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## **New Development of Fiscal Decentralization in China**

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Understanding the logic of fiscal decentralization is pivotal for the next steps of fiscal reform, and retrospection of the literature and evidences accumulated in the field is the first step. As a typical transition economy with rapid and extensive devolution reforms, China is the ideal context to examine the causes, processes, and effects of fiscal decentralization, attracting numerous academic endeavors both domestic and abroad. However, the literature has not been fully reviewed and the evidences on fiscal decentralization are still mixed and inconclusive. This paper aims to comprehensively review the latest advancement in the area of fiscal decentralization in China over the past decades. The processes, characteristics, and measurements of fiscal decentralization are firstly reviewed, and the antecedents and consequences of fiscal decentralization are then synthesized. The knowledge gap and avenues for future research are finally discussed, aiming to make the China fiscal decentralization knowledge contributive, accumulative, and sustainable.

*Key Words:* Fiscal decentralization; Federalism; New development; Corruption; China; Review.

*JEL Classification Numbers:* H1, H2, H5, H7, P10, R5.

## 1. INTRODUCTION

Fiscal decentralization, synonymous with fiscal federalism, fiscal autonomy, and fiscal reform, refers to the transfer of fiscal authority from central to subnational and local governments (Bird and Vaillancourt 1998). The advocacy of fiscal decentralization is underpinned by the idea that subnational and local governments could make more appropriate policy decisions concerning local citizens' demands when compared with central governments far away (Oates 1999). The rapid spread and enormous progress of fiscal decentralization in developing and emerging market economies have received extensive attentions from the academics (Bird and Vaillancourt 1998; Smoke 2001; Shah 2004; Bahl 2009). Lots of studies from many countries have been done on fiscal decentralization, accumulating a good deal of literature on the topic. Although some writers synthesized the current state of the literature on the impact of fiscal decentralization on several outcomes (e.g., service delivery, corruption, fiscal management, and economic growth), (Shah, Thompson, and Zou 2004), our understanding of its antecedents and processes is still insufficient.

The whole transformation of China over the past three decades is characterized by the transfer of formal power from the central government to local governments, enterprises, and societal sectors (Wong and Bird 2008). Fiscal decentralization is among the key components of the reform and opening-up policy in China, and its antecedents and consequences received much academic attention (Shen, Jin, and Zou 2012). The Chinese public finance system has many features of fiscal federalism, though China is not a federal country in nature (Bahl 1998). The tax policy reform in 1994 remarkably separated the evolution of fiscal systems in China into different phases, and the consequences of fiscal decentralization should also be examined separately (Knight and Shi 1999). Tax policy reform, tax administration reform, and intergovernmental fiscal reform are the three lags of fiscal system in China, and their dynamics should be incorporated in the examination of fiscal decentralization (Bahl 1998).

Numerous studies have been published on fiscal decentralization in China over the past decade, and it is the right time to review the state of the art. Such endeavor enables us to accumulate the evidences to facilitate smarter policy decision-making and implementation. A recent review systematically investigates the history and state of the art of fiscal decentralization in China (Shen, Jin, and Zou 2012), though it is more practice-oriented. Instead, we aim to review and synthesize the academic contribution on fiscal decentralization in China, which will be beneficial for scientific knowledge accumulation and evidence-based public policy making.

Both domestic scholars and those abroad contribute to the development of fiscal decentralization research, and the paper reviews both of them. The progress and shortcomings of current studies are reviewed. The measurement, consequences, and antecedents of fiscal decentralization are reviewed sequentially, and the progress and pitfall of the current literature is discussed. Theoretical and practical implications are discussed then, and future research avenues are finally presented in the conclusion.

## 2. SCOPE AND METHODS OF THE REVIEW

To capture all academic publications on fiscal decentralization in China is not an easy work due to diverse and interdisciplinary interests on the hot topic. We try our best to collect almost all relevant literature on fiscal decentralization in China. The mainstream search engine (e.g., Google Scholar and ISI Web of Knowledge) is used to collect most published studies on fiscal decentralization in China. Due to the large amount of studies published in Chinese (see below), selective review of representative studies will be an appropriate approach. Top tier academic journals in Chinese (accessed via CNKI China Academic Journal Network Publishing Database (CAJD)), including *Economic Research Journal*, *Economics Quarterly*, and *Management World*, are covered to collect enough qualified studies.<sup>1</sup>

Only empirical and quantitative studies are covered to elicit calculated evidences on the antecedents and consequences of fiscal decentralization, though conceptual and qualitative studies are also taken into account. Such strategy enables us to objectively assess the reliability and validity of concerned studies. Only studies published since 2000 are covered to depict the new development of the literature, because of the rapid process of fiscal decentralization in China over the past three decades.<sup>2</sup>

The key methodological components (units of analysis, samples and periods, models, independent variables, and dependent variables) and conclusions (key findings and limitations) are configured. We first concentrate on the measurement of fiscal decentralization, because we could not reach conclusive results on its causes and effects without consistent and accurate measurement of the focal construct. We then separately review the evidences on antecedents and consequences of fiscal decentralization, and accumulative knowledge (hypotheses receiving frequent, robust, and consistent empirical supports), knowledge gap (variables and linkages with little empirical analysis), and research opportunities (both theoretical and empirical) are identified and reorganized. Finally, a conceptual framework is synthesized and the evidences and knowledge gaps are pointed out to facilitate future research endeavors.

