. In view of this, for a regional balanced development, the central government should moderately centralize its administrative power to constrain local governments' self-serving behavior. In a word, since the research on the relations between administrative decentralization and regional

²⁴⁹ Wyly, E. K., Glickman, N. J., & Lahr, M. L. (1998). A top ten things to know about American cities. *Citiscape*, 3(3), 7–32.

²⁵⁰ Scott L. Greer, ed. *Territory, Democracy And Justice: Regionalism And Federalism in Western Democracies.* Palgrave MacMillan, 2006, p1-20. Paul E. Peterson. *The Price of Federalism.* Brookings Institution Press, 1995.

development is still inconclusive, this thesis is aimed at conducting a primary research on this issue based on China's experience.

4. 1 Local Government size and Regional disparities

Government size is one of the core issues discussed in economics and public administration. Over the past years, scholars have probed from multiple perspectives into the problem as to what size of government can promote the government's work efficiency, drive economic and social development, and expand social benefits. For instance, Keynesianism advocates "big government". A series of reasons such as the limitation of a market economy, the publicity of government services and the externality of public goods may cause "market failure". Therefore, it is essential to build a "big government" by adding government employees, expanding the government's fiscal expenditure and carrying out government-leading development plans; thus, further enhancing the social employment level, economic stabilization and development, and the public's welfare. However, western liberal economists propose a "small government" by concluding that the expansion of the government size is bound to result in the government's low efficiency, corruption phenomena, overburdened social finance, distorted market rules, malformed social development and restricted individual freedom. Just as Nozick stated that it can be proved that a minimal state's function is only limited to protecting its people from violence, theft, fraud and an enforced performance of contractual obligations; any multi-function state would infringe on people's rights and force people to do something, which cannot be proven.²⁵¹

There are numerous other theories highlighting the necessity of continuous expansion of government size from different perspectives. For instance, Wagner's law, also known as the law of increasing state spending, demonstrates that factors such as the maintenance of complex market rules, the increase of public demand, and the size effect of public enterprises let modern governments

²⁵¹ Nozick, R. (1974). Anarchy, state, and utopia. Basic books, p1.

constantly expand their size.²⁵² According to James Buchanan's "bureaucratic interests maximization model", as economic men, the bureaucrats' appeal for interests is reflected in the salary obtained, the size of the organization, the number of employees, the reputation of individuals and the expansion of power. Moreover, the above objectives are positively correlated to the maximization of department size and budget size, and the non-market producers' role is to meet their own demand for special interests instead of making efforts to reach the final goal in the public field.²⁵³ In addition, Anthony Downs' economic theory of democracy, Parkinson's Law²⁵⁴ and Mancur Olson's analysis of interest groups and government size propose unique ideas about the expansion of government size from different perspectives.

To sum up, instead of excessively pursuing "big government" or "small government", modern scholars probe into the reasons for the expansion of government size and the methods to improve public organizations' operation efficiency on the basis of admitting the necessity of government size expansion. In the above themes, the exploration on the relationship between government size and economic development is one of the pertinent topics. Many scholars have utilized economic data for systematic quantitative analysis of this issue. Some scholars believe that government size and economic development are positively correlated.

For instance, Rubinson²⁵⁵ has obtained a positive correlation between government size and economic development from transnational panel data; Ram²⁵⁶ has conducted research on 115 states and also reached a conclusion that the size of government consumption and the speed of economic development are highly positively correlated; Ma Shuanyou has applied China's data from 1979 to 1998 to discover that the Chinese Government's labor services are

²⁵² Auerbach, A. J. (1993). Public Finance in Theory and Practice. *National Tax Journal*, 46(4), 519-526.

²⁵³ Buchanan, J. M. (1988). The economic theory of politics reborn. 31(2), Challenge, 4-10.

²⁵⁴ Notes: Parkinson's Law found that "work expands to fill the time available for its completion," and that a sufficiently large bureaucracy will generate enough internal work to keep itself 'busy' and so justify its continued existence without commensurate output. Read more: http://www.businessdictionary.com/definition/Parkinson-s-Law.html#ixzz3p4iyhKIZ

²⁵⁵ Rubinson, R. (1977). Dependence, government revenue, and economic growth, 1955–1970. *Studies in Comparative International Development*, 12(2), 4-28.

²⁵⁶ Ram, R. (1986). Government size and economic growth: A new framework and some evidence from cross-section and time-series data. *American Economic Review*, *76*(1), 191-203.

featured by significant productivity and further expansion of government size (per capita government consumption expenditure) is beneficial to economic growth;²⁵⁷ Ouyang Zhigang has made use of China's data from 1980 to 2002 to construct a simultaneous equation and concluded that the expansion of the Chinese Government's expenditure size is indeed beneficial to the enhancement of the GDP growth rate.²⁵⁸

Moreover, other scholars consider that government size and economic development are negatively correlated. For instance, according to the research on developing countries and developed countries' transnational data, Landau has reached a conclusion that the growth of government expenditure is prejudicial to economic growth;²⁵⁹ according to 24 OECD countries' data from 1951 to 1980 and other countries' data from 1961 to 1980, Grier and Tullock have determined that the GDP growth is negatively correlated to the ratio of national fiscal revenue to the GDP in European, African and Latin American countries; however, they are positively correlated in Asian countries;²⁶⁰ based on 98 countries' data from 1960 to 1985, Barro has also concluded that government's high consumption distorts the market economic system and reduces the efficiency of economic growth; ²⁶¹ Hu Dongshu has taken government financial resources as the index to measure government size²⁶² and scholars such as Chen Jian have taken the ratio of government officials to total populations as the index to measure government size,²⁶³ and all of them have used the data before 2001 to draw a conclusion that government size and per capita GDP growth are negatively correlated.

²⁵⁷ Ma, S., Yu, H., & Chang, Q. (2006). Dynamic Analysis between Public Debt and Macro Economy——A Framework on Fiscal Stability. *Economic Research Journal*, *4*, 003.

²⁵⁸ Ouyang, Z., & Wang, S. (2009). The Asymmetric Reaction of Monetary Policy to Inflation and Real GDP in China. *Economic Research Journal*, *9*, 004.

²⁵⁹ Landau, D. (1983). Government Expenditure and Economic Growth: A Cross-Country Study. *Southern Economic Journal*, 49(3). Landau, D. L. (1985). Government expenditure and economic growth in the developed countries: 1952–76. *Public Choice*, 47(3), 459-477.

²⁶⁰ Grier, K. B., & Tullock, G. (1989). An empirical analysis of cross-national economic growth, 1951–1980. Journal of *Monetary Economics*, 24(2), 259-276.

²⁶¹ Barro, R. J. (1991). Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, 106(2), 407-443.

 ²⁶² Hu, S. (2002). The suitability between government size and fiscal decentralization. *Reform*, (2). 70-73. (In Chinese)
 ²⁶³ Jian, C & Jiayong, H (2003). Government size and economic development. *Research on Financial and Economic Issues*. (8), 4-7. (In Chinese)

Naturally, there are also scholars arguing that there is no correlation between government expenditure size and economic growth. For instance, Kormendi and Meguire have discovered from 47 states' statistical data, from 1961 to 1980, that there is an insignificant correlation between the ratio of government expenditure to the GDP and GDP growth rate;²⁶⁴ Evans²⁶⁵ conducted research on 92 states and reached a similar conclusion in 1997.

According to the above literature review, it is not difficult to determine that different scholars have reached different conclusions about the relationship between government size and economic development. To sum up, these are the following reasons.

Firstly, different time intervals of research result in poor comparability during the research. Secondly, research samples are dissimilar, i.e. although different scholars have conducted a large aggregation of transnational comparative studies, they selected different samples and sample sizes. Thirdly, scholars have established different definitions for government size, which include the ratio of government finance to GDP, gross government expenditures, per capita government consumption expenditures, the ratio of government officials to total populations, the ratio of civil servants to employed populations, etc. Fourthly, scholars select different research methods, which include multiple linear regression, multiple quadratic regression, simultaneous equation, correlation analysis, etc.

Furthermore, although scholars have attempted to probe into the general relationship between government size and economic development via transnational comparative research, all countries' different political and economic systems, social development stages, as well as the domestic and international environment make it difficult to uniformly select control variables; thus, failing to reach a consistent conclusion in relevant researches. Hence, based on a clear definition of government size, this thesis specifically studies the relationship between China's local government size and local economic

²⁶⁴ Kormendi, R. C., & Meguire, P. G. (1985). Macroeconomic determinants of growth: cross-country evidence. *Journal of Monetary Economics*, 16(2), 141-163.

²⁶⁵ Evans, P. (1997). Government consumption and growth. *Economic Inquiry*, 35(2), 209-217.

development, for the purpose of partially explaining the reasons for China's regional unbalanced development.

4.1.1 Definition and Dimension of Local Government size

With regard to government size, different scholars always create a variety of different definitions for it. Specifically, it is primarily defined in broad and narrow senses. Broad government size refers to the range of activity when the government performs its functions, as well as its quality and quantity, and it not only involves the scope of government functions and authority, but also covers government organizations and personnel.²⁶⁶ In other words, the measurement of government size includes the measure of government function, government structure, government organizations, government employees and government expenditures. Narrow government size only refers to the size of government personnel and fiscal expenditure, namely, the absolute quantity of government employees or its ratio to the total populations, as well as the ratio of government fiscal expenditure to the GDP. When it comes to this research, and as it is difficult to effectively measure broad government size, this thesis selects the narrow government size and measures the size of China's local government from two aspects such as the government's employee number and fiscal expenditure.

(1) Personnel Size of Local Government

According to China's national condition, concepts that can measure the size of government personnel include civil servants, officials, cadres, and personnel supported by finance. Civil servants refer to "personnel who are required to fulfill public duties in accordance with the law, incorporated into state administrative establishment, and paid by national finance", which was refined in *Civil Servant Law* and enforced in 2006. They are mainly composed of state administrative organizations' full-time staff. According to the statistical result at the end of 2012, there were about 7,089,000 civil servants.

²⁶⁶ Jin, J., & Zou, H. F. (2002). How does fiscal decentralization affect aggregate, national, and subnational government size? *Journal of Urban Economics*, 52(2), 270-293.

As a continued concept of identity since the age of planned economy, cadres cover mental workers in party groupings, governments, troops, state-owned enterprises, collective enterprises, public institutions and mass organizations, with a size of about 36 million.²⁶⁷ In the process of research, as a concept corresponding with "the public", officials include full-time staff of party organizations, legislative bodies, judicial organs, government agencies and social groups, with a size of about 11 million.²⁶⁸ Personnel supported by finance refer to "staff whose individual incomes and office expenses are paid by finance". In a statistical sense, they refer to all personnel who seek a livelihood by finance, including logistic workers and retirees of party organizations, public institutions, mass organizations, some village cadres and related departments. Due to the different definition and statistical caliber of this part of personnel, scholars have concluded that there are about 30-50 million personnel supported by finance.

According to the brief description above, it can be easily seen that as a formal concept, civil servant has been applied for a short time and it is difficult for its application range to cover the size of government personnel in the traditional sense. As a concept of identity, cadre covers a wide range, including a large number of personnel unrelated to the government's public behaviors. The concept of government "official" is similar to that of "government employee" and "public servant" in western countries; however, it excessively emphasizes the aspect of "government" and may overlook a large number of social organizations' workers, who are supported by government finance, bear public services and provide public goods. The concept of "personnel supported by finance" covers a wide range, including all personnel related to public services and public institutions' personnel who provide medical, educational and cultural services.

²⁶⁷ Li, H. (Eds). (2009) *The Blue Book of Size and Structure of Chinese Local Government Evaluation 2008*. China Social Sciences Press, p63.(In Chinese)

²⁶⁸ Guanglei, Z (Eds). (2008). *Chinese Government Development Research Report: the size of government employee* and government reform. China Renmin University Press, p63. (In Chinese)

To sum up, this thesis selects the concept of "personnel supported by finance" which is widely utilized by scholars but sets the following limitations to it:²⁶⁹ "personnel supported by finance" used in this thesis mainly refers to those who are paid by financial budget allocations in public departments and social organizations, excluding personnel of self-supporting institutional organizations, entitled groups and personnel of local agencies vertically managed by the central government.²⁷⁰ To be specific, this thesis uses the following indexes to measure the size of government personnel: the ratio of personnel supported by finance to all local social employees, the number of personnel supported by finance per unit of GDP, and per capita fiscal expenditure of personnel supported by finance.

(2) Fiscal Size of Local Government

Indexes measuring the fiscal size of the local government are as follows. Firstly, it is the local government's expenditure size, namely, the ratio of local government's fiscal expenditure to local GDP. This index, which is widely used by Chinese and foreign scholars, can effectively measure the influence of government consumption on social-economic development. Secondly is local government's administrative expenses, namely, the ratio of total administrative expenses to total fiscal expenditures. It directly reflects the government's administrative cost; thus, mirroring the government organization's operation efficiency to some extent. Thirdly is the local financial self-support ratio, namely, the ratio of the general budget revenue to prefecture-level fiscal expenditure, which is used to measure local government's independence. Theoretically, low financial self-support ratio indicates that the local government has a huge requirement for the central government's transfer payments. This behavior is greatly restricted by the central government to a certain extent. However, on the other hand, the low financial self-support ratio

²⁶⁹ Li, H. (Eds). (2009) *The Blue Book of Size and Structure of Chinese Local Government Evaluation 2008*. China Social Sciences Press, p63.(In Chinese)

²⁷⁰ Note: The employee expenses of vertical branches of central government are afforded by central government.

may increase the cost of the game between the central and the local, as well as the local government's rent-seeking behavior.

4.1.2 Change and Measurement of Local Government size

Since the People's Republic of China was founded, the lack of experience in socialist construction has caused the Chinese Government's design structure, organizational setting and personnel allocation to be in a changing and fluctuating state. In the early years of the nation, affected by the Soviet Union's political-economic model and based on the Chinese Communist Party's experience in political power construction which was accumulated in the process of the democratic revolution, China established the pattern of the local government administrative system "taking party administrating cadres appointment system as the core, administrative order system as the subject, and ideological mobilization as the impetus"²⁷¹ in the form of the constitution and the law. In this administrative system, erasing distinctions between the Party and the government, the government and the enterprise, and the government and the society, makes it is difficult to define the size of the government and it is also challenging to distinguish political identities such as government personnel and "cadres". Since the reform and opening-up, in order to meet the demand of a socialist market economy development and socialist political and administrative modernization, China had established the administrative system of "central unified leadership and local structured responsibility", and adjusted the government size and optimized government functions through constant reforms of a government administrative system.

(1) Local Government's Reform Course

Since the reform and opening-up, guided by the core idea of transforming government functions, China's administrative system has experienced five rounds of top-down reform. Most of the reforms aimed at adjusting government

²⁷¹ Li, H. (Eds). (2009) *The Blue Book of Size and Structure of Chinese Local Government Evaluation 2008*. China Social Sciences Press, p36.(In Chinese)

structure and streamlining government personnel, which kept the size of all levels of China's local government changing continually. Roughly, there were the following reforms.

Government Reform in 1983. To meet the requirement of a socialist economic reform, this reform substantially dissolved economic management departments, reduced the departments of the State Council from 100 to 61 in 1981, and sharply cut down the number of organizations, as well as personnel in various provinces, direct-controlled municipalities and autonomous regions. It explicitly stipulated the post number, age and educational structure of the leading groups in each department. The policy of making cadres "revolutionary, younger, knowledgeable and professional" started to be implemented. Economic management power, financial revenue and expenditure power and personnel management power began to be decentralized. Moreover, the size of the personnel force was shrunken, i.e. the number of personnel in all departments of the State Council was reduced to 30,000, the number of personnel in provincial organs was reduced from 180,000 to 120,000, and the number of personnel in city-level and county-level organs was reduced by 20%.

Government Reform in 1988. Based on previous reforms, this reform further weakened the economic management departments' excessive intervention into macroeconomic activities, intensified the government's macro-control function, and proposed that "the transformation of government function is the key to organization reform". This reform was implemented using the top-down way by steps. First of all, the central government started to adjust its organizational setting, transformed government functions, improved the way of working, accelerated administrative legislation, and enhanced work efficiency. However, due to a series of complex political and economic factors, the originally scheduled local government reform in 1989 was postponed. Moreover, the unstable economy caused the streamlined departments to start growing and expanding again.

Government Reform in 1993. This organizational reform was carried out based on the establishment of a socialist market economy system. The focal point of the reform was to transform government function with its core idea to

separate government functions from enterprise management, and its major task was to straighten out the division of powers and duties, adjust all levels of organizational setting, and reallocate and reduce government personnel. In 1993, the State Commission Office of Public Sectors Reform issued Opinions about All Levels of Local Party and Government Organization Setting²⁷² to explicitly stipulate the basic principles for the setting of local government organizations and its specific number. For instance, about 55 work agencies were set for interprovincial party committees and governments, and 30 administrative bodies were set for regional party committees and administrative offices. There were three kinds of work agencies for municipal party committees and governments, 60, 50 and 30 of which were set respectively. Furthermore, the way of classification design was taken for county-level and town-level work agencies. Meanwhile, the reform of public institutions started to be implemented. On the principle of separating public service units from government and socialization, it aimed at promoting public institutions' classification management, as well as "three settings" such as agency setting, function setting and establishment setting.

Government Reform in 1998. This reform was the most systematic and largest-size one since the founding of the People's Republic of China. Based on the preliminary reform exploration and global countries' experience in government reform, China's government reform started to march forward along a legalized, standardized and sustained path. Principles such as executing the separation of government functions from enterprise management, strengthening macro-control, retreating from micro-management, promoting downsizing, dividing government functions, fulfilling the integration of power and responsibility and implementing "rule of law" strategy, gradually penetrated into all levels of the government's reform activities. During this period, almost all industrial economic departments were dissolved, which gradually removed the chronic question of the separation of government functions from enterprise management. With regard to local government's reform, *Opinions on Local Government's Organization Reform* issued by the CPC Central Committee and

²⁷² http://www.chinalawedu.com/news/1200/21752/21754/21766/21792/2006/3/di36592250541113600218720-0.htm

the State Council in 1999 and *Opinions on City-level, County-level and Townlevel Personnel Downsizing* at the national local agency's reform conference stipulated the principles and specific requirements for the local government's function transformation, government structure optimization and government downsizing. According to the effect, the number of provincial government agencies was cut down from 55 to 40, reducing by 47%; the number of prefecture-level government agencies was reduced from 45 to 30; the number of county-level government agencies was reduced from 28 to 18. By June, 2002, a total of 1.15 million administrative establishments had been reduced from all levels of party, government and mass organizations in China.²⁷³

Government Reform in 2003. After accessing to the WTO, China started a new round of administrative system reforms. The Second Plenary Session of the 16th Central Committee of the Chinese Communist Party issued Opinions on Deepening Administrative System and Organization Reform to define the orientation and objective of the reform. In terms of local government's reform, based on the central government's functions of adjusting and intensifying macro-control, state-owned enterprises, circulation system, financial supervision, food and drug safety, local government no longer completely conformed to or kept pace with the central government, but adjusted government functions and personnel according to local conditions on the basis of the central government's unified deployment. In practice, many local governments began to intensify the management over departments of safety production management, land and resources administration, and sanitation and disease supervision. Moreover, they simplified the procedure of administrative management and enhanced the efficiency of administration via the administration service hall. During this period, administrative staff downsizing did not become the focus of work in various regions. Instead, local government's organization setting and personnel allocation was basically unchanged or even expanded to different degrees.

²⁷³ Wang, Y. (2008). *Retrospect and Prospect: Chinese administrative reforms 30 years*. People's Publishing House, p55-57.

Government Reform in 2008. Based on the "Super-ministry System", the Chinese Government started a new round of reforms, i.e. "according to the principles of unity, simplicity and effectiveness as well as the requirement that decision-making power, enforcement power and supervision power should be restrained mutually and coordinated mutually, the government paid close attention to function transformation and responsibility rationalization, to further optimize government organization structure, standardize organization setting, explore the super-ministry system implementing organic unity of functions, and improve the administrative operating mechanism".²⁷⁴ As for local government's reform, Opinions on Deepening Administrative System Reform proposed, "Both the central government and local government's positive roles must be played. Under the central government's leadership, local governments should be encouraged to conduct reform and innovation by combining the reality." "According to all levels of government's responsibilities, local governments' organization setting should be reasonably adjusted. Within the quotas determined by the central government, organizations to be set uniformly should be corresponding from superiors to subordinates and other organizations should be set according to local conditions." That "one size fits all" was encouraged in local reform during this period. Instead, all regions proceeded from reality to innovative pursuits within the local administrative system; thus, bringing about positive reforms and innovations, such as the "Hainan Mode" and "Fuyang Mode".275

(2) Measurement of Local Government size

It can be determined from the brief description above that China's local government size displays a periodic characteristic and constantly changes along

²⁷⁴ CPC Central Committee (2008). *Opinions on Deepening the Reform of Administrative System*, http://www.china.com.cn/policy/txt/2008-03/05/content_11590995.htm. (In Chinese)

²⁷⁵ Notes: During this period, many of China's administrative reforms began to try new model based on the based on the actual situation of the region. The Fuyang model as an example. Fuyang is a county of Zhejiang province. The core of Fuyang reform is reducing administrative examination and approval authority based on the principle "the power is invalid unless the law grants". They make a list of all the approval matters and check them one by one. Finally, the administrative examination and approval items are changed from 724 to 299. The conception "Power List" are adopted by the report of CPC.

with the advancement of every reform. According to the latest data, this thesis provides a primary description of the current government size.

According to all provinces' fiscal sizes, this thesis groups and collates all provinces and figures out of the average value of all indexes, based on the data in the China Statistical Yearbook in 2011 and China's three regions (eastern China, central China and western China). Indexes measuring all provinces' government size include: fiscal revenue, fiscal expenditure, administrative expenses, the ratio of fiscal expenditure to GDP (expenditure-GDP ratio), the ratio of fiscal revenue to fiscal expenditure (revenue-expenditure ratio), the ratio of administrative expenditure to total fiscal expenditure (administrativeexpenditure ratio), and the ratio of administrative expenditure to total fiscal revenue (administrative-revenue ratio).

Regions	Province	Revenue	Expend	Admin Expenses	Expend /GDP	Revenue /Expend	Admin /Revenue
	Beijing	300.628	324.523	26.138	19.97%	92.64%	8.69%
	Tianjin	145.513	179.633	11.781	15.89%	81.01%	8.10%
	Hebei	173.777	353.739	41.493	14.43%	49.13%	23.88%
	Liaoning	264.315	390.585	41.523	17.57%	67.67%	15.71%
F actoria	Shanghai	342.983	391.488	23.611	20.39%	87.61%	6.88%
Eastern	Jiangsu	514.891	622.172	74.845	12.67%	82.76%	14.54%
Region	Zhejiang	315.08	384.259	47.155	11.89%	82.00%	14.97%
	Fujian	150.151	219.818	24.747	12.52%	68.31%	16.48%
	Shandong	345.593	500.207	61.848	11.03%	69.09%	17.90%
	Guangdong	551.484	671.24	80.741	12.61%	82.16%	14.64%
	Hainan	34.012	77.88	8.202	30.87%	43.67%	24.12%
Eastern Average		285.312	374.14	40.189	16.35%	73.28%	15.08%
	Shanxi	121.343	236.385	25.158	21.04%	51.33%	20.73%
	Jilin	85.01	220.174	23.14	20.83%	38.61%	27.22%
	Heilongjiang	99.755	279.408	25.637	22.21%	35.70%	25.70%
Central	Anhui	146.356	330.299	34.534	21.59%	44.31%	23.60%
Region	Jiangxi	105.343	253.46	25.8	21.66%	41.56%	24.49%
	Henan	172.176	424.882	55.902	15.78%	40.52%	32.47%
	Hubei	152.691	321.474	39.495	16.37%	47.50%	25.87%
	Hunan	151.707	352.076	46.674	17.90%	43.09%	30.77%
Central A	verage	129.298	302.27	34.543	19.67%	42.83%	26.36%

Table 4-1 Fiscal size of local government in 2011 (Unit: Billion Yuan/%)

	Inner Mongolia	135.667	298.921	30.453	20.82%	45.39%	22.45%
	Guangxi	94.772	254.528	32.218	21.72%	37.23%	34.00%
	Chongqing	148.833	257.024	22.458	25.67%	57.91%	15.09%
	Sichuan	204.479	467.492	48.511	22.23%	43.74%	23.72%
	Guizhou	77.308	224.94	30.721	39.45%	34.37%	39.74%
Western Region	Yunnan	111.116	292.96	28.205	32.94%	37.93%	25.38%
	Tibet	5.476	75.811	9.594	125.14%	7.22%	175.20%
	Shanxi	150.018	293.081	34.132	23.42%	51.19%	22.75%
	Gansu	45.012	179.124	17.492	35.68%	25.13%	38.86%
	Qinghai	15.181	96.747	6.54	57.92%	15.69%	43.08%
	Ningxia	21.998	70.591	5.196	33.58%	31.16%	23.62%
	Xinjiang	72.043	228.449	24.536	34.56%	31.54%	34.06%
Western A	verage	90.159	228.306	24.171	39.43%	34.87%	41.50%

Source: National Bureau of Statistics (2012). China Statistical Yearbook 2011. China Statistic Press.

Regarding fiscal revenue (see Table 4-1), the fiscal revenue of eastern China was 285.3 billion yuan, 2.2 times that of central China and 3.2 times that of western China. In eastern China, Guangdong province obtained the highest fiscal revenue, reaching 551.5 billion yuan. In terms of fiscal expenditure, it was 374.1 billion yuan in eastern China, 1.2 times that of central China and 1.6 times that of western China. Guangdong Province obtained the highest fiscal expenditure, reaching 671.2 billion yuan. With regard to administrative expenditure, it was 40.2 billion yuan in eastern China, 1.1 times that of central China and 1.6 times that of western China and 1.6 times that of western China, 1.1 times that of central China and 1.6 times that of western China. Judged by the fiscal condition only, the average size of the provinces in eastern China is the biggest, followed by central China, and it is the smallest in western China.

