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Abstract

This paper surveys theoretical literature on fiscal federalism, noting several concepts useful in understanding features typical to countries in transition. We argue that some of the concepts of standard fiscal federalism do not apply to transition economies as they do elsewhere. For example, normally undesirable inter-regional competition may actually benefit the transition process by forcing regions to alter their patterns of public spending. We further suggest that practices such as in-kind transfers may carry additional benefits in a transition environment. The paper makes extensive use of observations from Russia's system of inter-governmental relations.

Keywords: fiscal federalism, transitional countries, Russia

1 Introduction

Fiscal federalism has been a subject of growing interest in recent years. Issues addressed have primarily focused on optimal division of responsibilities among various levels of government and on decentralization as means of reducing the overall size of the public sector. The literature draws considerable inspiration from attempts to design federalism into the European Union and design "Big Government" out of administration in the US and Canada. For example, the EU's "subsidiarity" principle has generated many studies on optimal allocation of redistribution responsibility.

Oddly though, the highly acute problems related to designing a division of responsibilities and rights of public sector in transition countries have received limited attention. Logically, once the most acute tasks of stabilization, liberalization and privatization have been addressed, the need for economic analysis of government functions should be apparent. International organizations such as the IMF, World Bank and OECD have led the way in generating voluminous empirical literature on fiscal federalism issues pertaining to Russia and other countries in transition. There are also numerous publications seeking to provide analysis of the constantly evolving jungle of federal relations in Russia. Yet this literature is essentially descriptive or policy oriented. Most of it skirts the crucial question of whether economic theories on fiscal federalism apply in transition environments. This paper sketches out some of the possible areas of analysis that could be covered in the quest for answers to this question.

We start with a modest review of the literature on fiscal federalism and then discuss theoretical findings that might hold some additional relevance for transition economies. Throughout this paper, Russia is used as the central example and the phenomena identified are described in light of Russian examples. Two major questions are addressed. First, we ask whether decentralization in general is beneficial for a transition economy. Second, we ask what specifics, particularly in Russia's case, might inter-governmental transfers in a transition country have, taking the division of expenditure responsibilities between various government levels for granted. Indeed, it seems that certain phenomena usually regarded as harmful (e.g. tax competition and in-kind transfers) may be, under certain circumstances, beneficial to the transition process.

For those unfamiliar with Russian intergovernmental arrangements, a brief description of some aspects of Russian fiscal federalism is offered in the second chapter. The third chapter considers the hows and whys of decentralization. On broad terms, the arguments in favour of decentralising are based on two assumptions. The first says that competition between rivalling local governments promotes efficiency. The second is based on the notion that local governments are better equipped to respond to the local preferences over public consumption. There are grounds to suppose that some of the arguments presented for or against decentralizing may even hold greater validity in a country in transition.

The fourth chapter discusses intergovernmental transfers. It is evident that if disparities between local governments are not welcomed, decentralizing public sector requires some sort of system of intergovernmental transfers. Most policymakers in advanced industrial countries understand only too well that designing a system of redistributive transfers between local governments is not an easy task. In transition countries, public policymakers face further obstacles that include asymmetrical and costly information, corruption and commitment problems. Thus, the latter part of the chapter describes elements of second-best public economics such as in-kind transfers and earmarking of public funds. In particular, an attempt is made to discuss their relevance for Russian federalism. Chapter five provides a short summary and conclusions.

2 Russian fiscal federalism

There is a wide body of research focusing on the problems and prospects of Russian fiscal federal arrangements. The seminal studies by Wallich (ed.) 1994 and Bahl – Wallich 1995 provide an excellent overview of these issues. Here, however, we only seek to note peculiarities that will likely persist for some time to come in influencing these institutional arrangements. Technically, Russia is a federation consisting of three levels. Here, we concentrate mainly on the two top levels: i.e. the federal (central) and regional levels. This is not meant to suggest that the local level is an unimportant element in Russian fiscal federalism. Leaving out the local level in this paper is made for the sake of simplicity only, and we believe that the results obtained would not change even if the local level was added.

Five caveats must be mentioned before Russia can be used as an example for wider theorizing. First, the 89 subjects of federation[1] are by no means a homogeneous bunch, so no average Russian region exists. Second, Russia is still a centralized state in many respects; its regions have few means to influence the amount of their budget revenues. Third, especially at the regional level, constantly changing regulations lead to very specific business environments. Fourth, the extensive use of non-monetary means of tax payment has repercussions, particularly on regional government behaviour. Finally, certain aspects of intergovernmental transfers are peculiar to Russia alone.

2.1 Peculiarities of Russian intergovernmental fiscal relations

Under the 1993 Constitution, Russia is a federation consisting of 89 equal subjects. Despite this officially recognized equality, however, these 89 regions comprise an odd collection of various administrative units. They differ greatly in terms of size, population, geography and natural resources. They cover 11 time zones and living conditions vary greatly. Russian soil contains huge reserves of precious natural resources including oil, gas, diamonds, platinum and gold, but these resources are extremely unevenly distributed across regions. To give just one example, two autonomous *okrugs* in the Urals account for 80% of all Russia's oil and gas production. The economic structure inherited from the socialist period still determines regional development to a great extent. Regions with heavy concentration of military good production or light industry are the ones most hit by transition. Under such circumstances, it should be no surprise that just ten regions account for nearly half of Russia's GDP. Regional leaders have great influence on the political orientation of their respective region, and indeed, also political differences across regions are remarkable.

Decentralization is a relatively new phenomenon in Russia. The Soviet Union was possibly the most centralised state in the modern world and it is somewhat unclear how much power its inheritor is willing to delegate to the lower-level governments. One consequence is that there still exist considerable room for negotiations and lobbying about the division of powers. As of July 1998, 46 regions had made power-sharing agreements with the federal centre. These agreements define the division of power between the two authorities, with a remarkable share of expenditure responsibilities assigned to the regional level, and most revenue raising powers left in federal hands.[2] All major taxes and tax rates are defined by federal legislation and neither regional nor local authorities are allowed to introduce their own additional taxes (Barisitz 1998). The majority of regional budget revenues come from federal taxes that are shared according to revenue sharing arrangements laid down in federal budget laws.

While much at odds with federal law on basic principles on taxation laid down in 1991, the overall amount of taxes in Russia has risen dramatically every year since. Regional level administrative regulations and orders on taxation change constantly. These often unpredictable changes in the business environment are

[1] Thereafter referred to as regions.