## 3. THE STATE OF CHINA FISCAL DECENTRALIZATION

### RESEARCH

#### 3.1. Fiscal Decentralization in Chinese Academic Journals

The development of China fiscal decentralization research is firstly surveyed. The China National Knowledge Infrastructure (CNKI) dataset compiles almost all important academic journals in China, and it could act as a reliable source for us to assess the state of the art of fiscal decentralization research in China. Due to the ambiguity of Chinese characters, the CNKI dataset provides several solutions for

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<sup>1</sup> The Chinese journals are generally low-quality compared with international peer-reviewed journals, though some of them are high-quality. We only choose top-tier high-quality Chinese journal according to their academic reputation and impact factor.

<sup>2</sup> The rule is except for some seminal works in the field, e.g., Zhang and Zou (1998).

scholars to search target articles. After comparing all the solutions available, we choose to use the appearances of “fiscal decentralization” in the subject, title, keyword, and abstract of journal articles as the filtering conditions, and collect all relevant fiscal decentralization studies in China. Such strategy could help us to cover the utmost number of target journal articles.

The accumulative numbers of journal articles on fiscal decentralization in China before 2011 are 1328, 1048, 934, and 553, when subject, keyword, abstract, and title are used as search conditions, respectively. Thus, the accumulative number of Chinese fiscal decentralization studies ranges from 553 to 1328, which is very remarkable due to the rapid clustering of research in such a short time scale.

Fiscal decentralization has received a great degree of academic attention in China, as illuminated by the increasing numbers of academic journal papers published (1993-2011) annually in Fig. 1. The academic attention of fiscal decentralization has particularly increased since 2000, though there were also sparse notable studies in the period before 2000.

[Insert Fig. 1 about here]

From the Chinese literature on fiscal decentralization in China, we find that most studies are about the diverse consequences of fiscal decentralization. The consequences of fiscal decentralization in China include but not limit to the follows: economic growth, inflation and economic fluctuation, public expenditure structure and preferences, public goods provision (education, health, environmental protection, and transportation), government size and efficiency, foreign investment and international trade, corruption, and so forth.

Few studies examine the antecedents of fiscal decentralization in China, excepting for Zhang (2009), who finds that intraprovincial fiscal decentralization is positively associated with the share of revenue allocated to counties by provinces while negatively related to counties’ reliance on fiscal transfers (Zhang 2009). In sum, the interregional disparities of fiscal decentralization and their impacts on diverse outcomes have received the majority of academic attentions in China, whereas what drives fiscal decentralization is still a black box to open.

Most empirical studies rely on provincial panel data or cross-sectional data to examine the consequences of fiscal decentralization in China, primarily owing to the availability of data and easiness of analysis. Recent studies develop county-level dataset to further investigate intraprovincial fiscal decentralization and contribute to the ongoing debates on the positive and negative consequences of fiscal decentralization.

### **3.2. Fiscal Decentralization in the International Academic Community**

As a typical transition economy and an important representative of developing countries, the large size (territory, population, and economic aggregate), crucial position, and tremendous effects of China receive numerous academic attentions on the processes, characteristics, and implications of its fiscal decentralization. Fiscal

decentralization in China is also extensively studied and published by the international academic community. The Thomson Reuters Web of Knowledge platform is used to collect the academic development on fiscal decentralization in China. We use “China”/ “Chinese,” “fiscal,” and “decentralization”/ “federalism”/ “autonomy” as keywords to search at the Social Sciences Citation Index (SSCI) dataset. The number of journal articles on fiscal decentralization in China (1995-2011) is depicted annually in Fig. 2.

[Insert Fig. 2 about here]

Totally there have been 111 SSCI journal articles on fiscal decentralization in China, and most of them were published before 2000. Compared with the output of studies in Chinese, the amount of international studies is very small. Due to the high standard of international peer-reviewed journal publications, however, such output is also remarkable. Similar to its counterparts in Chinese journals, most international studies are concerned about the consequences of fiscal decentralization in China. Although some scholars discuss the institutional originals and dynamic evolution of fiscal decentralization over the past three decades, they mainly rely on anecdotes and case studies and could not be objectively assessed according to empirical research criteria.

