ARTICLE IN PRESS

CHIECO-00642; No of Pages 16

China Economic Review xxx (2013) xxx–xxx

Contents lists available at SciVerse ScienceDirect

China Economic Review

Rising Chinese regional income inequality: The role of fiscal decentralization

Yang SONG *

School of Economics, Renmin University of China, Beijing 100872, China

ARTICLE INFO

Article history:
Received 16 August 2011
Received in revised form 5 February 2013
Accepted 12 February 2013
Available online xxxx

JEL classification:
E62
O15
O23
H71q7

Keywords:
Fiscal decentralization
Regional income inequality
Tax sharing reform
China

ABSTRACT

This article examines the quantitative effects of the Chinese fiscal system on the increasing regional income inequality in China, from 1978 to 2007. Fiscal decentralization is a multifaceted concept not likely to be captured by a single measure. This paper investigates the evolution of three aspects of fiscal decentralization including spending decentralization, revenue decentralization, and autonomy power, and tests the effects of each aspect on the regional income inequality in China in the past thirty years. Several critical findings were obtained through econometric analysis. The fiscal decentralization on spending side in China has contributed to rising income inequality over the last three decades. On the revenue side, the fiscal system became more decentralized from mid-1980s to 1994, and re-centralized after the 1994 tax sharing reform. The econometric analysis shows that the increase in revenue share of local governments from mid-1980s to 1994 indeed increased regional inequality, while the revenue re-centralization in 1994 only had a modest effect on reducing regional inequality. In terms of autonomy power measured by how public spending at local level of government is maintained by its own revenue, the degree of fiscal decentralization decreased since mid-1980s, and experienced a sharp reduction in 1994 due to the tax sharing reform. The autonomy power has mixed effects on regional inequality in the two periods, before and after the 1994 reform, depending on the targeting of fiscal transfers and the incentives of local governments. As it turns out, fiscal decentralization may not be automatically equalizing or anti-equalizing, whereas how fiscal decentralization is promoted is important for how it impacts regional inequality.

1. Introduction

China has experienced unprecedented economic growth during the past three decades of market-oriented reforms. Per capita real income has more than quadrupled since 1978. This growth has fueled a remarkable decline in the poverty rate, from 64% at the beginning of the reform, to 10% in 2004 (Dollar, 2007). However, the economic well-being of the people in a country is not only determined by the poverty rate and income per capita, it is also influenced by income inequality. The relationship between these factors has been established in the following abbreviated social welfare function (Lambert, 1993):

$$W = w(\mathrm{GNP},\ \mathrm{INEQ},\ \mathrm{POV}).$$

In this formula, GNP is the measure of the gross national product, INEQ is the measure of income inequality, and POV is the measure of poverty. When such functions are applied, the formula is usually based on the stipulation that social welfare increases strictly if GNP rises, INEQ falls, or POV falls.

* Tel.: +86 18810560288.
E-mail address: ys337@cornell.edu.

1043-951X/$ – see front matter © 2013 Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.chieco.2013.02.001

The existing literature demonstrates that inequality and GNP have increased markedly in China over the last few years, along with the decline in poverty (Gustafsson & Li, 1999; Khan & Riskin, 1998; Li, 2000; Meng, 2003; Yang, 1999). Thus, using the abbreviated social welfare function as the welfare evaluation criterion offers ambiguous results as to the change in the economic well-being of the Chinese people.

Myriad factors have contributed to the rising income inequality in China. According to Dollar (2007), the rise in income inequality is the natural result of the market forces that have generated strong growth; however, to some extent it is "artificial," in the sense that inequality may have been exacerbated rather than mitigated by a number of policy actions. Among these policies, the household registration system (hukou) is commonly considered as one that plays a large role in limiting the extent of rural–urban migration, and thus increases income inequality (Ito, 2008; Whalley & Zhang, 2007). The hukou system has likely contributed to inequality by limiting the opportunities for the relatively poor rural population to move to urban areas to secure better-paying employment. Another factor that may enlarge the nationwide income inequality is the differential return to urban and rural education, partly due to poor school quality in China's rural areas (Song, 2012).