As for the ratio of fiscal expenditure to GDP (see Table 4-1), it was the biggest -39.43% of western China, twice that of central China and 2.4 times that of eastern China. Except for Tibet, Qinghai had the highest ratio of government's fiscal expenditure to GDP -57.9%. Speaking of the ratio of fiscal revenue to fiscal expenditure, eastern China had the highest fiscal self-support rate -73.28%, and it was 42.83\% in central China and 34.87\% in western China. Beijing had the highest self-support ratio -92.64%. In terms of the ratio of government's dministrative expenditure to its total revenue, it was the highest

in western China – 41.50%, central China ranked second with 26.36%, and it was the lowest in eastern China – 15.08%.

Regions	Province	Staff number	Staff number/ population	Staff number/ urban population	Expenditure /staff	Average wage
	Beijing	431	2.13%	6.28%	6.07	66.038
	Tianjin	141	1.04%	5.25%	8.37	71.673
	Hebei	810	1.12%	14.58%	5.12	31.284
	Liaoning	506	1.15%	8.73%	8.21	39.177
E a at a ma	Shanghai	194	0.83%	3.90%	12.17	89.882
Eastern	Jiangsu	650	0.82%	8.01%	11.51	64.229
Region	Zhejiang	599	1.10%	6.01%	7.87	69.421
	Fujian	306	0.82%	5.14%	8.07	47.138
	Shandong	1058	1.10%	10.07%	5.84	39.284
	Guangdong	989	0.94%	7.99%	8.16	57.5
	Hainan	106	1.21%	12.45%	7.74	43.316
Eastern Average		526	1.11%	8.04%	8.1	56.3
	Shanxi	584	1.63%	14.26%	4.3	30.012
Central Region	Jilin	325	1.18%	11.71%	7.11	31.765
	Heilongjia ng	428	1.12%	9.19%	5.98	34.016
	Anhui	471	0.79%	11.44%	7.34	37.899
	Jiangxi	461	1.03%	13.39%	5.6	34.013
	Henan	1061	1.13%	12.65%	5.27	30.691
	Hubei	547	0.95%	9.33%	7.22	36.364
	Hunan	767	1.16%	13.90%	6.09	32.611
Central Av	verage	581	1.12%	11.98%	6.11	33.4
	Inner Mongolia	366	1.48%	13.96%	8.31	47.346
	Guangxi	405	0.87%	11.85%	7.96	34.83
	Chongqing	266	0.91%	7.89%	8.44	44.028
	Sichuan	793	0.99%	12.92%	6.12	39.555
XX 7 /	Guizhou	414	1.19%	17.17%	7.42	33.992
Western	Yunnan	470	1.02%	13.43%	6	34.402
Region	Tibet	100	3.30%	42.96%	9.58	50.336
	Shanxi	506	1.35%	12.84%	6.75	37.033
	Gansu	364	1.42%	18.26%	4.81	29.806
	Qinghai	92	1.62%	15.23%	7.09	46.408
	Ningxia	84	1.31%	13.77%	6.2	37.427

 Table 4-2 Number of public organization staff of provinces in 2011

	Western Average	353	1.43%	16.16%	7.09	39.6	
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Source: National Bureau of Statistics (2012). China Statistical Yearbook 2011. China Statistic Press.

Regarding the number of public organization staff (see Table 4-2), it was an average of 526,000 in the provinces of eastern China, 581,000 in the provinces of central China and 353,000 in the provinces of western China. Populous provinces such as Shandong and Henan had the most officials, 1,058,000 and 1,061,000 respectively. With regard to the ratio of each province's public organization staff number to total populations, it was 1.43% in western China, 1.12% in central China and 1.11% in eastern China. Except for Tibet, Beijing had the highest "official-citizen ratio". As for the ratio of each province's public organization staff to urban employed persons, 276 it was 16.16% – the highest in western China, 11.98% in central China and 8.04% in eastern China. Even if Tibet was excluded, the ratio of western China still reached 13.72%. Speaking of public organization staff's average administrative expense, it was 81,000 yuan – the most in eastern China, followed by 71,000 yuan in western China, and it was 61,000 yuan - the least in central China. Public organization staff's mean wage was roughly the same as per capita administrative expense. Generally speaking, the ratio of officials to citizens and the ratio of officials to urban employed persons in western China were higher than those in the other two areas, and public organization staff's average wage and per capital administrative expense were also higher than those in central China.

4.1.3 Local Government size and Grabbing Hand

According to the brief description above, it can be seen that western provinces' local government size is larger than that of other provinces throughout China in respect of both fiscal expenditure and personnel. Theoretically speaking, both Keynesian Theory and Developmental State Theory hold that powerful government intervention is an essential condition for the great-leap-forward development of the economy in backward areas. On the one hand, government-

²⁷⁶ Note: Most public sectors are established at urban areas. After the cancellation of agricultural tax, the expenses of public sectors are mainly from non-agricultural tax. Hence, by counting the proportion of public staff number accounted for urban employed population, we can observe the real size of the public sector.

led development plans and public investment contribute to strengthening the infrastructure of economic development, enhancing employment and stimulating economic growth; on the other hand, the government can make full use of its power to establish an excellent economic system, legal norms, incentives and good public-private partnerships within a short time, to create a well-organized environment for economic development. Just as some scholars asserted, "Those with vibrant economy are powerful states."²⁷⁷

This conclusion is also applicable to the catching-up of backward areas in a country. Nevertheless, many schools advocating the neo-liberalism economic theory believe that a large government size will lower the government's operational efficiency, enhance its operations cost, add burden to social finance and tax, disturb normal economic operation and weaken the potential of economic growth. Therefore, for the development of backward countries and regions, government expenditure should be reduced and government size should be shrunk. Particularly, small-sized government's "low tax burden" is in favor of the influx of capital and talents²⁷⁸, thus laying a firm foundation for economic growth.

In addition, the theory of "grabbing hand" is noteworthy, for it entails that the government's target is not to maximize social welfare, but to pursue its private interests.²⁷⁹ The methods to pursue private interests include: setting more government positions for interest transfer and exchange, and intensifying the government's approval, intervention and control ability to intervene in normal economic and social life, so as to create space for rent-seeking. In other words, according to this theory, instead of optimizing the reallocation of social resources, the expansion of government size will cause great losses of social efficiency while feathering the government's nest. Public choice schools also hold a similar view that both the government and the market are "rational

²⁷⁷ Weiss, L., & Hobson, J. M. (1995). States and economic development: a comparative historical analysis. Polity Press,

p6. ²⁷⁸Weingast, B. R. (2009). Second generation fiscal federalism: The implications of fiscal incentives. *Journal of Urban* Economics, 65(3), 279-293.

²⁷⁹ Shleifer, A., & Vishny, R. W. (2002). The grabbing hand: Government pathologies and their cures. Harvard University Press, p4.

economic agents", and apart from providing public goods and eliminating the external effect, the government would expand its size for its own interests.²⁸⁰

Based on the "Grabbing Hand" model, an important reason why "large-size government" restricts economic growth is because government organizations have made rent-seeking a career, rather than assuming a productive career in some backward counties or regions. The most outstanding social members always make full use of their intelligence and wisdom to garner benefits and obtain a bright career prospect, by assuming office in the government, which leads to insufficient human resources for industry, agriculture, commerce and social public service which can create social wealth; thus, weakening the development potential of regions. During the period of the Renaissance, the prosperity of northern Italy, Low Countries and Burgundy possessing decentralized government power, as well as their decline since the establishment of the Habsburg Dynasty's centralization system, proved the argument above to some extent.

In the present Chinese society, the "civil servant fever" has become a common phenomenon. Stable career prospects, abundant social welfare, recessive space for rent-seeking and high social status become important reasons for young people to select and seek government positions, which to some extent arouses people's concern about the loss of creative elites in the society; thus, possibly weakening the society's creativity and increasing the fiscal burden. This thesis calculates the disparity between the average salary of public servants in China's three areas and the average wage in society to primarily verify the argument above. If the forecast of "Grabbing Hand" is correct, Chinese officials' average salary is supposed to be high in western China, but low in eastern China.

Provinces	Official	Social	Province	Official	Social	Province	Official	Social
Inner Mongolia	47346	41118	Beijing	66038	75482	Shanxi	30012	39230
Guangxi	34830	33032	Tianjin	71673	55658	Jilin	31765	33610

 Table 4-3 Average salary of government officials and social staffs (unit: Yuan)

²⁸⁰ Brennan, G., & Buchanan, J. M. (1980). *The power to tax: Analytic foundations of a fiscal constitution*. Cambridge University Press.

Chongqing	44028	39430	Hebei	31284	35309	Heilongjia ng	34016	31302
Sichuan	39555	37330	Liaoning	39177	38154	Anhui	37899	39352
Guizhou	33992	36102	Shanghai	89882	75591	Jiangxi	34013	33239
Yunnan	34402	34004	Jiangsu	64229	45487	Henan	30691	33634
Tibet	50336	49464	Zhejiang	69421	45162	Hubei	36364	36128
Shanxi	37033	38143	Fujian	47138	38588	Hunan	32611	34586
Gansu	29806	32092	Shandong	39284	37618			
Qinghai	46408	41370	Guangdong	57500	45060			
Ningxia	37427	42703	Hainan	43316	36244			
Xinjiang	39862	38238						
Western	20595	20505	Eastern	5()(7	49022	Central	22401	25125
average	39585	38585	average	56267	48032	average	33421	35135

Source: National Bureau of Statistics (2012). China Statistical Yearbook 2011. China Statistic Press.

An interesting phenomenon can be found from Table 4-3, which is, the salary of government staff in western China was slightly higher than the average wage in society by about 1,000 yuan, the average salary of government staff in eastern China was far higher than the average wage in society by more than 8,500 yuan, and the average salary of government staff in central China was lower than the average wage in society. On the whole, government wages were high in eastern and western China, but low in central China, which obviously went against the result – high in the west, but low in the east, forecasted by the government's "Grabbing Hand" model. Can it prove from the opposite side of the argument that government, to develop their abilities in public departments, so as to enhance the government's transparency, accountability and work efficiency? The answer is apparently no.

According to the description above, it can be found that although civil servants in the east are well paid, they account for only 8.04% among the urban employed populations, and this proportion is 16.16% in the west; twice that of the east. In other words, although government staff in the provinces of eastern China are well paid, they account for a small proportion among urban employed populations, which can encourage civil servants to improve the quality of public service without damaging the society's production capacity and innovation

capacity; government staff in the provinces of western China are not only well paid, but also account for a high proportion among the society's employed populations. This is equivalent to five urban social workers supporting one government staff member, which not only generates a great burden of finance and tax, but also weakens the society's sustainable development capacity. This point can also be proved by the ratio of R&D personnel to civil servants: the eastern region is 42.3%, central region is 16.9%, and the western region is 11.1%.²⁸¹ In addition, according to the data of "China Local Government Innovation Award"²⁸², more than 50% of local government innovations are invented by eastern region. This rate of western region is less than 20%.

Another argument of the government's "Grabbing Hand" theory is, compared with well-developed regions with a solid economic foundation, abundant finances, tax resources and a profound development potential, relatively undeveloped regions always tend to impose a heavy tax on economic activities, in order to maintain the government's operation. This behavior of draining the pond to get all the fish, usually forces easily flowing industrial and commercial institutions with normally abundant tax sources and low tax costs to move to areas with a lower tax rate and a better developmental environment. However, the frequent emigration of industrial and commercial enterprises, forces local governments to impose taxes on sectors that cannot move, such as the agricultural sector. Due to the high cost and low efficiency of taxation on the agricultural sector, the local government has to add staff, which further expands the government size and increases the pressure of fiscal support. In this vicious circle, the backward areas' developmental potential is further weakened.

When studying the development disparity between China's coastal area and inland, scholars such as Fan Shenggen²⁸³ provided a detailed description of the

²⁸¹ Note: The number of R&D personnel can be found from the website of National Bureau of Statistics of China, http://www.stats.gov.cn/tjsj/pcsj/rdzyqc/decrdzyqc/201011/t20101124_72822.html.

²⁸² Note: The award is managed by some independent academic agencies, such as Beijing University, and Central Compilation and Translation Bureau. This award is published every two years from 2000 and 20 innovations of local government are awarded each time. The list of awards can be found from http://www.chinainnovations.org/.

²⁸³ Fan, S., Kanbur, R., & Zhang, X. (2011). China's regional disparities: Experience and policy. *Review of Development Finance*, 1(1), 47-56.

above trend. According to the results of their studies, in 1993, the average agricultural tax rate and industrial tax rate was 0.81% and 2.74% respectively in the coastal areas of China, and it was 1.15% and 5.95% respectively in inland China, which showed that mainland China's industrial tax rate was apparently higher than that of coastal areas. As the trend continued until 2000, the average agricultural tax rate and industrial tax rate was 1.06% and 0.8% respectively in the coastal areas, and it was 1.72% and 1.30% respectively in mainland China. As a result, not only was mainland China's industrial tax rate higher than that of the coastal areas, but also, its agricultural tax rate increased by about 70% comparable to 1993. Under this background, the disparity in the development between the central and western areas was further widened. Along with the reform of rural tax since 2000, the taxes and fees on the rural township elimination plan, rural education funding, governmental funds, agriculture and agricultural special products began to be reduced and reformed. In 2006, China completely abolished the agricultural tax. Since then, an agricultural tax with low efficiency and high cost has been placed in the museum of history. After the agricultural tax was abolished, faced with limited tax sources, tax bases as well as relatively fixed and standardized tax rates, undeveloped areas were bound to release their pressure of fiscal support via new approaches. As a result, increasing the non-tax revenue became their important "life-saving straw".

Non-tax revenue include special income, administrative charges, confiscated income, state-owned capital operation income, state-owned resource income and other income. Administrative charges refer to the fees charged to special service objects, according to the cost reimbursement and non-profit principle, as when the government provides special services for citizens and legal persons. It is customary worldwide that the government charges for public goods with small externalities. Theories such as New Public Administration emphasize the importance of paid services by holding that the government should introduce a profit motive into the activities of public services, turn administrators into entrepreneurs, learn to save money by spending money, and make an investment for returns.²⁸⁴ Yet in practice, compared with statutory taxes, administrative

²⁸⁴ Denhardt, J. V., & Denhardt, R. B. (2007). The new public service: Serving, not steering. ME Sharpe, p4.

charges, items and standards are made by multi-level government sectors; such as the central government, provincial government and local government,²⁸⁵ which leave institutional space for the phenomena such as "arbitrary charges".

Tevenue								
Province	Non-tax	Charges	Province	Non-tax	Charges	Province	Non-tax	Charges
	/total	/total	Flovince	/total	/total	Flovince	/total	/total
Inner	27.240/	C 070/	D -:::	5.040/	1 450/	Cl	29.070/	C 1(0)
Mongolia	27.34%	6.07%	Beijing	5.04%	1.45%	Shanxi	28.07%	6.46%
Guangxi	31.96%	10.09%	Tianjin	30.97%	12.64%	Jilin	26.57%	8.47%
Chongqing	40.80%	20.75%	Hebei	22.40%	6.80%	Heilongjiang	25.63%	8.48%
Sichuan	24.81%	6.88%	Liaoning	25.28%	6.00%	Anhui	24.27%	8.59%
Guizhou	32.98%	5.95%	Shanghai	7.50%	3.14%	Jiangxi	26.23%	11.07%
Yunnan	20.63%	4.88%	Jiangsu	19.89%	6.24%	Henan	26.64%	9.37%
Tibet	16.31%	2.21%	Zhejiang	6.31%	1.29%	Hubei	30.11%	13.56%
Shanxi	37.75%	4.64%	Fujian	16.46%	4.58%	Hunan	39.66%	12.64%
Gansu	36.90%	8.37%	Shandong	24.68%	8.07%			
Qinghai	21.05%	3.56%	Guangdong	17.52%	6.70%			
Ningxia	19.48%	7.52%	Hainan	13.06%	3.48%			
Xinjiang	17.63%	5.08%						
Western	27.2004	7 170/	Eastern	17 100/		Central	29.400/	0.820/
average	27.30%	7.17%	average	17.19%	5.49%	average	28.40%	9.83%

Table 4-4 Non-tax revenue and administrative charges accounted to total budgetary revenue

Source: National Bureau of Statistics of China (2012). China Statistical Yearbook 2011. China Statistic Press.

As displayed in Table 4-4, according to the ratio of non-tax revenue to budgetary fiscal revenue, and the ratio of administrative charges to budgetary fiscal revenue, central China had the highest level, followed by western China, and eastern China was at the lowest level. The ratio of these two in eastern China was obviously less than that in central and western China. Despite the small ratio in western China, it did not leave a gap from that in central China, even if the minimum value of autonomous regions such as Tibet was excluded. In particular, the non-tax revenue accounted for more than 30% of budgetary revenue in provinces like Shaanxi, Gansu, Guizhou, Chongqing and Guangxi.

²⁸⁵ Notes: In China, administrative charges are very complicated systems, including the following types: administrative charges based on the central government's administrative approval items and standards, administrative charges based on central government's administrative approval items and provincial standards, administrative charges based on provincial government's administrative approval items and standards, and administrative charges based on provincial government's administrative approval items and standards, and administrative charges based on provincial government's administrative approval items and standards, and administrative charges based on provincial government's administrative approval items and standards.

To some extent, it proves that compared with economically developed coastal provinces and some central provinces, the western provinces were more likely to gain fiscal funds using a non-tax method. Without uniform legal norms, and faced with fiscal shortages, the governments in the backward areas were likely to create rent-seeking and charging space by strengthening administrative examination and approval, setting administrative charge and prolonging approval process, so as to worsen the investment and production environment, enhance living cost, cause the outflow of capital and human resources, and finally further weaken the local development potential.

4.2 Government Structure and Regional Balanced Development

Government structure refers to administrative organizations and administrative subjects' spatial arrangement mode, behavioral patterns, as well as the relationship among the parts. According to structural-functional theory, the government is an overall system similar to a living organism, namely, the organic combination of multiple sub-systems and sub-divisions, with each subsystem bearing some functions of all the departments. The realization of government functions is the outcome or influence of specific government structure's activities. Different government structures appear in different societies or at different stages of social development.²⁸⁶ From the perspective of the government's actual operating state, government structure refers to the form of government organization, departmental relationship and hierarchical connection to stipulated authoritative documents, such as the constitution and the law. Generally speaking, it is inclusive of the horizontal departmental structure and the vertical hierarchical relationship.

When it comes to China, given that there are a broad-sense and narrow-sense "government", the research on China's governmental structure not only includes the study of administrative organs' internal relationships, but also covers the

²⁸⁶ Riggs, F. W. (1980). The ecology and context of public administration: A comparative perspective. *Public Administration Review*, 107-115.

structure of CPC organizations, national power organs, national consultation agencies and national judicial organizations, as well as their relationship. But in general, most scholars studied government structure from the perspectives of the Chinese government's vertical hierarchical structure, horizontal departmental relationship and vertical-horizontal-combined relationship. For instance, Ma Lihong stated that China's government structure is basically featured by "the combination of central departments and local governments". According to his argument, "as a basic structural relationship in China's administrative organization system, the combination of central department's administrative management from different levels in different areas".²⁸⁷

Zhu Guanglei considered that China's government structure is a pattern of uniformity between the central and local government, namely, "different levels of government' high unity and consistency in horizontal functions, duties and institution setting". ²⁸⁸ If the government of every level sets government organization according to the upper-level government's mode, on the one hand, it will result in organizational overlapping and low efficiency; on the other hand, it will complicate the authority-responsibility relationship between the upper-level and lower-level governments; thus, sharpening the contradiction between departments and hierarchies. In a word, most studies related to China's government structure focus on descriptive analysis, namely, the illustration of the history, evolution, status, problems and optimizing countermeasures of China's government structure.

Regarding the relationship between government structure, economic development, and regional disparities, few thematic researches can be found. Most scholars involved the above issue when they studied fiscal decentralization, fiscal federalism and the system of tax distribution. For instance, Weingast argued that economic success required not only a reasonable economic system, but also an accurate political structure, while as the smallest system of market

²⁸⁷ Ma, L. (1998). The vertical and horizontal relationships in the process of government administration. *CASS Journal of Political Science*. (4),73-78.

²⁸⁸ Zhu G. L., & Zhang, Z. H. (2005). A Critique of "Isomorphic Responsibility" Governmental System. *Journal of Peking University (Humanities and Social Sciences)*, *1*, 014.

intervention, (fiscal) federalism not only promoted America and Britain's economic growth, but also heavily drove the economic take-off since China's reform and opening-up.²⁸⁹ Zhang Xiaobo expounded on the relationship between China's economic decentralization and political centralization and argued that the dislocation of this government structure was an important reason for regional developmental disparity in China.²⁹⁰ Scholars like Fu Yong studied the relationship between Chinese-style decentralization and the local economic development to determine that China's unique system, which combines economic decentralization with political vertical management resulted in the present situation that local public expenditure structures valued economic investment and infrastructure, but overlooked human capital and public service.²⁹¹ When studying the relationship between institutional supply and China's fiscal decentralization, Yao Yang and Yang Lei emphasized that the sharp contradiction between fiscal decentralization and the government's administrative vertical decentralization was an important obstruction to weaken the standardization of China's fiscal decentralization system; thus, producing an insufficient supply of a supporting system related to fiscal decentralization.²⁹²

To sum up, most researches have not established the theoretical relationship between government and regional balanced development even up till now, and some tentative researches are limited to the exploration of the relationship between fiscal decentralization and regional disparity. Essentially speaking, since the fiscal decentralization system is directly affected by government structure, any fiscal relation must be adjusted on the basis of the adjustment of government structure, otherwise, the fiscal structure and government structure may be unmatched; thereby, weakening the overall effect of reform. Therefore, based on previous studies, this thesis attempts to primarily explore the

²⁸⁹ Weingast, B. R. (1995). Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development, *The. JL Econ. & Org.*, 11, 1.

²⁹⁰ Zhang, X. (2006). Fiscal decentralization and political centralization in China: Implications for growth and inequality. *Journal of Comparative Economics*, 34(4), 714-726.

²⁹¹ Yong, F. (2010). Fiscal Decentralization, Governance and Non-Economic Public Goods Provision. *Economic Research Journal*, 8. (In Chinese)

²⁹² Yang, Y & Lei Y (2003). The consequences of system supply imbalance and China's fiscal decentralization. *Strategy and Management*, *3*. (In Chinese)

relationship between China's present government structure and regional balanced development.

4.2.1 China's Regional Policies and Government Structure Evolution Rules

Government structure mentioned in this thesis refers to a three-dimensional government operation mode, which is formed by vertical and horizontal governmental departments. The concept of government structure differs from that of the form of state structure, for the latter attaches more importance to the horizontal distribution form of the special state power, namely, the relationship between the whole state and its constituent parts, or the relationship between the central government and local governments. Moreover, government structure also has a different concept from that of an organizational form of political power, for the latter focuses on the combination of the state's horizontal powers and their relationship, such as the relationship between power organs and government agencies, judicial organs and party organizations. In brief, government structure mainly relates to "the horizontally and vertically interlaced relationship among governments as well as the relationship among government in different regions, and it includes the relationship between the central government and local governments, the relationship among local governments, the relationship among governmental sectors, and the relationship among governments in different regions."²⁹³ Concepts similar to government structure include "vertical-horizontal relationship", "vertical-horizontal structure", etc. In the process of this research, the above concepts are utilized on an equal basis.

Theoretically speaking, the introduction and implementation of any national development strategy must be supported and enforced by the corresponding government structure, and specific government structures may, in turn, affect the implementation effect of the specific national development strategy. Since new China was founded, the regional development strategy has always been a pertinent part of China's overall developmental strategy. It has experienced the

²⁹³ Xie, Q. (2000). Study on the relationship among governments in China. Journal of Beijing University, (1), 26-34.

period of regional economic balanced development guided by the heavy industry development strategy (1949-1978), the period of regional non-balanced development guided by the strategic idea that "the rich first push on those being rich later" (1978-1990), the period of regional balanced and coordinated development guided by the development idea of "efficiency first and fairness considered" (1991-2000) and the period of an overall regional coordinated development represented by the western development and the main functional areas guided by scientific development perspectives. The following will describe the government structure and implementation effect in each period of the regional development structure and regional policy.

(1) Government Structure during the Period of Regional Balanced Development Strategy (1949-1978)

During the period of the regional balanced development strategy, the Party and the government's strategic target was to establish a relatively independent industrial system, not only throughout China, but also in all the regions due to China's overall backward situation, unbalanced economic development and repeatedly deteriorating international environment. To reach this target, on the one hand, the government had to create a spatial arrangement for its overall economic development, and on the other hand, it had to stimulate a positive local development and encourage local governments to support the realization of the national strategy by self-reliance.

During the early days of the nation, China's lack of experience in economic construction and national administration, as well as years of war and weak industrial foundation, resulted in extremely deficient capital required by the economic construction at that time. Affected by the Soviet Union's economic management mode and construction experience, China started to employ all available resources for large-size infrastructure and economic layout. Supported by the highly centralized fiscal system "unified revenue and expenditure", China's planning power and administrative power were concentrated by the central government and the so-called "vertical departments' dictatorship" was formed. Such government structure based on the Soviet pattern played a role of stabilizing the society and developing the economy in the early days of the Party's governance.

