Regional Economy

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Political and economic factors of economic growth in Russian regions[1]

Introduction

Securing the conditions for a stable economic growth is the primary aim of the second phase of post-communist transformation, the phase which follows the solution of problems of macroeconomic stabilization. Nevertheless, the macroeconomic stability is just one of the preconditions of growth. Economic growth is a result of a complex combination of factors, and what is more, these factors are extremely specific in any given country and at any given time.

In general, economic growth is influenced by such groups of factors as the presence of natural resources, the adequacy of economic policy and the general political situation in the country. The object of this work is to investigate the role of political factors in securing economic growth in a post-communist country.

Political preconditions together with the macroeconomic stability form the general basis of economic growth. It is especially important in a country struggling to overcome its totalitarian past characterized by an absence of any basic institutions of a market economy and first of all the institution of private property. Without ensuring the personal security and the stability of the "rules of the game", without the guarantee of property rights (not only the declared but also the practically realized ones), no economic policy as such can ever attain its ends. At the same time, the role of natural resources is in general rather negative in the case of countries classified as the "emerging markets" (Gylfason and Zoega 2001)[2].

But it is for the countries with a developing market economy that the role of political factors is decisive. The most considerable risks for investors are concentrated in this very sphere, and it is precisely these risks that are most resistant to the universally adopted methods of analysis. What is absolutely natural for the countries with stable traditions (and with a stable credit history which includes not only a financial but also a political creditability) and is taken for granted by the investors remains a major risk for the "new market economies". But it is clear that these very risks (the risks of losing the whole of the property, dangers to life, health etc.) are primary in respect to the risks regarding the market situation (fluctuations in demand and factor prices etc).

The fact that political risks are dominant is proved by the very practice of investment activity taking place in the world after the collapse of communism. Despite all the inconveniences of administrative barriers hampering business in the countries with developed economies, despite all the peculiarities of economic activity in such "noncommunist" systems as the People's Republic of China, these countries are much more attractive for investors than Russia with its sufficiently liberal

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[2] Geographical situation can be considered as one of the aspects of natural resources, which is especially important in Russia's case where regions significantly differ from one another by this very parameter. While analysing this factor, it is easy to notice that the Federation's subjects objectively most favourably located in terms of geography, are not necessarily most successful (Russia and the WTO).

economic environment and profit opportunities. In other words, the investment attractiveness (and, correspondingly, the growth prospects) of the countries with extremely strong state regulations (ecological, social etc) and rather exotic restrictions such as gender and race quotas, let alone the high taxes is incomparably higher than in the countries with a liberal tax system and minimum formal obstacles but with weak guarantees of personal immunity and inviolability of property.

Nevertheless, the problem as such is not confined to the importance of political factors to the development of the economy. The other aspect of this problem is the character of economic and political interrelations. What political regime or at least what political institution proves to to be important for economic development?

The answer to this question and therefore the conclusion to be expected from our work are not clear. Until now, the subject of relation between politics (democracy) and the economy (growth) has been treated from the standpoint of ideological preferences, while any more or less accurate analysis was always second in importance. It makes the problems of economic and political interrelations still more acute as regards Russia during the past fifteen years. Throughout this period there was an incessant discussion (though with various degrees of intensity) as regards the relative advantages of the democratic and authoritarian ways of forming a market economy.

In order to answer this question there exist a lot of arguments of logical and historical nature, while the corresponding polemic is still going on, and it is unlikely that it will end in the near future. We are undertaking an attempt to quantitatively analyze these problems. Being aware of all the relativity of such a quantitative analysis, we consider it both necessary and useful to try to introduce certain elements of formalization into the relations between economic development and the state of political institutions.

The subject of the present article is to reveal the interrelations between the economic and political development of contemporary Russia. Though the analysis is conducted on the basis of regional statistical data (the reasons are given in the second section of the article), the authors assume that the conclusions made are also applicable to the situation on the national scale. We have set ourselves to assess the importance of political factors of economic growth and if possible to single out a set of the most significant of them. In the present article, political factors are understood as those various forms of functioning of the institutional environment in which business does exist that are external as regards the latter legislation, judiciary law, the degree of development of the institutions of civil society, etc (to be addressed in more detail in the third section). Proceeding from the acquired indicators, the fourth section of this paper presents an assessment of quantitative relationships between political factors and economic development.

Methodological problems

The researcher of economic and political interrelations in general and those in a post-communist country in particular will inevitably face two rather difficult methodological problems. First, a limited nature of the time horizon, that is of the information available for making any more or less justified quantitative models. Second, a principal difficulty of any quantitative assessment of political processes.

In order to solve the first problem, we will shift our analysis from the national level to a regional one [3]. It is true that the post-communist history of Russia is limited to ten years only, and any economic growth has been registered just in four of them. Such a volume of information is not sufficient for revealing any quantitative regularities. Nevertheless, Russia is a federal state where the regions, its constituent parts, are invested with considerable authority. The regional authorities have an opportunity to create significantly different conditions for economic activity within the territory under their jurisdiction. The diversity of regional practice makes the problem of assessing the influence exerted by political and legal peculiarities on the economic development quite sensible. Thus, theoretically we have 89 models of economic policy with different effects on economic growth. And this provides a significant basis for a quantitative analysis.