#### **4. THE MEASUREMENT OF FISCAL DECENTRALIZATION IN CHINA**

It is a difficult task to appropriately measure fiscal decentralization, owing to variable disparities in fiscal systems and other contextual factors among different countries and regions (Oates 1972). Inappropriate operationalization of fiscal decentralization may result in inclusive findings. A meta-analysis of 61 studies on the relationship of fiscal decentralization and government size reveals that unit of analysis (local government, state or province, or country) and decentralization measure (revenue decentralization, expenditure decentralization, fragmentation, or federalism) matters significantly for the estimates of the relationships (Yeung 2009). Studies with federalism measure are more likely to find a negative link than that using fragmentation measure. Lin and Liu (2000) use marginal revenue retention rate to measure fiscal decentralization and study its linkage with economic growth, but they find opposite sign against Zhang and Zou (1998), which uses traditional expenditure decentralization measures.

When measuring fiscal decentralization, Oates (1972) suggests that different government levels should be weighted differently; decentralization in different areas should be analyzed separately; inter-governmental grants should be taken into account. When reviewing the current practices, we could find that the three requirements have not been fully satisfied (Panizza 1999). In this section, the key indicators and indexes to measure fiscal decentralization in China are reviewed, and the validity and comparability are then discussed. The appropriate measurement approaches are finally

suggested for future research.

There are several frameworks to measure fiscal decentralization, and most studies employ the Government Finance Statistics (GFS) issued by the International Monetary Fund (IMF) to measure fiscal decentralization (Ebel and Yilmaz 2003). Decentralization could be gauged by four types of measure: revenue decentralization, expenditure decentralization, fragmentation, and federalism (Yeung 2009). Federalism (as a dummy variable coded 1 for federalism and 0 for unitary countries) only applied to cross-country analysis, while fragmentation is more appropriate for local level analysis due to its stress on inter-jurisdictional competition (Yeung 2009). Thus, decentralization of revenue or/and expenditure is more proper for ordinary empirical studies.

Fiscal decentralization is usually measured by the relative sizes of subnational spending and revenue collection to central ones in the fiscal federalism literature. For instance, cross-national studies often utilize subnational share in total government revenues or expenditures (or GDP) to gauge fiscal decentralization (Treisman 2006). The GFS data may overestimate fiscal decentralization due to its aggregation problem, however, in that it fails in disaggregating local expenditure autonomy, revenue sources, and intergovernmental transfers. A replication of three studies with GFS data on the effects of fiscal decentralization by using OECD data found different results, implying that wrong measurements of fiscal decentralization may result in wrong and fragile conclusions (Ebel and Yilmaz 2003).

Although both revenue and spending could be analyzed in fiscal decentralization, it becomes different in the case of China. The Chinese unitary political system, however, makes fiscal arrangements very different from many Western countries, and the measurements of fiscal decentralization should be altered accordingly (Jin, Ligthart, and Rider 2011). Revenues mainly collected by local governments generally were not spent locally, but rather were levied by the central government in China (Knight and Shi 1999). Thus, the relative size of spending between central and local governments is more appropriate than that of revenue collection to reflect local tax autonomy (Zhang and Zou 1998).

Government spending in China is not fully expressed in budgets, and the consolidated spending is commonly constituted by budgetary spending and extra-budgetary spending (Knight and Shi 1999). Thus, three indicators ought to be created to measure fiscal decentralization. The seminal work of Zhang and Zou employed three indicators to measure fiscal decentralization of government spending: the ratio of per capita provincial consolidated spending to central, the ratio of per capita provincial budgetary spending to central, and the ratio of provincial extra-budgetary to central, expressed relative to income (Zhang and Zou 1998). Most sequent studies follow the approach due to its relevance to the theoretical originals and measurement of easiness.

Some scholars argue that fiscal decentralization may not result in equivalent fiscal incentive, and a more appropriate measurement strategy is to gauge the incentive power of fiscal decentralization. They propose a measure of revenue retention rate (Lin and Liu 2000) or marginal revenue retention rate (Jin and Zou 2005) to measure

of fiscal incentive, and find different results concerning the relationship between fiscal decentralization and economic growth (Jin, Qian, and Weingast 2005). Recent evidences further demonstrate the correlation between fiscal decentralization and fiscal incentive, and thus link the two measures both theoretically and empirically.

Almost all of the measurement strategies proposed in the prior studies are objective and archival, though subjective and survey-based indicators are also prospective. Identifying key characteristics of fiscal decentralization and then using a checklist to score the jurisdictions is a potential approach for future studies (Bahl 2009). Scholars could also classify jurisdictions according to different types of fiscal decentralization system, grouping jurisdictions by cluster analysis of institutional arrangements (federalism, government levels, taxing power, borrowing power, and local officials' independence) (Liu 2011). The correlation of and subtle differences between subjective and objective measures could be a proper window for the scholars to identify the processes underpinning fiscal decentralization. Such approach could also take both quantitative and qualitative natures of fiscal decentralization into account (Ebel and Yilmaz 2003), making the estimations of antecedents and effects of fiscal decentralization conclusive.