[2] First this kind of agreements very signed with separatist regions like Chechnya, Tatarstan and Baskortostan, but later on Yeltsin declared that every region should negotiate their agreement with Kremlin.

characteristic for Russia and undoubtedly makes it more difficult to launch new legitimate business activities. There are two possible reasons for the continuous alteration of the rules in Russia's legislative jungle. The first claims that bureaucrats seek to maximize their own welfare, so they need freedom to interpret legal norms as means to increase their possibilities for collecting bribes. Certainly, relations are important in Russia – not only in the handling of intergovernmental matters. A less-cynical argument says that most governments live from hand-to-mouth, so they simply try to grab revenues wherever possible. To ensure this, regulations are interpreted so that maximum tax revenues can be collected. This reasoning might have relevance especially in explaining federal government's actions.

It has been estimated that currently less than 40% of all payments in the industry are made in cash. The remaining 60% involve barter or IOUs. A natural consequence is that also a substantial share of budget revenue, collected mainly from large enterprises, is in non-cash form. In 1996, various money surrogates accounted for 50% of consolidated regional governments' tax revenue. (Lainela 1997.) Tax receipts collected in timber or toilet paper are not easily transferred to salaries or electricity. It is probable that in-kind tax receipts may seriously alter public expenditure pattern. A regional government may, for example, be forced to spend on road repairs because that is the only tax payment government is likely to get from an enterprise. Wide use of money surrogates may also increase tensions between regional and federal governments. Regional governments may be better positioned to use in-kind tax receipts and payments in regional IOUs. Thus, it might be in regions' interest to sustain system of non-cash payments, thereby reducing federal government's ability to use the taxes collected in the region.

2.2 The Fund for Financial Support of the Regions and other forms of transfers

Total federal transfers to regions doubled from 1992 to 1994, when they reached 3.6% of GDP. The transfers were dramatically cut in the following year, so that during 1996–1997 total transfers were at a level close to 2% of GDP. (Barisitz 1998, 6) The share of federal transfers in regional budget revenues in year 1996 was around 12% (Russian Economic Trends 1997.3, 23). On average, about half of total transfers have been made through a special fund aimed at inter-regional redistribution (Fund for Financial Support of the Regions, FFSR) while the rest consists of mutual settlements, grants, subventions and budget loans. These include grants to Moscow City, subsidies for Russian North and Far East and special programmes such as "Children of North" (*deti severa*). The federal government has attempted to channel more transfers via the fund, and in the 1998 budget law expenditures on FFSR make approximately 80% of the RUB 52 billion budgeted as "financial support for other levels."

The FFSR was established in 1994 as an attempt to increase the transparency and fairness of the system of inter-governmental transfers. Initially, 22% of federal VAT revenues were earmarked to the fund. Under the 1998 budget law, 14% of all federal budget tax revenues (excluding customs duties and revenues earmarked for other special funds) were to be allocated to the fund.[3] Transfers from this fund are calculated according to a specific formula, whereby the sum of revenues raised in the base year (usually two or three years earlier) is taken to represent the region's revenue-raising capacity. Actual expenditures in the base year are assumed to be region's expenditure needs – the amount demanded and the cost of providing local public goods. The choice of these variables is justified on grounds of simplicity and transparency, but the shortcomings are obvious. Above all, this for-

[3] This equals about 7.8% of all budgetary expenditures in 1998.

mula rewards cost inefficiencies in expenditures, and allows regions with high expenditure level to continue while penalizing regions with low expenditure levels. (Stewart 1997, 8-9.) There is clear potential for a ratchet effect, whereby a region that has cut inefficient public expenditures sees its transfers reduced, while a neighbouring region that has neglected reforms continues to enjoy large transfers.

The Russian system of intergovernmental transfers may also generate unintended side effects that are specifically harmful for the transition process. Treisman (1998) analyses data for 1992-1994 on federal redistributive transfers and concludes that regional expressions of discontent have lead to larger federal transfers. He claims that the most anti-reform and anti-federal minded regions have received larger transfers than those supporting government's reforms. There was even as increased positive relationship between anti-reform voting behaviour and amount of federal transfers received from 1992 to 1994. An interesting remark is made in a World Bank study focusing on regional government's subsidy spending.[4] There was a strong positive correlation between the level of transfers received and the amount of regional subsidies. This finding suggests that federal transfers in fact support the old status quo and offer no incentives for restructuring regional economy. Regions more dependent on federal transfers tended to spend more on subsidies. (Freinkman-Haney 1997, 19–23.)

Doubts about perverse incentives of the sharing formula are not the only reasons for criticizing the FFSR. Stewart (1997) concludes that, on the basis of data on equalizing transfers in 1992-1995,[5] distribution of transfers was basically equalizing, with per capita transfers higher to regions with greater need.[6] However, the equalizing impact has been very weak, and the transfers appeared to have been of little more than nominal assistance. McAuley (1997) uses data on total financial flows between the centre and the regions for 1995. He concludes that three-fifths of regional variances in net financial flows involve socio-economic and demographic variables describing expenditure needs. Thus, he concludes that federal redistributive transfers are influenced, if not totally determined, by social concern. However, according to one study, federal transfers in 1992 and 1994 actually exacerbated disparities (Freinkman-Haney 1997, 16-18). Also Le Houerou – Rutkowski (1996) conclude that since 1991 the system of transfers has moved from equalizing to creating greater disparities.

There are at least two possible reasons for the lack of equalizing effect. First, the low overall level of funds available for federal transfers as the share of FFSR in the consolidated budget is only about half the OECD average. In a country with huge regional differences, this probably is inadequate. The second reason is poorly designed targeting with too many recipients. When 78 of 89 regions classify as recipients of FFSR, it is difficult to concentrate transfers to any particular region.[7] Redistribution of revenues among regions or individuals can never aspire to be more than a zero sum game; for someone to win, somebody has to lose. Further, the federal government has little, if any, possibility to control the use of transfers. Transfers from FFSR are lump-sum grants that regional administrations may use as they please. No wonder then that in recent months there have been increasing discussion about making transfers conditional on region's economic reforms. The increased pressures for more efficient fiscal policy in Russia have also raised much discussion of

[4] Subsidy spending in this study includes budget subsidies allocated to regional firms and various other transfers like investment grants and subsidized loans to the enterprise sector.

[5] Stewart includes FFFS, extra VAT retentions and subventions to Moscow as equalization funds.

[6] Need variables like small own revenues per capita, high infant mortality, more children, higher wage differentials and smaller and more rural populations had positive impact on transfers.