Naturally, the result of such an analysis must not be seen as absolute. They are rather abstract because apart from the political practice on the part of the authorities of a given region there exists a number of objective aspects also exerting a significant influence on the development of the economic situation. It is not always possible to say definitely in which case some positive (or negative) economic dynamics is a result of development of the political situation on the federal level in combination with certain objective (e.g., technical and economic) specific features of a given region irrespective of the political practice of its authorities. But as far as we are going not to investigate the specific factors of the policy pursued by each individual subject of the Federation, but to reveal the stable regularities of the influence exerted by the political process on the economy, such an abstraction can be considered justifiable.

We should also make a reservation that our analysis covers not all the 89 subjects of the Russian Federation. For the obvious reasons, the analysis does not include Chechnia, Ingushetiia and the autonomous okrugs, because there is no set of data on them that could be used in our analysis (the data of economic statistics and those of political and legal statistics).

The second methodological problem is the difficulty of any quantitative assessment of the political situation in the country. It cannot be said, that the number of indicators capable to characterize the political processes is too small. Quite the reverse - they are too numerous, but many of them characterize very narrow spheres of political and social life, and it must be added that they could become an object of a very wide interpretation. Many of the potential indicators are not sufficiently comparable with each other on the regional scale. And finally, in contrast to the economic statistics, political indicators do not represent an object of any more or less centralized accounting, and their acquisition requires cooperation with various state or public organizations which develop their own databases. This also does not conduce to any better correlarion of these data.

The difficulty of acquisition of the necessary information often forces the researchers to conduct their analysis on the basis of expert opinions characterizing the situation in a certain region (or even in a certain country)[4]. Their advantages include

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[3] This approach was repeatedly used by us in order to study the interrelations between the political and economic processes in post-communist Russia (Gambarian, Mau 1997).

[4] Most prominent among the investigations of this kind are the works of the Heritage Foundation and the GATO Institute devoted to the construction of indices of economic freedom (see, e.g., Gwartney et al. 1996; O'Driscoll et al. 2000, as well as various methodologies of the assessment of investment risks.

the depth of specification of legal norms and political processes as well as of the practice of actual functioning of certain institutions, while the very fact of existence and application of such methodologies during a sufficiently long period of time also increases the value of these investigations. Nevertheless, despite the unquestionable value of such works, their narrowness caused by the subjectivity of the assessments is absolutely obvious.

Focusing on non-formal (non-formalized) expert opinions chosen to form a basis of comparative ranking and a further analysis frequently leads to grave mistakes. And this is true of the opinions presented by expert analysts and of those presented by the entrepreneurs deeply involved in business and therefore seemingly capable of producing some realistic assessments of the existing political (economic and political) course.[5] It is also natural that all these assessments are given by the experts who do not have equal knowledge of all the analysed objects (countries, regions), and therefore there emerge considerable doubts concerning the compatibility of the acquired data. It is clear that such errors are much less typical of the countries with stable and developed socio-economic systems than of the economies in the state of development or in transition. Thus we are again facing the necessity to elaborate such approaches to the analysis of these countries that would contain a more strict and more formal assessment of the political and legal situation.

Thus, our work is based on the available indicators capable of being measured or assessed and which are also more or less compatible throughout the regions of the Russian Federation. Or, to be more exact, we are going to use the two following types of indicators: those which acquire certain absolute values and those which represent logical variables[6].

The literature of the past ten years has put forward a number of proposals concerning a formalized quantitative assessment of the functioning of the institutions influencing the economic development of any country (including the economies in

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[5] For example, according to the index of economic freedom for the year 2000 (.Index of Economic Freedom 2000, Gerald P. O'Driscoll, Jr., Kim R. Holmes & Melanie Kirkpatrick, the Heritage Foundation, The Wall Street Journal, 2000), Burma has a moderate index in the category "legal order" despite the fact that even the elementary legal norms necessary for a stable conduct of affairs - personal immunity, the right for judicial protection and even the very right for life - are not guaranteed in this country, while the private-property right is considerably restricted by the arbitrary rule of the left-leaning and radical military government). It is also doubtful that according to the assessment of the European Bank for Reconstruction and Development based on standardized surveys of entepreneurs' opinions, Uzbekistan in a number of cases (Transition Report 1999. Ten Tears of Transition, EBRD, 1999 pp.116-117) has better results in the category "Quality of Governance" which includes the assessment of obstacles to business and the assessment of legal order, crime and macroeconomic indicators, than Poland, Czechia, Lithuania and Slovakia (the afore-said does not reduce the value of such surveys but makes it necessary to interpret their results more cautiously).

On the other hand, if the term "legal order" implies a low level of street crime and especially the level of officially registered street crime with a correction for the information backdrop (reflection, exaggeration or underestimation of certain facts of organized or street crime), the level of legal order in authoritarian states can be assessed as sufficiently high. Nevertheless, such an approach while being understandable (especially with regard to subjective opinions expressed by the people who are under the pressure of collective myths, prejudices or simply under threat of punishment for excessive frankness) still cannot be considered not only accurate but even more or less acceptable in assessing the situation in the majority of countries.