## **5. THE CONSEQUENCES OF FISCAL DECENTRALIZATION IN CHINA**

The consequences of fiscal decentralization receive extensive attentions over the past decades. *Environment and Planning C: Government and Policy* even arranges a special issue entitled “The political and economic consequences of decentralization” to examine diverse effects of fiscal decentralization (Lago-Peñas, Lago-Peñas, and Martinez-Vazquez 2011). As a double-edged sword, fiscal decentralization could impact several outcomes, e.g., public service delivery, corruption, fiscal management, and economic growth (Shah, Thompson, and Zou 2004). Fiscal decentralization is also argued to be positively correlated with good governance, although the strength of the correlation is surprising (Shah and Huther 1999). The impact of fiscal decentralization is diverse, both economic (e.g., fiscal stability, economic growth, and public sector size) and social outcomes (e.g., literacy rates, immunization, school enrollment) should be examined (Ebel and Yilmaz 2003). Without comprehensive and systematic examination of multi-dimensional outcomes of fiscal decentralization, our understanding of good governance is partial (De Mello and Barenstein 2002).

The direct effects of fiscal decentralization are financial, and many studies examine its impacts on size and structure of fiscal revenue and expenditure. The Evidence from provincial governments reveals that the growth of both budgetary revenue and expenditure decentralizations decreases the percent of non-tax revenue of local governments, and the effect of the former is more significant. However, the growth of fiscal decentralization of the whole expenditure (both budgetary and off-budget) increases the percent of non-tax revenue (Wang and Gong 2009). Comparing with western and central provinces, fiscal decentralization in eastern provinces decreases



non-tax revenue more significantly.

Fiscal decentralization is usually argued to positively contribute to local economic growth (Martinez-Vazquez and McNab 2003). However, the earlier evidence from Chinese provinces shows that a higher degree of fiscal spending decentralization is associated with lower economic growth (Zhang and Zou 1998). Fiscal expenditure decentralization is also found to be negatively associated with provincial economic growth (Zhang and Zou 2001). Another study using distinct decentralization measures shows that fiscal decentralization makes a positive contribution to economic growth (Lin and Liu 2000). Further evidence shows that the divergence of revenue and expenditure assignments at the sub-national level contribute to economic growth, in contrast to the theory that the convergence is beneficial for economic growth (Jin and Zou 2005). Using *ex ante* contractual marginal revenue retention rate as the measure of fiscal incentive, Jin, Qian, and Weingast find that fiscal incentive is a more predictive variable than fiscal decentralization in explaining growth of non-state sectors and reform of state sectors (Jin, Qian, and Weingast 2005). The fiscal incentive argument thus challenges the logic of fiscal decentralization, which may not be fully represented in the share of expenditure or revenue. A meta-analysis of 26 studies finds a positive but not robust link between fiscal decentralization and economic growth, and cross-country and intra-country studies result in different decentralization-growth nexuses (Feld and Schnellenbach 2011).

Fiscal decentralization is argued to be associated with public sector size, and numerous studies contribute to the question. Two theories predict opposite directions on the effects of fiscal decentralization on government size (Chen 2004). The Leviathan hypothesis proposed by Brennan and Buchanan (1980) argues that fiscal decentralization triggers intergovernmental competition and public sector size is then reduced due to governments' self-downsizing. Oates (1985) contends that decentralized governments under competition pressures may increase and improve public services to serve constituent preferences. A meta-analysis of over 60 studies finds that most estimations support the Leviathan hypothesis (Yeung 2009). Fiscal decentralization generally constrains government size (Marlow 1988), but different measures of fiscal decentralization (revenue decentralization, expenditure decentralization, and vertical imbalance) affect differently the sizes of different levels of governments (aggregate, national, and subnational government size) (Jin and Zou 2002). Subnational fiscal decentralization is directly associated with national fiscal decision-making concerning spending and deficit (Gong and Zou 2003). An economic analysis of 32 industrial and developing countries from 1980 to 1994 shows that increases of subnational spending and deficits contribute to increases in spending and deficits at the national level (Fornasari, Webb, and Zou 2000). Evidence from Chinese provinces shows that fiscal decentralization positively affects government size measured by fiscal expenditure as share of GDP, supporting the Oates hypothesis while rejecting the Brennan-Buchanan hypothesis (Chen 2004). Another similar study also finds the same results, in that both expenditure decentralization and revenue decentralization are positively associated with government size (Wu and Lin 2010). As evidenced by Yeung (2009), diverse approaches of research design may explain

mixed results from the studies on government size. Thus, more studies should be done to replicate the current evidences to guarantee the validity of results.