However, faced with China's vast territory, diversified cultures and complex political system, the central government quickly realized the drawbacks of excessive centralization and started to implement the fiscal system "with division of revenue and expenditure and with management at different levels" by endowing some financial power to the local governments in 1951. Meanwhile, instead of being weakened correspondingly, there had been as many as 81 planning and vertical sectors of the central government by 1956, covering all economic aspects like human resources, financial resources, material resources, production, supply, and marketing. The government structure with excessively centralized power obviously did not conform to the conception of "both central and local initiatives". Therefore, China rapidly changed the Soviet pattern to a highly-centralized administrative structure and started to delegate power to the local governments. Guided by On the Ten Major Relationships and relevant resolutions of the 8th CPC National Congress, a wide range of powers such as the plan management power related to local governments, project approval power, fiscal expenditure and taxation power of some enterprises subordinate to the central government's various departments were delegated to the local governments. Meanwhile, the State Council started to cut the number of the planned economic departments which reduced from 81 in 1956 to 60 at the end of 1959. Decentralization contributed to the rapid expansion of the local governments' power and the formation of the vertical and horizontal government structure, as well as the game among them.

Since this reform of government structure was based on the decentralization, and the Great Leap Forward was executed at the same time, and the wave and influence of the "left" submerged the original intention of "mobilizing both central and local initiatives", therefore, it was difficult to control the local governments' power expansion; thus, bringing about a disastrous effect to the national economy and regional balance. Moreover, under the guidance of "adjustment, consolidating, enriching and improving", the central government began to readjust the power distribution between the central government and local governments and emphasized the central government's unified leadership. *Temporary Provisions on Management System Adjustment* issued in January, 1961 marked the start of a new round of government structure adjustments.

From the perspective of reformed contents, first of all, the central government set up six central bureaus in Northern China, Northeast China, Eastern China, Central-south China, Southwest China and Northwest China, for the purpose of centralizing the central power and enhancing the unified leadership of the regional economy. Secondly, it extended the range of planning, unified management, expanded planning targets from 12 types in 1961 to 20 types in 1963, and made them more detailed than those during the "1st Five-Year Plan". Thirdly, the central government strengthened the centralized management of finance, infrastructure, goods and materials, and restored the highly-centralized planned economic system. Fourthly, it centralized and decentralized the enterprises' management power, i.e. the central departments administered the enterprises' power of administrative management, material distribution, production command, and personnel arrangement. Finally, it added management organizations, i.e. given that the highly-centralized economic management system expanded the central ministries and commissions' management range and administrative functions, the corresponding "vertical" organizations had to be added, and as a result, the State Council institutions increased from 62 in 1961 to 79 in 1965. Power centralization had achieved an immediate effect and the central government rebuilt the control over the national economy. Apart from the steady recovery of the economy, the state's balanced developmental strategy was also implemented with some effect, because the trend of widening the regional disparity caused by the Great Leap Forward and natural disasters was contained.

After the economic crisis, decision-makers such as Mao Zedong still questioned the central government's absolute centralized system and believed that it was not a good idea that the central government managed everything rigidly.²⁹⁴ Meanwhile, strategies such as the "Third Front Movement", active

²⁹⁴ Mao, Z. (1999). Works of Mao Zedong (Vol 8). People's Publishing House, p427-428. (In Chinese)

preparation for the war and the establishment of an independent industrial system in all regions also objectively needed local governments' great cooperation. Thus, the central government's authority was further weakened in the atmosphere of the "Cultural Revolution".

Since 1970, a new round of government structural adjustments featured by decentralization had been developed throughout China. In a short time, the management of a large number of centrally controlled national strategic enterprises, which included Anshan Iron and Steel Group Corporation, FAW and Daqing Oilfield, was delegated to local governments. According to the statistics, as many as 10,533 state-owned enterprises were controlled by the central government in 1965, accounting for 42% of the gross national industrial value. Since the decentralization in 1970, only 142 enterprises are controlled by the central government, accounting for 8% of the gross industrial value.²⁹⁵

Meanwhile, the central government's institutions and personnel were substantially dissolved and reformed into a smaller group merged with other departments, i.e. the departments of the State Council were cut from 79 departments to 32 departments, 19 of which were actually managed by the State Council, and another 13 of which were led by the Central Cultural Revolution Team and Central Military Commission. Moreover, the size of the State Council's personnel force was also reduced from more than 50,000 before the Cultural Revolution to about 10,000. Furthermore, the ratio of the central fiscal revenue to the overall fiscal revenue also lowered from 35.17% in 1966 to 11.85% in 1975. In this case, the central government's "vertical" control ability was weakened to the greatest extent since the founding of new China, while the local governments' "horizontal" power was strengthened in the process of decentralization. In this government structure, the local governments had sufficient power to implement economic and industrial policies in favor of areas under administration and constructed a local self-sufficiency economic system. To some degree this contributed to achieving the strategic conception of constructing a complete range of large heavy industry systems and a series of

²⁹⁵ Zheng, Y. (2007). *De facto federalism in China: Reforms and dynamics of central-local relations* (Vol. 7). World Scientific Publishing Company Incorporated.

emerging industrial centers in the central and western area in a short period of time. "Horizontal departments" with a strong economic capability, unique local interests and political "bargaining" power were also trained.

After the shift of two rounds of power – "vertical power" and "horizontal power", an interlaced state had basically been formed: although the central government had always been trying to promote the initiative of the local development by actively restricting its own power, it didn't fundamentally shake China's centralized political system. Furthermore, the central government was able to maintain the final control over the overall economy through leaders' personal charisma, the Party's vertical organization, as well as legislation and planning. Moreover, in the process of decentralization, local governments gradually accumulated the experience in managing local public affairs and the vested interests of local development; however, the "cellularized" government structure made it difficult for the central government to integrate the local economy into a highly-centralized government structure like the Soviet Union. The dynamic game between vertical and horizontal departments became the main trend of China's government structure for the future.

From the perspective of regional development, although the regional balanced development and average productivity layout were important national developmental strategies during this period, the CPC did not have adequate experience in implementing these strategies. On the one hand, the CPC's leaders incisively realized that it would not only smother the initiative of local development, but it would also increase the risk of bureaucracy to implement the Soviet's highly-centralized government structure in China – being such a state with complicated national conditions. On the other hand, the incomprehension of the scientific governmental structure, as well as the radical and unsophisticated means in which the process of the government structure adjustment caused China's economic development to be trapped in a vicious cycle where "decentralization leads to chaos and centralization leads to deadlock".

In this cycle, the different economic development efficiencies in different regions, the lockdown and mutual competition among local governments and the central government's lowered ability of macro-control resulted in China's overall widening regional disparity during this period (Fig. 3-1). Obviously, the high centralization, excessive local decentralization and excessively changing government structure during this period went against the regional balanced development and overall balance of China's economy. The experience and lessons during this period of regional development, as well as the primarily formed "vertical-horizontal relationship" had become the foundation and basic space for China's regional policy making and implementation.

(2) Government Structure during the Period of Regional Unbalanced Development (1978-1990)

In the early days after the "Cultural Revolution", faced with the complex tasks such as setting things right, restoring the economy and adjusting politics; it was imperative for the Chinese Government to recover government structure and functions. The old planned economic management system and expectations, were still the Chinese Government's major governing mode and experience at that time; thus, the orientation of government reform was still set to establish "vertical" departments' control over the economy by means of power recovery.

From 1976 to 1981, the number of the State Council departments increased to 100 and the size of the personnel force reached 51,000, both of which achieved the biggest size since the founding of new China. Some key enterprises' administrative power decentralized during the Cultural Revolution started to be centralized again, and the number of enterprises and public institutions directly under central management increased from 1,260 in 1978 to 2,680 in 1981. As for the fiscal system, the government continued to use the system of "integrating expenditure with revenue and sharing in the total revenue", and both the central government and local governments were supported by the big pot – national finance. From the government's perspective, several specialized coordination committees were established between the State Council and its ministries and commissions, to achieve uniform leadership and centralized management by setting specified departments over the departments of agriculture, machinery and energy.

In a word, since the Cultural Revolution, China's government structure had been featured by bloated organizations, overstaffing and increasing levels. Leaders like Deng Xiaoping emphasized on multiple occasions that the cause of the above problems was closely related to the central government's highly-centralized management system. He said, "Our leading agencies have been handled a lot of things they should and cannot interfere with."²⁹⁶ Based on introspecting previous government structures and the alteration mode of government structure, the central government started to promote the reform of government structure focusing on rationalizing the power relationship and delegating power to local governments in a constitutional and legal way. In essence it decentralized state-owned enterprises and weakened the national ministries' planning and commanding power; it dissolved the State Council's overlapped organizations from 100 in 1981 to 42 and optimized all departments' functions.

Furthermore, it constructed the "municipally affiliated county" system, overcoming the disadvantage of a confused division of powers and responsibilities, as well as overlapped agencies in the previous regional management system. Municipalities were also built with independent planning status; thereby, broadening the central government's management span and tightening the adjustment and control over core cities; it implemented the system - "serving meals to different diners from different pots", mobilized local governments' enthusiasm and responsibility for increasing revenue and reducing expenditure by adding local governments' financial autonomy. Moreover, it also thoroughly transformed the previous "vertical-oriented" fiscal management mode into a "horizontal-oriented" management mode; it delegated local legislative power, e.g. the Local Organization Law in 1979 and the Constitution in 1982 stipulated that the provincial people's congress and its standing committee had the power to formulate local laws and regulations when different constitutions, laws and administrative laws and regulations collided with each other.

²⁹⁶ Xiaoping, D. (1994). Selected Works of Deng Xiaoping (Vol 2). People's Publishing House, p328. (In Chinese)

In addition, it expanded the local power of personnel administration, transformed cadre management authority from "managing two subordinate levels" to "managing one subordinate level", and reduced the number of cadres directly managed by the central government from more than 14,000 to less than 4,000. It also executed asymmetric decentralization, i.e. the central government provided numerous preferential policies and preferential conditions in respects of tax, credit, land, foreign trade and foreign capital in the eastern coastal areas, "bringing about four different levels of tilting decentralization – special economic zones, open coastal cities, inland economic and technological development zones, and inland provinces".²⁹⁷

During this period, under the guidance of the central government's regional unbalanced development strategy, China's regional development disparity was gradually bridged (Fig. 3-1). Many scholars have provided possible explanations for it. Some scholars stated that the reform of the rural management system, which focused on the household contract responsibility system, with remuneration linked to output in the early 1980s, greatly enhanced the peasants' enthusiasm for production and agricultural production efficiency; thus, promoting the rapid growth of rural income. According to their argument, the increasing purchasing price of agricultural and sideline products finally contributed to the substantial increase of the rural resident's income, and the narrowed urban-rural disparity finally offset the widening regional disparity.²⁹⁸ Some scholars considered that "the rapid development of light industry in central and western regions has bridged the disparity with metropolises' industrialization degree in some period", ²⁹⁹ thus, controlling the sharply widening regional disparity. To some degree, the narrowed regional disparity indicated that compared with an excessively-centralized planned economic system, institutionalized decentralization reform was in favor of encouraging

²⁹⁷ Xie, Q. (2000). Study on the relationship among governments in China. Journal of Beijing University, (1), 26-34.

²⁹⁸ Fang, C. (2008). Thirty Years of Rural Reform in China: an Analysis from the Perspective of Institutional Economics. *Social Sciences in China*, *6*, 009.

²⁹⁹ Dong, X. (2004). Understanding the Regional Income Disparity in China, 1952—2002. *Economic Research Journal*, *9*, 002.

local governments to discover their development potential, so as to achieve a dynamic regional balanced development in the course of competition.

However, it's noteworthy that the adjustment of government structure during this period was obviously featured by asymmetry and non-thoroughness, that was, while the central government endowed the eastern coastal areas with more autonomous rights, the residual of a planned economic system still existed. Before government functions were completely transformed, "vertical" departments started another round of expansion. Compared with the eastern coastal areas, the central and western areas' development was intervened by "vertical" departments, which limited the orientation of development and the initiative of reform. Although this asymmetric government structure promoted China's economic aggregate development to some extent and laid the necessary foundation for the gradient transfer of industrial resources, it also brought about hidden troubles to further widen the disparity in China's future regional development.

(3) Government Structure during the Period of Regional Balanced and Coordinated Development (1991-1999)

The government structure of decentralization during the last period greatly aroused the enthusiasm for local development, but due to the lack of standardization, stability and fairness in the division of the relationship between the central government and local governments, the government structure was always being adjusted. In the fiscal decentralization and contract system, the central government used every limited scope and channels to gain revenue. Central finance was enslaved to local finance, which greatly weakened the central government's ability of macro-control. Driven by interest, the local governments competed for infrastructure construction and high-profit projects, which led to a great deal of redundant construction, imbalanced industrial structures, as well as investment inflation and waste. As a result, the industrial structure convergence among various regions paralleled the widening regional disparity. In this case, directed by the overall objective of building a socialist market economy, China started a new round of government structure adjustments focusing on a "revenue-sharing system".

First of all, on the principle of combining financial power with powers or authority of office, it defined the central government and local governments' range of fiscal revenue according to the categories of tax, and established two tax systems such as state tax and local tax, breaking the "principal-agent relationship" between the central government and local governments in terms of revenue collection and management. In this way, not only was the central government's stable growth mechanism of fiscal revenue formed, but also the distribution pattern that "the central government enjoys the largest share" was constructed and the central government's ability of macro-control was strengthened. Secondly, it adjusted the State Council's departments, intensified the state comprehensive economic management departments, and enhanced macro-control. Specifically, it transformed the specialized economic management department into enterprises or industry associations, and reduced the specific intervention into the micro economy; it sharply adjusted and streamlined departments and administrative bodies directly under the State Council; thereby enhancing administrative efficiency. Thirdly, it encouraged and pushed forward local governments' administrative reform, weakened the function of microeconomic management, reduced affairs of administrative approval, and resolutely separated government functions from enterprise management. Moreover, it streamlined and standardized the local government agency setting, explicitly specified the number of all levels of government agencies, developed "better troops and simpler administration", and determined local governments' reasonable size.

In general, on the one hand, the reform of government structure during this period standardized and centralized the central government's financial power and strengthened the central government's ability of macro-control through the "revenue-sharing system"; on the other hand, the adjustment of government functions through the reform of government structure made the government retreat from micro economic management and return the power to the market. From the perspective of the change in government structure, based on the "vertical-horizontal" relationship constructed in previous reforms, the government strengthened the "vertical" departments' macro controlling ability, and weakened the "vertical" departments' function of a planned economy; thus, promoting the modernization of government structure.

At this stage, regional disparity started to deepen. Many studies have determined that 1990 was a turning point and after the reform and opening-up, the trend of constantly narrowing regional disparity became reversed, i.e., regional disparity continued to deepen from then on (Fig. 3-1). On the one hand, it was because the dividend of rural reform was gradually exhausted and the major components of the regional development disparity turned from agriculture into industry and commerce; on the other hand, it was directly related to the strategy of regional unbalanced development and asymmetric decentralization after the reform and opening-up. Since the reform and opening-up, the eastern coastal areas had always enjoyed various preferential policies awarded by the central government with very few "vertical" interventions, and they had basically constructed a government administrative system and economic operational mechanism based on market economization.

Although the reform of a market-oriented economy had been implemented throughout China since 1993, the strategy of national unbalanced development still contributed to a lot of preferential policies to the eastern coastal areas. Meanwhile, the excellent industrial foundation of the eastern areas further magnified the dividend of a socialist market economic reform; thus, further widening the disparity in development among regions.

In addition, although the government structure was optimized and adjusted on the basis of marketization and modernization, the basic structure of "verticalhorizontal" relationship was not changed yet: despite the strengthened financial power, the central government did not have a scientific and reasonable transfer payment system; thereby, failing to effectively bridge the fiscal disparity among regions. Moreover, policies such as tax returns and special subsidies objectively protected the developed areas' vested interest, but they caused the existing system to play limited roles in promoting a balanced development. Furthermore, obstacles of communication among "horizontal" departments were not cleared yet; after realizing many problems such as the convergence of industrial structure in all regions, the prevailing redundant construction, and repeated low-level competition, the central government proposed a series of principles like "overall planning, rational division of labor, complementary advantages, coordinated development, benefit consideration and common prosperity" for regional development. However, the lack of a coordination mechanism among the "vertical" departments and communication mechanism among "horizontal" departments in the existing government structure made the ideas of rational division of labors and complementary advantages become formalistic.

(4) Government Structure during the Period of Regional Overall Coordinated Development (2000-present)

During this period, China had experienced four administrative reforms in 1998, 2003, 2008 and 2013 respectively, and government structure was adjusted four times correspondingly. Despite their different background, reasons, concrete steps, contents and achievements, they had a consistent direction: to establish a government system in line with a socialist market economy, strengthen the government's function of macro-control, and reduce the government's excessive intervention in the micro market. The following will provide a brief introduction to the key points in all previous government structure reforms.

In 1998, the reform of government structure focused on the reform of government agencies and personnel streamlining, and the number of State Council departments were reduced from 40 to 29. In that reform, the State Council's 9 industrial management departments were degraded to national offices under the State Economic and Trade Commission all at once, completely separating the government's functions from enterprise management. Furthermore, the government supervision department's functions were enhanced, which included implementing vertical management to departments of industry and commerce, quality inspection and drug regulations, streamlining all levels of government components, and determining the number of government agencies at all levels.

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In 2003, the reform was implemented by continuing the idea of transforming government functions, including reforming the administrative approval system, abolishing a total of 1,195 administrative approval projects in 2002 and 2003, issuing the Administrative License Law in July, 2004; thus, creating a limited government and law-based government in market economy conditions. Moreover, the State-owned Assets Supervision and Administration Commission was established, implementing the reform idea of separating administrative functions from enterprise management and separating proprietorship from management rights; the State Development Planning Commission was renamed as the National Development and Reform Commission, the State Economic and Trade Commission was abolished, the intervention in the market by means of planning was reduced, and the central government's ability of macro-control was strengthened. Furthermore, the central government's regulatory capacity was enhanced, the China Banking Regulatory Commission was founded, the State Food and Drug Administration was built, and the State Bureau of Safe Production Supervision and Administration was upgraded; together with the existing China Securities Regulatory Commission and China Insurance Regulatory Commission, the central government's vertical supervision system was preliminarily improved.

The adjustment of government structure in both 2008 and 2013 was implemented along with the idea of a "Super-Ministry System", i.e. "with an aim of transforming government functions and rationalizing departments' responsibilities, the reform explored the super-ministry system of organically unified functions".³⁰⁰ In other words, the reform of the "Super-Ministry System" attempted to solve problems such as the separation of departments, the difficulty in coordination, and low efficiency caused by too detailed department settings through function integration among government agencies, so as to separate government functions from enterprise management, separate government functions, and give play to the government's macro adjusting and controlling function. Besides, the reform of an administrative approval system continued

³⁰⁰ http://www.chinanews.com/gn/news/2008/04-11/1188849.shtml.

during this period. For instance, after Li Keqiang took office in the government, the government promised to abolish and delegate the central government's 1/3 of 1,700 administrative approval affairs, namely, 567 items. By 2013, a total of 221 items had been abolished and delegated.

Since 2000, the regional development disparity has displayed a fluctuating tendency (Fig. 3-1). According to the provincial per capita GDP, regional disparity came to a head in 2004 and then declined. The growth rate of GDP in the central, western and northeast areas also started to exceed that in the eastern coastal areas in 2004. Regional disparity showed a convergent tendency, but the rate of convergence was obviously less than the expansion rate of regional disparity after 1990, which indicated that it was an arduous task to achieve regional balanced development. During this period, to achieve the strategy of an overall regional coordinated development, China adjusted its government structure correspondingly.

First of all, it established a regional development coordination agency to coordinate the "vertical" departments' responsibility to assignments in regional development. For instance, to support the strategy of western development, the State Council set up a western development leading group in January, 2000, with the previous premier serving as the group leader. Its group members were composed of most ministries and commissions' heads. Meanwhile, an office for the western development leading group was implemented separately in the State Development Planning Commission, to be responsible for researching and proposing western developmental strategies, developmental plans, major issues, as well as relevant policies, laws and regulations. In the strategy of rejuvenating the old northeastern industrial base of China, similar leading and coordinating agencies were established. Secondly, through the removal and merger of ministries and commissions, as well as the "Super-Ministry System" reform, the integration and cooperation among "vertical" departments was strengthened and a great deal of internal friction caused by department's separation was reduced, which to a certain extent contributed to the implementation of a regional balanced and coordinated development strategy. Thirdly, by abolishing and delegating administrative approval affairs, the central government approved

local governments with more power of economic development to encourage their enthusiasm for local development; thus, bridging the regional disparity in local competition. At last, China strengthened the central vertical supervision departments' power to guarantee the central government's ability of macrocontrol, i.e. it tried to ensure the stability of a macro economy and the implementation of national strategies via public policies instead of direct intervention.

In general, China learned a lot of lessons and gained experience from previous reforms to adjust the government structure in this period. Although regional strategies were implemented using the top-down method, the central government did not directly control the micro economy and local development by means of a target or plan, but paid more attention to guiding the orientation of China's regional economic development by integrating "vertical" departments' macro adjusting and controlling functions on the basis of arousing the initiative for local development. This powerful and moderate government structure not only played its role in the implementation of the strategy of regional balanced and coordinated development, but also contributed to the convergence of the regional economy to some degree.

4.2.2 Present Government Structure and Difficulties in Regional Balanced Development

According to the experience of other countries, regional balanced development requires the balanced combination of market regulation and government intervention, the organic combination of central adjustment and local coordination, as well as the dynamic combination of local competition and local cooperation. To meet the above requirements, the government's structure should have the following characteristics: firstly, it should have the functions of weakening the government's intervention into the micro market and strengthening the government's macro-control; secondly, based on endowing local governments with sufficient independent developmental power, the central governments; thirdly, in addition to forming benign competition among local governments, it should have an institutionalized coordinating and collaborating method.

From a general view, China's inherently rigid "vertical-horizontal" government structure began to change after more than 6 decades of exploration and change. Apart from awarding local governments with more independent developmental powers, the central government mainly directs and intervenes in local governments through macro fiscal and financial means. Nevertheless, despite the great achievements, there are still a lot of problems being to the disadvantage of regional balanced development in the current government structure.

(1) The Uniformity between Central and Local Government and Rigid Government Structure

The uniformity between the central and local government means all levels of government have generally the same functions, but different characteristics in an organizational setting – "vertical and horizontal consistency". ³⁰¹ Some scholars name this system the "administrative level-by-level contracting system³⁰², i.e. a superior government delivers all power, except for legislative power, to local governments, and subordinate government is basically the sizeddown version of the superior government. Theoretically speaking, the uniformity between the central and local government is in favor of reducing the central government's burden of information collection, and its cost of supervising the subordinate government in particular historical periods. Nevertheless, as economic activities become complicated, the highly consistent uniformity between central and local government gradually reveals its disadvantages. From the perspective of regional development, the biggest problem of the uniformity between the central and local government is the establishment of multi-level local governments similar in size on the principle that "one size fits all" in all regions throughout China, without considering their

³⁰¹ Mertha, A. C. (2005). China's "soft" centralization: shifting tiao/kuai authority relations. *The China Quarterly*, *184*, 791-810.

³⁰² Li, H., & Zhou, L. A. (2005). Political turnover and economic performance: the incentive role of personnel control in China. *Journal of Public Economics*, 89(9), 1744-1762.

economic development, population size, resource endowment, economic structure and geographical location, which causes backward regions to be responsible for government agencies and fiscal-supported personnel of a similar size to that in the developed regions. On the one hand, limited to tax bases and tax sources in the central and western regions, an excess of "maintenance" expenditures such as administrative expenditure and fiscal-supported personnel expenditure is bound to reduce "development" expenditures such as science, education, culture and health expenditure and economic construction expenditure; thus, weakening the backward regions' developmental potential. On the other hand, "the uniformity between central and local government", which is protected by laws and regulations, removes the motivation or reason for backward regions to adjust government functions, streamline government agencies and reduce fiscal-supported personnel, which further hinders the backward regions' local governments from promoting their work efficiency.

(2) Management Based on Territories and Local Protectionism

Management based on territories is an important principle for the system of uniformity between central and local government, i.e. the central government divides the territory into several administrative regions and evenly allocates the generally same government functions, so that the government of each administrative region can execute independent and closed management of affairs within the region. In traditional society where public affairs were relatively simpler, management based on territories contributed to the central government's control over the whole state. However, in modern society where a market economy is highly developed, due to the overflow of natural resources, the mobility of production elements and the externality of public service, it is crucial to break the closed administrative jurisdictional territory and the selfsufficiency economic system, so as to establish a broad coordination and cooperation mechanism among local governments.

However, in the existing system, given that all local governments undertaking similar functions are responsible for their common superior government, they always treat their "competitors" with an attitude of "implementing regional blockade, undermining each other's work, and sacrificing principle for profit" for benefit maximization of the head in their jurisdictional territory or region. This results in a series of problems like local protectionism, governments' vicious competition, high convergence of industries, and overexploitation of common resources. This situation or state obviously goes against the establishment of an intergovernmental collaboration mechanism and the achievement of regional balanced development.

(3) Vertical Departments' Intervention and Separation of Department Functions

In the present government structure, although the central "vertical" departments' function of intervening in the micro economy has been further weakened, they assist in implementing China's regional development policies by macro fiscal disbursements, taxes, and other financial means. Furthermore, in the implementation of strategies such as the western development and rejuvenation of the old northeast industrial base, "vertical" coordination agencies like the western development leading group have been gradually established and started to play their roles. However, generally speaking, the separation in "vertical" departments still exists, which is mainly reflected in the following aspects: "vertical" departments actually still have substantial powers like administrative approval power and special subsidies granting power, and these special powers maintain "vertical" departments' special interest, which generates numerous difficulties to the integration of "vertical" departments; secondly, the reform of the "super-ministry system" is still advancing, so it is an arduous task to effectively integrate the "vertical" departments' functions; thirdly, although the premier of the State Council serves as the leader and relevant ministries' heads are component members of the "vertical" coordinating agencies, such as the western development leading group, the specific administrative bodies are subordinate to the National Development and Reform Commission and they are departmental-level units. This power allocation obviously goes against coordinating the agencies' effective work proceedings.