[6] Logical variables assume three values in our work; "1" - given the existence of a certain phenomenon (institution)) "-1" - in its absence or in the presence of serious reasons to equate the absence of the corresponding information with the absence of the institution as such; "0" - when it is impossible to verify the presence or absence of a given institution in a given region.

transition). Thus, the authors of "The Index of Economic Freedom" use the indices of the relation between the state expenditures and revenues on the one hand and the GDP on the other (O'Driscoll et al. 2000), Many researchers use the indicator of tax burden as an indicator of the degree of statisation of the economy. According to some authors, this role can be acquired by the share of cash in M2 (money supply) acting as an indicator of the ability of the state to guarantee the implementation of contracts (Clague et al.)[7]. It is important that all these indicators have a synthetic character because they include a number of non-institutional components which can also reflect political processes.

Nevertheless, most of such works deal with the formation of economic institutions, while out object is to investigate economic and political interactions. Therefore, from the standpoint of our analysis, most interesting is the work devoted at first sight to the analysis of a rather local problems: the factors influencing the actions of the authorities aimed at coping with crop failures in various states of India. In the model constructed by T. Bessley and R. Burgess, the role of the explained variable is played by the expenditures incurred by the budgets of the states in order to ease the consequences of crop failures, and the role of the explanatory variable - by various indicators including the amount of circulation of independent newspapers (Besley, Burgess).

At the same time, our study has a more serious objective - to analyse the political factors of a rather complex phenomenon, that is economic growth which depends on a wide variety of phenomena of social life. We still have to find the indicators most minutely characterizing the political (or, better say, political-and-legal) processes taking place in this country and its regions. And undoubtedly, there will be a certain multitude of such indicators. There is no point in trying to find a single universal indicator characterizing the whole set of political processes. Despite the fact that such attempts have been made[8], the importance of the acquired indicators turns out to be very limited in practical terms - either in time or in space. For certain countries and for certain periods of the economic-and-political process, some synthetic political indicators can be found, but as soon as the political situation in a country changes, they can no longer play this role[9]. Therefore, it would be expedient

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[7] The share of cash in M2, according to the supporters of this indicator, reflects the share of self-executing transactions (e.g., purchasing of goods in a shop, or a ticket in a bus), while the reverse indicator (the share of bank money) reflects the role of "contract-intensive" transactions (that is, transactions certified by a written contract, as a rule suggesting clearing settlements via the banks). It is assumed that the higher is the share of "contract-intensive" transactions, the higher is the assessment given by the transactors as regards the ability of the state to guarantee the implementation of contracts.

[8] One of the proposed synthetic indicators was the share of cash in the amount of M2 money supply suggested to play the role of an indicator of the state's ability to guarantee the implementation of contracts (see above: Clague et al.). Nevertheless, the authors have not considered this Indicator to be *universal*; in their case it rather played the role of a *synthetic* indicator.

[9] Thus, at the first stage of post-communist reforms, the index of inflation is in essence a synthetic political indicator characterizing the balance of forces as regards the major groups of socio-political interests - inflationists and antiinflationists, thus being an indicator of the state's ability to control and guarantee the stability of economic and political processes, and also an indicator of the security of property rights. It was especially true in Russia's case, where the first stage of post-communist transformation was relatively long (1992-1999), while the reverse side of the weakness of the state authorities manifested itself in the sharp increase in the influence exerted by the groups of interests on the adoption of political decisions (for more detail, see: Starodubovskaia, Mau 2001), Inflation plays a similar role in other situations of prolonged (lasting for many years) inflation, including the "weak

for us to use a number of indicators in order to conduct a quantitative analysis and to obtain a characteristic of the political situation in its relation with the degree of economic development of a certain country.[10].

A single variable cannot completely operationalize the concept it represents. It does not reflect all the meanings of the concept, and its application can produce a distorted notion of the actual interrelations. Politological concepts are multidimensional because each of them usually contains several aspects or components. It is precisely this fact that makes them "abstract" and rather resistant as regards any unambiguous interpretation. Accordingly, the criteria of definition of these concepts introduced for the purpose of a quantitative analysis must reflect their multidimensional nature.

Ambiguity and vagueness of many political indicators result in the fact that the latter frequently become internally interrelated, and therefore cannot pass the multicollinearity test. This should also be taken into consideration when developing the methods of their quantitative analysis.

Thus, the sufficiently general concepts of political (and legal) process are better to be presented as combinations of the revealed categories. Therefore, the methods of factor analysis, and namely the major components method, as we believe, are best suited to solving the problems confronting us.

The explanatory and explained variable

It is possible to single out the following political problems in principle capable of influencing economic growth. Most generally, we must consider two problems. On the one hand, it is the role of democratic institutions and the economic development of contemporary Russia. On the other hand, it is the stability of the political situation, reliability and predictability of the institutional system.

In principle, there exist quite a lot of corresponding indicators. For the purpose of analysis they can be assembled into five groups.