It is often assumed that the fiscal policy should play a role in reducing income inequality. However, Dollar (2007) argued that the fiscal decentralization that gives the provincial and local governments more power and autonomy with respect to public expenditures and revenues may lead to larger income inequality. Dollar claimed that in a highly decentralized fiscal system, local governments rely primarily on local tax collection to provide basic services, such as primary education and health care. Given the large differences in initial economic structures and revenue bases between provinces, fiscal decentralization would prevent the central government from playing a redistributive and equalizing role and further enlarge regional inequality. Indeed, China's fiscal regime on the spending side is much more decentralized than the Organization for Economic Co-operation and Development (OECD) and middle-income countries. Specifically, Dollar and Hofman (2006) showed that the sub-national share of total government expenditure was 73% in China in 2003, while it was only 32% on average in OECD countries and 26% in other transition economies during the same period. China's decentralized public expenditure has resulted in inadequate resources for the local governments in many locations to fund basic social services. Consequently, this has widened the inequality within the country. Although fiscal decentralization policy may provide incentives to local government officials to develop their own economies and thus promote economic growth, differences in initial endowments tend to leave the effective tax rate regressive across Chinese provinces (Zhang, 2006).

2. Institutional background of Chinese fiscal reform

Since 1980, China has undergone the transformation of its regional development policies that have paid considerable attention to regional equality, in contrast to the current system that tends to emphasize efficiency based on comparative advantage (Yang, 1990). With this market-oriented transformation, the decentralized fiscal system started to burgeon, in that both the expenditures and revenues of local governments increased from the mid-1980s to 1993. Under this fiscal system, the central government signed contracts with the local governments and specified a fixed amount or a fixed ratio of revenue submissions. Beyond that, the local governments could keep the surplus and enjoy full discretion in spending. This financial incentive encouraged local officials to promote economic growth in their jurisdictions and maximize their local revenues (Liu, Xu, Su, & Tao, 2012).

Admittedly, the decentralized fiscal system had a positive influence on the promotion of China's economic growth (Cheung, 2008). It increased the efficiency of the use of financial resources. In particular, this mechanism of incentives helped the Chinese coastal areas to a large degree. Nonetheless, the decentralized fiscal system has also produced some detrimental distributional effects due to large differences in initial economic structures and revenue bases (Zhang, 2006). According to Wong (1997), the decentralization transferred too much authority to the local governments, thereby enlarging the inequality among provinces. The decentralized fiscal system reduced resource transfers from richer to poorer regions, increasing inequalities in public spending (Piazza & Liang, 1998). An analysis of public expenditures over 11 years shows that the allocation of resources is skewed toward richer regions; more specifically, the allocation of resources is skewed toward the fastest growing provinces in China (Hammer, 1996). Overall, fiscal decentralization provided more incentives for local governments to develop their own economies at some expense of redistribution (Fan, Kanbur, & Zhang, 2011).

As a result of the decentralized fiscal system, the share of central government revenues dropped sharply from the mid-1980s to 1993. Specifically, the central share of the government's budgetary revenues dropped from about 40% in the mid-1980s to only 22% in 1993, while the central share of expenditure decreased quickly from 55% in 1981 to 28% in 1993.

In 1994, the central government implemented a *tax sharing reform* that separated national and local tax regulations and administrations to give the central government a larger share of the total revenues. The tax sharing reform raised the central revenue share to 55.7% the following year and to about 50% since then (World Bank, 2002). However, the expenditure assignment did not recentralize accordingly. The main responsibilities for public goods and services were still concentrated within the sub-national governments. In 2009, the central government collected approximately 52.4% of the total budgetary revenue, but only accounted for 20% of the total budgetary expenditure (Huang & Chen, 2012). That is, the expenditure decentralization continued even after the 1994 fiscal reform.

Compared to the fiscal system that was in place before 1993, the tax sharing system established in 1994 divided all taxes into three categories–central, local, and shared–which provided a clearer delineation of revenues by tax types.[1] To further recentralize

[1] Central taxes: tariff, consumption tax, and so forth; local taxes: business tax, urban maintenance and construction tax, vehicle purchasing tax, agriculture and animal husbandry tax, housing property tax, urban and township land use tax, land appreciation tax, vehicle and vessel utilization tax, fixed asset investment tax, and others; shared taxes: value added tax (central 75%, local 25%), corporate and personal income tax (central 60%, local 40%), stamp tax on security exchange (central 97%, Shanghai and Shenzhen 3%).