Comparing with fiscal and economic outcomes, the social and political outcomes of fiscal decentralization have not been fully examined. Fiscal centralization in China is found to lower the level of social services provision and amplify regional disparities, particularly in rural and poor regions and at county levels (West and Wong 1995). In considering social consequences of fiscal decentralization, several studies deserve discussion. The expenditure devolution and revenue centralization of fiscal decentralization system in China, together with the exploitative behavior of local government officials, results in heavy financial burden on peasants and violent protest (Jin, Shen, and Zou 2012). Fiscal decentralization is found to be good for one of health outcomes in China, in that it is positively correlated with infant mortality rate at county level, although the effects condition on county governments' own fiscal capacity and intergovernmental transfers (Uchimura and Jütting 2009). The mixed consequences of fiscal decentralization deserve further estimations.

Fiscal decentralization is found to result in deteriorating regional fiscal disparities in China (Zhao 2009), which in turn widens regional disparities in socioeconomic aspects, especially for provinces with agriculture or the primary industry as the dominant economic activity (Zhang 2006). A time series analysis also shows that the degree of fiscal decentralization explains a large portion of regional inequality in China (Zhang and Kanbur 2005). Fiscal transfer is the common means to mitigate regional disparities, but its effects depend on the extent of fiscal decentralization. An analysis of Chinese provinces shows that inter-regional transfers minimized provincial expenditure shocks, but richer provinces during periods of fiscal decentralization were better insured (Tochkov 2007).

Theoretically, fiscal decentralization increases the number of competing jurisdictions which is characterized by tax competition and rent-seeking, lowering corruption (Arikan 2004). Cross-country evidences show that expenditure decentralization is negatively and significantly associated with corruption (Fisman and Gatti 2002). The benefits of fiscal decentralization may be eliminated by local corruption and tax evasion commonly occurring in developing countries (Brueckner 2000). Thus, fiscal decentralization may directly affect corruption and suffer from corruption simultaneously, though their distinct effects require in-depth exploration.

The province-managing-county (PMC) reform, characterized by the devolution of fiscal and economic management authorities from prefecture-level cities to counties or county-level cities, has been experimented in almost all provinces in China and dramatically changed the landscape of hierarchical arrangements below the provincial level. Evidence from central Henan Province shows that decentralized counties reduce the share of public education spending, contrary to the expectation of policy designers in that fiscal decentralization would not automatically result in local governments' responsiveness to long-term benefits of local residents (Wang, Zheng, and Zhao 2011). Another study of Henan PMC reform found that Party and executive leaders in charge of decentralized counties may experience distinct trajectories of career advancement against their peers in non-reformed counties (Ma 2011). However, the preliminary

findings deserve further test due to the complex and sensitive nature of political career change.

Riker's theory (1964) denotes that the results of fiscal decentralization depend on the level of political centralization. International evidences show that strength of national political parties significantly improves the results of fiscal decentralization (e.g., economic growth, quality of government, and public goods provision), while administrative subordination does not (Enikolopov and Zhuravskaya 2007). The coexistence of fiscal decentralization and political decentralization, which is termed by "asymmetric decentralization" (Chien 2010) or decentralization with political trump (Tsui and Wang 2004), may result in different economic and social outcomes from other Western countries (Zhang 2006). Typically, the behavioral differences of fiscal federalism between China and Russia are emphasized by scholars (Blanchard and Shleifer 2001; Jin, Qian, and Weingast 2005). However, we still know little on the phenomena, and future studies should explore further in the direction.

## **6. THE ANTECEDENTS OF FISCAL DECENTRALIZATION IN CHINA**

What drives the spread and progress of fiscal decentralization? Unless we understand the antecedents and mechanisms of fiscal decentralization, we would not design appropriate policy framework to advance fiscal decentralization. Thus, it is vital to investigate the antecedents of fiscal decentralization (Oates 1972). While there are numerous studies examining the effects of fiscal decentralization, little work has been contributed to the causes of it (Treisman 2006). In this section, evidences from China are synthesized, and potential antecedents are pointed out for future studies.

The variations of countries and jurisdictions in fiscal decentralization have been attributed to geographical, cultural, institutional, and economic factors (Treisman 2006). A study of 57 countries demonstrates that country size, income per capita, ethnic fractionalization, and democracy are positively correlated with fiscal decentralization (Panizza 1999). Another study of 64 countries finds that urbanization has a negative impact on decentralization, while income per capita is positively associated decentralization; effects of both of them are moderated by income level and functional areas (Letelier 2005). A study of five Latin American countries develops a political theory of fiscal decentralization, and finds that political accountability between politicians at central and subnational levels of government is positively correlated with the extent of decentralization (Garman, Haggard, and Willis 2001). Cross-country evidences suggest that rather than advancing fiscal decentralization, globalization and international market integration actually promotes fiscal centralization (Garrett and Rodden 2003). Evidence from 66 countries shows that fiscal decentralization is contingent on several variables: country size, colonial history, economic development, and federalism are significant predictors of decentralization, while ethnic division and democracy have little effects on decentralization (Treisman 2006).