The first group combines the indicators characterizing personal security. Undoubtedly, this is the major problem forming the basis of any decisions on the suitability of any business activity. It is common knowledge that it is the guarantees of personal security reflected in the Habeas Corpus Act that had formed the foundation for the business environment which subsequently resulted in the beginning of the industrial revolution and converted Great Britain into one of the most highly developed powers of the world.

The problem of personal security is of the highest priority even in comparison with the problem of safety of property. In this respect, it is appropriate to cite a curious dialogue between a lawyer and a businessman which took place somewhere in Soviet Russia in the year 1921 and regarded the publication of a degree issued by the

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dictator" situation (Alesina 1992, Burdekin and Burkett 1996). Naturally, as soon as this period is over, the index of inflation can no longer play the role of a synthetic political indicator.

[10] As regards the quantitative analysis of political processes, it was demonstrated, in particular, by G.B. Mannheim and R.C.Rich. They emphasized that the mathematical means necessary for an analysis of political phenomena must be more diverse (Politologiia. Metody issledovaniia" Per. c angl., / predisl, A.K.Sokolova. - Moscow: "Ves' Mir", 1997) (Politology. Methods of Research) and more sophisticated than those which are used at the present time.

Bolshevic government as a guarantee of inviolability of bank deposits. "Will the bourgeoisie bring their money to the banks now?" - we asked one of the Russian bourgeois... And he answered: "Inviolability of deposits? And where is the inviolability of depositors? Nobody will bring" (Chlenov 1921, p. 27).

Naturally, this problem is extremely acute in the post-communist countries as well. "…There exists a road to an efficient economy which is not noticed by many. An opinion was frequently expressed that protection of personal rights desirable from the standpoint of morality is not so much a source of economic development as an obstacle on its way, being a luxury which can be afforded by prosperous countries but not the cause of their prosperity. But this opinion is erroneous. It is not by chance that it is in the prosperous countries that the institutions guaranteeing the al-embracing personal rights do exist", wrote M. Olson in the early 1990s (1994, p. 121) analyzing not yet the lessons but the prospects of post-communist transformation. It would 'be incorrect to affirm that weak guarantees of personal security represent an insurpassable obstacle for business activity. Business is capable of breaking through practically in any conditions. Nevertheless, the quality of such business and its ability to ensure a high and stable rate of legal economic growth in the contemporary world raise serious doubts.

This group is joined by a number of problems regarding the implementation of guarantees pertaining to the safety of property. Though we believe that this subject is better to be treated not as such but as a result of action of all the groups of socio-political problems which we shall address later.

The second group reflects the presence and reality of functioning of a democratic system of governance. Business wants to deal with an understandable, transparent and predictable system of decision making when the decisions would not depend on the whim of any individual ruler. Naturally, it would not be correct to assume that democracy is absolutely indispensable for economic growth; a number of examples of a feedback are also known. Nevertheless, in certain circumstances and in a certain stage of economic and cultural development of a given country, some direct influence of democratic processes on the economy can be very significant. Therefore, we should attempt to establish whether this influence is also substantial for contemporary Russia.

The category of indicators characterizing the development of democracy can be extended to cover the data on the development of institutions of civil society (including the activity of human-rights organizations), on the presence and activity of political parties and independent mass media. It is the existence of an independent civil society that represents one of the major factors providing the stability of functioning of a democratic system.

And here it becomes clear that the relation between the development of civil society and the state of affairs with civil rights does exist, and that this development is really a factor of any responsible economic policy. For example, the freedom of expression (the presence of independent mass media) is not only a major source of additional guarantees of personal immunity and private property but also one of the conditions guaranteeing the transparency of budgets and the decisions taken by the authorities as regards property, and the participation of the state in joint-stock companies, etc. [11].

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[11] In Russia, this interrelation manifested itself especially clear and convincingly during the existence of the leftist government headed by E. Primakov. The cabinet which included a

The third group relates to the problems of stability of a political system. Unlike the previous group, these indicators must reflect the stability of the existing regime irrespective of its character. The stability of the existing regime is also a factor of predictability of the future course of events.

The fourth group must characterize the ability of the state to guarantee the stability of a given economic system and first of all to guarantee the implementation of transactions. The focal point here is the provision of actual guarantees of property rights and the functioning of the legal and law-enforcing system (as regards the rule of law in economic matters).

The fifth group describes the state's economic activity directly in the economic sphere. It deals with the efficiency of economy legislation, the depth of business-activity regulation on the part of various government bodies, the character of the tax system, etc. Such questions are very important, the experience indicates that their role is secondary in comparison with that of the general political factors.

All these groups and the corresponding indicators, by some means or other, characterize the level of transaction costs relating to the conduct of business in a given country (region). Transaction costs represent a most general characteristic of the efficiency of economic and political interactions, but for their realistic assessment one should need a group of indicators and not just one of them.

In the above-listed five groups, we should try to find some adequate quantitatively measurable indicators (either having an absolute value or logical) which could characterize the corresponding processes and phenomena with a sufficient degree of completeness. These indicators will play the role of independent (explanatory) variables in the course of construction of a model.