[7] In 1998 budget law there will be 11 donor regions including Moscow city, Bashkotostan, Krasnoyarsk, Khanty-Mansi and Yamalo Nenets AO's, Lipetsk, Samara, Sverdlovsk, Tatarstan, Komi and St Petersburg.

poor accounting practices and clear cases of misallocation of federal transfers in the regions.

If transfers do not ameliorate regional differences, what then are the benefits and who are the beneficiaries of the current system? As the largest transfers have been directed to anti-reform, anti-federal regions, it may be argued that the transfer system has actually helped to keep the federation together. "... the practice of appeasing mobilised anti-centre regions was one reason why, despite separatist pressures, economic crisis, and weakened central institutions, Russia did not disintegrate in the early 1990's..." (Treisman 1998, 198).

The recent political economy literature on integration and break-up of nations may give some light on this line of reasoning. Bolton and Roland (1995) model a federation consisting of two regions A and B, which differ in their income distribution; region A having income equally distributed across citizens. Both regions may have incentives to leave the federation, because the social policy (redistribution) chosen by the median voter in the federation is not the one preferred by either region A or by region B. The benefits from breaking up (having social policy closer the one preferred regionally) have to be weighed against the political and economic costs of separation. One of the main conclusions of the paper is that fiscal accommodation reduces the likelihood of secession. In Russia's case, this model might be reinterpreted so that the federal government is the median voter who decides on the social policy and the transfers scheme to be implemented. Regions can only decide whether secede or not taken the federal policy choices. Since maintaining the federation is politically essential to the federal government, it is behaving perfectly rationally when targeting inter-governmental transfers so that the cost of separation is lowered for those most willing to secede.

3 The hows and whys of decentralization

Fiscal federalism may be defined as a system in which both revenue-raising powers and control over public expenditure are vested in various levels of government. This economic definition does not require a federal constitution to be in force. In fact, practically every modern state fits this definition. What, then, is the motivation for vesting government functions at various levels instead of at a single level responsible for all revenue-raising and consumption decisions? From an economist's point of view, there are at least two major benefits from decentralizing certain government functions. First, decentralising either revenue-raising powers or decision over public consumption or the both will promote efficiency through increased competition. The second motivation, the benefits from larger variety of outcomes, is discussed in the second section. Admittedly, these benefits are conditional on the institutional arrangements in place, so these restrictions are briefly dealt with at the end of this section.

3.1 Competition leads to optimal allocation

The seminal work on local public economies is provided by Tiebout (1956). Tiebout argued that there is a rather straightforward analogy between competitive goods markets and providing pure local public goods. He proposed that the provision of local public goods should be decentralized to allow jurisdictions compete for taxpayers. In Tiebout's model, citizens "vote with their feet" i.e. choosing the jurisdiction offering optimal mix of taxes and public goods. In commodity markets, competition leads to optimal outcomes, and identically, competition in the Tiebout world leads to optimal allocation of public goods. The mobility of citizens forces jurisdictions to behave efficiently; failing to do so would lead to depopulation. The model has been much criticized because of a large set of assumptions, not least the perfect mobility of citizens. Nevertheless, the Tiebout model in its simplest form makes a strong case for decentralizing. In his hypothetical world, competition between local governments automatically leads to optimal levels of local public goods consumption. In a centralized solution, decisionmakers have little, if any, means of defining the optimal level of public goods provision.

In Tiebout's world, local public goods are financed by local benefit taxation. Because of informational problems these or lump sum taxes may not be feasible, and public consumption has to be financed through distorting taxation, e.g. through income taxes. If factors are perfectly mobile inside a federation, decentralizing taxation powers will cause fiscal externalities. Gordon (1984) offers an excellent treatment of fiscal externalities caused by local taxation. One of the externalities he mentions may be interpreted as tax competition among local governments. Local governments engaged in tax competition hope to attract mobile factors to their jurisdiction by offering preferential tax treatment. The conventional wisdom on tax competition is that it is harmful for the participants, so that it should generally be a Pareto improvement to centralize taxation decisions. Despite the fact that tax competition (or fiscal competition in large) is usually regarded as harmful, tightened local budgets may, after all, be beneficial to the transition process for at least the two following reasons.

First, the traditional literature on tax competition assumes that local governments are led by benevolent social planners maximizing their citizens' welfare. In this setting, tax competition is clearly a source of inefficiency. It lowers the tax rates (compared to optimum) and thus lowers the local government revenues leading to a level of public consumption below the optimum. However, in a world where bureaucrats are likely to seek maximization of their own utility over that of the citizenry, this result does not necessary hold. Decentralization and inter-regional competition can be seen as a useful constraint on policy-makers as well as a necessary means of restricting growth of public sector if bureaucrats are likely to be Leviathans (Brennan – Buchanan 1980).[8] Decentralization as such has also been examined as a means of diminishing the overall size of government.[9] Judging from numerous examples of the abuse of public funds, one is tempted to believe that bureaucracy in Russia would be better described as Leviathan than as completely benevolent. This in turn may well justify some degree of decentralization of taxation powers in a country like Russia even before taking into account the pressures to diminish or at minimum refocus public consumption.

Second, even if decisionmakers seek to maximize the social welfare of their region, fiscal competition may be beneficial for restructuring local public consumption. Many models, though not all, conclude tax levels are too low in a competitive, non-cooperative equilibrium, but fiscal competition affects also the composition of public expenditure. In the presence of mobile capital, fiscal competition tend to lead to over-provision of public inputs in infrastructure and under-provision of items that directly affect consumer welfare such as social services (Keen-Marchand 1997). In an economy that would otherwise be at optimum, this clearly is an additional disadvantage of fiscal competition. In a country starting from centrally planned socialist optima, this may be a benefit.

Roland et al. (1996) studied the behaviour of China's subnational units. They note that China's regions have engaged in competition for highly mobile foreign direct investments (FDI) by providing better local infrastructure and other local public goods. There the phenomena suggested by the Keen-Marcand model is observed, i.e. fiscal competition has led to excess local infrastructure investment in the regions. However, it may have also helped local governments behave more efficiently. Roland et al (1996) conclude

[8] This result is controversial. Anderson – Den Berg 1998 find no empirical evidence of a negative relationship between fiscal decentralisation and government size.

[9] See for example Person-Tabellini 1994, Janeba-Raff 1997.

that as local authorities prefer to allocate revenues to infrastructure alluring FDI, the cost of other social projects such as bailing out loss-making local state-owned enterprises (SOEs) rises.[10] It seems that decentralization and promotion of competition between sub-national units in a transition country may help to harden the budget constraints of local SOEs. This, in turn, is highly beneficial for enterprise restructuring and the transition process as a whole.

