www.elsevier.com/locate/worlddev

World Development Vol. 37, No. 2, pp. 503–512, 2009

0305-750X/$ - see front matter

doi:10.1016/j.worlddev.2008.05.010

Fiscal Decentralization in Rentier Regions: Evidence from Russia

LEV FREINKMAN
World Bank, Washington, DC, USA

and

ALEXANDER PLEKHANOV *
European Bank for Reconstruction and Development, London, UK

Summary. — The paper argues that governments in regions that rely heavily on intergovernmental transfers and natural resource rents face serious distortions in their incentive structure. As a result, such regions tend to have more fiscally centralized governments than the regional characteristics would suggest. Data on Russian regions in the late 1990s—early 2000s support this hypothesis. Advancing intra-regional fiscal decentralization in rentier regions could reduce policy distortions, and make the subnational environment more supportive of economic development.

Key words — decentralization, rent-dependence, windfall, oil producers, Russia

1. INTRODUCTION

It has been widely suggested that fiscal decentralization can be beneficial for development if subnational governments are provided with appropriate incentives to extend their tax base and foster economic growth (e.g., Qian & Weingast, 1997). However, for this mechanism to work, subnational government revenue must be sufficiently sensitive to changes in the local tax base (Plekhanov, 2004). Desai, Freinkman, and Goldberg (2005) pointed out that this condition is not met in rentier regions, that is, regions that derive a major part of their revenue from exogenously determined or externally generated rents. Such rents most commonly take the form of intergovernmental transfers and revenues from the extraction of mineral resources. Desai *et al.* (2005) showed that, in contrast to rent-free regions, expansion in fiscal autonomy in rentier regions does not result in higher rates of economic growth and development but appears to slow down reforms, investment, and growth.

This paper extends the analysis of asymmetric outcomes of fiscal decentralization in the case of rentier *versus* non-rentier regions by noting that the distortion of fiscal incentives in rentier regions can also result in excessive centralization of regional government spending. That is, the structure of regional budget expenditure in such regions is more centralized than the regional measures of demand for fiscal decentralization would suggest. The panel data on Russian regions in 1996–2001 support this hypothesis.

The analysis suggests that, while delegation of substantial fiscal autonomy to the governments of rent-dependent regions may be harmful, fiscal decentralization *within* rentier regions (i.e., expansion of fiscal autonomy of municipalities at the expense of the regional government level) may be beneficial. Firstly, it would bring the degree of intraregional fiscal decentralization in line with the implicit local demand. Secondly, in many instances, municipalities within the rentier regions are likely to be less prone to capture by elites and more exposed to interjurisdictional competition. Therefore, allocation of additional decision-making power to this tier of government may help mitigate incentive distortions in the rentier regions. As Bardhan and Mookherjee (2000, 2005) noted, the relative degree of governmental capture may be a primary factor determining the outcome of fiscal decentralization in developing countries.

The rest of the paper is structured as follows. Section 2 briefly considers fiscal incentives in resource-rich and transfer-dependent jurisdictions. Section 3 discusses the determinants of fiscal decentralization from the demand side and from the supply side. Section 4 presents an empirical study of the determinants of fiscal decentralization in Russia and shows that rent-dependence plays a significant role in explaining cross-regional variation in expenditure decentralization. Section 5 concludes.

2. FISCAL INCENTIVES IN RENTIER REGIONS

(a) *Distorted fiscal incentives*

A large literature has recently emerged on the possible adverse effects of natural resource abundance and external aid on incentives for good governance and fostering economic growth. Such adverse effects may have multiple origins.

Firstly, a high degree of unearned income concentrates political and economic power in the hands of regional elite groups, resulting in a more intense rent-seeking behavior of politicians and a possible diversion of resources from more productive uses to rentier activities. Tornell and Lane (1999) provided empirical evidence of this so-called *voracity effect*.

Secondly, revenue derived from taxation of natural resources and external aid depends little, if at all, on subnational

* The authors are grateful to Toke Aidt, Jeremy Edwards, David Hauner, Kai Kaiser, John Litwack, Marsha McGraw Olive, Stepan Titov, Daniel Treisman, and the anonymous referees for valuable comments. Final revision accepted: May 26, 2008.

economic and fiscal policies. In fact, better regional economic outcomes could even plausibly reduce the future amount of transfer income available to the recipient. If such sources of income account for a major part of government revenue, the initial benefits of investment in improvements in the business environment, infrastructure, and human capital would appear to be *relatively* small, undermining government's incentives to pursue such policies. Olson (1993) and McGuire and Olson (1996) analyzed these incentive effects in the historical context of stationary and roving bandits.