Diverse factors contribute to variations of fiscal decentralization across different countries, regions, government levels, functional areas, and periods, thus comprehensive examination should be emphasized in the study of its antecedents (Treisman 2006). The evidences on the determinants of fiscal decentralization are mainly from cross-country studies, while we know little about them at subnational and local levels (Garman, Haggard, and Willis 2001). That is why we could not find studies on the antecedents of fiscal decentralization in China (Zhang 2009), though some cross-national studies include China as one observation. The causes of fiscal decentralization may vary at different government levels and in different functional spending areas (e.g., health and education) (Letelier 2005), thus specific design should be done to gauge its drivers.

## 7. DISCUSSIONS

As mentioned earlier, fiscal decentralization in China has received extensive and sustaining attentions from both domestic and abroad scholars. Although the literature accumulated many findings and results concerning the antecedents and consequence of fiscal decentralization in China, our understanding of the logic and processes of fiscal decentralization in China is still in lack due to the followings.

The measurements of fiscal decentralization in China should be consistently improved, in that future studies could compare them with those done in other countries. Although recent studies reach some consensus on how to measure and compare fiscal decentralization across regions, government levels, and time periods, more endeavors should be paid on it to clarify the appropriateness of different measures used in prior studies. Unless the measurement of fiscal decentralization is accurate and proper, we could not reach conclusive findings on the antecedents and consequences of fiscal decentralization.

As of the consequences of fiscal decentralization, two points are discussed. First, Fiscal decentralization is a penetrative process and has extensive effects on diverse aspects of social transition, both short- and long-term, positive and negative (Lago-Peñas, Lago-Peñas, and Martinez-Vazquez 2011). We only know a little about the economic consequences of fiscal decentralization, which has been inconclusive so far. The social and political effects of fiscal decentralization in China then deserve further investigations. Second, as noted in the above, limited studies on the consequences of fiscal decentralization in China result in mixed results, which is not helpful for both theoretical and practical implications. Thus, future studies could re-test the hypotheses concerning the effects of fiscal decentralization to clarify its applications and verifications in China.

As evidenced in the above review, few studies have been conducted on the drivers of fiscal decentralization in China. Although some hypotheses on the antecedents of fiscal decentralization have been tested, most of them are cross-nation design or conducted in other countries, particularly in Western developed countries. More studies should be done on the antecedents of fiscal decentralization, as our understanding of the outcomes of fiscal decentralization has been much improved.

The transmission channels by which fiscal decentralization affects diverse results or is affected by different factors should be detected to clarify the theoretical arguments of fiscal decentralization (Feld and Schnellenbach 2011). The causal linkage among fiscal decentralization and its antecedents and consequences may be intertwined by other relevant variables, and the complicated connections and even network should be examined in the future studies. The mechanisms underpinning the correlations among fiscal decentralization and other variables should also be disentangled to clarify what matters, in what context, and by what manners.

The moderating or contingency effects of fiscal decentralization should be emphasized in the future research. The expected consequences of fiscal decentralization are not automatically or linearly resulted. In contrast, there are many contextual factors moderate the effects of fiscal decentralization. Future studies should examine these factors, as well as the mechanisms underpinning their effects. The relative importance and interacting effects of fiscal decentralization and political incentive increasingly receive academic attentions, as both of them provide strong-power incentives for local cadres to serve economic growth and social development (Jin, Qian, and Weingast 2005). Future studies could explore the differentiating effects of two types of incentive and their distinct consequences in different functional areas. The unique governance system of China provides a good context for scholars to test the untouched consequences of the coexistence of fiscal and political incentives, and innovative theories and evidences may emerge from the research direction.

Most current studies are concerned about central-local relations and fiscal decentralization at the provincial level, while the knowledge at sub-provincial levels is insufficient. Although much advancement has been achieved at sub-provincial levels, their processes and effects have not been systematically studied. For instance, the province-managing-county (PMC) reform has been experimented in almost all provinces in China, and the Ministry of Finance required all qualified provinces to implement PMC before the end of 2012 (Wang, Zheng, and Zhao 2011). More studies are thus expected to examine fiscal decentralization at local level (e.g., county). Although their empirical analysis is run at provincial level, the data are aggregated from county level (Uchimura and Jütting 2009), making the estimations reflective of county dynamics.

Although we focus our attention on the antecedents and consequences of fiscal decentralization in the sole country, China, comparative and cross-country studies would benefit the development of the field extensively. Comparative case study (e.g., China and Russia (Blanchard and Shleifer 2001; Jin, Qian, and Weingast 2005), China and India (Jin, Ligthart, and Rider 2011), Sino-US (Zhao 2009)) and cross-country research would extend the sole country study approach of fiscal decentralization, and contribute to more generalizable results concerning its causes and effects.

To direct future studies on fiscal decentralization in China, we propose a research framework, as noted in Fig. 3. The accumulative evidences concerning the antecedents and consequences of fiscal decentralization in China are illuminated in the framework, and future studies could fill the gap according. The framework is

indicative, and more boxes and links could be added to make the landscape of fiscal decentralization in China more comprehensive and prosperous. Further more, the moderating and mediating effects of other variables are not depicted due to their complexity, which could be examined in the future studies.