As long as the reasoning behind this model is also valid for other social projects, the implications for Russia are extremely interesting. Several Russian regions and localities have long offered a variety of tax breaks and other benefits to attract FDI to their jurisdictions. An illuminating example is the competition arising between St Petersburg and the surrounding Leningrad *oblast*. The jurisdictions have numerous rival projects on transportation infrastructure investment,[11] and currently are in competition to see who can outdo the other in terms of tax breaks. From the traditional point of view, this does not make much sense. The EU has even launched an ECU 3 million project to foster integration between the two. However, if some competition is useful in supporting public sector restructuring, would it be better to let them compete?

3.2 Decentralization leads to a variety of solutions

If different regions of a country have different preferences over public consumption, decentralising decision-making may be a Pareto improvement. Assume, for example, that Russian regions in North Caucasus strongly prefer road construction, whereas the regions in Northern Siberia prefer housing construction. In centralized solution with unitary provision of public goods, they both would be forced to consume a median basket including an equal amount of the both "goods." If North Caucasus is allowed to use more resources on roads and less on housing (North Siberia vice versa) compared to a unitary solution, both regions would be better off and no one would be worse off. This idea is formalized in Oates' (1972) decentralization theorem. The theorem concludes that government functions should always be decentralized unless there are additional benefits from centralizing.[12]

This model suggests that local governments are better positioned than the federal government to observe differences in local preferences. As far as this intuition is valid, the local governments possess more information on demand for public consumption than the federal government. If consumption decisions are not decentralised, the federal agency may be faced with a problem of hidden information when deciding on public consumption. It is sometimes argued that people are more responsive to decisions taken by the local government in their particular region than to decisions made in the federal capital. Following this line of argumentation politicians in local governments have, in fear of local elections, stronger incentives to behave efficiently.

Decentralization may offer in a greater variety of outcomes that citizens can choose from. In a transition economy, this might offer an additional advantage if there is uncertainty about the outcome of reforms. A decentralized structure of government may allow for more flexibility and larger scope for experimentation. In a decentralised setting, reforms can be tried in one region, offering benefits of learning with relatively low reversal costs.[13] China is an illuminating example. Practically the entire reform process in China has been trialed first on a limited regional scale, and only after showing promise scaled up for implementation throughout the country. Chinese regions have also been the initiators of various reforms. In

[10] This naturally assumes that regional governments are operating under relatively hard budget constraints.

[11] The oblast has plans for 5 new ports and the city for 4 new ports, all within 100 km.

[12] This idea is very close to the subsidiarity principle adopted in the EU.

[13] About the concept of reversal cost of reforms & experimentation, see Dewatripont – Roland 1998.

some instances, the central government has been pushed to follow regional initiatives.

Regional experimentation was barely possible in Soviet Union because of the dominantly vertical structure of administration. Since 1992, however, Russia's regions have gained substantial independence. The dramatic decentralization of the administrative structures has eroded the power of central ministries, so that economic performance and economic policy differ greatly among regions. Today, examples of regional policies vary from hard-line communist Uljanovsk to the much praised pro-reform administration of Nizhny Novgorod. One is tempted to believe that when the outcomes of different reform policies will be clearly observable, some learning takes place. Then the best policy choices may be picked up and implemented in other regions. An illuminating example is offered by two ancient city-states of Russian Northwest: Novgorod and Pskov. The situation highlights how fast regions can abandon old policies, just to get into the game. In the 1996 gubernatorial elections, the two regions voted for distinctly different economic approaches. Novgorod strove to attract FDI with tax breaks and liberal administration; Pskov took a more xenophobic line by banning export of raw materials produced in the region and restricting import of produced outside the region.[14] Even so, it was simply too much for members of Pskov's business community and many public officials to idly watch the inflows of FDI next door. Taking Novgorod as the proper model for reforming their region, Pskov passed a law on investments this March that bears an uncanny resemblance to its Novgorodian counterpart.

Another recent observation is that some Russian regions have adopted far more liberal policies than those at the federal level have. An obvious example is legislation on the sale and purchase of land. Already three regions have adopted a new land code allowing land to be sold and brought freely, even though current federal legislation does not allow it. In the light of these examples decentralized structure of government may be especially beneficial for a country in transition. The federal government's role in fostering competition and innovation should not, however, be neglected.

3.3 ...but only under some restrictive assumptions.

Given the above, there seem to be remarkable advantages to be gained from decentralization. But which public sector functions are the best candidates for decentralization? According to Musgrave (1958) governments perform three main functions: they stabilize, redistribute and allocate. Based on Musgrave's principles, there is wide consensus that the stabilization and redistribution functions should be left to central government whereas the allocation function is best assigned to subnational governments. Beyond these broad principles, however, researchers highly disagree about which state functions should be decentralized.

The classical argument favouring centralizing redistribution responsibility is based on perfect mobility. Fiscal externalities created by mobile poor would make decentralized redistribution difficult, if not impossible. This proposition has been severely challenged in the recent literature.[15] Wildasin (1991) argues that decentralized redistribution is possible when the central government participates in the process with corrective transfers. In another article, he shows that, even in absence of central government transfers, decentralized redistribution is possible when regions choose to cooperate (Wildasin 1994). Taking advantage of Wildasin's Nash-equilibria framework, Pfingsten-Wagener (1997) argue that there is considerable scope for designing systems of interregional transfer mechanisms that ensure desired levels of inter-personal redistribution.

Taking its problems, one has to be slightly sceptical of complete information framework as the most suitable basis for discussion onRussia. In their recent paper, Raff-Wilson (1997) examine the optimal scheme of

[14] More discussion on differences and similarities in Novgorod and Pskov, see Solanko-Tekoniemi 1998.

[15] Good overview of decentralization and redistribution is Cremer et al. 1995.

inter-regional redistribution when central government has imperfect information on regional productivity. They conclude that decentralized redistribution is necessary for well-functioning inter-regional redistribution, and that decentralized inter-personal redistribution can yield efficient outcomes when combined with inter-regional transfer mechanisms. Thus, there is a clear case against harmonization of social policy in a heterogeneous federation. One may dispute whether Russia has a social policy, but this model seems to justify the prevailing division of responsibilities in Russia. The majority of traditional social policy instruments such as subsidizing housing and paying family allowances are a regional responsibility in Russia.

The efficiency of decentralized government is based on a large set of assumptions about economic behaviour of subnational governments and about the institutional environment where competition takes place. Economic models very often take the fulfilment of these assumptions for granted. When analysing real-world phenomena, however, it is vitally important to assure that the shortcomings of assumptions are into account. Considering the institutional framework of economic behaviour is even more important when focusing on economies in transition. Assumptions about economic behaviour can be gathered on the basis of two criteria.