Unfortunately, for the afore-said reasons, it is practically impossible to put forward a list of indicators that could fully characterize the processes interesting to us. Some of the data desirable for our purposes have not been measured at all, while in other cases these data cannot be correlated throughout the regions. Therefore, we have to be content with those available indicators which at least to some extent permit to characterize all the above-listed groups of problems.

The first group is composed of variables permitting to assess the guarantees of personal immunity. In this case we should address the data of judicial statistics. According to the data of the Ministry of Justice of the RF, in the year 1999 for the crimes specified in Chapter 19 of the Criminal Code "Crimes against constitutional rights and human and civil liberties" 1000 persons were convicted, the vast majority of them - for violation of the inviolability of dwellings and violation of job safety rules. For violation of the inviolability of private life, secrecy of correspondence, the

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number of prominent figures from the ranks of the Communist Party, from the very beginning was determined to take some openly populistic measures that would have inevitably led to a complete collapse of the financial system and to hyperinflation. Any criticism on the part of political opponents was ignored by the new government, because the results of their economic management were considered by the leftists as catastrophic. Nevertheless, the intentions of the cabinet soon became a subject of a detailed discussion in the mass media, and the experts did their best to minutely explain the fatal character of the measures envisaged by the initial plans of the leftists (as regards not only the country in general but also the government itself). The macroeconomic course was then revised in a most radical fashion, and E. Primakov made a number of responsible and painful decisions resulting in a financial stabilization and the beginning of economic growth.

right for freedom of worship, obstruction of public gathering and legal activity of journalists and refusals to deliver information to citizens, etc. just several scores of persons were convicted throughout the country (and nobody for the latter crime). There are some precedents of convictions in accordance with the Criminal Code's articles protecting personal immunity - for deliberately illegal arraignment and custody, for enforcement of depositions, for falsification of evidence, etc. But there were less than a hundred of such sentences during the whole year.

Such a scale of judicial activity aimed at protecting the major institution of the open society does not make it possible to use the acquired data as an ordinary variable measured by the population's size. Nevertheless, one could present the existing data as logical variables: for example, sentences in accordance with Article 19 - the absence of such sentences; sentences in accordance with the afore-said article of the Chapter "Crimes against the Law" - the absence of such court decisions. Unfortunately, the data of the Legal Department of the RF Supreme Court subdivided by the regions do not reflect the cases proceeding from the afore-said articles, while the data of the RF Ministry of Justice do not have any regional subdivision. This effectively depreciates the possibility to use the data of legal statistics.

The only data of this kind that can be included in the model are the number of complaints about illegal arrests and the number of positive court decisions (on changing the restrictive measures) taken in 1999 in response to such complaints. Their high values can signify both the existence of a relatively healthy situation (especially at the beginning of reforms when the norm is just coming into action and the investigation agencies are still not fully aware of the responsibility they face for choosing arrest as a restrictive measure) and the existence of an adverse situation (if after the lapse of some years the investigation agencies still do not accept the judicial control imposed on them and take a high number of deliberately dubious decisions).

Nevertheless, in the case of contemporary Russia, when a certain imported norm was introduced quite recently, the worst signal from the standpoint of guarantees of personal immunity is the absence or a negligible number of such complaints and positive decisions regarding them. Therefore, despite the deficiency we are ready to admit, it is all the same included in the model.

The second group is represented by the variables capable of characterizing the state of civil society in Russia. First of all, it is the state of public and political (non-government) organizations and the mass media. This information is generally available and can be represented by a considerable group of data.

First of all, it is necessary to consider the presence in a given region of human-rights organizations which have their own public reception rooms and web sites; the ability of human-rights organizations to win in lawsuits (at least in the role of consultants or as organizations providing a lawyer); and the presence in this region of a network of specialized human-rights organizations.

The five following logical variables can characterize the state of independent mass media. They include:
-        the presence of non-communist mass media criticizing the regional authorities for an inefficient policy, violation of the law and non-observation of moral norms;
-        the presence of mass media with the afore-said characteristics published in the region (broadcasting from the territory of the region);
-        the presence of political mass media with foreign founders or constituting branches of foreign mass media.

-        the presence of regional mass media regularly retransmitting the programmes of foreign mass media;
-        the presence of mass media constituting branches of Moscow-based mass media or the presence in the region of a correspondent network of Moscow-based mass media.

The third group of variables must characterize the political stability in contemporary Russia. In this case our analysis is based on two indicators.

First, it is the existence of a conflict between the governor and the mayor of a corresponding regional center, representatives of the federal authorities, and big business. It is a very important indicator clarifying the character of the political system of a certain region. But it would be erroneous to make any unambiguous conclusions and to equate political stability with an absence of such conflicts. In the present stage of Russia's socio-economic transformation, conflicts between representatives of major groups of Influence are absolutely natural, and their open nature most likely demonstrates the ability of the elite to struggle in a civilized (transparent) way. This is especially true in the case of conflicts between the governors and the mayors of large cities, the conflicts which exert a certain stabilizing influence on the political process making the objective contradictions transparent both for the citizens and the federal authorities [12].