4.3 Government Incentive Mechanism and Regional Balanced Development

In brief, incentive means arousing the enthusiasm for work. The normal and successful operation of specific institutions not only relies on reasonable designs, but also rests with the coordination of individual members' actions. In real political life, an important reason why a well-designed institution fails to reach an expected effect is that the designer overlooks individual members' support and compliance in the operation of this institution. Although pure legal enforcement and violence intimidation may compel participants to act in accordance with specific rules for a short period of time, as time goes on, a variety of open struggles and secrete resistances will result in institutional failure. In neo-institutional economics, this phenomenon is explained as the coordination among formal institutions, informal institutions and the implementation mechanism. 303 Reasonable coordination will produce efficiency and cooperation, while unreasonable coordination may lead to low efficiency and internal friction. Moreover, organization theory also holds that an organization is composed of three structure levels, ³⁰⁴ namely, the organization's power and resource structure (statutory power and resource allocation), interaction structure (personal attitude and action strategy), and organization paradigm (game rules and institutionalized thought structure). For a stable operation of an organization's statutory power and resource allocation, participants are required to conduct benign interaction according to specific game rules.

In general, there are three incentive methods to maintain institutional operation, namely, compulsion, negotiation, and reciprocity. Compulsion means restraining participants' noncooperation or violations via violence, menace and punishment, so as to reach the goal of institutional operation. Negotiation refers

³⁰³ Kasper, W., & Streit, M. E. (1999). Institutional economics: social order and public policy. *EG Furubotn*, 334.

³⁰⁴ Zheng, Y. (2007). *De facto federalism in China: Reforms and dynamics of central-local relations* (Vol. 7). World Scientific Publishing Company Incorporated, p41.

to a rule-based behavioral pattern formed by repeated games in which participants take part in division of labors and collaboration for their own interest. Reciprocity refers to "a system in which both sides assume obligations, i.e. when one side makes an action of giving, the given side must provide corresponding feedback; similarly, one side's illegitimate deceit will also cause the other side to break off all relations with the deceiver." Different from negotiation, reciprocity is based on not only self-interest, but also obligations to others.

Theoretically speaking, the incentive problem can be simplified into a principal-agent problem³⁰⁵, which comes about for two reasons: the information asymmetry between the principal and the agent, as well as the goal conflict between the principal and the agent. Information asymmetry means different people have different acquisitions of related information in the trading process, i.e. people with rich information are generally at an advantaged position, but those with poor information are always at a disadvantaged position. In particular, some participants hide the information they possess from others for their own interests; thus, damaging or inhibiting others' benefits. Goal conflict refers to the principal and the agent's inconsistent interest preference. For instance, the central government's goal is to maintain a smooth operation of a macro economy, but local governments' goal is to make the local economy develop rapidly. This conflicting goal always causes great damage to the principal's interests. To solve the incentive problem, it is essential to reduce the information asymmetry and goal conflicts between the principal and the agent. Theoretically speaking, solving one problem contributes to solving the incentive problem.

According to the three methods of maintaining an institutional operation mentioned above, "compulsion" is to force the agent to act in line with the principal's goal by means of punishment and constrain the agent's behavior with a complex supervising system, so as to reduce damage to the principal's interests caused by information asymmetry. Although this method contributes to achieving the principal's goal in a short time, it always fails to continue due to

³⁰⁵ Li-an, Z. (2007). Governing China's Local Officials: An Analysis of Promotion Tournament Model. *Economic Research Journal*, *7*, 36-50.

the huge costs of punishment and supervision. The way of "negotiation" is to make both sides realize that "they will gain more benefits by mutual consultation than by unilateral action or breach of agreement" through repeated consultation and games.³⁰⁶ By utilizing this method, a point of balancing the interest between the principal and the agent is discovered; thus, reducing the goal conflict between the principal and the agent. The way of "negotiation" is aimed at reducing huge costs because of information asymmetry by bridging the goal, but this neglect of supervision is exactly the fatal flaw. In the real "negotiation" process, for the sake of their own interests, the agent always acts in a way that can maximize their benefits; thereby, causing damage to the principal's benefits. The way of "reciprocity" is to make the principal and the agent's exchange behavior proceed by arousing people's "double motives"³⁰⁷. Even if two sides receive unbalanced benefits in an exchange activity, "it makes people have a common expectation, that is, if they bring benefits to others, others will bring benefits to them in the future". ³⁰⁸ The way of "reciprocity" is to build cooperative behavior on the basis that it is more stable than the philosophy of personal benefit maximization, which can effectively reduce the principal and the agent's goal conflict and information asymmetry. However, correspondingly, the initial condition for "reciprocity" is harsh and a long and stable interaction process is required, which means that once one side will breach this "reciprocity" cooperation at some point, and all previous efforts may be totally destroyed.

4.3.1 Historical Context of the Chinese Government's Incentive Mechanism

The Chinese Government's incentive mechanism mainly refers to the central government's incentive for local governments, namely, the method in which the central government constrains local governments' behaviors and arouses their enthusiasm for development for the purpose of keeping the consistency between

³⁰⁶ Lieberthal, K., &Lampton, D. M. (Eds.). (1992). *Bureaucracy, politics, and decision making in post-Mao China*. Berkeley: University of California Press, p37.

³⁰⁷ Notes: it means that the agent not only pursue the maximization of material benefit, but also maximization of nonmaterial benefit, such as community identity, feeling of accomplishment and so on. This idea is used to against the traditional neoliberal rational man hypothesis.

³⁰⁸ Xian L., & Qiao, Z. (2012). New institutional economics. Beijing University Press, p239.

local governments' behaviors and the central government's developmental strategy. In China, a unitary state, local governments are empowered by the central government and enforce local administrative power on behalf of the central government. Except for legal provisions, the central government constrains local governments' behaviors by adjusting personnel administrative power and fiscal power. Hence, the following will describe the dynamic changes of personnel's administrative power and fiscal power between the central government and local governments with an aim of analyzing the central government's incentive mode for local governments. It's worth pointing out that instead of taking a single mode, the central government always combines different modes to encourage local governments.

(1) The Chinese Government's Incentive Mechanism before the Reform and Opening-up

Since the founding of new China, China has followed the Soviet Union to gradually establish its centralized planned economic system - the central government uniformly fulfilled the power of planning various economic and social affairs. Nevertheless, as the national economy recovered, the central government began to realize the decision-making and implementation burden caused by excessive power concentration. To achieve the national strategy of industrialization and balanced productivity distribution better and faster, the central government has started to decentralize most planning power, stateowned enterprise administrative power and infrastructure construction power to local governments since 1957. Most importantly, the central government endowed the local governments with a considerable autonomy of power related to taxes and fiscal funds and promised that this policy would not be changed within the five years after local income, expense items and sharing proportion were divided. Based on fiscal decentralization, to further arouse local governments' enthusiasm for development, the central government made use of its personnel's administrative power to adjust 12 provinces' major leadership from 1957 and 1959, mainly involving cadres who held reservations for the "Great Leap Forward" and behaved passively when promoting aggressive policies.³⁰⁹ As a consequence, the concept of arousing local governments' enthusiasm for development via the decentralization of economic power and the adjustment of personnel quickly brought about an effect, i.e. all regions began to construct various enterprises and infrastructures to stimulate economic growth. Nevertheless, with the decentralization of fiscal power and the reduction of the central government's revenue, the central government's ability of control over the national macro economy began to lower sharply. Additionally, due to the radical policies against the objective reality and natural disasters, China's economic and social development suffered a disastrous effect. Faced with disasters, the central government soon adjusted the policies of decentralization in 1962 and began to not only centralize, but also decentralize local governments' economic management power. In particular, it recovered the local governments' capital expenditure power, but changed it into central special appropriations. Meanwhile, the central government continued to make use of its personnel management power to accelerate power centralization and error correction. This decentralization-centralization mode kept being repeated during the Cultural Revolution when every adjustment of economic power was made along with personnel adjustment, and the major leaders of almost every province were replaced.

According to the description above, it can be found that in the fiscal system of "egalitarianism (eating in big pot)", the central government attempted to establish a "reciprocity" fiscal decentralization system to actively encourage local governments to develop the economy and expand tax bases and tax sources, for the purpose of increasing the central government's revenue while achieving the state's developmental strategy. It dispatched officials who remained consistent with the central government's goal through the "compulsory" personnel power centralization system, to reduce the goal conflict between the central government and local governments. From a theoretical perspective, although the "reciprocity" fiscal incentive mode was of good original intentions, the decision makers did not realize that the principal and the agent's mutual trust

³⁰⁹ Zheng, Y. (2007). *De facto federalism in China: Reforms and dynamics of central-local relations*. World Scientific Publishing Company Incorporated, p70-87.

was required for the successful establishment of this mode. In other words, either side's breach of agreement would generate difficulties for the effective operation of the whole reciprocity mechanism. At that time, the central government had the absolute right of power distribution, i.e. it could either promise "changeless financial allocation proportion within five years" or cancel the commitment at any time on the basis of economic fluctuation, which made it difficult to operate the reciprocity mechanism and resulted in local governments' serious opportunistic tendencies. Additionally, due to the powerful "compulsory" political or personnel incentive mechanism, local governments would keep wavering along with the change of "wind direction", and correspondently, China could not extricate itself from the vicious cycle that "excessive decentralization results in disorder but excessive centralization leads to inefficiency". In general, the "reciprocity-based" decentralization incentive mechanism failed to play the expected roles, and instead, the "compulsory" personnel and cadre system was regarded as the most important tool to guarantee local governments' consistent goals with the central government. From some aspect, it reflected that the central government's limited means of control over local governments inevitably resulted in the high costs of incentive.

(2) The Chinese Government's Incentive Mechanism during the Period of *"Fen Zao Chi Fan"* (Serving Meals to Different Diners from Different Pots)

Since the Cultural Revolution, in the presence of the ravaged economy and devastated state, the central government sharply reversed the situation of the national economic development through temporary centralization. Nevertheless, central decision makers were still skeptical about the excessively centralized planned economic system. Despite many problems with the decentralization during the Mao era, its effect of arousing local governments' enthusiasm for development cannot be ignored. After the national strategies of the national industrialization and regional balanced development were transformed into the national economic development and regional unbalanced development, the idea of arousing the enthusiasm for local development via economic decentralization was on the agenda again. First of all, the original fiscal system – egalitarianism

(eating in big pot) was transformed into "serving meals to different diners from different pots" (fen zao chi fan). Specifically, fixed revenue, shared revenue and adjusted revenue were classified, forming a fiscal relationship of classified contracts and self-balance based on revenue and expenditure classification. The central government began to restrain "vertical" departments' economic management so that the local governments could arrange expenditures by themselves according to central policies and their own financial state. Meanwhile, the central government officially promised to amend the settings of the contract base negotiation from "every year" to "every five years", in order to increase policy stability. According to the personnel and cadre system, although the central government still ensured its integral control over the whole state by "firmly holding personnel distribution power such as selection power, promotion power and removal power"³¹⁰, the transformation of personnel management power from "managing two subordinate levels" to "managing one subordinate level" meant empowering local governments to effectively control the appointment and removal of local officials apart from endowing them with the power of administering local economic affairs. Local governments had great decision-making power in respects of the economy and personnel, which contributed to arousing and encouraging their enthusiasm and initiative for local development. Additionally, this mode was in favor of assigning the central government and local governments' powers and responsibilities. During this period, the central government actively stopped replacing provincial leaders who failed to strictly comply with the central government's development strategies through the "compulsory" personnel and cadre system, but began to coordinate various possible contradictions between the central government and local governments via active negotiation.

According to the description above, it can be determined that in the system of "serving meals to different diners from different pots" (*fen zao chi fan*), instead of continuing the "reciprocity-based" incentive in line with local interests, the central government coordinated its interest based relationship with local

³¹⁰ Huang, Y. (1999). *Inflation and investment controls in China: The political economy of central-local relations during the reform era.* Cambridge University Press, p119.

governments through negotiation and consultation, while awarding local governments with more autonomous powers pertaining to economic development from a pragmatic perspective. On the one hand, the central government admitted the local governments' discretion and self-interest; on the other hand, it tried to let the local governments know, by persuasion, that cooperation might help them gain more interests. To prove its reliable promise of decentralization to the local governments, the central government transformed the "compulsory" personnel management mode into a "negotiationbased" management mode. Instead of absolutely controlling provincial leaders by means of threats, such as removal, the central government employed measures, which included open consultation, negotiation, and promise of promotion to encourage the local governments' leaders to remain consistent with its decisions in essence and in form, while striving for local interests. During this period, a large number of provincial governmental leaders became Central Committee members, surpassing those from the central Party and government organizations in number. In this way, local leaders started to play their important roles in a nationwide political arena. From a theoretical perspective, the government's incentive mechanism began to be balanced from two extremes - "reciprocity" and "compulsion" in this period. Based on a balanced economic and political decentralization, a "negotiation" mechanism between the central government and local governments was constructed; thus, reducing their goal conflict. As a result, the "negotiation" mechanism took effect soon, i.e. the central government's reform and opening-up policy and regional unbalanced development policy of "letting some regions get well-off first" were implemented efficiently by the local governments, and the local governments started to take various measures to promote the reform and develop the economy. However, at the same time, another problem began to emerge, that was, the central government was unable to generate sufficient financial resources to properly execute the national strategy and macro-control policy due to the rapid growth of the economy. Along with the asymmetric growth of the central government and local governments' strength, as well as the weakening of a "compulsory" personnel mechanism, the central government was always at a

disadvantaged position in the process of negotiation; thereby, failing to effectively coordinate and suppress the local governments' destruction of the macroeconomic order, because of their self-interested behaviors. Generally speaking, a "negotiation-based" economic and personnel incentive mechanism efficiently bridged the goal conflict between the central government and local governments at the initial stage of its implementation, promoting the reform and opening-up and accelerated economic and social development. Nevertheless, due to the central government's lack of effective restriction and supervisory mechanism, the serious information asymmetry made the central government's control over local governments reach a record low.

(3) The Chinese Government's Incentive Mechanism during the Period of "Revenue-sharing System"

To prevent various economic and political risks caused by the lowered central government's control ability, China started the far-reaching "revenue-sharing reform" in 1994, achieving financial power centralization and enhancing the central government's ability for macroeconomic adjustments and control by institutionalizing the relationship between the central government and local governments. Based on institutionalization of the "revenue-sharing system", central tax, local tax and shared tax were divided, the central government set the standards for taxation, and local governments were not allowed to increase or abate tax arbitrarily. Furthermore, the central government and local governments' revenue and expenditure boundaries were divided, so that they performed their own duties respectively; the central government's independent tax collection and management institutions was established, making the central government deactivate its dependence on the local governments in the process of taxation. Moreover, based on further removal and mergers of the State Council's specialized economic departments, as well as the decentralization and repeal of the administrative approval authority, the central government's "vertical" intervention in the micro economy was reduced. The central government also balanced various regions' financial resources by establishing the financial transfer payment system. According to the personnel and cadre system, the "negotiation-based" incentive mechanism, after the reform and opening-up, was basically extended after the "revenue-sharing system". On the one hand, regarding the principle of managing one subordinate level, the central government awarded provincial leaders with autonomy in personnel use within their jurisdiction and encouraged local governments to work hard on economic development; on the other hand, it awarded or constrained local governments by means of promotion, so that they would not go beyond the central policy framework. It's noteworthy that during this period, the incentive method of the personnel and cadre system was gradually transformed into inspecting cadres' work results; especially their achievements in economic development. For instance, in September 1994, The CPC Central Committee's Decision on Several Important Issues of Strengthening the Party's Construction made explicit demands on cadre assessment that, "Related departments should make scientific assessment system and standards according to different characteristics to conduct comprehensive assessment and accurate evaluation of work results." ³¹¹ Based on the data research during 1979-2002, scholars have determined that in this mechanism, taking economic performance as the main incentive standard, provincial officials' promotion probability was positively correlated to the economic growth of their jurisdictions.³¹²

It can be ascertained from the above description that during this period the government basically continued to use the incentive system during the period of "serving meals to different diners from different pots", but made some amendments according to its defects. Firstly, it brought the financial power distribution between the central government and local governments into the orbit of institutionalization in a legal way; thus, reducing disputes in the process of negotiation and damage to cooperation, because of excessive self-interest behaviors. Secondly, apart from decentralizing the fiscal power to the local governments, the central government reserved its power of making and explaining relevant laws; thus, guaranteeing its control and constraint to local

³¹¹ http://news.xinhuanet.com/ziliao/2005-03/16/content_2705439.htm

³¹² Chen, Y., Li, H., & Zhou, L. A. (2005). Relative performance evaluation and the turnover of provincial leaders in China. *Economics Letters*, 88(3), 421-425.

governments. Thirdly, in addition to endowing local governments with a tremendous power of independent economic development, the central government gradually reclaimed their powers related to macro-control such as banking, securities, safety supervision and quality supervision for vertical management, so as to strengthen its ability of macro-control. Fourthly, regarding personnel incentives, more explicit economic standards were utilized to replace the previous fuzzy political standards, which not only created a fair competition platform for local governments, but also intensified the central government's legitimacy and operability of supervising local officials; thus, reducing the information asymmetry between the central government and local governments. The above improvement measures further perfected the central government's "negotiation-based" incentive mechanism for local governments; thereby, not only arousing local governments' enthusiasm for development, but also strengthening the central government's control and supervisory ability. In the process of transforming the state's regional unbalanced developmental strategy into the regional balanced and coordinated developmental strategy, the above mechanism ensured that the central government had sufficient financial resources and coordinating abilities to achieve the implementation and promotion of the western development and rejuvenation of the old northeast industrial base.

Not only should the huge advantages of the "negotiation-based" incentive mechanism be highlighted, but also, its insurmountable defects should be noticed. According to the description above, it can be determined that an important condition for the effective operation of the "negotiation-based" incentive mechanism after the "revenue-sharing system" was the combination of personnel incentive and economic incentive. Local government officials worked hard not only for the local economic growth and the local people's welfare, but also their own promotion and rewards from the superior government. Since the central government provided limited positions, a large number of local governmental leaders had to stand out in the fierce competition, which resulted in a competition mode similar to a "political tournament".³¹³ This mode has a lot of advantages: firstly, a tournament can create an intense competitive atmosphere; thus, providing strong incentives to the participants; secondly, in a tournament, the competition is based on the temptation of interests, and rewards are clearly published in advance; thirdly, the tournament system is features an easy design, convenient operation and little controversy. However, just like a double-edged sword, this mode unavoidably has many disadvantages: firstly, if there is a big capability disparity among the different participants, it may cause the weak to drop out; secondly, due to the overly powerful incentives, participants may undermine each other's work; thirdly, if there are diversified competition targets, the agent may focus all their efforts on the task which can be easily observed, but then overlook hidden tasks. It is exactly the powerful tournament-type incentive mode that maintains the continuous and rapid growth of the Chinese economy, but correspondingly, it is the mode that gradually widens the development disparity among regions, worsens the vicious competition among local governments, and makes the GDP-oriented idea continue despite repeated prohibitions.

4.3.2 Government Incentive Mechanism and Competition Revolving around Poverty-stricken Counties

In the present government incentive mechanism, local governments develop "benchmark competition" for their own benefits. ³¹⁴ According to some scholar's views, the weak position of some backward areas in the competition may result in these areas' withdrawal and developed areas' inexertion. ³¹⁵ However, facts have proved that instead of withdrawing from the competition, the backward areas develop an intense competition in the field of the national poverty alleviation policy.

³¹³ Li, H., & Zhou, L. A. (2005). Political turnover and economic performance: the incentive role of personnel control in China. *Journal of Public Economics*, 89(9), 1744-1762.

³¹⁴ Maskin, E., Qian, Y., & Xu, C. (2000).Incentives, information, and organizational form. *The Review of Economic Studies*, *67*(2), 359-378.

³¹⁵ Zhou, L. A. (2004). The Incentive and Cooperation of Government Officials in the Political Tournaments: An Interpretation of the Prolonged Local Protectionism and Duplicative Investments in China. *Economic Research Journal*, *6*, 34-40.

Since the 1980s, China's poverty alleviation policy has been featured by "regional aim". In September, 1984, The CPC Central Committee and the State Council's Notification on Helping Poverty-stricken Areas Change Their Present State Soon explicitly stipulated, "The key points should be highlighted when solving poverty-stricken areas' problem. At present, efforts should be focused on problem solution of a dozen of contiguous poverty-stricken areas." Owing to China's existing government structure, the regional poverty alleviation policy was naturally implemented by Taking County as the basic unit. Hence, the government first determined 273 national poverty-stricken counties in 1986, and let them enjoy preferential policies in respect of land use, tax deductions and exemptions, as well as financial aid. In 1994, the government issued the Seven-Year Priority Poverty Alleviation Program and further increased the number of poverty-stricken counties to 592. In 2001, the Outline of the Developmentoriented Poverty Reduction Program for Rural China (2001-2010) formulated the principle of poverty alleviation and development "by taking county as the basic unit and poverty-stricken village as the base", to highlight the roles of the village level as the foundation of poverty alleviation, but county-level areas were still considered as the basic unit of poverty alleviation to enjoy various preferential policies. In 2011, the State Council issued the Outline of the Development-oriented Poverty Reduction Program for Rural China (2011-2020), which still employed the county level as the basic unit for poverty alleviation, proposed "making and implementing poverty alleviation program based on county under the guidance of the state", and determined 14 concentrated contiguous exceptionally poverty-stricken areas, covering 679 poverty-stricken counties.

Although the poverty alleviation policy, based on the county unit, simplifies the procedure of policy implementation and responsibility assignment in the current incentive mechanism that encourages local governments' "self-interest", the huge benefits in aspects of education, technology, investment attraction, land use, tax deductions and exemptions, and financial aid contained by the poverty alleviation policy, are always the targets strived for by the local governments. Additionally, since there is not an explicit withdrawal mechanism for the existing poverty-stricken county selection system, counties and cities receiving state aid have been growing over the years, which results in a once-for-all title of a poverty-stricken county and relevant preferential policies. Thus, it becomes not only the target competed for by the poverty-stricken counties, but also the title coveted by affluent cities, which therefore leads to the farce of "celebrating the election of poverty-stricken county".

In general, the present poverty alleviation and development mode for povertystricken counties goes against reducing poverty and regional disparity, which is reflected in the following aspects. Firstly, in the competition for the title of a poverty-stricken county, relatively affluent counties have an advantage in the competition, because of their rich lobbying resources, but real poverty-stricken counties may fail to obtain relevant policy support. For example, the nationally renowned affluent areas such as Fuyuan County in Yunnan Province and Shenmu County in Inner Mongolia have always retained the title of a povertystricken county. As a joke goes, "The reason why we fail to compete for the title of poverty-stricken county this time is that we are really too poor." Secondly, the poverty alleviation policy based on county unit cannot precisely "aim" at real poverty-stricken groups, i.e. in the competition for poverty alleviation resources, "those who own some resources and abilities are able to make full use of these resources to reach the goal of throwing off poverty, but those suffering from extreme poverty always fail to obtain poverty alleviation resources because of their limited resources and abilities".³¹⁶ Thirdly, in the incentive mechanism, the employing of economic indicators as the major assessment item, large-size infrastructures and industrial-mining projects for GDP and political performance, are still major orientations drawing the investment of poverty alleviation resources, which means it is difficult to use all the poverty alleviation resources for public service supply and support for poverty-stricken populations. Fourthly, as the source of policies and funding for poverty-stricken counties involves a dozen of central ministries and multi-level local governments, the disorder of rights and liabilities results in tremendous corruption and waste of poverty alleviation resources. In December, 2013, the

³¹⁶ Park, A., & Wang, S. (2001). China's poverty statistics. *China Economic Review*, 12(4), 384-398.

Audit Office conducted a selective examination of 19 counties from 592 national-level poverty-stricken counties to find that 17 of them defrauded the poverty alleviation funds, and Changning County in Yunnan, Libo County in Guizhou, Xunyang County in Shaanxi, Gulang County in Gansu, Jingxi County in Guangxi, and Haiyuan County in Ningxia embezzled the poverty alleviation funds, which made it difficult for real poverty-stricken areas to relieve their poverty. Fifthly, the state has noticed that China's poverty is featured by regional aggregation, and designated 14 concentrated contiguous exceptionally poverty-stricken areas, as well as proposing that "all departments of the State Council and local governments at all levels should reinforce planning and coordination".

However, because of the existing incentive mechanism, all poverty-stricken counties pay attention only to their own interests; thus, making intra-regional advantages complementation and coordinated development become empty talk. To sum up, in the existing incentive mechanism, the competition for the title of poverty-stricken county and the interests behind it prevents the poverty alleviation policy from aiding really poverty-stricken areas or for people to relieve their poverty, which is not in favor of achieving the goal of a regional balanced development.

4.3.3 Government Incentive Mechanism and Difficulty in Regions' Voluntary Collaboration

Given that regional problems cross the local governments' administrative boundary, according to other countries' experience, regional balanced development requires not only the central government's intervention, but also the coordination and cooperation of local governments in or between regions. However, within the current incentive mechanism, as in the case of "selfinterest", local governments conduct fierce competition in terms of "political performance" for promotion of political and economic interests. Particularly, "the basic characteristic of the game for political promotion is to drive participants to only concern about their position relative to competitors, and if cost permits, participants not only have incentive to do something in favor of their regions' economic growth, but also have the similar incentive to do something to the disadvantage of their competitors' regions". ³¹⁷ As a consequence, in the process of China's regional economic development, phenomena such as local protectionism, redundant economic constructions and inter-regional vicious competition still continue, even despite repeated prohibitions. Furthermore, it is difficult to effectively manage the central-leading or local-initiative regional cooperation mechanism; thus, eventually damaging the effect of China's regional balanced development strategy. Specifically, it is manifested in the following aspects.