1. **Optimal and sufficient sharing of revenues.** The requirement of dividing revenue-raising powers has raised the question about optimal tax base for each level of government. Taxes should be designed and assigned so that there would be as little spillover as possible caused by regional decisionmaking. The standard argument is that the central government should use tax bases that are mobile or unevenly distributed across the federation. Taxes on personal and corporate income should be centralized as well as taxes on unevenly distributed natural resources. It is widely accepted that immovable tax bases should be assigned to the local level. According to the strictest interpretation, the optimal taxes for local governments are property taxes, inheritance taxes and taxes on real estate (Oates 1972). In most, if not all, regional and local governments, own revenues are insufficient to cover expenses. In these cases, central government grants and transfers should be used to fill the fiscal gap. (Transfers are discussed further in Chapter 4.)

2. **Budgetary responsibility.** The economic criterion of hard budget constraint is applicable to subnational governments. This should be interpreted so that assuming appropriately designed sharing of revenues, local governments have to make the ends meet. This is another way of stating that decentralization will not be efficient if lower levels can trust on higher levels to finance possible deficits in all circumstances. However, a reservation should be made for unexpected local economic shocks. Regional borrowing has received a lot of attention over the last years. Some see it as a necessary means of allowing regional governments more fiscal independence. There are, however, serious concerns about possible negative effects on macroeconomic and monetary stabilization for the federation as a whole (Wildasin 1998.)

There is much doubt if Russian federalism meets the above assumptions. In Russia decentralization was carried on spontaneously, both from above and from bottom. One of the pitfalls of the system is that decentralization was never planned so that each level of government would have appropriate revenue sources. Wallich (1994) has strongly argued that the federal centre intentionally pushed expenditures down to regions in order to ease budgetary pressure in higher level. Sharing expenditure commitments was not followed by sharing of revenue raising powers. Even though Russian regions increasingly face hard budget constraints, local government has little, if any, fiscal independence.[16]

In addition to the economic criteria for optimal revenue sharing and regional budget-

[16] Zhuravskaya (1998) and Alexeev et al. (1998) give good treatment of local governments' fiscal incentives in Russia.

ary responsibility, decentralization must fulfil certain institutional criteria to be efficient. These can be added together as (1) dependency on legal framework, (2) transparency and (3) simple structure.

1. As for any other political structure, decentralization (fiscal federalism) must be based on a political decisionmaking process that reflects citizens' preferences. If those preferences change, it has to be possible to change the structure according to the altered preferences.[17] The other side of the coin is that the structure should not be changeable by the central government either unilaterally or under pressure from a few local governments. In this sense, decentralization has to be characterized by certain degree of durability and coherent legal framework.[18]

2. The rules of the game have to be unambiguous and transparent. Without properly defined ownership rights, competition rarely leads to optimal allocations. The same observation applies to decentralizing government functions. Decentralization of government functions may be justified because the local governments have better knowledge of local preferences and citizens have better possibilities to influence the local decisionmakers. If there are no clear-cut laws about which level is responsible for which functions, these benefits rarely materialize. Poorly defined, a decentralization process may even harm macroeconomic management of a federation (Ter-Minassian 1997). This line of argumentation has often been used against decentralization in transition countries.

3. The structure of decentralized administration has to as simple as possible in order to minimize administrative costs. A great amount of various administrative levels, overlapping functions and contradictory orders and instructions will seriously diminish benefits to be gained from decentralization.

Any country would have difficulties in meeting these criteria. Probably the most troublesome feature of Russian fiscal federalism is the complex structure and imperfect legal framework in which it must evolve. As Russia's Constitution, the Federation Treaties and the power-sharing agreements are partly contradictory, there is excessive room for interpretation as to which level is responsible of what. As noted, much of the discussion about transition has focused on privatization and on defining ownership and control rights clearly. In fact, defining ownership and control rights is critically important to well-functioning public sector as well. Unambiguously defined taxation powers and their clear allocation at certain levels of administration are critical for economic performance.

In comparing China and Russia Berkowitz – Wei Li (1997) conclude that when tax rights are clearly defined, FDI and local tax collections are higher. "The performance difference of the Chinese and Russian economic reforms is striking and is in need of an explanation....the definition of government tax rights is an important reason for the performance difference." (ibid., 21) Another explanation of the difference may be the dramatic and fast disorganization of bargaining between suppliers and buyers in Russia. After the collapse of the USSR, formal command lines were distorted without any alternative framework to replace them.[19]

Summing up what has been said above, decentralizing some of the responsibilities of public sector may be more beneficial than has usually been pointed out for an economy in transition. This, however, presupposes that the institutional arrangements defining the division of powers are clear and durable. In a second-best world of incomplete information and possibly selfish decisionmakers, interaction be-

[17] Stiglitz (1988, 390 – 401) uses similar criteria for defining a good tax system.

[18] Montinola et al (1995) see 'institutionalised degree of durability' as one prerequisite of market-preserving federalism.

[19] More about disorganization explaining output fall in transition, see Blanchard – Kremer 1997.

tween central and regional levels of government becomes even more complex.

4 Intergovernmental transfers and inter-regional redistribution

Designing a perfect division of powers between federal and regional governments so that no inter-governmental transfers would be needed is scarcely possible. In all counties, there are external effects, inequalities in initial resources or sudden catastrophes that call for transfers from one level of the public sector to another or from some regions to others. Implementing these transfers is, however, not an easy task. Transfer schemes that would otherwise be advisable may prove unfeasible due to informational problems or political resistance. First, the various purposes of inter-governmental transfers are discussed. The second section of this chapter contains remarks on the theory of the second-best world.

4.1 Rationales for intergovernmental transfers

Transfers between different governmental units both horizontally and vertically may be justified as efficiency- or equity-enhancing. In broad terms, intergovernmental transfers can be grouped into three purposes.[20]

- Transfers should encourage or discourage expenditure on particular merit goods or goods that have (negative) positive spill-over (external effects) to other regions.
- If one level of government collects more revenues than it has expenditure responsibilities, transfers have to be used in order to fill the fiscal gap elsewhere.
- According to the principle of horizontal equity, people in equal positions should be treated equally. This indicates that poorer regions should be subsidized to be able to provide some predetermined level of public goods and services at uniform price. (Musgrave 1958, Oates 1972.)