[Insert Fig. 3 about here]

Some mixed results concerning the antecedents and consequences of fiscal decentralization in China, those with positive, negative, and/or non-significant correlations, could be re-tested to clarify the empirical findings. Some knowledge gap with no empirical studies have been done could be investigated to accumulate evidences for theoretical and empirical implications. When the framework was systematically examined and filled, we could then conclude with reliable and valid results for both theoretical and policy implications. Finally, the framework could also be used in other countries and cross-country studies, due to the coexistence of contextualizable and generalizable nature of fiscal decentralization and its antecedents and consequences.

## **8. CONCLUSION**

Understanding the antecedents and consequences of fiscal decentralization is pivotal for the next steps of fiscal reform, and comprehensive review of the literature and evidences accumulated in the field is crucial for healthy development of the field. As a typical transition economy with rapid and extensive devolution reforms, China is the ideal context to examine the causes, processes, and effects of fiscal decentralization, attracting numerous academic endeavors both domestic and abroad. However, the literature has not been fully reviewed and the evidences on fiscal decentralization are still mixed and inconclusive.

This paper aims to comprehensively review the latest advancement in the area of fiscal decentralization in China over the past decades. The processes, characteristics, and measurements of fiscal decentralization, as well as its antecedents and consequences are systematically reviewed and synthesized. The knowledge gap and avenues for future research are discussed, aiming to make the China fiscal decentralization knowledge contributive, accumulative, and sustainable. We believe our review contributes to the academic prosperity and development of fiscal decentralization in China.

Although we try our best to comprehensively collect and review the literature on China fiscal decentralization, we acknowledge the limitations of our review. Due to the diverse nature of studies and differentiating frameworks and design, our review could only be qualitative. When sufficient evidences are accumulated, systematical review and meta-analysis (Yeung 2009; Feld and Schnellenbach 2011) could be done to gauge the linkage between fiscal decentralization and its antecedents and consequences, which will make the knowledge on China fiscal decentralization be more comparable and valuable.

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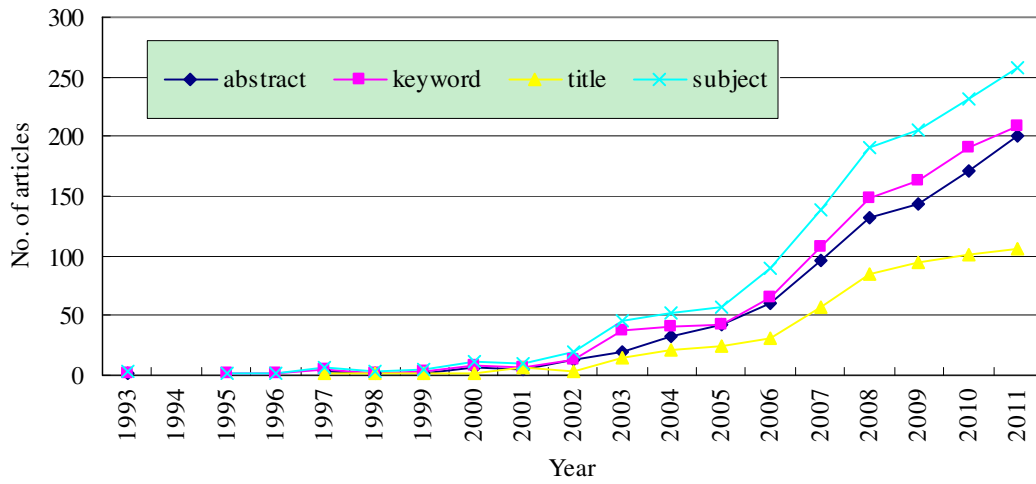
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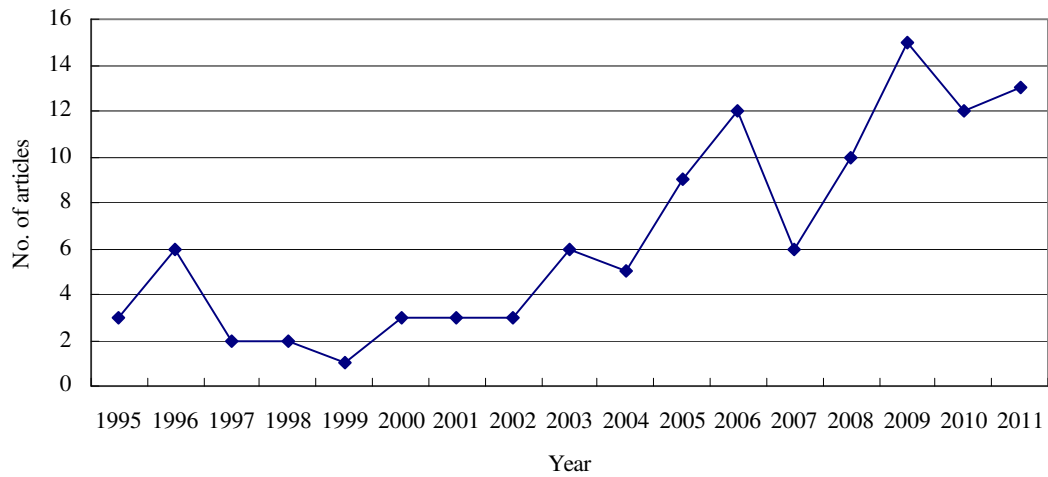
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**FIG. 1.** The Number of Journal Articles on Fiscal Decentralization in China in Chinese Journals (1993-2011)