In the first place, local protectionism protects "the backward". Along with the increasing development and improvement of a socialist market economy system, the phenomena of local protectionism; featured by product blockage, resource competition and administrative barriers gradually decreased in the 1980s. However, present local protectionism is still serious, exhibiting more diversified forms and more concealed and sophisticated methods. In particular, the phenomena, such as providing extra preferential policies for local enterprises, limiting migrant labors, and establishing technological barriers to products seem to emerge endlessly.³¹⁸ The prevailing local protectionism not only damages the state's overall economic growth efficiency, but also protects the backward, sustaining the local economy in a backward state for the medium and long term, finally worsens the local unemployment situation, and slows down economic and fiscal revenue growth; ³¹⁹ thus, widening the developmental disparity among regions.

In the second place, local governments' redundant construction brings about significant barriers to regional cooperation. In the current incentive mechanism, all regions always compete for large and extensive key projects in favor of economic growth and political performance promotion, without ever

³¹⁷ Zhou, L. A. (2004). The Incentive and Cooperation of Government Officials in the Political Tournaments: An Interpretation of the Prolonged Local Protectionism and Duplicative Investments in China . *Economic Research Journal*, *6*, 34-40.

³¹⁸ Shantong, L., Yongzhi, H., Yunzhong, L., & Bo, C. (2004). The Analysis on Survey of Local Protection in China Domestic Market . *Economic Research Journal*, *11*, 78-84.

³¹⁹ Montinola, G., Qian, Y., & Weingast, B. R. (1995). Federalism, Chinese style: the political basis for economic success in China. *World Politics*, *48*(01), 50-81.

considering local conditions. Take the automobile industry for example. At present, in China, 27 provinces and cities manufacture automobiles and their local governments give support for automobile manufacturing by classifying it as a pillar industry. Currently, there are more than 100 vehicle manufacturing enterprises. Vicious competition and local blockage, in the process of automobile manufacturing and marketing, have become obstacles preventing China from evolving from an automobile country to an automobile power. Similarly, the problem of redundant construction can be found in the field of infrastructure construction as well. Take airport construction for example. There are five large and heavily used airports, including the Hong Kong airport, Guangzhou airport, Shenzhen airport, Macau airport, and the Zhuhai airport within the range of 200 kilometers away from the Pearl River Delta. Moreover, Foshan and Huizhou are joining the competition.

After the "12th Five-Year Plan" was issued, it was evidenced from various provinces' concrete plans that they are trying to retain their economic achievements in the local area, by establishing an "independent" industrial system, for the main purpose of promoting their political performance in a short period of time. However, such immoderate redundant construction is bound to distort the division system of the socialist market economy, which not only causes a waste of large amounts of resources, but also makes the cooperation in and between regions appear as nothing more than empty talk. Take, for example, the Yangtze River Delta region, which has made significant achievement in regional cooperation. Since the 1990s, mechanisms related to regional cooperation have been established, and now more than 20 cooperative agreements and documents have been issued; ³²⁰ the different regions' agreements on construction and development have not yet been reached. Another example of airport construction, in which 17 civil airports are distributed within the region of the Yangtze River Delta, which means there are 0.9 airports per ten thousand square kilometers, even exceeding the U.S. level of 0.6; thus, making the region of the Yangtze River Delta one of the regions

³²⁰ Bi-feng, Y. E. (2004). Legal Co-ordination in the Background of Economic Integration in Yangtze River Delta . *Journal of Shanghai Jiaotong University*, *6*, 12-19.

with the largest airport density internationally. However, according to the "self-interest" incentive mode, many regions' airports refuse to coordinate with Shanghai's airport to become a "secondary airport".³²¹ It seems such cases are very prevalent.

In the third place, local governments' vicious competition adversely effects the development at administrative borders. Along with the overall growth of China's economy and the advancement of the state's poverty alleviation strategy, people are becoming more aware, and have discovered that most of China's poverty-stricken areas are distributed at or near provincial borders. According to scholars' statistics, more than a half of China's poverty-stricken counties are distributed in borders of Hunan-Jiangxi, Shanxi-Henan-Shaanxi, Jiangsu-Shandong-Henan-Anhui. Among 14 concentrated contiguous exceptionally poverty-stricken areas, designated by Outline of the Development-oriented Poverty Reduction Program for Rural China (2011-2020), except for three areas; such as Tibet, southern Xinjiang and western Yunnan are in national borders, the other 11 exceptionally poverty-stricken areas are located at provincial borders (see Table 4-5). The natural environment is one of the reasons for this situation, i.e. most areas mentioned above are in mountainous zones, with poor transportation, informational encapsulation and are a considerable distance from the nearest economic center. However, more importantly, it is because of the conflict between "economy in administrative regions" and "economy in administrative borders", i.e. under the current incentive conditions, local governments always take the beggar-my-neighbor policy to pursue local benefits, that is, they attempt every means to prevent the "overflow" effect of resource input and retain all economic achievements in their own administrative regions. Therefore, they maintain an opportunistic attitude towards the joint development of administrative borders, in the hope of gaining profits with the state's support or neighboring regions' radiation. Besides, in the presence of the direct competition from neighboring administrative regions, decision makers always place large amounts of resources into core administrative zones where there are complete infrastructures, excellent natural environment, concentrated

³²¹ http://news.xinhuanet.com/fortune/2004-12/11/content_1225646.htm

human resources and a relatively centered economy, but display little willingness of putting resources into remote administrative borders.

Poverty region	Involved provinces	Numbers	Numbers
		involving	involving
		cities	counties
Liupan Mountain	Shaanxi, Gansu, Qinghai,	15	61
	Ningxia		
Qin-ba Mountain	Henan, Sichuan,		
	Chongqing, Hubei, Shaanxi,	18	75
	Gansu		
Wuling Mountain	Hunan, Chongqing,	12	64
	Guizhou		
Wumeng Mountain	Sichuan, Guizhou, Yunnan	10	38
Yunnan and Guangxi and			
Guizhou rocky desertification	Guangxi, Guizhou, Yunnan	15	80
area			
The mountainous border of	Yunnan	10	56
western Yunnan	1 unnan		
The mountains of south	Inner Mongolia, Jilin,	4	19
Daxinganling	Heilongjiang		
Yanshan-Taihang Mountain	Hebei, Shanxi, Inner	6	33
Area	Mongolia		
Luliang Mountain area	Shanxi, Shaanxi	4	20
Dabie Mountain area	Anhui, Henan, Hubei	11	36
Luoxiao Mountains	Jiangxi, Hunan	6	23
Tibet region	Tibet	7	74
Tibetan areas in four provinces	Yunnan, Sichuan, Gansu,	12	77
	Qinghai		
Three region in South Xinjiang	Xinjiang	3	24

Table 4-5 Chinese contiguous poverty-stricken area and involving provinces and cities

Source: collected by author.

It is noteworthy that most contiguous poverty-stricken areas appear in adjoining regions of the middle and western provinces, as these administrative areas have a similar natural resources endowment, economic development levels and leading industrial structure. In particular, they are faced with direct competition in terms of economic development. All of these result in their poor cooperative intention. It cannot be ignored that the poverty-stricken areas may be located in the borders between the backward regions and developed regions, such as poverty-stricken areas around Beijing and Tianjin. Theoretically speaking, there is a difference in the industrial structure, economic level and development goals between the backward provinces and developed provinces; thus, resulting in complementary advantages and deep cooperation. Nevertheless, with regard to the cooperation among Beijing, Tianjin and Hebei, these three provinces took the lead to establish the Northern China Economic Cooperation Region in 1981; moreover, they would propose a cooperative plan every once in a while and signed many cooperation memorandums, as well as cooperation programs, but their cooperation has still exhibited great difficulty and empty talk, at least up to now. According to the brief description above, it can be seen that in the current government incentive mechanism, the complements in the economy can still pose a difficult challenge, to break the mutual competition and mutual guard among administrative regions; thus, resulting in an obstacle toward cooperation among administrative regions, and, finally, going against China's regional balanced and coordinated development.

4.4 Explorations and Reflections on Administrative Decentralization and Regional Development

The effective operation of the financial decentralization system requires the support and supplementation of other systems covering administration and public service. Just as some scholars point out, "Concerning the promotion of efficiency, justice and macroeconomic stability, there is neither good nor bad fiscal federalism system, for its effect depends on the concrete institutional environment." ³²² The ideal fiscal federalism model, further proposed by Weingast, ³²³ requires five basic institutional environments, namely, government hierarchy, a degree of local autonomy, common market, significant budget constraint and the institutionalization of political power distribution. To

³²² Litvack, Jennie Ilene, Junaid Ahmad, and Richard Miller Bird. *Rethinking decentralization in developing countries*. World Bank Publications, 1998.

³²³ Weingast, Barry R. "Second generation fiscal federalism: The implications of fiscal incentives." *Journal of Urban Economics* 65.3 (2009): 279-293.

clearly determine the rules of interaction between the fiscal federalist system and the institutional environment, Enikolopov³²⁴ et al. made a comparison between Chile and Argentina, as well as China and Russia to discover that the different effects of the fiscal decentralization system in these countries with similar initial development conditions are caused by their different institutional environments. Relatively speaking, both China and Chile have a powerful national party; thus, they have sufficient authority and resources to award and punish local governments, so as to ensure that local developments submits to an overall national interest. Based on a comparison between China and Russia, Blanchard³²⁵ et al. reached a similar conclusion, i.e. compared with Russia's "crappy democracy", China's powerful central government is more unlikely to be "captured" by local elites, because it has sufficient power to restrain local governments' behaviors. In a word, China's relatively centralized political and administrative system has become the institutional guarantee of the "China Miracle" in the eyes of most scholars.

When it comes to the target of regional balanced development, China's administrative power distribution serves the fiscal decentralization system, trying to achieve the goal of ensuring the central government's coordinating ability, while attempting to effectively mobilize the local governments' initiative. According to the previous description in this chapter, it can be preliminarily discovered that in the current administrative system, the administrative incentive mode corresponding to the fiscal incentive is mainly reflected in terms of personnel incentives, i.e. the central government endows local leaders with the power of controlling local personnel and provides promotions and rewards for officials in line with central targets, according to a specific set of standards. The central government's control over local governments is mainly reflected in structural control, i.e. it ensures the smoothness of the relevant central government decree through the vertically and horizontally consistent government structure. In the process of regional

³²⁴ Enikolopov, Ruben, and Ekaterina Zhuravskaya."Decentralization and political institutions." *Journal of Public Economics* 91, no. 11 (2007): 2261-2290.

³²⁵ Blanchard, O., & Shleifer, A. (2001). Federalism with and without Political Centralization: China Versus Russia. *IMF Staff Papers*, 171-179.

development, China's administrative power distribution mode is responsible for different roles at different stages and develops abundant practice, which provides a firm foundation for summarizing the relationship between administrative decentralization and the regional balanced development, as well as reflecting on problems within the existing system.

4.4.1 Explorations on Administrative Decentralization in the Course of Regional Development

Many scholars have pointed out that the effective operation of China's fiscal decentralization system benefits from its relatively centralized administrative management system. However, the history of administrative power distribution reveals that the central decision makers have always been exploring an administrative power distribution mode that can effectively mobilize both the central and local governments' initiative, according to different regional developmental strategies utilized throughout different historical periods, including the attempt of centralization and the exploration of decentralization, forming two basic clues.

(1) Attempt at Combining Personnel Incentive with Local Fiscal Incentive

During the early period of the new China, administrative power, just like fiscal power, was centralized by the central government, so as to ensure its control over national politics, the economy and society. Most particularly, the central government retained the power of controlling the local personnel structure. Afterwards, to support the first fiscal decentralization and further arouse the local governments' enthusiasm for development, the central government used its power over personnel to transfer a large number of leaders, who refused to support the central government's "Great Leap Forward" policy, from their original positions and appointed local cadres, who supported the central government's radical policy to retain the financial power of economic construction. This attempt provided double incentives for local governments and led to their growing "enthusiasm" for local development; thus, resulting in disasters, such as a disordered macro economy and widened regional disparity. In the process of economic adjustment, the central government once again used its personnel power to accelerate the centralization of fiscal power and the recovery of economic order, by rectifying the situation where provincial leaders implemented radical policies. Before the reform and opening-up, this interaction between administrative power and fiscal power repeated constantly, and every adjustment of economic power was accompanied by a personnel adjustment, which to some extent aggravated the vicious circle of "excessive decentralization results in disorder but excessive centralization leads to inefficiency".

After the reform and opening-up, the central government realized the inadequacies of "overlapped" personnel and financial incentives. Based on this reflection, instead of enforcing local governments to unconditionally accept the central government's decisions, central leaders attempted to encourage local officials to behave with appropriate integrity for the sake of the overall interests relating to economic performance measurement and promotion. In particular, the transformation of the central government's personnel management authority from "managing two subordinate levels" to "managing one subordinate level" meant decentralizing local officials' power of appointment and removal, while decentralizing the power of local economic affairs, so that the operation of the fiscal decentralization system was not directly intervened by the central government; thus, local governments' enthusiasm and responsibility for development was aroused. The system of decentralizing personnel power and fiscal power at the same time continued till the reform of the "revenue-sharing system". Within a planned economic system, local governments started to abate the situation of being completely subordinate to the central government, and a relationship based on negotiation and consultation between the central government and local governments began to be established gradually. Over time, the central government began to be at a somewhat disadvantage, because of its lowered personnel management ability and fiscal extractive capacity. Therefore, the reform of the "revenue-sharing system" increased the central government's financial strength, by designating central and local governments' revenue and expenditure boundaries and establishing an independent central tax collection

and management system. Meanwhile, the central government improved the incentive mechanism for local personnel management, and in particular, the permanent assessment system, based on the gross national product and financial growth, which became the major qualifying approach for officials' promotions. By then, the combination of the personnel incentive mechanism and the fiscal incentive mechanism became an important guarantee for the sound operation of China's "fiscal federalism".

(2) Attempt of Limiting Local Governments' Self-interest Tendency with Structure Control

Since the founding of the new country, to China, a great power with an extremely unbalanced development, balancing productivity distribution and bridging regional disparity became important topics for ensuring its internal and external safety and stability. After the state was preliminarily steady, the central government attempted to mobilize the local governments' enthusiasm and initiative for development, by means of fiscal decentralization, so as to gradually establish a local self-sufficient economic system; however, in this process, it still took precautions against inflicting any damage to the central authority, because of excessive decentralization. The elimination of localism had always been an important principle for the central government's decisionmaking. In the course of decentralization, before the reform and opening-up, due to the contradiction between "vertical" control and fiscal decentralization, the "vertical dictatorship" had to be broken, so as to arouse the local governments' enthusiasm for development. In view of this, the central government concurrently delegated the planning power and fiscal power to the local governments. The central government mainly controlled the local governments' self-interest tendency with the leaders' personal charisma, ideology and personnel power. In this control mode, the central government did not actually have sufficient and institutionalized channels to constrain the local governments. Even if it could adjust the local cadres, who went against the central decision, through leaders' personal charisma colored by "humanized governance", it still needed to continuously strengthen the central vertical

agencies' authority, so as to constrain local governments' self-interest behaviors. In this central control mode, with low efficiency and side effects, the "vertical" and "horizontal" departments' power shifted over and over again, failing to form an effectively structured central control system. After the Cultural Revolution, as its control force of personal authority and ideology gradually declined, the central government was faced with establishing a new mode to control the local governments' self-interest tendencies. During this period of economic recovery, in addition to the transient "vertical centralization", based on a planned economy, which is essential to a market economic system, the central government began to gradually reduce vertical agencies' excessive intervention in the micro economy. They also tried to strengthen the macro-control function, by reducing the number of central departments and integrating the ministries' authority, for the purpose of guiding local government to behave in line with central strategic decisions. The history of China's administrative reform has proven that all reforms, since 1988, were basically established and designed in this direction. The weakening of the central micro "vertical" agencies did not inhibit nor impair the central government's control ability, and, as a result, by strengthening the macro functions, the central government enhanced its authority of structural control over the national economy. Most significantly, the removal and mergers of ministries and the reform of the "super-ministry system" effectively intensified the integration and cooperation among the "vertical" departments and reduced a substantial degree of internal friction, caused by departmental segmentation, which, to some extent, contributed to the implementation of the strategy of a regional balanced development.

4.4.2 Reflections on Administrative Decentralization in Regional Development

In the course of regional development, since the founding of new China, apart from arousing local governments' enthusiasm for development through the decentralization of fiscal power, China was always attempting to discover an improved administrative power distribution mode. This distribution mode would not only guarantee the achievements of fiscal decentralization, but also constrain local governments' self-interest behaviors and ensure the central government's macro-control ability. After learning from some profound historical lessons, the state has basically created an administrative power distribution mode, which combines local personnel incentives with the central control structure; thus, laying the fundamental institutional environment for China's overall progress and regional balanced development. Nevertheless, it should be pointed out that as China's regional problem becomes increasingly complex, numerous components against regional balanced development can still be found in the presently existing administrative power distribution mode. Specifically, the following aspects are included.

In the first place, a direct combination of personnel incentives and economic incentives eventually leads to incentive deviation. Theoretically speaking, the original attention of fiscal decentralization was to make use of local governments' information superiority, so as to improve the quality of the local public service supply.³²⁶ Afterwards, along with the development of a secondgeneration fiscal federalism theory, scholars discovered that fiscal decentralization contributed to encouraging local governments to promote economic transition and growth; particularly, the central government's personnel promotion incentive, which could further intensify the effect of fiscal decentralization.³²⁷ However, this incentive mode, which combines personnel incentives with economic incentives had obvious drawbacks, i.e. in the process of competition for growth, local governments always paid more attention to infrastructures and important projects related to short-term economic performance, but overlooked the input in long-term human resources and public service.³²⁸ This phenomenon was more serious in undeveloped areas, which had a backward economy and insufficient financial resources; thus, directly weakening the undeveloped areas' development potential. In addition, in this "overlapped" powerful incentive system, local governments would compete

³²⁶ Hayek, F. A. (1945). The Use of Knowledge in Society FA Hayek. American Economic Review, 35(4), 519-30.

³²⁷ Li, H., & Zhou, L. A. (2005). Political turnover and economic performance: the incentive role of personnel control in China. *Journal of public economics*, *89*(9), 1743-1762.

³²⁸ Jin, H., Qian, Y., & Weingast, B. R. (2005). Regional decentralization and fiscal incentives: Federalism, Chinese style. *Journal of public economics*, 89(9), 1719-1742.

with each other for all available resources. Excessive competition would not only make the coordination and cooperation among governments become "a castle in the air", but also cause a tremendous waste of resources, which can be proven by the previously mentioned competition for the title of poverty-stricken county and the difficulty in cooperation in and between regions. The above mentioned incentive deviation resulted in the failure of regional cooperation, and greatly discounted the effect of the state's regional balanced development policy and relevant resources input.

In the second place, the direct collision of structure control and local incentives resulted in policy failure. In the long-term fiscal decentralization system, local governments gradually formed unique local interests, as well as the awareness and ability of maintaining local interests. To confine the damage done to the overall interests, caused by local self-interest, China attempted to strengthen the administrative structure of "uniformity between central and local governments", so as to control local governments by the vertical departments' power. In this direct "colliding" monitoring pattern, the central government's "vertical" power must continue to be strengthened, along with the enhancement of local governments' "horizontal" power, which would directly result in a continuous open and secret competition between the central vertical departments and local governments. This would; thus, bring about "the most brain-consuming thing"; perplexing China's development. When it came to the concrete regional development, the contradiction between central structure control and local incentives might result in the failure of regional policy, which is mainly reflected in the following aspects. Firstly, the complex relationship between the central and local governments creates institutional space for the game between local governments and the central government, i.e. local governments always selectively implement or resist any central policy involving their own interest and maintain a negative attitude towards regional cooperation that may damage their short-term economic benefits. Secondly, the central "vertical" departments' enhanced ability can be directly transferred to the central government's improved ability of monitoring local governments; the long-term "vertical" segmentation greatly decentralizes the central

government's power in the field of regional coordination, while the "vertical" departments actually still have significant powers of the administrative approval and special subsidy granting, and these special powers protect "vertical" agencies' departmental benefits, which creates numerous difficulties relating to the central government's integration of regional coordination ability. Thirdly, within the existing system, since all local governments bearing similar functions are responsible for the common superior government, they always treat their "competitors" with an attitude of "implementing regional blockade, undermining each other's work, and sacrificing principle for profit", for the express benefit and maximization of the head in their jurisdictional territory or region; thus, resulting in a series of problems like local protectionism, governments' vicious competition, high convergence of industries, and overexploitation of common resources. This situation obviously goes against the establishment of an intergovernmental collaboration mechanism and the achievement of a regional balanced development. At last, in the existing control system, China has established local governments of a similar size on the principle that "one size fits all" in all regions throughout China, without considering their economic development, population size, resource endowment, economic structure and geographic location, which may cause the central government's financial aid or transfer payment funds to be consumed by public organizations; thereby, resulting in the failure of regional policy.

4.4.3. Improvements of Administrative Decentralization in Regional Development

According to the description above, it can be determined that, although the present administrative power distribution mode promoted China's overall progress in history, its implied contradictions hindered the implementation of an inter-regional balanced coordination strategy in China. In future development, the administrative power distribution between central and local governments should be further adjusted, on the principle of maintaining and sustaining the central government's control ability, while arousing local governments' enthusiasm. More specifically, the following improvements should be made.

In the first place, the personnel incentive mechanism should be improved and a scientific political performance assessment system should be constructed. Based on admitting the practicality of the present political performance assessment mechanism, to prevent a problematic political performance assessment mechanism from causing incorrect incentives to local governments, future reforms should be structured from the following three aspects. Firstly, indicators such as the quality of public service, the efficiency and efficacy of economic development and the state of environmental protection for political performance assessment should be added. The difficulty with this measure is to effectively locate and determine the GDP-like indicators which are objective, concise and measurable enough to accurately reflect various other social progress, distinctly apart from economic growth. Seen from the present inquiry, it is most difficult to conduct relevant and accurate experiments. For instance, the State Environmental Protection Administration and the State Statistics Bureau jointly launched the "Green GDP" assessment project in 2014, but their profound disagreements relating to the selection of indicators and the local governments' boycott, resulted in a zero tolerance for constructive inquiry concerning this project. Secondly, the achievements of regional poverty alleviation and regional joint development should be listed within the scope of all cooperators' performance assessment, while the pattern of closed local interests should be broken, and the interaction and collaboration of local governments in and between regions should be encouraged. The difficulty with this measure is to codify the methods and standards of identifying various cooperators' contributions. According to the existing practice of regional cooperation, explicit shared measures for performance assessment have not yet been established. Thirdly, public opinion and public satisfaction should be listed within the scope of officials' political performance assessment. In general, extensive exploration of this reform has been conducted throughout China. Central ministries, such as the Organization Department of the Central Committee of the CPC and the State Statistics Bureau, as well as governments of provinces covering Hebei, Shandong, Gansu and Guangdong have carried out an investigation on public satisfaction utilizing a variety of methods and also

listed it in the scope of officials' political performance assessment. This reform means the transformation of the current personnel incentive mechanism, i.e., instead of directly relating incentives to economic development, the government takes the public attitude and preference as an important method for encouraging officials, utilizing the power of public scrutiny and accountability. Nevertheless, the difficulty with this reform is to establish a collective nationwide public satisfaction evaluation system, which would include a clear subject, expectations, consistent standards, neutral operation and objective results.

In the second place, the structured central control mode should be adjusted with the establishment of a systematic structure to promote and enhance the relationship between the central government and local governments. Along with the optimization of government behavioral patterns through market-oriented reforms and the improvement of the central fiscal situation by an effective revenue-sharing system reform, the importance of a structured central government control mode, based on the uniformity between central and local governments starts to decline. The central government explicitly proposed in the process of the "Super-Ministry System" reform since 2008, "According to all levels of government's responsibilities, local governments' organization setting should be reasonably adjusted. Within the quotas determined by the central government, organizations to be uniformly should be corresponding from superiors to subordinates and other organizations should be set according to local conditions." In other words, the uniformity between central and local governments is no longer the unique feature of China's governmental structure. Therefore, to ensure the state's overall development and regional balance, future reforms should continue in the following direction. Firstly, the central government's macro-control function should be adjusted and merged, central ministries' power relationship, in respect of regional development, should be gradually adjusted and integrated, and low efficiency, because of "coexistence of multiple departments", should be reduced. In particular, regional coordinating agencies' grades and resource integration ability should be enhanced, and the implementation of the current regional development strategies should be ensured. Secondly, the rigid system of "the uniformity between central and local government" should be further amended. Local governments should be endowed in an institutionalized way, with autonomous power in terms of organization structuring and personnel allocation, and the number of financial-support personnel in the central and western regions should be moderately reduced, according to the economic situation and social development, so that the central and western regions can "go forward with burdens discarded" in development. Thirdly, local governments' self-interest behavior should be controlled through macro methods; such as finance and tax, while vertical administrative instruction should be avoided as far as possible in the competition with local governments, and an institutional environment with benign competition and interaction among local governments should be created slowly and systematically.