A rationally behaving regional government takes into account only the benefits (disadvantages) accruing to its own territory when making decisions about spending and production. Without external effects, this would indeed lead to efficient outcomes, but many of the decisions made in one region do influence living conditions in other regions as well. Classic examples of negative externalities are air and water pollution; infrastructure projects such as inter-regional highways, large ports or higher education institutions may have considerable positive impact on economies of surrounding regions. Omitting these external effects may lead to over- or under-production of some public goods.[21]

In theory, regions could solve the problem of externalities through multilateral agreements. However, in a federation as large as Russia, regional co-operation would certainly be constrained by administrative as well as incentive problems. To induce regions to behave efficiently from the federation point of view, the central government should offer price subsidies (or negative taxes) to regions. According to the Pigou tradition, these subsidies should be set so that the total cost of any decision to an individual region equals the real social costs of that move. A Pigou-type price subsidy is proportional to regions's expenditures on a given item. The problem, therefore, is how to estimate the actual size and value of externalities since, to be efficiency-enhancing, the subsidy should exactly equal the value of the externality in question. (Wildasin 1984, 124.) Estimating the true price of an externality is likely to be even more problematic in a transition country than in well-established market economies. While apparently there are no

[20] An excellent overview of central government transfers is found e.g. in Rubilfeld 1991, 634-636.

[21] Even thought the issue is not discussed here, it should be mentioned that fiscal federalism may also give rise to fiscal externalities, both horizontal (tax competition, tax exporting) and vertical (concurrent taxation). An excellent treatment on concurrent taxation is Keen 1997.

clear-cut matching grants aimed at curing the externalities problem in Russia, a number of federal extra-budgetary funds, (e.g. federal road fund) are designed to encourage regional spending on certain items such as road maintenance.

The second motivation for intergovernmental transfers contains the very essence of fiscal federalism. The very existence of multilevel government may create the mismatch between revenues and expenditures. No vertical division of expenditure responsibilities can match exactly the division of revenue raising powers. As a result, equalizing the vertical imbalance is critically important for keeping the country together and for ensuring that all government functions can be effectively carried out. Usually central governments are better positioned to administer the largest revenue streams. They take charge of collecting and allocating some of the take to lower levels. This arrangement is very often implemented as tax sharing. Lower level governments receive a fixed share of tax receipts collected by the central government. These tax-sharing arrangements are lump sum grants in nature; regional governments do receive a fixed amount of revenues irrespective of their own actions. The actual degree of centralization in a federation may be judged by the regional share in total budget expenditures or revenues. It should be kept in mind, that as long as a coherent system of filling up the fiscal gap is in place, those figures do not need to be equal.

The Russian fiscal federalism is based to a high degree on tax-sharing arrangements. Although regions and localities accounted for 50–60% in the consolidated budget revenues in 1996-1997, they have very few sources of own revenues. The Law on Basic Principles of Taxation, which came into effect in early 1992, assigned a relatively large number of taxes to regional and local level. Taxes such as inheritance or advertising taxes may be of some use as means of controlling regional economic activity, but they cannot be characterized as solid revenue sources. The lion's share of consolidated regional budget revenues comes from shared federal taxes. The centre thus sets tax rates and collects revenues from all major taxes including personal income tax and VAT. Revenues on these taxes are shared between regions and the centre according to sharing rules confirmed each year in the budget law. Despite clearly defined laws, ad hoc arrangements have been common in deciding the actual amounts transferred to regions. During 1992-1993 many regions decided unilaterally what proportion of tax revenues should be shared with the centre. As a result sharing rates varied substantially from region to region, and considerable exemptions and special tax regimes were granted to several regions. Although sharing practices seem to have improved and stabilised in recent years, the amounts transferred to the federal budget continue to differ greatly. (Popova-Tekoniemi 1998, 15-16.) According to 1998 budget law 100% of personal income tax, 25% of VAT on domestic products (excluding precious minerals), 50% of excises on alcohol and 100% of excises on many other domestic products were assigned to regional budgets.

The somewhat troublesome feature of tax sharing is in its lump sum nature. Since regions cannot directly affect the lump sum grant they receive, they have little, if any, incentive to broaden the tax base or even ensure tax collection in their respective jurisdiction. If shared taxes account for most budget revenues and if regions have few possibilities of raising their own revenues, the lack of incentives can have considerable effects on overall tax discipline. This may be, to some extent, the case in present day Russia and it may thus follow that if regions had greater more revenue raising powers, they would be more interested in ensuring efficient tax collection.

The last of the three goals for intergovernmental transfers, reducing horizontal imbalance, is probably the most demanding.[22] When the two previous tasks can be justified by efficiency grounds, this one is very much based on equity considerations. It is usually considered

[22] One might argue however, that if labour and capital were perfectly mobile across regions, market mechanism would equalise rents and wages making federal government transfers unnecessary. In practice especially mobility of labour is far from perfect due to moving costs, employment constraints, imperfect housing markets etc.

that every citizen, irrespective of place of residence, should be entitled to similar public goods. If it is the regional government that offers these public goods, then poorer regions should be subsidized so that they can provide some predetermined level of public goods and services at a uniform price. However, it is difficult to give precise answers to questions like how much resources should be redistributed among regions, what is an accurate measure of inequality among regions and what form redistributive transfers should assume. Regions classified as needing assistance are often entitled to lump-sum grants, cheap loans or various matching grants. Thus, while the Russian system of inter-regional redistribution is probably one of the least transparent and least efficient in the world, the need for inter-regional redistribution in Russia is still self-evident. Federal transfers are of vital importance to regions in most depressed areas like North Caucasus and Eastern Siberia. In 1996, transfers from FFSR comprised 50%–80% of budget revenues in nine poorest regions.[23]

An essential prerequisite for redistributing revenues from richer to poorer regions is that redistribution is seen as justified and necessary by at least the great majority of regions. The design and implementation of inter-regional redistribution is likely to be politically difficult without necessary unanimity. Implementation of a redistribution scheme is likely to be even more problematic if there is asymmetrical information between central and regional governments. In that case the central government faces the classic principal-agent problem. The rich regions, which would lose in the programme, have incentives to hide their revenues and true revenue raising capacities. The centre (principal) must find ways to persuade regions (agents) to reveal their private information. Since Russia is a vast federation with huge regional differences and reportedly poor practices in accounting and statistics, one is tempted to believe that at least some regions are able to withhold information from the centre.[24] This, in turn, calls for a cleverly designed transfer scheme that would take into account the costs of accounting and monitoring.