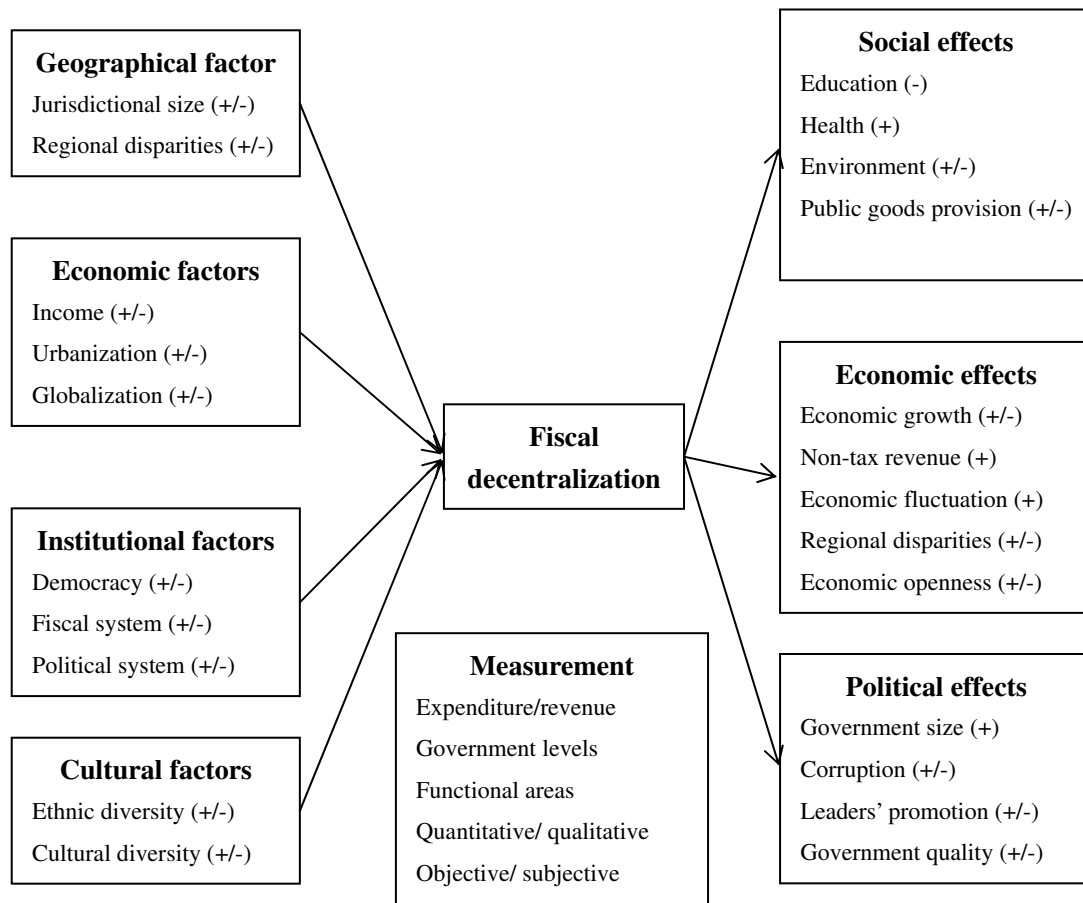
Note: The numbers of academic journal articles on fiscal decentralization in China is generated by the accumulative numbers of articles published each year, which is available at the CNKI China Academic Journal Network Publishing Database (CAJD) Website: <http://trend.cnki.net/index.php> (accessed on 2012-01-29).

**FIG. 2.** The Number of Journal Articles on Fiscal Decentralization in China in the International Academic Community (1995-2011)



Note: The numbers of academic journal articles on fiscal decentralization in China is generated by the accumulative numbers of articles published each year, which is available at the Thomson Reuters Web of Knowledge platform Website: <http://apps.isiknowledge.com/> (accessed on 2012-02-24).

**FIG. 3.** The Conceptual Framework of Fiscal Decentralization in China



Note: +, -, and +/- denote the positive, negative, and mixed relationships between variables, respectively.