Second, it is the stability of governors' authority as such, that is the indicators pertaining to the replacement of the heads of RF subjects in the years 1992-2000. The practice of the past decade indicates that in the vast majority of cases a long-term staying in office makes the policy pursued by the "first persons" more stable and predictable. This policy is not always efficient (its assessment will be given later in the fifth group of indicators), but its predictability is extremely important for economic actors in the process of decision making. Also, staying in office generally conduces to a certain "economic rationalization" of the activity carried out by any top official - both due to the accumulation of practical experience and to the process of transformation of "wandering bandits" into "stationary" ones.

The fourth group of indicators is represented by the data characterizing the quality and efficiency of the law enforcing system of a given region and the quality of work of investigation agencies (and to a certain extent even the courts). This problem is vital in all post-communist countries and especially in Russia where the absence of mature traditions and, correspondingly, of any reliable system of law enforcement plays a more important role than the state of the state of the legislative basis. These data are also the major indicators of the level of transaction costs. The state of the law-enforcement system also partly characterizes the situation with individual rights (personal immunity), because the information presented in the first group of variables turns out to be clearly insufficient.

This group also comprises such data as the number of cases sent to re-investigation (in proportion to the size of the population), the share of sentences of raion courts repealed by the courts of appeal for criminal and civic suits, and the number of sentences repealed in view of the unjustified character of the convictions (also in proportion to the size of the population).

Nevertheless, it is clear that the demarcation line between this group and the first one is rather abstract.

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[12] For more detail, see: Mau 1998.

Finally, the fifth group of indicators reflects the character of the economic policy pursued by regional authorities. Here one could use a number of logical variables reflecting the specific features of a corresponding regional economic law. Especially important are the variables reflecting the existence of anti-constitutional bans or restrictions curbing the transfer of goods throughout the territory of the country and similar restrictions imposed on the freedom of price formation (which in fact restricts the right of private property).

Our work makes use of the following variables reflecting the policy of regional authorities:

- restriction of trade allowances and the levels of profitability;
- the normative acts envisaging some fixing of prices in the territory of a given region - both the existing and the ones abrogated in accordance with the protests lodged by the prosecution;
- the normative requirements of a preliminary agreement on prices with the consumers or the administrative bodies, or the presence of any other similar procedures;
- the existence of any bans or other administrative restrictions imposed on export of goods to other regions;
- the presence of five or more normative acts regulating prices in the territory of a given region.

Apart from this, a number of variables reflect the system of tax rebates in any region. They include:
- the presence of a regional law on the procedure of granting tax rebates;
- the presence of individual benefits stipulated by a corresponding decision of the executive authorities} the presence of group benefits envisaged by the law;
- the presence of group benefits envisaged by a decision of the executive authorities.

The choice of an explained variable for the purpose of economic-and-political analysis also involves a lot of difficulties. It is evident that in the case of our analysis, it is necessary to find an indicator adequately reflecting the economic activity in a given region. Theoretically, there is a multitude of such indicators, but it is rather seldom that they can be unambiguously interpreted, not to mention the unreliability of any indices of regional statistics.

The most natural criterion is the gross regional product per capita. Nevertheless, this also involves a number of serious problems: the data on the per-capita GRP exist only from the year 1994 onwards, and they are published with a delay of one or two years, and what is more, these data are very unreliable. The fact that the official statistics of the GRP is published only in current prices, creates additional difficulties to any correlation within the framework of a single model. The use of the data of per-capita GRP standardized by the subsistence minimum of a corresponding region only increases the error (because of the unreliability of the latter indicator). Thus, despite the apparent contextual advantages of the GRP index as the main measurement of economic growth, it was not used in this work. Our attempt to resort to an average index for the years 1995-1998 is also vulnerable to criticism. First, because of the use of the same standardization by the subsistence level. Second, because the "smoothing" of the problem of a low year-to-year

comparability is achieved at the expense (if not the lose) of quality of the dynamic picture.

Apart from the afore-mentioned indicator, the role of the explained variable is played in our work by the data on foreign investments and on the increase in the number of cars per 1000 inhabitants. Both indicators clearly reflect the presence or absence of economic growth. The first of them characterizes the dynamics of the major factor of economic growth. The second one reflects the increase in well-being of the population as a result of economic growth. Naturally, these indicators are not all-embracing. Nevertheless, they are much more reliable and comparable in time and space than the GRP statistics[13]. Thus, the authors of the present work when choosing an explained variable prefer the reliability of indicators to their completeness.

4. Quantitative interrelations and their interpretation

As it has been already mentioned above, the independent variables used in the analysis are inter-correlated with one another. For example a relation is evident between the presence of independent mass media, the activity of human-rights organizations and a number of indicators of judicial statistics (dealing with the protection of individual and property rights). In order to solve the problem of multicollinearity and the decrease in the number of explanatory variables, the methods of singling out the major components is used.

Table 1. The major components and the matrix of their weighting coefficients.