4.2 Towards a redistributive transfers-scheme in a transition country?

Another peculiarity of Russian transition has been the lack of unanimity on the overall goal of transition. In most CEECs, the large majority of people have shared the consensus that adopting democracy and a market economy implied abolishing the socialist system and returning to the West. It has been less clear what the politicians in Russia and the other CIS countries have as a goal. Governments and the Duma respectively have had troubles in credibly committing themselves to any coherent economic policy. Laws, presidential decrees and implementation of taxation, transfers and tax sharing have constantly changed and agreements vary from region to region. As mentioned in the second chapter, thus rapidly evolving legal jungle may be a by-product of self-interested bureaucracy – room for interpretation leaves room for corruption. During the financial crisis in 1998, it once again became clear that Russia's public sector is striving for cash. The governments have to use all possible sources of budget financing, which includes taxing away revenues whenever they come up. When the economy is living from hand to month, problems of time consistency are almost inevitable.[25] What lessons might be available if one departs from the classical assumptions of first-best public economics and allows for such real-world phenomena as cor-

[23] These are all ethnic regions; Chechnya, Ingushetia, Aginski Buriatski, Tuva, Altai, Ust-Ordinski, Buriatski, Dagestan, Kalmykia and Jewish AO (Russian Economic Trends 1997.2, 138-141).

[24] The newly elected president of Chuvashiya told in a recent interview that the only way for the republic to succeed is to 'work well, but do not show it to the centre' (Russian Regional Report, 2 July 1998).

[25] A policy is time inconsistent if it is optimal when announced before agents act, but which is no longer optimal after they have acted.

ruption, asymmetric information and commitment problems?

One result may be that, contrary to the conventional view, earmarking of public funds may be efficient. In its strictest form, earmarking is defined as a practice of assigning revenue from specific tax or taxes to specific government activity or areas of activity. This implies a benefit taxation nature of earmarked taxes at least in some cases (road fees – road maintenance). A broader definition may include cases such as the Russian FFSR where a fixed percentage of general revenue is devoted to a specific program. Earmarking is usually seen as inefficient since it limits the flexibility of budgets and reduces political control over the use of public money. But when decision-makers do not behave optimally, reduced political control could be a blessing. Earmarking gives the assurance of some minimum level of public finance will go to a certain object irrespective of political struggles, shifting majorities or corruption. (McCleary 1991.) By linking taxation with spending on a known item, earmarking may also facilitate accepting some new taxes or new expenditure. This is clearly an advantage in an environment where voters do not wholly trust the politicians to whom they delegate the taxation powers. (Brett-Keen 1997.)

The broad definition of earmarking in fact comes very close to the concept of in-kind transfers. Transfers in kind have usually been regarded as inferior to cash transfers, because in-kind transfers constrain the behaviour of their recipients. Receiving food stamps or some specified public goods instead of money may change consumption patterns and force the recipient to move to a lower indifference curve. But once again, in a second-best setting, in-kind transfers may be Pareto-improving. There is extensive literature arguing that the use of in-kind transfers may be welfare-improving where information on individuals is asymmetrical.

If the centre does not know the true wealth of the regions, any scheme of redistributive transfers has to be designed so that also the rich regions have incentives to reveal their true wealth. In their recent paper Cremer – Gahvari (1997) prove in an optimal taxation framework that in-kind transfers may enhance welfare by weakening agents' self-selection constraints. The government may set the minimum consumption constraint (minimum of in-kind transfers) in a way that mimicking low-income individual becomes less attractive to high-income individuals. Constraining the end use of transfers will also diminish possibilities for corruption as well as for misuse of the resources. In a setting where policymakers are possibly not benevolent this may offer a remarkable advantage. In Russia's case, it would support the idea of obliging regions to use federal transfers exclusively for financing well-specified programmes.

These results of second-best public economics should be very interesting for designing intergovernmental transfers. After all, in Russia ten regions out of 89 produce about 50% of GDP. The ten poorest regions rely on federal transfers for over half of their budget revenues. In other words, there is a compelling need to design a system for equalizing transfers that is, on one hand, transparent and relatively efficient, and on the other, able to tackle the problem of costly and incomplete information available to the federal government. Following Cremer–Gahvari (1997) argument, if at least a part of equalizing transfers would be in kind, richer regions might be more willing to reveal real information about their true fiscal capacity. In the long run, a well-to-do region would probably not be interested in additional transfers that could be used only to, e.g. support families living below subsistence level. This calls for a new model of intergovernmental transfers based on the tradition of optimal income taxation initiated by Mirrlees (1971) and interpreted by Stiglitz (1982). The charm of this familiar principal-agent framework is that intuitively it seems to describe current Russian reality rather well.

5 Concluding remarks

The recent explosion of literature on fiscal federalism makes this a highly preliminary attempt apply several fashionable concepts to the needs of economies in transition, especially considering that a certain degree of decentralization and loosening of fiscal control may be inevitable during Russia's transition to a market economy. Here it is noted that decentralization per se could be beneficial, under certain circumstances. Promoting competition among regions may be a welcomed restraint to a bloated public sector. Increased competition may also help regional governments to refocus their spending patterns.

As economists know little about what happens when an economy shifts from one equilibrium to another, study of decentralization schemes may provide useful knowledge. Decentralization, after all, gives greater opportunities for implementing gradual or partial reforms, since different reform approaches can be tested on a small scale in different parts of the country. One of the prerequisites for efficient decentralization is an efficient system of inter-governmental transfers. In a transition country problems of asymmetrical information are likely to be even more pressing than in 'normal' market economies. Analysis of fiscal federalism is probably more than many other fields of economic research dependent on the surrounding institutional framework. In a transition country, many institutions do not function as classical theories assume. Here, it is argued the theory of second-best public economy may offer valuable ideas for transition countries such as Russia. This aspect of transition clearly deserves greater attention and thoughtful research .

References

Alexeev, M – Kurliandskaia, G (1998): **Second Tier Fiscal Federalism. Budgetary Relations between Regional Governments and Municipalities.** Mimeo, Indiana University.

Anderson, J – Van Den Berg, H (1998): **Fiscal Decentralization and Government Size.** Internation Tax and Public Finance 5, 171 – 186.

Barisitz, S (1998): **Fiscal Federalism in Russia. Evolution, Problems and Prospects.** Paper presented at the Austrian National Bank, Vienna 14.5.1998.

Bahl, R M – Wallich, C I (1995): **Intergovernmental Fiscal Relations in the Russian Federation.** In Bird, Richard M - Ebel Robert D – Wallich, Christine I. (eds.): *Decentralization of the Socialist State.* World Bank, Washington DC.