Chapter 5 Decentralization of Public Services and Regional Disparities: an Exploration of China

Introduction

Public service is a generic term that refers to the practical activities that a government, by means of multiple mechanisms and approaches, and through its public sector departments, performs on behalf of the public. The government delivers various goods both material and immaterial, in response to the demands and needs of the public, and in order to adequately maintain public interest. ³²⁹ In recent years, the public service function of governments has become one of the most contentious issues in society, and there are conflicting opinions over the supply approach of public service. The perception that a public administration is an independent domain of public service supply has been popular ever since Woodrow Wilson posited the political administrative dichotomy, ³³⁰ in which administrative organs and officials began to be known as the holders of public services. The best organizational pattern from which public programs are delivered is a stratified bureaucracy, because such a structure is more efficient and rational, compared with political officials who can be strongly influenced by voters. Thereafter, public choice theory was a method that could be used to study the particular mode of governmental service; this involved applying economic measurements, and raising the notions of the "economic man" hypothesis, "utility maximization" and "public goods", as well as making use of mathematical models in an effort to determine the most efficient public service supply mode.³³¹

Since the 1980s, the idea of the New Public Administration, "steering, not paddling", ³³² has been developed as a paradigm of government reform. Private business organizational models should be applied in public sectors so as to increase efficiency in bureaucratic organizations; and public organizations can

³²⁹ Denhardt, R. B., & Denhardt, J. V. (2000). The new public service: Serving rather than steering. *Public Administration Review*, *60*(6), 549-559.

³³⁰ Goodnow, F. J. (1967). Politics and administration: A study in government. Transaction Publishers, p1-5.

³³¹ Denhardt, J. V., & Denhardt, R. B. (2007). *The new public service: Serving, not steering*. ME Sharpe, p2-8.

³³² Osborne, D. (1993). Reinventing government. *Public Productivity & Management Review*, 6(1), 349-356.

also improve the supply mode of public goods by cooperating with private sectors, or even by subcontracting particular services. As a result, the supply of public services need no longer be monopolized by public organizations and government officials. However, private sector organizations have increasingly been identified as suitable participants in public services, since they can help to provide services that are more efficient, more economical, and more differentiated. However, scholars have recently been criticizing the privatization of public services by exposing public organizations and their marketing ideas, and by discussing the internal nonconformities between market principles and political principles (such as fairness, justice, equality, and democracy). For example, Denhardt and Denhardt proposed the idea of a "new public service", ³³³ advocated "Serving, not Steering", and emphasized that "to establish a kind of new public service mode based on civil rights, democracy and serving for public interest replaces the current dominant mode based on economic theory and self-interest". In such a pattern, the public sector, private sector, social organizations and individual citizens can all participate in the process of public service supply, in which public interest is considered as its core.

From the findings above, it is easy to assume that scholars have extensively researched and discussed the provisions, principles and modes of public service; and have extensively commented on the duties and advantages of administrative organizations, the private sector and social organizations to/for citizens. However, there are no detailed descriptions regarding the respective responsibilities of central and local governments, which are both responsible for offering public services. Fiscal federalists have argued, ³³⁴ "Local governments not only know the local condition very well, but also have the political power to adjust the output of local public goods according to the local condition and flavor." Local governments therefore have informational superiority, and so they may offer differentiated services on the basis of local citizens' preferences, and thus increase the efficiency of the supply of services. By contrast, the "one size

³³³ Denhardt, J. V., & Denhardt, R. B. (2007). *The new public service: Serving, not steering*. ME Sharpe, p110-125.

³³⁴ Sellers, J. M., & Lidström, A. (2007). Decentralization, local government, and the welfare

state. Governance, 20(4), 609-632.

fits all" service supply modality of central governments is not only inefficient, but cannot match the needs of all citizens. However, welfare state theorists believe that a relatively centralized political system is needed to ensure a general and fair public service supply, because domineering local governments and interest groups may be an impediment to new policies of the welfare state. Moreover, the amount of public services offered by the local governments amounts to an inequality in terms of regional benefits, which is against the general principles of public service. Pragmatically, the successful practices of the Scandinavian welfare states are the result of welfare policies formulated and supervised by relatively compartmentalized sections of their central governments. ³³⁵

According to empirical studies, there is no agreement or consensus in the academic world on whether decentralization of public services may enhance supply efficiency or expand regional disparities. Costa Font discovered that, by calculating the relevant economic data for Spain (dating from 1999 to 2005),³³⁶ there have been narrowing regional disparities of public services in fields such as education, medical treatment, and endowments in different regions of Spain. Obinger et al. ³³⁷ argued that decentralization may strengthen the veto power of local governments (after studying public service supply modes in Austria, Germany, Sweden and some other countries); and that decentralization could hinder the establishment of a generally equitable national public service delivery system. Besley and Coate ³³⁸ discovered that the allocation of public service resources by a centralized political system may lead to enhanced competition among different regions, resulting in more aggressive regions garnering more resources, thereby resulting in inequality. If the public service policy implementation is coordinated by representatives from different negotiating regions, then conflicts may be dispelled in the legislative process. Through

³³⁵ Huber, E., & Stephens, J. D. (2001). *Development and crisis of the welfare state: Parties and policies in global markets*. University of Chicago Press.

³³⁶ Costa - Font, J. (2010). Devolution, Diversity and Welfare Reform: Long - term Care in the 'Latin Rim'. *Social Policy & Administration*, *44*(4), 481-494.

³³⁷ Obinger, H., Leibfried, S., & Castles, F. G. (Eds.). (2005). *Federalism and the Welfare State: new world and European experiences*. Cambridge University Press.

³³⁸ Besley, T., & Coate, S. (2003). Centralized versus decentralized provision of local public goods: a political economy approach. *Journal of Public Economics*, 87(12), 2611-2637.

comparative analyses of many developed welfare states, Sellers et al. 339 determined that Denmark, Finland, Sweden, Norway and similar countries that enjoy generally equitable public service systems tend to have relatively impeccable decentralized systems. It is evident the level of decentralization in these countries is apparently higher than most other welfare states, both in terms of the legal process of decentralization, and in terms of the control of financial revenue and expenditure of local governments. Therefore, to some extent, both decentralization and a generally equal welfare system can coexist. After conducting a comparative study of the power structures in Switzerland, Denmark, Austria and Ireland, Biela et al³⁴⁰ claimed that centralized countries would find it difficult to offer differentiated public services, and that disagreements and internal friction can arise in the provision of public services in federal states. Therefore, decentralization as a horizontal coordination mechanism is regarded as the best public service supply mode. By analyzing data for China, Russia, Chile, Argentina and another 75 developing countries spanning 25 years, Enikolopov and Zhuravskava³⁴¹ discovered that decentralization contributes to an improvement in the equality of public services in a country that has a powerful national party. However, if a government merely applies decentralization, there is no obvious effect of fiscal decentralization.

From the brief summary above, it is apparent that there is no consensus on public service supply modes or the regional disparities of public services. Scholars have proposed and used a diverse range of definitions of public service and decentralization, and some may have applied ineffective research methods. Therefore, the focus of this chapter is on the transitions in the Chinese public service supply mode and on China's regional disparities, and the possible relationship between these patterns.

³³⁹ Sellers, J. M., & Lidström, A. (2007). Decentralization, local government, and the welfare state. *Governance*, *20*(4), 609-632.

³⁴⁰ Biela, J., Hennl, A., & Kaiser, A. (2012). Combining Federalism and Decentralization Comparative Case Studies on Regional Development Policies in Switzerland, Austria, Denmark, and Ireland. *Comparative Political Studies*, 45(4), 447-476.

³⁴¹ Enikolopov, R., & Zhuravskaya, E. (2007). Decentralization and political institutions. *Journal of Public Economics*, *91*(11), 2261-2290.

5.1 Historical Changes of Chinese Public Service Supply Mode

Scholars have yet to reach a basic consensus or agreement on the correct means of extending public services. ³⁴²For example, some scholars divide public services into sovereign services (judiciary, police, national defense); social and cultural services (education, medical treatment, sanitation, social insurance); and economic services (infrastructure construction related to economic development). Some other scholars divide public services into political public services (legislation, judiciary, administration, national defense); social public services (employment, social insurance, education, medical treatment, recreation and sports); and commercial public services (post and telecommunications, communication, transportation). Furthermore, public services are continuously expanding due to improvements in society and with the increasing demands of the public. For the sake of convenience and comparability, the public services discussed in this chapter refer to basic public services that improve people's lives and their overall well-being and development.

5.1.1 China's public service supply mode prior to the reform and opening-up era

After the establishment of the new People's Democratic Republic of China, the Chinese Communist Party didn't copy the highly centralized political and economic system of the Soviet Union, but attempted to use a combination of methods relating to central planning and decentralization, so as to stimulate the initiative from both central and local governments following a primary stabilization of the national economy. In 1958, the central government began to decentralize its economic power by devolving planning, project evaluation and approval, tax-raising powers, and business and finance policy to local governments. The central government also devolved various public service functions such as education, medical treatment and culture. This approach

³⁴² Denhardt, R. B., & Denhardt, J. V. (2000). The new public service: Serving rather than steering. *Public Administration Review*, *60*(6) 549-559.

became the public service mode, whereby the central government exercised authority in terms of policy-making and basic principles, while local governments became responsible for policy implementation and for managing specific transactions. In theory, public services of whatever type would be "sub-contracted" to a subordinate layer of government, ³⁴³ and so the lowest tier would become the direct provider of basic public services. This practical operating process is termed "dan wei" (单位, work unit or unit)³⁴⁴ whereby institutions in cities and people's communes in villages provide public services in the broadest possible aspects.

In reference to the cities, Mao Zedong, at the Second Session of the Seventh Conference in 1949, proclaimed,

"We should unite most of the Chinese people involving the organizations of politics, military, economy, culture and other areas, so as to overcome the undisciplined condition of the old China, and we can take advantage of the great people's collective power to advocate the people's government as well as the people's liberation army and to establish a new China with independence, democracy, peace, unity, prosperity and power." ³⁴⁵

With its profound advances in socialist transformation and with the acceleration of construction in China's cities, the "*dan wei*" approach gradually became the main governing instrument in Chinese cities throughout the period of planned economy. "*Dan wei*" is also about the recombination of services, including production, organizational, and social basic public service supply functions. "*Dan wei*" has a substantial influence on urban residents' production and lives (both geographically and temporally), but it also comprises a large proportion of basic services that should be offered by a national, central

³⁴³ Zhou, L. A. (2004). The Incentive and Cooperation of Government Officials in the Political Tournaments: An Interpretation of the Prolonged Local Protectionism and Duplicative Investments in China. *Economic Research Journal*, *6*, 33-40.

³⁴⁴ Note: A unit or *dan wei* (单位) is the name given to a place of employment in the People's Republic of China. Workers were bound to their work unit for life. Each *dan wei* created their own housing, child care, schools, clinics, shops, services, post offices, etc.

³⁴⁵ Mao, Z (1996). Works of Mao Zedong (Volume 5). People's Publishing House, p348. (in Chinese)

government, including housing, medical treatment, sanitation, education, and security. A typical example of this aspect is the so-called "social service supported by enterprises".

In Chinese villages, people's communes perform a similar function to the "*dan wei*" services in the cities. Communes have a producing function, and they also provide medical treatment and public health services, together with cultural education and various other public services. The cost of basic public services is fixed and managed by the farmers themselves, except for a small part of the financial budget at the county level. A portion of the income produced by the people's commune is collected via a national agricultural tax, labeled "public grain"; part of this is reserved for production expenses and management costs, and there is a storage fund for education, medical treatment, public health and social insurance; finally, the remaining money is distributed as income among the farmers. ³⁴⁶

One example is the provision of education. ³⁴⁷ From 1950 to 1952, the Chinese government adopted the principle of "unified charges" and high centralization, and put a three-level educational management system into practice: central, regional, and provincial/city levels. The aim of this measure was to ensure an adequate supply of revenue for educational expenses during these turbulent economic circumstances, so that the Chinese educational structure could be transformed from the old to the new system within such a brief period of time. Whilst regions were being abolished, and amidst sudden political and economic changes, China began to employ an educational financial system that was based on "dividing income and expenses, level-to-level administration, [and] concentrating on particular emphasis". Under this system, educational management authorities were established at a local level. Due to the spread of the decentralization movement in 1958, in terms of educational services, "central departments and local government [began to] cooperate with each other". The administrative authority of educational business and expenses

³⁴⁶ Putterman, L. (1993). *Continuity and change in China's rural development: collective and reform eras in perspective*. Oxford University Press.

³⁴⁷ Bastid, M. (1984). Chinese educational policies in the 1980s and economic development. *The China Quarterly*, 98, 189-219.

were both devolved to local government. Meanwhile, the local government was required to negotiate with the administrative department for education when establishing the educational budget of the subordinate government, and had to submit it to the people's council. There was disorder and chaos within the educational system in the initial stages of the Cultural Revolution; however, in 1972 the "earmark" system was launched through an earmarking method, in order to ensure and establish a stable input of revenue "earmarked" for educational expenditure. However, since the proportion of educational expenditure by local government was too small at that time, it was not possible meet the basic requirements of educational development. Generally, during this period, expenditure on higher education, trade schools and technician training schools was arranged and financed by both central and local governments. Elementary education was implemented through cooperation among the state, factories and village communities; urban elementary education was funded by local financial departments and factory enterprises; and village education was funded by both community organizations and local financial sectors.

As shown in Figure 5-1, before the year 1958, under a relatively concentrated system of public services, around 8% of the national fiscal expenditure went on science, education, culture, and health; following the decentralization of public services, in 1958 the proportion increased slightly to 9%, an effort of the "Great Leap Forward." Afterwards, the economic regulations caused the percentage to fall slightly, but then it rose suddenly to above 12% in 1962, and above 10% prior to the "Cultural Revolution". The "Cultural Revolution" apparently influenced the expenditure of public services, since expenditure on science, education, culture and health only accounted for about 6% of national fiscal expenditure in 1970.

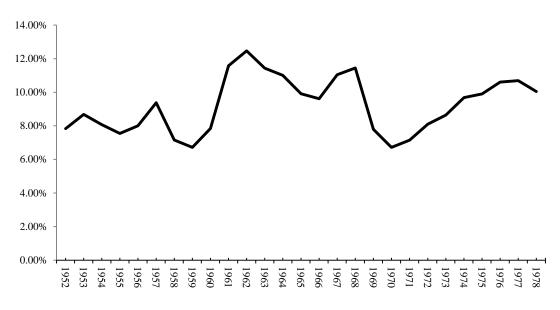
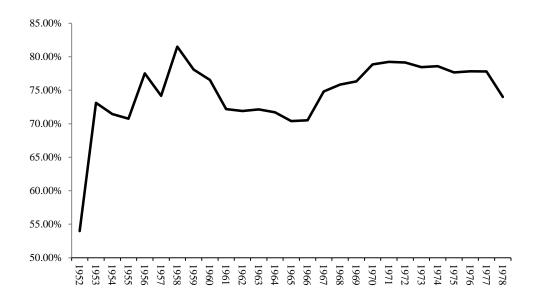
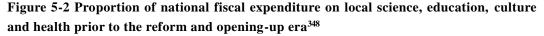


Figure 5-1 Proportion of China's national fiscal expenditure on national science, education, culture and health before the reform and opening-up policy era

Source: State Statistics Bureau: 60 Years of Compilation of Statistics in the New China, China Statistics Press, 2010.

As powers and responsibilities for public services were being transferred to the local governments, the proportion of local public expenditure on local science, education, culture and health rose from 54% in 1952 to 73% in 1953. After the further transference of public service authority to local governments in 1958, the proportion rapidly rose to 81%. As the "adjustment, consolidating, enriching and improving" in the economy took place, the proportion of local public service expenditure on these services began to decline to about 70% by 1965. After the start of the "Cultural Revolution", the controlling force of the central government upon national public services was continuously falling, while the proportion of local public service expenditure began to increase. It should be pointed out that, from 1966 to 1970, the absolute value of expenditure for national public service declined from Υ 5.168 billion to Υ 4.365 billion.





Source: State Statistics Bureau: 60 Years of Compilation of Statistics in the New China, China Statistics Press, 2010.

5.1.2 The public service supply mode during the period of the fiscal contract system

When the reform and opening-up policy was enacted, the Chinese fiscal system was transformed from "egalitarianism", to "serving meals to different diners from different pots", in the transition to a socialist market economy system. The fundamental aspects of this reform included setting clear boundaries between local and central governments (in terms of revenue and expenditure), and increasing local financial autonomy, in order to arouse enthusiasm, autonomy and responsibility at a local government level. There also occurred fiscal decentralizing, whereby the responsibility for delivering public services was decentralized to local government. However, during this period, there were some adjustments regarding the precise responsibilities of central and local government departments: local governments continued to operate and manage expenditure on public services, including local agriculture; forestry and water conservation; industry, traffic and business departments; as well as

³⁴⁸ Note: The rate of public service expenditure is undervalued owing to the lack of data from Sichuan, Guangdong and Shandong.

operating expenses for culture, education, science and public health services, pensions, and the social relief fund. It is necessary to point out that there were two major defects in the public service decentralization system at that time. First, although most public service authorities were decentralized down to a local level "symmetrically", the allocation of finance appeared to be "asymmetric", which led to different tax bases and proportionally unbalanced public spending; as a result, the expense of providing public services varied among regions. Second, the contract system between the central and provincial governments was relatively clear, but the authority-responsibility relationship of local governments below provincial level was relatively obscure; thus, responsibility for public service expenditure tended to be decentralized down to the level of the county municipality.

Taking education as an example, from 1980, the arrangement of educational expenditure was divided by changing the system from a centralized one to that of "dividing by central and local government", with central finance (in the central government) being primarily responsible for spending on national colleges and universities, trade schools and technician training schools; local governments were responsible for spending on local colleges, universities, and elementary and secondary schools. There was a clear demand in Decisions about Reform of the Educational System in 1985 that "the increase [in] educational appropriation [spending] of central and local government should be higher than the increase of financially recurring income". The Chinese government encouraged the creation of multiple channels for capital raising, and urged enterprises, social organizations and individuals to manage schools and contribute money to help economically disadvantaged applications secure advanced educational opportunities. As for primary education in rural areas, there were stipulations in the document, Opinions on Several Issues about Preliminary Education System Reform in Rural Areas by the State Education Commission and Ministry of Finance in 1987:

"After the local has taken charge of elementary education, the four levels - province, prefecture-level city, county-level city and village - should make

sure [perform] their duties respectively. At the same time, the key emphasis is the division of power between county and village."

As for urban elementary education, the State Education Commission issued in its pamphlet, *Opinions on Further Enhancing the Leaders of Elementary and Secondary Schools in Enterprises* in 1987:

"Elementary and secondary schools run by enterprises and public institutions should implement the leadership system that takes education institutions as the principal thing, and the leadership system of local education department as supplements."

From the description above, it can be determined that, in addition to a partial deployment of responsibilities for spending on higher and professional education, most of the other educational public service functions were delegated to local governments, particularly county municipalities, which are responsible for funding basic education (primary and secondary schools).

As shown in Figure 5-3, it is evident that following the fiscal decentralization reform (characterized by "serving meals to different diners from different pots"), the proportion of national fiscal expenditure on national science, education, culture and health declined somewhat, from 16.24% in 1982 to 15.79% in 1985. After 1985 there was rapid growth, from 17.9% in 1986 to 22.7% in 1992. Overall, the decentralization of both fiscal expenditure and responsibilities for public service expenditure during this period was beneficial, and resulted in an increase in the proportion of fiscal expenditure on these public services.

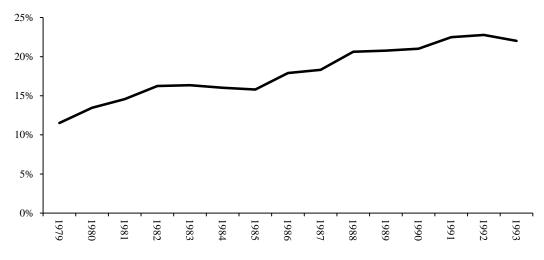


Figure 5-3 Proportion of national fiscal expenditure on national science, education, culture and health during the period of the financial contract

Source: State Statistics Bureau: 60 Years of Compilation of Statistics in the New China, China Statistics Press, 2010.

It is evident from the graph in Figure 5-4 that the proportion of national fiscal expenditure on local science, education, culture and health expenditures fluctuated sharply during this period, although levels were around 83% during most years; there occurred a sharp a rising trend after 1992. In general, the proportion was around a higher level following the decentralization of public service expenditures.

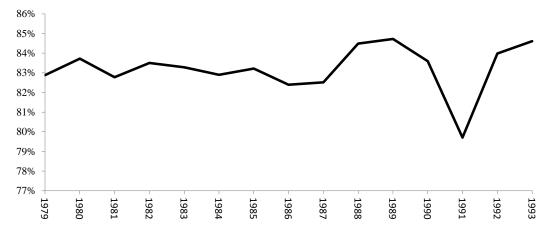


Figure 5-4 Proportion of national fiscal expenditure on local science, education, culture and health during the era of "serving meals to different diners from different pots" ³⁴⁹

³⁴⁹ Note: The data for rate of public service expenditure is slightly undervalued owing to a lack of data from Sichuan.

Source: State Statistics Bureau: 60 Years of Compilation of Statistics in the New China, China Statistics Press, 2010.

5.1.3 The public service supply mode after the revenue-sharing system reform

The revenue-sharing system reforms included specifications on central and local governments' income sources and forms of expenditure. The central government became primarily responsible for expenditure on national defense, foreign affairs, administration (of central state departments), and macro-control and regional coordination funds. Meanwhile, local governments became responsible for the following:

"...the expenses necessary for operating government offices, [the] economy, and the career development in the region. It specifically includes: local administrative fees, public security...expenses, parts of the armed police, militia operating expenses, the basic [local] construction investment...the local enterprises' expenditure [on] technological transformation and the trial production of new products, expenditure for supporting agriculture, urban maintenance and construction funds, [and] the operating expenses [and] various expenditures in local culture, education and health...[and] price subsidy expenditures..." ³⁵⁰

Overall, local governments bear the most responsibilities for providing basic public service functions, while the central government is responsible for expenditure on public security departments, culture, education, health, and science.

		0					
Level	Types	Characters	Main expenditure responsibilities				
National	Central government	National	Operation of central government; national security; diplomacy; investment and				
	C		subsidies of state-owned enterprises; key				

Table 5-1 Main expenditures of Chinese governments at all levels

³⁵⁰ http://news.hexun.com/2008/1994fszgg/

-			
			national construction projects; macro-control;
			education through universities under the
			Ministry of Education; social security of
			state-owned enterprises; cultural facilities
			belonging to central government.
	Provinces and		Internal operations; investment and
	Autonomous	Regional	subsidies in level-owned enterprises; key
Provincial	regions		infrastructures in provinces.
Provincial		Combination	Internal operations; investment and
	Municipalities	of urban and	subsidies of level-owned enterprises; key
		rural	infrastructures in metropolitan areas.
			Internal operations; investment and
	Regions	Regional	subsidies in level-owned enterprises; key
		-	infrastructures at this level.
			Internal operations; investment and
	Prefecture-	Combination	subsidies of enterprises owned by government
Prefecture	level cities	of region	departments of this level; education in cities;
Level	(with counties)	and urban	city construction; unemployment insurance,
			pensions and unemployment relief.
	Prefecture-		Internal operations; investment and
	level cities	Urban	subsidies of level-owned enterprises; city
	(without		construction; unemployment insurance,
	counties)		pension and unemployment relief.
	,		Internal operations; education; health
			and medical care; subsidies for rural/county
	Counties	Regional	level infrastructure and township
County			construction; birth control.
level			Internal operations; education; health and
	County-level	Combination	medical care; subsidies for rural/county level
	city	of region	infrastructure and township construction;
		and urban	birth control.
Township			Internal operations; rural education; birth
Level	Townships	Rural	control.
	1	1	· · · · · ·

Source: Feng Xingyuan: Study of Public Service Authorization Clarification of Chinese Government at All Levels, *Review of Economic Research*, 2005 (26), p89.

Table 5-1 lists the main expenditure items of all levels of the Chinese government, and Table 5-2 details the proportions of central and local government expenditure on different public services. Based on the data in both tables, the following conclusions can be drawn:

First, the data in the tables are evidence of extensive decentralization. Local

governments shoulder much of the burden of education, medical treatment, social security and many other public service functions. According to the data, from 2010 to 2011, 94.08% of the expenditure on education, 95.29% of expenditure on social security, and 98.71% of expenditure on health and medical treatment came from local government. According to international practice, such basic public services have strong externality and there may be spillovers, and so multilevel finance and transfer payments from central government will be needed. However, in China, the transfer payment system is imperfect, the basic public services are largely controlled and funded by local government, which, to some extent, leads to a further dislocation of the central and local powers.

Expenditure items	Rate of central expenditure	Rate of local expenditur e	Accounting for total central expenditure	Accounting for total local expenditure
General Public Services	8.56%	91.44%	5.35%	11.15%
Public Security	16.18%	83.82%	5.88%	5.95%
Armed Police	73.86%	26.14%	4.58%	0.32%
Education	5.92%	94.08%	5.29%	16.40%
Science and Technology	50.91%	49.09%	11.09%	2.09%
Culture, Sport and Media	9.86%	90.14%	1.04%	1.86%
Social Safety Net	4.71%	95.29%	2.93%	11.58%
Medical and Healthcare	1.29%	98.71%	0.45%	6.66%
Environmental Protection	2.83%	97.17%	0.44%	2.96%
Community Affairs	0.16%	99.84%	0.07%	8.15%
Agriculture Affairs	4.45%	95.55%	2.47%	10.36%
Transportation	14.02%	85.98%	5.60%	6.70%
Purchasing	33.28%	66.72%	3.95%	1.54%

Table 5-2 Proportions of Main National and Local Expenditures from 2010 to 2011

Vehicles					
Exploration					
and	12.71%	87.29%	2.93%	3.93%	
Information					
Commerce	5.88%	94.12%	0.51%	1.60%	
and Services	5.8870	94.1270	0.5170	1.00%	
Financial	70.13%	29.87%	2.78%	0.23%	
Supervision	70.1370	29.8770	2.7070	0.2370	
Post-					
earthquake	5.80%	97.10%	0.23%	0.76%	
Recovery					
Land and	14.31%	85.69%	1.26%	1.47%	
Weather	14.5170	05.0970	1.2070	1.47%	
Housing	11.54%	88.46%	2.20%	3.29%	
Security	11.5470	00.4070	2.2070	5.2970	
Grain and Oil	42.40%	57.60%	3.18%	0.84%	
Reserves	+2.4070	57.0070	5.10/0		
Other	3.09%	96.91%	0.53%	3.26%	
Expenditures	5.0970	90.9170	0.3370	5.2070	

Source: State Statistics Bureau: China Statistical Yearbook 2010, China Statistics Press, 2011; China Statistical Yearbook 2011, China Statistics Press, 2012.