	Component									
	1	2	3	4	5	6	7	8	9	10
Existing mass media (published in - or broadcasted from the territory of a given region)	**0.874**	0.202		-0.173	0.170					
The presence of non-communist mass media criticizing the regional authorities and the authorities of large cities	**0.814**	0.120			0.147		0.124	0.210		
The presence of political mass media with foreign founders, or those being a branch of foreign mass media	**0.719**		-0.397					-0.293		
The presence in a given region of human-rights organizations having public reception-rooms and/or web cites*	0.234	**0.777**					-0.176	-0.112	-0.221	
The presence of a network of specialized human-rights organizations		**0.764**	-0.102		0.110		0.137			0.231
The presence of victories in	0.239	**0.691**					0.171		-	-0.155

	1	2	3	4	5	6	7	8	9	10
law-suits									0.231	
Group benefits envisaged by the law	-0.200	**0.558**	-0.122	0.150		0.154	-0.217		0.345	-0.323
The share of sentences of raion courts repealed by the courts of appeal for criminal law-suits	-0.112	-0.100	**0.736**		-0.228	-0.144		0.110	0.216	
The presence of mass media constituting branches of Moscow-based mass media, the presence of a correspondent network of Moscow-based mass media	-0.185	0.301	**-0.711**		0.124		0.183	0.171		0.148
The presence of local mass media regularly re-transmitting broadcasts of foreign mass media	0.421		**-0.642**							
Restrictions of trade allowances, the levels of profitability, etc.		0.115	**0.564**		0.318	0.167		-0.193	-0.183	
The number of complaints regarding arrests, of them satisfied	-0.125			**0.893**						
The number of complaints regarding arrests	-0.136	0.100		**0.877**					0.141	
The share of repealed decisions on civic law-suits taken by raion courts	-0.266	-0.122	0.264	**-0.448**	-0.114		0.366	0.175	0.213	
Political development of a given region, the presence (1) of conflicts between the governor, the mayor and big businesses	0.108		-0.136	-0.113	**0.727**	-0.185	0.323		0.140	
The stability (1) (instability (-1)) of the governor	-0.277				**-0.703**	-0.183	0.112	-0.112		0.154
Bans and other administrative restrictions imposed on export of products to other regions		0.139	0.145		**0.591**		-0.133	-0.239		
The normative acts both existing in the territory of a given region and abrogated in accordance with the protest of the procession: fixing of prices	-0.153	0.171	-0.162		**0.423**		-0.361	-0.112		0.252
Individual benefits prescribed by the law		0.145	0.258			**0.740**	0.233	0.148		
The number of decisions to re-investigate the cases			0.352			**-0.670**	0.107	-0.151		0.157
Preliminary "coordination of prices with the consumer" or with the government bodies, or any other individual procedures	0.241	-0.312	0.192	0.146		**0.398**	-0.207	-0.343	-0.120	0.101
The presence of a regional law on the procedure of granting tax rebates	0.161	0.174		-0.114		0.131	**0.640**	-0.134		0.127

Five or more normative acts regulating prices in the territory of a given region		0.152	0.290	-0.332		0.179	**-0.547**	0.310		0.250
Complaints about the unjustified actions of the collegiate government bodies and public organizations						0.195	-0.151	**0.796**		
The number of sentences repealed on the grounds of an unjustified conviction, 1998-99	0.219	-0.238		0.243					**0.757**	
Individual tax rebates introduced by the decisions of the executive authorities	-0.170			-0.360	-0.133	0.387	0.128	-0.356	**0.460**	0.252
Group tax rebates introduced by the decisions of the executive authorities			-0.117						**0.863**	

Note: the amount of weights by each of the components is not equal "1" because of the rotation of the matrix of factor loads conducted for the purpose of better interpretation of the components.

Table 2. The results of regressional analysis (the development of indicators of economic dynamics on major components)

#	Dependent variable	Coefficients at major components (factors) included in the model	Corresponding t-statistics	R^2
1.	**Foreign investments, 1998**	**$-4*10^{-5}$ at the third; $-6*10^{-5}$ at the fifth**	**-2.843; -3.579**	**0.201**
2.	**Relative growth in the number of cars per 1000 inhabitants**	**9.05 at the second; – 14.33 at the third; 12.83 at the tenth; 48.18 at the dummy (the presence of the border with Poland, Belarus' or Japan - across the sea)**	**2.105 ; -3.357; 3.025; 3.021**	**0.288**
3.	**GRP per capita (standardized by the subsistence minimum), on the average, 1995-1998**	**4.42 at the second factor; -3.42 at the third;**	**3.353; -2.589**	**0.175**

It is easy to notice that the majority of the acquired components (Table 1) can be interpreted with sufficient clarity. During the formation of the resultant model where the role of explanatory components is played by the major components themselves, only four of then - the second, third, fifth and tenth - turn out to be important for the assessment of the economic situation in a corresponding region (Table 2).

At the same time, for a number of reasons, the three other components, and primarily the first component (reflecting the role of independent mass media as the most developed though the most vulnerable component of civil society) and also the

fourth one can be considered sufficiently important as well. Let us consider them in more detail.