Berkowitz, D – Wei Li (1997): **Decentralization in Transition Economies: A Tragedy of the Commons?** Unpublished paper, September 1997.

Blanchard, O – Kremer, M (1997): **Disorganization. Quarterly Journal of Economics Vol 112,** 1109-1126.

Bolton, P – Roland, R (1995): **The break up of nations: A political economy analysis.** Mimeo, ECARE.

Brennan, G – Buchanan, J M (1980): **The power to tax: Analytical foundations of a fiscal constitution.** Cambridge University Press.

Brett, C – Keen, M (1997): **Political Uncertainty and the Earmarking of Environmental Taxes.** University of Essex.

Cremer, H – Gahvari, F (1997): **In-kind transfers, self-selection and optimal tax policy.** European Economic Review 41, 97 – 114.

Cremer, H – Fourgeaud, V – Monteire, M L – Marchand, M – Pestieau, P (1995): **Mobility and Redistribution; a Survey.** Paper presented at HMC Network Meeting 26.5.1995.

Dewatripont, M – Roland, G (1998): **Transition as a process of large-scale institutional change.** In Kreps, D – Wallis, K (eds), Advances in Economic Theory, Cambridge University Press, (forthcoming).

Gordon, R H (1984): **An optimal taxation approach to fiscal federalism.** The Quarterly Journal of Economics , 567-586.

Freinkman, L – Haney, M (1997): **What Affects the Russian Regional Governments' Propensity to Subsidize?** *World Bank Policy Research Working Paper* no. 1818.

Janeba, E – Raff, H (1997): **Should the Power to Redistribute Income be (De-)Centralized?** An Example. International Tax and Public Finance 4, 453-461.

Keen, M (1997): **Vertical Tax Externalities in the Theory of Fiscal Federalism.** IMF Working Paper, December 1997.

Keen, M – Marchand, M (1997): **Fiscal competition and the pattern of public spending.** Journal of Public Economies 66, 33-53.

Lainela, S (1997): **Money surrogates and regional financial markets in Russia.** Paper presented at National Convention of the AAASS, Seattle 20.-23.11.1997

Le Houerou, P – Rutkowski, M (1996): **Federal Transfers in Russia:** Their Impact on Regional Revenues and Incomes. Comparative Economic Studies 38, 21-43.

McAuley, A (1997)**: The Determinants of Russian Federal-Regional Fiscal Relations: Equity or Political Influence?** *Europe-Asia Studies* 49, No. 3, 431- 444.

McCleary, W (1991)**: The Earmarking of Government Revenue.** A Review of Some World Bank Experience. The World Bank Research Observer 6, no.1.

Mirlees, J. A (1971): **An Exploration in the Theory of Optimal Income Taxation.** Review of Economic Studies 38, 135-208.

Montinola, G – Yingyi Qian – Weingast, B (1995): **Federalism, Chinese style – the Political Basis for Economic Success in China.** World Politics 48, Oct. 1995, 50-81.

Musgrave, R A (1958): **Multi-Level Finance.** Includes *The Theory of Public Finance* (McGraw-Hill, New York 1958) pp. 132-133, 179-183. In *Public Finance in a Democratic Society. Volume II: Fiscal Doctrine, Growth and Institutions*. Wheatsheaf Books Ltd, Oxford.

Oates, W E (1972): **Fiscal Federalism**. Harcourt Brace Jovanovich, INC.

Persson, T – Tabellini, G (1994): **Does Centralization Increase the Size of Government?** European Economic Review 38, 765-773.

Pfingsten, A – Wagener, A (1997): **Centralized vs. Decentralized Redistribution:** A Case for Interregional Transfer Mechanisms. International Tax and Public Finance 4, 429-451.

Popova, T– Tekoniemi, M (1998): **Challenges to Reforming Russia's Tax System.** Review of Economies in Transition 1/1998.

Raff, H – Wilson, J D (1997): **Income Redistribution with Well-Informed Local Governments.** International Tax and Public Finance 4, 407-427.

Roland, G– Yingyi Quian (1996): **The soft budget constraint in China.** Japan and the World Economy 8, 207 – 223.

Rubinfeld, D (1991): **The Economics of the Local Public Sector.** In Auerbach, A – Feldstein, M (eds): Handbook of Public Economics, Volume 2. Elsevier Science Publishers, Amsterdam.

Russian Economic Trends 1997, Russian European Centre for Economic Policy, Moscow.

Russian Regional Report, Institute for EastWest Studies.

Stewart, K (1997): **Are Intergovernmental Transfers in Russia Equalizing?** *Innocenti Occasional Papers*, Economic and Social Policy Series no. 59. UNICEF, Florence.

Stiglitz, J.E. (1982): **Self-Selection and Pareto Efficient Taxation.** Journal of Public Economies 17, 213-240.

Stiglitz, J E (1988): **Economics of the Public Sector.** W.W. Norton & Company.

Solanko, L – Tekoniemi, M (1998): **Novgorod ja Pihkova - esimerkkejä politiikan vaikutuksesta talouteen.** Mimeo, BOFIT.

Ter-Minassian, T (1997): **Decentralization and Macroeconomic Management.** IMF Working Paper.

Tiebout, C (1956): **A Pure Theory of Local Expenditures.** Journal of Political Economy 64, 416-424.

Treisman, D(1998): **Fiscal Redistribution in a Fragile Federation:** Moscow and the Regions in 1994. *British Journal of Political Science* 28, Part1, 185 - 200.

Wallich, C I (ed.): *Russia and the Challenge of Fiscal Federalism.* World Bank, Washington DC.

Wildasin, D. E (1984): **Urban Public Finance.** Harwood academic publishers, London.

Wildasin, D. E (1991): **Income Redistribution in a Common Labor Market.** American Economic Review 81, 757-774.

Wildasin, D. E (1994): **Income Redistribution and migration.** Canadian Journal of Economics 27, 637-656.

Wildasin, D. E (1998): **Fiscal Aspects of Evolving Federations – Issues for Policy and Research.** World Bank Discussion Paper 1884.

Zhuravskaya, E (1998): **Incentives to Provide Local Public Goods:** Fiscal Federalism – Russian Style. RECEP Working Paper No. 1.

Treisman, Del (1996): **The Politics of Intergovernmental Transfers in Post-Soviet Russia.** *British Journal of Political Science*, Vol 26, 299 – 335.

Treisman, Daniel (1997): **Russia's Ethnic Revival.** The Separatist Activism of Regional Leaders in a Postcommunict Order. World Politics, Vol 49, 212 – 249.

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