Second, public service responsibility was decentralized subordinately, level by level. This was performed in response to the inertia of the "*bao gan*" (contract system) throughout much of modern China's history, as well as the fuzzy boundaries among government layers in terms of responsibilities. Under the revenue-sharing system reforms, a higher level government tier passed responsibility for public services down to the next level. As a result, "almost 70% of public expenditure in China [is conducted by departments at] provincial [level] and below the provincial level, of which more than 55% of expenditure [is conducted by departments at] city, county and village levels, [and there is] especially...heavy expenditure responsibilities on township levels". ³⁵¹ According to a report by the World Bank, township governments shoulder 55% to 60% of the bill for basic education, public health and other public services with a strong spillover. This kind of situation intensifies local governments'

³⁵¹ Feng, X. (2010). *The competition between local governments: theory, analytical framework and Empirical Research*, Yilin Press, p157. (In Chinese).

financial burdens and runs against the grain of equalization in terms of public service provision.

5.2 Current Decentralization of Public Services and Regional Disparities

Public service authorities and distribution of responsibilities between government layers are among the key issues that are discussed in academic circles. Theoretically speaking, depending on the range of beneficiaries, public goods can be divided into national public products and local public products.³⁵² The beneficiaries of the former are evenly distributed throughout the territory of the nation as a whole, and examples of relevant public products include national defense, and international diplomacy. Beneficiaries of the latter tend to be more local, and examples of local public products include parkland management, firefighting, and public security. There is also a third category of public goods, for which redistribution is essential, for instance, social insurance and health care, as well as public services where there are spillovers, such as education. Apparently, these kinds of public goods are provided more efficiently by local governments, which can more reliably meet the requirements and expectations of the public. However, other features such as spillovers and social values beyond service (such as fairness, equality, and justice) are better delivered by higher-level government departments or the central government, which can also deliver fiscal transfer payments, which in turn are spent by the local government.

In China, education, healthcare and social security (along with other public services and management responsibilities) have been the responsibility of local governments for several years. In addition to China's current political structure, in which there is "uniformity between central and local government", the responsibility for fundamental public services has been decentralized, level after level, down to governments below the provincial level. Since there has been no

³⁵² Ostrom, V., Tiebout, C. M., & Warren, R. (1961). The organization of government in metropolitan areas: a theoretical inquiry. *American political science review*, *55*(4), 831-842.

effective balanced fiscal transfer payment system, this decentralization of public services has led to numerous problems. The first is a structural inadequacy of public services. One example is expenditure on medical treatment and healthcare. Of total expenditure on healthcare in 2007, expenditure on government, social services, and personal hygiene accounted for 20.3%, 34.5% and 45.2%, respectively. ³⁵³ Compared with a typical level of 70% of total expenditure in OECD countries, the proportion of government expenditure on these services in China is probably too small. Second, there is a heavy financial burden for basic public services. Ever since the reform of the tax system (especially after the abolition of agricultural tax), local governments in counties and villages that have had to undertake more than half of all public service functions do not have stable and sufficient financial resources to support the necessary expenditure. In some cases this has resulted in a reduction of local government offices at the grass-roots level, and the withdrawal of some local public services. ³⁵⁴ Third, the expenditure of public service is directly linked to the level of local financial resources. If there are insufficient transfer payments from higher levels of government, the decentralization of public services can lead to regional disparities in healthcare, education, and social security. ³⁵⁵

5.2.1 Decentralization of and regional disparities in public services

First, there exist regional disparities of public services in terms of expenditure on public service. As shown in Table 5-3, expenditure on science, education, culture and health in the Eastern region account for 23.16% of the total regional public expenditure; the levels in the Central region are around 22.29%; and those in the Western region are around 21.47%. As is the case with the level of economic development, the level of regional public service expenditure in China reflects an economic differential from east to west. Regional public expenditure on science, education, culture and health in the provinces of Fujian, Jiangsu and

³⁵³ http://www.gov.cn/gzdt/2009-02/17/content_1233236.html.

³⁵⁴ Zhang, X., & Kanbur, R. (2005). Spatial inequality in education and health care in China. *China Economic Review*, *16*(2), 189-204.

³⁵⁵ Hofman, B., & Guerra, S. C. (2007). Ensuring inter-regional equity and poverty reduction. In *Fiscal Equalization* (pp. 31-59). Springer US.

Zhejiang reached more than 26% of total regional expenditure, while the proportions in the western provinces of Inner Mongolia, Tibet and Qinghai is below 19%. Overall, there exists a positive correlation between the level of basic public expenditure in each province and the level of economic development level in the province. The basic public expenditure in less developed areas is not only less than other regions, but accounts for an even smaller proportion of their own regional fiscal expenditure as well.

icarti across clima in the total expenditure, 1777-2000								
Western average	21.47%	Eastern average	23.16%	Central average	22.29%			
Inner Mongolia	18.16%	Beijing	23.05%	Shanxi	23.58%			
Guangxi	25.88%	Tianjin	22.38%	Jilin	19.84%			
Chongqing	19.38%	Hebei	24.28%	Heilongjiang	19.71%			
Sichuan	20.62%	Liaoning	17.54%	Anhui	22.75%			
Guizhou	27.03%	Shanghai	19.56%	Jiangxi	22.83%			
Yunnan	24.97%	Jiangsu	26.08%	Henan	25.90%			
Tibet	17.06%	Zhejiang	26.62%	Hubei	21.80%			
Shaanxi	22.08%	Fujian	28.55%	Hunan	21.89%			
Gansu	21.21%	Shandong	25.27%					
Qinghai	17.91%	Guangdong	21.35%					
Ningxia	20.34%	Hainan	20.03%					
Xinjiang	23.05%							

Table 5-3 Proportion of regional public expenditure on science, education, culture and health across China in the total expenditure, 1997-2008

Source: State Statistics Bureau: 60 Years of Compilation of Statistics in the New China, China Statistics Press, 2010.

Second, there are regional disparities in public services in terms of the quality of public services offered. Because of the vast scope of basic public services, it is difficult to utilize an index that describes them accurately; therefore, the more widely used Human Development Index (HDI)³⁵⁶has been chosen as the standard with which to judge the quality of public services across China. HDI consists of three indexes: the life expectancy index (to measure the level of medical and health services in specific areas); the education index (based on measurements of total years spent in education and the enrollment rates of the population in particular areas, which altogether form the local mean educational level); and, the living index (which reflects the income level of a particular area). Generally,

³⁵⁶ Note: the method of calculation can been found in China National Human Development Report 2013.

these three indexes of HDI are related to people's standard of health, education and living, which both relatively and objectively reflect the level of basic public services in a region. As shown in Table 5-4, it is clear that the quality of public services is characterized by a decreasing tendency from east to west. The HDI of the eastern provinces is at an average of 0.745. According to the standard of the United Nations Development Program (UNDP), most of the eastern provinces all enjoy a high HDI. The average value of the central provinces is 0.686; Jilin, Heilongjiang and Shanxi have a high HDI, while other provinces have medium development indexes. The average value across the western region is 0.681, among which only Inner Mongolia has a high HDI. As for sub-indexes such as healthcare, education, there is also a declining tendency from east to west. In terms of the life expectancy index, Beijing and Shanghai have the highest scores (0.952 and 0.953, respectively), while Yunnan and Tibet have the lowest scores (0.784 and 0.762, respectively). The highest readings for education are for Beijing and Shanghai (0.837 and 0.808, respectively), and the lowest scores are for Guizhou and Tibet (at 0.586 and 0.498, respectively).

Provinces	Life	expectancy	Education	Income	HDI
Provinces	index	index		index	index
Beijing	0.952		0.837	0.694	0.821
Tianjin	0.932		0.779	0.692	0.795
Hebei	0.870		0.676	0.561	0.691
Liaoning	0.892		0.737	0.618	0.740
Shanghai	0.953		0.808	0.699	0.814
Jiangsu	0.896		0.719	0.650	0.748
Zhejiang	0.913		0.700	0.645	0.744
Fujian	0.882		0.676	0.610	0.714
Shandong	0.893		0.686	0.613	0.721
Guangdong	0.894		0.696	0.624	0.730
Hainan	0.891		0.660	0.536	0.680
Eastern	0.906		0.725	0.631	0.745
average	0.906		0.725	0.031	0.745
Shanxi	0.869		0.699	0.547	0.693
Jilin	0.889		0.715	0.576	0.715
Heilongjiang	0.886		0.710	0.554	0.704
Anhui	0.871		0.640	0.516	0.660

Table 5 4	UDI of all	nnovin and laiting	of China in 2010
Iable 5-4	HDI OF AL	provinces/cities	of China in 2010

Jiangxi	0.860	0.651	0.519	0.662
Henan	0.864	0.664	0.540	0.677
Hubei	0.868	0.696	0.558	0.696
Hunan	0.866	0.677	0.539	0.681
Central	0.972	0.692	0.544	0.696
average	0.872	0.682	0.544	0.686
Inner	0.961	0.690	0.624	0.722
Mongolia	0.861	0.689	0.634	0.722
Guangxi	0.872	0.634	0.516	0.658
Chongqing	0.881	0.667	0.556	0.689
Sichuan	0.866	0.645	0.520	0.662
Guizhou	0.809	0.586	0.452	0.598
Yunnan	0.784	0.604	0.476	0.609
Tibet	0.762	0.498	0.487	0.569
Shanxi	0.865	0.699	0.554	0.695
Gansu	0.826	0.631	0.480	0.630
Qinghai	0.791	0.613	0.537	0.638
Ningxia	0.845	0.658	0.552	0.674
Xinjiang	0.828	0.660	0.542	0.667
West average	0.833	0.632	0.526	0.651

Source: China National Human Development Report 2013, UNDP, June 2013

In general, the decentralization of public services is incomplete, since local governments hold a majority of public service responsibilities, and many of them still rely on transfer payments from the central government's exchequer system. The disparity in the funding of public services directly affects the quality of public services, and is the cause of the regional disparities in terms of education, healthcare, sanitation, and other public services.

5.2.2 Decentralization of public services, and regional public service barriers

According to the model of fiscal federalism, local government authorities have a better understanding of the issues facing local residents, and so local governments have more sufficient information about residents' preferences. Therefore, in contrast to central government, local governments can provide differentiated and more efficient public services. However, scholars have noted that residents can freely flow between different regions, and so they can select different public services within different regions by means of "foot voting". ³⁵⁷ In the process of this "flow", there is an optimal allocation of public service resources. However, some scholars have mentioned that not all residents can afford to migrate freely across regions. Even if citizens are able to migrate, differences among public services do not form the only factor for the flow.³⁵⁸ Therefore, it is difficult, during decentralization, to maximize the efficiency of public service supply. In addition, there are scholars who fear that when citizens are free to select a higher quality public service in another region, this may amount to a large population flow, which may increase the financial burden for the local government providing that service. Therefore, in order to prevent the area from becoming a "welfare magnet", local governments should compete in order to reduce expenditure on public services, although this could result in a decrease in the overall welfare level across the country. Theoretically, decentralization of public services does not necessarily lead to an increase in the efficiency, quality or level of public services provision, but may instead lead to a series of problems in the delivery of public services.

In China, although the duty for providing public services has been decentralized to local governments, for a long time the barriers of the household registration system impeded the free flow of citizens across the regions. China's household registration system was not only designed to be a means of population registration and management, but also had two functions: ³⁵⁹ "the first is to prevent the mass flow of rural labor, especially [an] out-flow [of] agricultural [laborers]... the second is to ensure...essential [services in urban areas] and the lowest social welfare supply, so that [there is an] institutional arrangement [that] repels [the] rural population..." The household registration system is associated with "various daily necessities, personnel job placement and [a] social welfare system"; ³⁶⁰ and thus forms a barrier between urban and rural public services.

 ³⁵⁷ Tiebout, C. M. (1956). A pure theory of local expenditures. *The journal of political economy*, 64(5), 416-424.
 ³⁵⁸ Faguet, J. P. (2004). Does decentralization increase government responsiveness to local needs: Evidence from Bolivia. *Journal of Public Economics*, 88(3), 867-893.

³⁵⁹ Cai, F. (2011). Hukou system reform and unification of rural–urban social welfare. *China & World Economy*, *19*(3), 33-48.

³⁶⁰ Chan, K. W., & Zhang, L. (1996). The Hukou System and Rural-Urban Migration in China: Processes and Changes. *Chinese Sociology & Anthropology*, 29(1), 15-26.

After the mid-1980s, following the closure of the household contract responsibility system for rural workforces, rural laborers began to migrate to urban areas. Moreover, the state also issued a series of policies to relax the restrictions of the household register system upon population flow, such as the abolition of the sales system (which included a certain quantity of grain produced by farmers). However, at the same time, the additional benefits of urban household registration were not fully available. The floating population still could not enjoy equal treatment alongside urban residents in terms of fertility services, education, labor insurance, and pensions.

Ever since the beginning of the 21st century, China's labor force has been continuously migrating from all parts of the country, mainly by travelling to the east coast and metropolitan areas to find non-agricultural work. They have made indelible contributions to the economic development and social prosperity of Chinese cities. In the process of urbanization, the expansion of urban conurbations poses a great demand for both labor and land. In order to allow developers to obtain human resources from rural areas, the Chinese government has relaxed the household registration system within the eastern provinces and metropolitan areas, and so local farmers have begun to gain more social and public services. However, due to the management of territories under the household registration system, the external floating population that is contributing to local economic and social development is still excluded from local public services; migrant workers are unable to enjoy equal education, healthcare, social security, or other public services. The barriers separating public services between urban and rural areas gradually turned into barriers between different regions, which have resulted in an immobilized trend of public service disparities among different areas.

Moreover, for many years, China's local municipal governments have always served as major resource controllers and distribution centers of public services. Chinese cities are grouped into (i) directly controlled municipalities, (ii) subprovincial capital cities, (iii) municipalities with independent planning status, (iv) provincial capital cities, (v) prefecture-level cities, (vi) county-level cities, and (vii) other types of cities. The economic development and social management powers vary among these different categories. In general, in the Chinese political system, central departments and local governments cooperate with each other. However, the higher the status of the city, the closer it is to the center of political power, and thus the stronger its bargaining power, and the more public service resources it obtains. When Bian Yanjie and her colleague conducted a comprehensive survey on Chinese society in 2003, ³⁶¹ they discovered that the higher a city's political status, the better its resources for public services. In other words, the variation in the quality of public services among China's regions is not only the result of economic development, but is also associated with China's system of asymmetric decentralization. In Table 5-5, the overall expenditure on education, science and technology of local governments in Chinese cities in 2009 is ranked. It should be mentioned that among these top 20 cities are 4 directly controlled municipalities, and 12 subprovincial cities. Zhengzhou is a provincial capital city, whereas Suzhou, Wuxi and Foshan are the only prefecture-level cities. Most of the cities in the table are located in eastern coastal areas. Xiamen is 18th among the 20 cities in terms of expenditure on education, science and technology. Yet its total expenditure is even higher than that of the western provinces, including Guizhou, Yunnan, Xinjiang, Ningxia, Qinghai, and Tibet. There is a similar trend in terms of spending on medical and health services. In summary, the mode system of level decentralization and asymmetric decentralization in China forms an important barrier to an equally high quality public service throughout its regions.

R	Cities	Scienc	Educatio	Tota	R	Cities	Scienc	Educatio	Tota
К		e	n	1			e	n	1
1	Shanghai	21.51	33.81	55.3 2	11	Dalian	1.81	4.25	6.06
2	Beijing	12.50	35.26	47.7 7	12	Suzhou	1.40	4.47	5.88
3	Shenzhen	7.92	13.66	21.5 8	13	Wuhan	0.95	4.83	5.78

 Table 5-5 Ranking of urban local government expenditure on education and science in

 2009 (billion Yuan)

³⁶¹ Yu, B. & Dahai, H. (2006). Structural Barriers, Institutional Transformation and Resource Differentials: The Chinese General Social Survey Report. *Social Sciences in China*, *5*, 012.

4	Tianjing	3.36	15.81	19.1 7	14	Ningbo	1.08	4.46	5.54
5	Guangzhou	3.12	9.74	12.8 6	15	Wuxi	1.15	3.79	4.93
6	Chongqing	0.63	8.79	9.42	16	Qingdao	0.79	3.93	4.71
7	Hangzhou	1.87	6.33	8.20	17	Harbin	0.51	4.11	4.62
8	Nanjing	1.28	5.84	7.13	18	Xiamen	0.84	3.77	4.61
9	Foshan	0.84	5.89	6.74	19	Chengdu	0.47	4.00	4.46
10	Shenyang	1.35	5.25	6.60	20	Suzhou	0.41	3.80	4.21

Source: State Statistics Bureau (2011): China City Statistical Yearbook 2010, China Statistics Press.

Overall, China's decentralization of public services, its long-term implementation of the household registration system (which produced a dividing line between urban and rural areas), as well as its pyramid-shaped government power structure, have resulted in the concentration of public service-based resources in eastern coastal and metropolitan areas, which form the regional disparities in terms of basic public services. A worsening in these regional disparities in public services will only strengthen public service barriers. Since the quality of public services in eastern coastal areas and metropolitan areas is much higher than in other regions, this could be resulting in a "welfare magnet" that attracts people from the rest of the country. When a large population migrates into a city, the incomers will share public service resources with local residents, and this increases the burden of fiscal expenditure upon the local government. The only avenue is to continue imposing or strengthening the household registration system and the barriers of public service, in order to prevent such a burden from increasing. Because of this vicious circle, the idea of balancing the notion of a uniform level of public service quality across China with that of a freely flowing population remains a dream. Although the state has called for a reform of the household registration system on several occasions, the more public services and households there are in a region, the harder it is to advance reforms. ³⁶² It is also difficult to try and solve the disparities in public services by reforming the household registration system in less developed regions. Thus, there remains much work to be done to break the barriers, and to

³⁶² Cai (2010b), "Labor market development and expansion of rural and urban employment", in Cai (ed.), *Transforming the Chinese Economy*, 1978–2008, Leiden Boston: Brill.

ensure that the quality of public services across China's regions is uniform.

5.2.3 Decentralization of public services and reverse subsidies for less developed areas

There is a redistribution element to the provision of public services, whereby a standard operation and equal value is applied throughout the country examples include access to justice, and national laws. There is also a production element to the provision of public services that can be used to improve the level of human capital in certain areas, and to provide firm foundation for the development of the economy across the nation. Many scholars agree that the provision of public services is an important or perhaps the only function of, a government. ³⁶³ In China's multilayered governmental structure, basic public services have a strong spillover feature. There may be people who "hitchhike" into regions where they can receive free public services, and so public service providers will become increasingly reluctant to offer public services. In order to prevent this kind of spillover, Denhardt and Denhardt ³⁶⁴ suggest that government departments at different levels should be allocated duties in a reasonable and pragmatic way. Through methods such as transfer payment, joint burdens and cooperative supply, the benefits and costs of services provided by an administrative jurisdiction can be controlled internally. In China, most of the supply duties of public services have been decentralized to local governments. Since the balanced transfer payment system is imperfect, the household registration system has been used to internalize and control the spillover and externality of public services.

Prior to the reform and opening up era, the size of the mobile population was relatively small. Management approaches have been used to define the duties and necessary expenditure on public services by local governments. China's mobile population has generally been flowing from rural to urban areas, from inland to coastal areas, from small cities to large metropolitan cities. As a result,

³⁶³ Hughes, O. E. (2012). Public management and administration. Palgrave Macmillan, p88-96.

³⁶⁴ Denhardt, R. B., & Denhardt, J. V. (2000). The new public service: Serving rather than steering. *Public Administration Review*, *60*(6), 549-559.

the more highly economically developed coastal and urban areas have effectively become beneficiaries. Under the aegis of the household registration barrier, local governments in these prosperous regions do not have to spend money providing basic public services for these migrants (whose names are not under local household registries); and these regions directly utilize human capital from other regions. Therefore, although local governments in midwestern and rural regions are investing substantial financial and related resources in education, healthcare and social security, the people who benefit from these services are increasingly moving away and are not contributing to the local economy. As more people migrate to coastal and urban areas, they accelerate the development of these prosperous areas. Therefore, these people effectively form "reverse subsidies from less developed areas towards developed regions". ³⁶⁵ This condition widens the gap in terms of the quality of public services between regions, and discourages local government officials in underdeveloped regions from providing a full suite of public services, which in turn further undermines the developmental potential of underdeveloped regions.

C	T . (. 1	111'4	Primary	High	College and	Destand 1 at
Current residence	Total	Illiteracy	school	school	university	Postgraduate
National	82653	1242	14316	57526	9184	385
Beijing	6809	54	639	4457	1559	99
Tianjin	2925	30	480	2129	279	8
Hebei	1349	22	248	849	224	6
Liaoning	1719	23	335	1116	234	12
Shanghai	8589	156	1298	5928	1133	75
Jiangsu	7113	105	1328	5088	567	25
Zhejiang	11278	237	2972	7616	438	15
Fujian	4124	56	969	2893	198	8
Shandong	2032	41	322	1316	345	9
Guangdong	20874	138	2596	16672	1439	29
Hainan	561	9	96	341	114	2
Eastern average	6125	79	1026	4400	594	26

 Table 5-6 Populations registered in other provinces based on educational status (thousands) (continued over-page)

³⁶⁵ Li, M (2011). China's Regional Unbalanced Development: a Political Science Analysis. *CASS journal of Political Science*, 3.

Eastern total	67374	872	11283	48404	6529	286
Eastern proportion	81.5%	70.2%	78.8%	84.1%	71.1%	74.4%
Shanxi	893	15	171	614	91	3
Jilin	440	7	70	245	113	5
Heilongjiang	490	11	90	275	111	4
Anhui	688	20	124	409	130	6
Jiangxi	579	7	71	282	215	4
Henan	570	10	76	362	117	4
Hubei	974	18	149	544	252	11
Hunan	699	8	95	404	186	7
Central average	667	12	106	392	152	5
Central total	5333	95	848	3134	1213	43
Central proportion	6.5%	7.7%	5.9%	5.4%	13.2%	11.1%
Inner Mongolia	1385	45	299	916	122	3
Guangxi	798	11	137	524	121	5
Chongqing	911	16	164	480	242	9
Sichuan	1089	21	186	600	268	14
Guizhou	724	18	173	459	70	3
Yunnan	1171	31	333	695	107	4
Tibet	162	10	42	99	11	0
Shanxi	941	12	117	543	261	10
Gansu	414	10	75	251	74	4
Qinghai	303	16	70	187	29	1
Ningxia	348	13	83	216	36	1
Xinjiang	1699	73	507	1018	99	3
Western average	829	23	182	499	120	5
Western total	9946	274	2186	5988	1442	56
Western proportion	12.0%	22.1%	15.3%	10.4%	15.7%	14.5%

Source: State Statistics Bureau (2011): China Population Census Data2010, China Statistics Press.

The populations of registered households in other provinces nationwide are listed in Table 5-6 (data is sourced from China's sixth census). It is evident that there is a flow of people from the central and western provinces to the eastern coastal provinces. Developed provinces such as Beijing, Shanghai, Jiangsu, Zhejiang and Guangzhou have attracted large floating populations of people who are therefore not listed on local household registers. Based on the data in the sixth census, most migrants have moved away from districts in China's central region. In 2010, 48% of migration originated from the central region, of which the net out-migration rates of Anhui, Jiangxi, Henan, Hunan, Hubei were all above 10%; the net out-migration rates of Guangxi, Sichuan, Guizhou in the western region were around or above 10%; while there was net immigration into Qinghai, Ningxia, Xinjiang, and Tibet.

Among the people who migrated into the eastern region who were enrolled in education, 37.02 million were attending junior middle school, and they accounted for 85% of the entire flowing population who were attending junior middle school. There is a substantial flow of junior middle school children into eastern provinces, and the local governments in these eastern provinces are not obligated to fund their education. About 70% of the flowing population who possess a college degree or one of a higher classification migrated into eastern coastal areas, and this is contributing to a serious "brain drain" in the central and western regions, which is not conducive to the economic development in the central and western regions. Due to the Western Development policy and other relevant policies, the flux of migration into the western region is better than that of the central region, now that there are more highly talented, educated people moving into this region. However, the investment in compulsory education and higher education by local governments in the central and western regions cannot do not fully translate into local economic development (based on the same level of human capital), because of the great population flow into eastern, more developed areas (see Table 5-6). This results in the unreasonable pattern of long-term reverse subsidies from the central and western regions to the more developed areas in the eastern region.

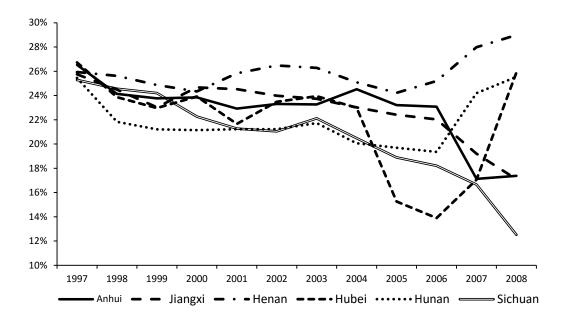


Figure 5-5 Proportion of total expenditure on science, education, culture and health expenditures by provinces with net emigration, 1997- 2008

Source: State Statistics Bureau (2010): 60 Years of Compilation of Statistics in the New China, China Statistics Press.