Thirdly, as Dalmazzo and de Blasio (2003) noted, reforms leading to a more broadly based growth may reduce the elite's ability to appropriate rents, including external aid. This drives up the opportunity costs of growth-oriented policies, in many cases making reforms prohibitively costly.

Against the background of numerous theoretical and empirical studies of resource-rich and aid-dependent countries, little attention has been devoted to the rentier regions within larger decentralized economies. At the same time, gap-filling federal transfers to subnational governments are in many ways analogous to external aid to poor countries, and the arguments about the adverse impact of natural resource abundance on incentives for good governance and reform remain valid for particular resource-rich regions within decentralized economies as well.

Moreover, since factors of production, primarily capital, are usually sufficiently mobile across jurisdictional borders within a single country, regions are likely to compete with each other to attract mobile factors of production (Wilson, 1986; Zodrow & Mieszkowski, 1986). In general, such interregional competition may to a large extent discipline regional governments even if they have a distorted incentive structure (Edwards & Keen, 1996). However, since natural resources are intrinsically immobile, and gap-filling federal aid could be easily reduced as a consequence of inflows of private capital, interregional competition may have little, if any, disciplining effect on the governments of the rentier regions.

(b) *Asymmetrical federalism*

Taking these phenomena into account, Desai *et al.* (2005) noted that the marginal effect of higher regional fiscal autonomy on growth and development does not need to be uniform across different regions within a decentralized economy. Using the average rate of tax revenue retention by a region as a proxy for the degree of fiscal autonomy, Desai *et al.* (2005) showed that the marginal effect of fiscal autonomy on economic growth and regional authorities' propensity to reform is lower in rentier regions, and may even turn negative when the reliance on rent and external aid becomes particularly heavy.

As a solution to this problem, Desai *et al.* (2005) suggested an asymmetrical federalism model, implying centralization of revenue assignments and expenditure responsibilities of rentier regions at the federal level.

While selective—*asymmetrical*—fiscal centralization may be beneficial to a certain extent, its potential scope is constrained by the limited ability of the central government to engage in micro-level management at the subnational level. A combination of imperfect information available to the central authorities (both about the demand for regional and municipal projects and about their cost) and the lack of voter accountability of centrally appointed bureaucrats may substantially increase the costs of external management of regional economies.

These considerations call for an alternative—complementary—strategy to address the problem of distorted incentives in the rentier regions, which may come in the form of encouraging *intraregional* fiscal decentralization, that is, devolution of funds and responsibilities from the governments of rentier regions toward municipalities. For reasons discussed below, the same factors that may lead to the poor development performance of the rentier regions are also likely to result in a lower degree of fiscal decentralization (measured by the share of municipal government spending in consolidated regional government expenditure) compared with the implicit local demand for fiscal decentralization inferred from key regional characteristics. Under these circumstances, further decentralization of spending may yield direct welfare gains as well as mitigate some incentive distortions induced by heavy reliance on rent income.

3. DETERMINANTS OF FISCAL DECENTRALIZATION

(a) *Demand-side factors*

The government of a region in a federation typically consists of the regional government itself and one or two tiers of municipal (local) government. Factors determining the relative share of spending of each tier of government can be divided into demand-side and supply-side factors. People are expected to demand a higher degree of spending decentralization if the perceived benefits of the decentralized provision of government goods and services exceed the associated costs. The factors that determine the costs and benefits of the decentralized provision of public goods and services can thus be referred to as demand-side factors. By contrast, the supply-side factors reflect the ability and readiness of the government to respond to people's demand for decentralized provision of goods and services. These factors include, for instance, government revenue structure and institutional arrangements for division of powers.

Since tax bases are typically sufficiently mobile and voter preferences are substantially heterogeneous, on efficiency grounds revenue collection generally tends to be more centralized than expenditure, with revenues being subsequently redistributed across the tiers of government by means of intergovernmental transfers. As a result, the decision about the degree of expenditure decentralization can be viewed as sufficiently isolated from revenue considerations, and, consequently, the literature has traditionally focused on a number of demand-side factors of expenditure decentralization abstracted from supply-side factors.

According to Oates (1972), local governments can have both consumer and producer advantages over the central government. The consumer advantage arises due to the fact that local provision of public goods and services can better match the diverse preferences of the local population. The producer advantage stems from asymmetric information: local governments are likely to be able to collect more precise information about the cost and benefits of local projects, and thus provide public goods in a more cost-efficient way. Since the benefits from matching heterogeneous preferences are more significant when the regional population and area are large and diverse, the degree of decentralization is expected to increase with the size of the jurisdiction (in terms of both area and population) and with the degree of ethnolinguistic fractionalization of its population.

Following Wheare (1964), decentralization is often viewed as a luxury good since, as Prud'homme (1995) argued, at low levels of income the basic needs of the population are universal and require no sophisticated preference matching, while, as in-