These long term inverse subsidies may weaken the willingness of government officials to deliver public services in regions with declining populations. As shown in Figure 5-5, there has been a fluctuating decline in the proportions of provincial government expenditure on science, education, culture and health care. For example, in Anhui, the proportion of expenditure on science, education, culture and health in 1997 was 27%; this fell by 17% from 1997 to 2008; in Jiangxi, the proportion declined from 26% to 17%; in Sichuan the proportion fell from 25% to 13%. This explains, to a certain extent that in provinces with declining populations, expenditure on public services including science, education, culture and health does not translate into local economic development and a large part of fiscal expenditure is expended on human capital that is migrating to other regions. This migration might generate a rise in China's GDP development in the short term, but in the long term it will exacerbate regional disparities in terms of public services, and will damage the economic development potential of less developed areas.

5.3 Public Service Decentralization and Regional Development -Exploration and Reflection

Economic and political scholars have spent years debating on whether public services should be provided by a central government, or provided by a local government. Scholars, such as Hayek, Stigler and Tiebout have made classical interpretations of the advantages of public service supply by local governments. Decentralization of public services to lower government levels has been practiced in several countries. Generally speaking, the basic argument by such scholars is that local governments have more convenient and complete access to local information and are more aware of local people's preferences, and can therefore provide information to the central government. ³⁶⁶ The "foot voting" mechanism formed by the free movement of citizens can ensure a good match between public service supply and citizens' preferences, ³⁶⁷ and in a decentralized system, competition among local governments can result in more efficient public services. Based on the above theories, some scholars further propose that decentralized supply is effective when public services are heterogeneous and when there are no spillovers in regions; otherwise, the central government is a more effective provider of public services. ³⁶⁸ Some scholars³⁶⁹ have even proposed limitations on the decentralization of public services, by direct and effective citizens' supervision of a decentralized government, and "yardstick competition" among local governments. These two conditions can help to redress information asymmetry sufficiently and effectively. Residents can evaluate the effectiveness of local public services by comparing them with those provided by other local governments. However, since the 1990s, scholars have been examining the problems caused by the decentralization of public services, and they are increasingly of the opinion that a decentralized system

³⁶⁶ Stigler, G. J. (1957). Perfect competition, historically contemplated. *The Journal of Political Economy*, 65(1), 1-17.

³⁶⁷ Tiebout, C. M. (1956). A Pure Theory of Local Expenditures. *The Journal of Political Economy*, 64(5), 416-424.

³⁶⁸ Oates, W. E. (1993). Fiscal decentralization and economic development. *National Tax Journal*, 46(2), 237-243.

³⁶⁹ Dethier, J. J., Ghanem, H., & Zoli, E. (1999). *Does Democracy Facilitate the Economic Transition? An Empirical Study of Central and Eastern Europe and the Former Soviet Union*. World Bank Publications.

may not always improve public service quality for the following reasons: ³⁷⁰ (i) residents will not move away solely because they want to access different, better public services; (ii) local governmental operations may not always meet efficiency standards; (iii) compared with central government, local governments tend to show poor governing ability; (iv) competition among heterogeneous local governments can intensify regional differentiation.

China has been decentralizing public services to local governments ever since the 1950s, and the responsibility for delivering basic public services in China are borne by local governments. During the past six decades there have been several readjustments and reallocations in terms of the types and funding of public services by the Chinese government. However, throughout this period, local governments have always been responsible for delivering basic public services. Local governments have always been responsible for more than 70% of the national public service expenditure, and as much as 90% of local government expenditure goes into health, education, social security, and similar services. ³⁷¹This ratio is much higher than those for local governments in the United States and in other federal states. China's 50-year decentralization of public services is a fascinating case on the relationship between decentralization and balanced regional development.

5.3.1 Exploration of decentralization of public services and regional development

On the whole, many scholars believe that the establishment of an effective basic education system and medical system contributed greatly to China's economic development.

Upon the founding of the new China, the government established a centralized planning system, and took responsibility for delivering public services. This centralized mode of public service guaranteed an effective supply of relevant funds and the transformation of new and old public service systems within a

³⁷⁰ Fu, Y., & Zhang, Y. (2007). Chinese style decentralization and structural bias of fiscal expenditure: Price of competition for growth. *Management World*, *3*, 4-11.

³⁷¹ Li, L. C. (2010). Central - local relations in the people's Republic of China: Trends, processes and impacts for policy implementation. *Public Administration and Development*, *30*(3), 177-190.

short period, which thus provided a solid foundation for national development and social stability. However, decision makers in the central government quickly recognized that their centralized model of public services was inefficient. Hence, during the first decentralization of financial power, public services were devolved to local governments, and a supply system was created whereby "central departments and local governments cooperate with each other". Local governments were responsible for funding and managing public services. Under the political and economic climate of The Great Leap Forward, public services were expanded rapidly and unreasonably. In a later adjustment, financial and administrative power was again concentrated in central government, while local governments delivered public services. The central government only adopted "earmarks" for some essential services such as education in order to guarantee the necessary expenditure on basic public services. At the start of the reform and opening up era, a "fiscal responsibility" system was implemented, whereby local governments had clearer responsibilities in terms of public service expenditures. The local governments still took charge of public service spending in local farming, forestry, water conservation, industry, transportation, culture, science, health, pensions, and social assistance. The central government was primarily responsible for the formulation of relevant policies, and for providing a small part of the national public service. The reform of the tax-sharing system in 1994 resulted in a continuation of the earlier system, with local governments assuming responsibility for the vast majority of public services. Since 2002, due to the strengthening of central finance and the widening of public service gaps among regions, the central government began to increase balanced transfer payments and tried to balance the regional differences in terms of public services through compulsory education transfer payments, rural cooperative medical transfer payments, and countryside transfer payments. Generally speaking, decentralization is the chief characteristic of the public sector in China. The Chinese government has worked to guarantee the efficiency of public service investment, and has developed a basic public service system nationwide using fewer resources.

5.3.2 Reflection on decentralization of public services and regional development

Due to the traditional "administrative contracting system" and the impact of specific historical circumstances, local governments control most of the public services in China. In addition, in the existing political structure there is "uniformity between central and local government", wherein public service responsibilities are delegated to government departments below the provincial government layer. Meanwhile, due to the absence of both a clear incentive mechanism (regarding public service development) and a central control mechanism for public service equalization, the current public services system in China is affected by a number of problems, including inadequacy, regional disparity, and structural barriers:

First, the lack of a local incentive mechanism leads to an overall inadequacy of a public service. Historically, public services were regarded as the inherent functions of local governments. The central government provides clear incentives for local economic development by shifting fiscal and administrative power down to local levels. However, in China the decentralization of public services has not been accompanied by a clear incentive mechanism, and so the quality of local services in specific areas does not affect local government officials' economic interests and promotions. Thus, local officials have no direct incentive to develop or improve the public services. In light of China's remarkable economic growth, the scale and quality of public services provided by some local governments simply do not meet the requirements for economic and social development. Education, healthcare and other public services in some regions are plagued by inefficiency, and there are stark contrasts in the quality of public services among China's regions because public services are controlled directly to the local government. Moreover, since there may be less motivation among officials in lower tiers of government to develop public services, central government tends to shift responsibilities for running public services down to these lower levels - this is termed "isomorphic responsibility". As a result, "Nearly 70% of the public spending occurs in provincial and [lower levels of] government, among which over 55% of public spending [is conducted at]

municipal, county and township levels...the county and township governments burden a heavy spending responsibility." ³⁷² This situation aggravates the financial burden among grass-roots local governments. In addition, a lack of financial resources is another reason for an overall inadequacy in Chinese public services.

Second, the absence of a central control mechanism leads to regional disparities in terms of public services. Despite the decentralization of financial and administrative powers, no clear central control mechanism for the decentralization of public services has yet been established. The central government only takes charge of the formulation of relevant polices and guidelines, while the local governments are responsible for policy implementation and fund raising. For a long time, the central government has been short of relevant funds and power to properly conduct appropriate supervision on the delivery of public services by local governments. Therefore, the developmental policies pertaining to public services that are formulated by the central government cannot usually be implemented. In the document, *China's Education Reform and Development Outline* (published in 1993), the following is clearly proposed:

"Raise the proportion of state government spending on education (including financial funding for all levels of education; urban and rural education surcharges; organized funding for primary and secondary schools by businesses; partial tax deductions and exemptions for school-run industries) up to 4% of total GDP by the end of this century and reach the average level of developing countries in the 1980s."

However, due to the lack of a central control mechanism, local governments are not taking the initiative in terms of investments, so this goal was not achieved until 2012. In addition, as most of the public services have a significant spillover, local governments tend to prevent their areas becoming so-called

³⁷² Feng, X. (2010). *The competition between local governments: theory, analytical framework and Empirical Research*, Yilin Press, p187. (In Chinese).

"welfare magnets" and will not permit outsiders to partake of the social welfare that is designated for local residents, particularly when the central control mechanism is absent. This system is different to those in some Western countries, whose local governments have a "dip competition" on public services. However, local governments in China can use the household registration system as a barrier to prevent the influx of outsiders gaining access to local public services. If things continue in this way, the incoming population that makes contributions to the local economic and social development shall be excluded from the local public service system, and they cannot equally share in education, medical treatment, social security, or other public services. As a result, the public service gaps among different regions become entrenched. It should also be noted that, because of the absence of a central control system as well as the existence of barriers to local public services, the developed coastal and urban areas have become the actual beneficiaries of what is a population migration from the midwest to the east. Because they are protected by the household registration barrier, these areas need not have to provide basic public services to the incomers, since those people are not recorded on local residence registers. At the same time, these regions can take direct advantage of talented human capital coming from other regions. In fact, this is effectively a subsidy of public services in prosperous areas by the less developed areas. This unjust situation widens the regional gaps in terms of public services, which results in further unbalanced regional development.

5.3.3 Improvements to decentralized public services and regional development

Due to these aforementioned problems, the Chinese government needs to establish a more equal incentive and control system over public services, and apply some of the methods used by governments in some foreign countries:

(1) There should be a combined incentive system for both upper and lower levels of government that are responsible for supplying public services. In theory, there are two methods to encourage local public services supply: one is to integrate the development of public services into a local performance evaluation system, and link that to the promotion of local government officials; the other method is to empower local residents by enabling them to evaluate local public services and supervise the public services of local government through a democratic method. It has been proved that public services should be subject to a performance evaluation system. However, there is one problem - public services are complicated, and it is difficult to establish an objective and measurable adjustment standard. Moreover, there is the danger that "one generation plants the trees under whose shade another generation rests", which makes the establishment of a performance evaluation mechanism for public services more difficult. The expansion of local democracy can encourage local governments to more carefully meet the needs and preferences of citizens, and improve public service supply. ³⁷³ However, in the current political structure, most officials are not elected directly by the people, and superior government departments conduct performance evaluations; therefore, an incentive mechanism would not function properly above the grass-roots local government layer. There is a need to include basic public services, such as education, medical treatment and social security, under a performance evaluation system, in order to encourage local governments to improve investment in and management of basic public services. Furthermore, the Chinese government should tackle the overall inadequacy and structural differences in its public services as soon as possible by establishing standards, both domestic and foreign, which can be used to measure the quality of public services. There also needs to be more inner party democracy, including competitive elections, so that the people, party members and NPC members can be allowed to supervise local public services; large groups of party members and ordinary citizens are direct clients, ³⁷⁴ and so they should persuade the government layers to provide public services that meet people's preferential needs.

(2) Build a standard control system for public services, which is dominated by the central government. Public services affect people's living standards and

³⁷³ Zhang, X., & Kanbur, R. (2005). Spatial inequality in education and health care in China. *China economic review*, *16*(2), 189-204.

³⁷⁴ Zhou, L. A. (2010). *Incentives and governance: China's local governments*. Cengage Learning Asia Pte. Limited, p119-128.

economic development potential; furthermore, the provision of public services affects and can strengthen national identity. Most modernized nations operate public service systems that are of a uniform scale and quality nationwide; such a system needs a strong central government. Of course, due to the complexity of the public services as well as limited access to information by central government, the central government should not directly control each and every specific public service function, but it should guarantee a consistent quality of basic public services throughout the nation via fiscal transfer payments and by formulating standards. Both central and provincial governments must be able to raise sufficient revenues, support one another and invest in education, medical treatment, and social security. The provision of public services should no longer be tied to the household register. The central government should ensure a balanced transfer of payments so that public services in backward regions can be improved, and so that a generally consistent level of basic public services nationwide can be guaranteed. In addition, since certain public services such as education, healthcare and social security are characterized by homogeneity and economies of scale, a uniform minimum standard should be applied across the country so as to reduce spillovers between regions. The implementation and provision of basic public services should be supervised and subject to evaluation mechanisms. Institutionalized methods should be used to strengthen the powers of the central government over public services.

Conclusions

1. Preliminary Conclusions

Unequal regional development is a worldwide issue which affects a nation's sustainable economic development, and which may also threaten social stability, national unity, and state security. Therefore, decision makers in all countries have paid significant attention to this issue and have attempted to coordinate regional development by every available means. Governments in many developed countries have instrumented regional governance. Most of these states have endeavored to provide financial aid, manpower support, and infrastructural development to less developed regions in an effort to encourage large-scale regional development. There occurred substantial economic rehabilitation and rapid development in these countries immediately after the Second World War. However, due recent economic stagflation and financial retrenchment, most developed countries can no longer provide sufficient capital and adequate policy support to their less developed regions. In addition, many countries' decision makers and scholars have recognized that regional development policies led by central government tend to be inefficient. This results in a tremendous waste of resources, and there may also be a failure to realize the real demands of less developed regions, which may exacerbate conflict between less developed regions and more developed regions. As well as reflecting on the failures of centralized regional intervention policies, policymakers in some countries have tried to inspire local governments' enthusiasm for development and cooperation through power decentralization policies. In an effort to sustain efficiency, they have attempted to achieve a more dynamic balance of regional development by effecting orderly, sustained competition and voluntary cooperation among different regions. In addition, international organizations such as the Organization for Economic Co-operation and Development (OECD) and the World Bank have proposed potential power decentralization models in published research reports, and have popularized them among developing countries.³⁷⁵

In China there has been substantially unequal levels of development among its regions, although in recent years the divide (in terms of development) between coastal and inland areas has been reduced. Its government has been achieving this via large-scale regional productivity allocation, which has been ongoing ever since the founding of the People's Republic of China. China's regional development plan is primarily led by the central government, and the purpose of every "Five-Year Plan" is to uniformly arrange and plan regionally balanced development. This is particularly the case with the regional development strategy, which is predominantly focused on development of the western region in China. As a result, substantial fluxes of capital, technological enhancement and talents have transferred to undeveloped regions, while investments in large-scale infrastructure construction and in large and mediumsized projects have transformed China's regional development pattern in a relatively short period of time. However, in contrast with that of the Soviet Union, the regional development strategy by the Chinese Central Government has not been adequately supported by a consistently centralized system. Throughout the history of PRC, the central government has decentralized economic development, business management and policy-making decisions to local governments, and has enhanced the efficiency and efficacy of regional development by empowering local governments. Despite the saying that "centralization leads to deadlock and decentralization leads to chaos", the central government has always considered power decentralization to be an important means of solving China's developmental issues. More predominantly, ever since the "revenue-sharing system" reform, power division between the central government and local governments has begun to be institutionalized, i.e. the central government retains power and authority over the distribution of fiscal resources for macro control, while local governments have an institutional commitment toward autonomous development. Many scholars argue that this "Chinese-style decentralization" is, by far, the most important secret of China's

³⁷⁵ Roura, J. R. C. (2011). Regional development policies in OECD Countries. *Investigaciones Regionales*, (19), 205-208.

miraculous economic growth.³⁷⁶

Since China's economy continues to develop rapidly, the inequality among its regions (in terms of development) is not a mere linear problem of productivity allocation, but a multi-dimensional issue that concerns economic growth, social progress, structural transformation, quality of public services, and environmental protection. Policy makers therefore need to consider whether China should strengthen the central government's dominance in regional development, or encourage autonomous competition and voluntary cooperation among local governments by intensifying power decentralization. This project is an analysis of the relationship between power decentralization and regionally balanced development in China. Power decentralization is not merely financial power decentralization. In this dissertation, its influence on regional development has been analyzed from three distinctive aspects: financial power decentralization, administrative power decentralization, and public services. The following preliminary conclusions are drawn:

First, an unstable, nonstandard and asymmetric decentralized financial system directly results in regional financial and economic disparity. Prior to the Reform and Opening-Up era, the central government invested a large amount of political, economic, administrative, and human resources. Its aim was to coax development of the central and western regions through productivity allocation and "*third-line*" construction. However, the powers of the central and regional governments were centralized and decentralized (respectively) to an excessive degree. China's central government wielded excessive political and administrative power, which resulted in cynicism among local government officials. Local governments always adjusted their policies according to the political climate, economic laws, or national strategies. This led to a classic situation where "centralization leads to deadlock and decentralization leads to chaos". In fact, an unstable macro economy inflicts greater harm upon less developed regions with poorer economic foundations, and exacerbates regional disparity. After the Reform and Opening-up mandate was issued, power in

³⁷⁶ Jin, H., Qian, Y., & Weingast, B. R. (2005). Regional decentralization and fiscal incentives: Federalism, Chinese style. *Journal of public economics*, 89(9), 1719-1742.

central government began to be distributed among local governments, and data on governmental revenues and expenditure gradually become transparent. Nevertheless, because an asymmetric power division had been in existence for many years, the eastern coastal regions were noticeably more privileged in terms of financing and tax revenues; they attract talent from other regions, and taxation tends to be lower. In central and western regions in China there are higher tax rates, and their own public expenditures are more limited. This vicious circle has continued to weaken the central and western regions' development potential, and additionally, since China's balanced transfer payment system is not yet complete, regional disparity continues to grow.

Second, a rigidly large government, segmented government structure, and provincial government incentives hinder coordination and cooperation in and among regions; this altogether weakens the effect of China's regionally balanced development strategy. In contrast to its decentralized financial system, China's administrative system has always been relatively centralized. Its central government controls local governments by intervening in these provincial governments' personnel arrangements, organizational settings, and incentive mechanisms. In contrast to Russia's power decentralization model, many scholars regard this unique "dislocation" as the secret of China's successful economy.³⁷⁷ However, the numbers of local government personnel is determined by a government's power rather than the local community's actual economic condition. In the western and central regions, a large proportion of the working population is employed in local government. For example, 16% of urban workers in the western region are employed by the government - twice that of urban workers in the eastern region. If the size of government is too large, it draws excessive social resources, and, as a result, the government becomes "the grabbing hand" that weakens the central and western regions' developmental potential. China's lengthy "horizontal and vertical" governmental structure, characterized by isomorphic responsibility, has caused continued conflict between local governments and the central government. This

³⁷⁷ Blanchard, O., & Shleifer, A. (2001). Federalism with and without Political Centralization: China versus Russia. *IMF Staff Papers*, 171-179.

situation tends to aggravate wastage during the course of regional policy coordination, and inhibits both the formulation of an effective coordination mechanism among departments and a cooperation mechanism among local governments. In addition, China's central government has thrust local governments into a fierce "tournament" through enforced political performance assessments. During this process, local governments always "win" by proper or improper means, which are always driven by self-interest. This has resulted in inadequate coordination and cooperation among local governments. Other consequences include repeated building construction, market blockades and data fraud, all of which profoundly hinder proper, regionally balanced development.

Third, excessively decentralized basic public services result in barriers to social welfare and excessive disparity in the quality of public services among regions, which contribute to the differing rates of development among China's regions. In general, the local governments provide most of China's public services. This is especially true in a system where administrative power is decentralized and financial power is centralized. Governments at the local level therefore consume a fairly large proportion of public expenditure, even if they do not have sufficient tax revenues.

Without a complete transfer payment system, the decentralization of basic public services results in a series of problems, both actual and potential. Without sufficient resources to provide high quality public services, governments in less developed regions will only invest funds in economic growth and infrastructure construction for the express purpose of increasing their own political performance in a fierce central government-induced competition. As a result, the quality of public service within the central and western regions is found wanting. Moreover, due to their long-term economic advantages and China's national preferential policy, the quality of public services in the eastern and metropolitan regions is far higher than that in other regions. To prevent themselves from becoming a "welfare magnet", governments in developed regions tend to continue to exploit the household registration system in order to construct a "welfare barrier"; this consolidates the disparity in the quality of public services among regions. In addition, there is a large-scale population movement across China. Governments in the eastern coastal regions and metropolitan regions do not bear the full 'brunt' of providing public services to floating populations, but they directly enjoy the benefits of increasing human capital as more citizens migrate into their jurisdictions. Meanwhile, central and western regions' investment in education and healthcare is not entirely transformed into human capital serving the local economy. Altogether this amounts to a "reverse subsidy" from less developed regions to more developed regions, which significantly weakens less developed regions' willingness to develop public services.

2. Countermeasures

China has faced increasingly complex regional issues, and so its government's "12th Five-Year Plan" postulates an overall strategy for regional development by "giving full play to different regions' comparative advantages, promoting the rational flow of production factors, deepening regional cooperation, driving benign interaction among regions, and gradually shortening regional development disparity". To achieve these ambitious targets, some countermeasures are proposed based on the experience of OECD countries and the questions discussed above:

Firstly, China must standardize and improve its financial decentralization system, and properly direct tax resources and preferential policies to its central and western regions. Ever since the reform of the revenue-sharing system, China's fiscal and taxation systems began to stabilize, and this led to more stable regional development and a reduction in the disparity between regions, especially in what became a consistently stable and sustainable macro environment. Naturally, stability within the fiscal and taxation systems does not in itself result in improvements in these systems. China should continue its reform and innovation policies by effectively optimizing tax revenue allocation between central government and local governments. This will result in improvements in their expenditure, and a standardization of their revenue and expenditure systems. It is worth noting that China's long-term fiscal and taxation policies tend to benefit eastern coastal regions, not least because economic development in the central and western regions was far lower than that of the eastern region at the start of the Reform and Opening Up era. Although the central government has established preferential fiscal and taxation policies for the central and western regions ever since, they are still inadequate since the eastern regions still enjoyed substantially higher tax revenues and low tax rates. Therefore, the government should scientifically assess the central and western regions' comparative advantages so that it can more accurately guide industries, capital, talents and technologies into the central and western regions. Moreover, China's government should continue to improve the equalized financial transfer payment system. Specifically, the state should merge the administrative departments which deal with transfer payments, reduce the number of special transfer payments, and optimize the computational formula for equalized transfer payments. Moreover, the state should intensify its guidance and supervision of transfer payment capital in an effort to (i) restrain vested interests, (ii) enhance the reallocation potential of the transfer payment system, and (iii) guarantee sufficient expenditure for public services and economic development within the central and western regions.

Secondly, China's central government should also decentralize its administrative powers and adjust its rigid vertical and horizontal structure, so that it can become more attentive to localized problems. As has been observed with regional development policies in other countries, for sustainable, regionally balanced development to occur there must be comprehensive regulation by the central government, and voluntary cooperation between local governments. China's governmental structure is the most significant barrier which hinders both effective coordination among central government departments and enhanced cooperation among local governments. Therefore, once it has completed the necessary scientific assessment, China's central government should permit local government employees. Moreover, it should moderately reduce the numbers of personnel on the government payroll in the central and western regions, so that the central and western regions' development becomes more efficient.

China should also continue with its the reform philosophy of the superministry system, and tackle the problem of "the coexistence of multiple departments". China should also optimize the governmental incentive mechanism. For example, the mechanism could be adapted so that regional poverty can be alleviated, and the progress of each region could be subject to a national performance assessment (which could be used to bypass the special interests of individual local governments). Moreover, the central government needs to tackle administrative conflicts by establishing a regional organization, which could be directly led by a superior governmental body. Furthermore, poverty alleviation programs should not be "county-based", but should be targeted at enterprises and individual citizens. This could solve the problem of local governments competing against one another for funds, as well as the associated waste.

China should also centralize basic public services and gradually establish a balanced public service system throughout the nation. In the existing public service system, there is often a lack of local government investment in public services, and the household registration system has exacerbated public service barriers and the 'reverse subsidy' phenomenon. As both central and provincial financial income streams become more plentiful, the central and provincial financial ministries should gradually assume responsibility for spending money on public services including education, healthcare and social insurance, whilst allowing for a strong spillover effect, so that the problems of household registration and the public service barrier can be overcome. By applying a scientifically determined, balanced transfer payment capital, they should redress the deficiency of public services in less developed regions and guarantee a generally consistent quality of basic public service throughout the nation. Amendments should be made to the government's incentive mechanism, and the proportion of public services in the performance assessment should be increased. The general public should be permitted to assess governmental public services and stimulate local governments into supplying and improving public services. There should be both a top-down assessment and a down-top assessment.

3. Research Prospect

The issue of unequal development in China's regions is a complex one, which in this dissertation has been analyzed from the perspective of power decentralization. However, there are deficiencies in the methods and findings in this dissertation which should be considered in future research studies.

First, the research methodology in this dissertation primarily included the literature review, institutional analysis and macro data sorting. However, it was not possible to summarize and analyze every inspirational case relating to the process of China's regionally balanced development. The conclusions in this chapter have neither been supported nor tested by a large number of cases. Further investigation, study and analyses of other cases in regional development are needed.

Moreover, there is a need to further analyze systems and institutions, and to further explore power allocation between central governments and local governments in other countries. In general, both developed countries and developing countries have used different institutional models and operating mechanisms in line with their own national condition in their efforts to achieve regionally balanced development. They have gained a tremendous amount of experience and have encountered setbacks, which are worthy of investigation. However, only the experiences of the Organization for Economic Co-operation and Development are detailed in this dissertation, and the experiences of other nations' regional governance was not evaluated. In view of this, future researchers should hopefully be able to continue to produce viable hypotheses by investigating policies (for regenerating economic growth in underperforming regions) in other countries.

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