To begin with, it is apparent that the first component is capable of reflecting the major share of variation of the starting factors. The fact that the first and the fourth components have not significantly influenced the dependent variable can be explained by the afore-noted "insufficient" complexity   of the dependent variables rather than by their low importance. And finally, it might be well to point out the strong relation between the conditions for a stable economic growth and the indicators of the actual existence of the freedom of expression in a given region. The support provided by the freedom of mass media to all the basic rights (including personal immunity, the inviolability of property, the right for legal protection in the broad sense) can easily explain the rationality of the activity of regional business in the regions where the press is strong and free.

The fourth component comprising a number of indicators of judicial statistics reflecting, to a certain extent, the guarantees of personal immunity [14], is clearly in need of being "augmented" by new data (block variables) in connection with the afore-said problems of data acquisition. Nevertheless, their essential importance also seems to be apparent[15].

The second component characterizes the activity of human-rights organizations. In our models, it is this very component that characterizes the role of civil society. It has a substantial and positive influence on economic development.

The third component has a complex character and cannot be unambiguously interpreted. It includes three essential groups of elements:

- indicators characterizing the independence of mass media. They are included in the major component with a negative sign, but bearing in mind that the third component of all the three equations has a negative sign, the role of independence of mass media exerts a positive influence on the dynamics of economic processes;

- a restriction of trade allowances and the levels of profitability which has a positive sign in the major component, and therefore negatively influences the parameters of economic development;

- repealing of court verdicts by the courts of appeal also exerts in this model a negative influence on economic growth, which is also clearly understandable if it indicates a low efficiency of the judicial system existing in a given region.

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[14] It includes the weighty indicators of the quantity and proportion of satisfied complaints about unjustified arrests. In a country with a rather low quality of work on the part of law enforcing agencies (police, public prosecution) and hard condition of preliminary detention this factor represents an important parameter of observation of individual rights (personal immunity) and of the presence of effective methods of protection of persons by judiciary means.

[15] Thus, there is a point to continue to collect data on the corresponding first and fourth components of the block variables, while the hope for constructing some new variants of the model in the future (through the use of other explained variables such as the refined GRP indices) does not look unfounded.

The fifth component combines two different groups of problems. On the one hand, it is the political situation in a given region. On the other hand, it is the important elements of the economic policy pursued by the regional authorities - the administrative restrictions regarding the movement of goods and the attempts of the regional authorities to fix prices. It leads to a number of conclusions:

- the existence of anticonstitutional restrictions imposed on the movement of goods and the attempts to fix prices have a negative effect on foreign investments;
- the stability of political authority as regards a long-term staying in office of a given administration is a positive factor from the point of view of the investors;
- any conflicts between the main actors of economic and political life have a negative effect on the investment attractiveness of a given region.

The latter conclusion is quite obvious, though it was not so at the starting point of the analysis. As noted above, the existence of such conflicts makes the situation more transparent. Nevertheless, as seen from the achieved results, after all it is the real stability of political life of a given region and not the general mechanisms guaranteeing this stability that is more important for the investors. The absence of conflicts turns out to be more vital than the transparency achieved through conflicts.

The tenth component characterizes two different phenomena: the situation with protection of individual rights and the specific features of the existing economic policy (the presence of individual tax rebates established by the executive authorities' decisions). The positive role of the indicator demonstrating the efficiency of the judicial system is natural. Nevertheless, the positive influence of individual tax rebates quite understandable from the standpoint of common sense cannot be easily interpreted on the national scale when individual benefits represent a potent means of restriction as regards the normal business activity.

As seen from Table 2, the set of variables put forward by us to characterize the institutional (and first of all political) specific features of the regions makes it possible to interpret between 10 and 20 per cent of variation of the variables influencing the level of economic development and the dynamics of economic growth, and to do so with a sufficiently high degree of reliability (in the 95-per-cent interval, and in the 99-percent interval in some models).

A relatively low and yet statistically reliable R^2 can be considered a rather acceptable result, bearing in mind a higher importance of the federal-level institutions (basic legislation, the judicial system and law enforcing agencies) as regards the observation of guarantees of the basic rights. But the main reason for not choosing the factors increasing the explanatory capabilities of the model is our orientation to the maximum possible emphasizing of the importance of purely institutional factors.

In principle, the explanatory capability can be increased to the values close to "1" by introducing more complex explanatory variables (such as the electoral statistics - the survey data reflecting the ability of the population to adapt to market conditions, and the variables including dummies - the variables for the accounting of a large number of factors dealing with the initial level of various resources possessed by a given region). But in this case we should lose the ability to test the basic hypothesis, and it would become impossible to separate from the mass of factors considerably

different by nature (institutions and human assets, fixed assets and mineral reserves) any specific factors and to assess their importance. In the extreme variant, this approach becomes a truism: "the results of economic development are determined by the whole amount of operative factors".

The estimated values of the explained variables acquired by the means of regressional relationships can be tentatively considered as a rating of quality of the institutions existing in a given region. When the explanatory capability of the model is less than 50%, this cannot be anything else but a curious illustration.

*   *   *

First of all, we can make a number of general conclusions. In the course of our research it has become possible to reveal a quantitatively important relationship between the legal and political institutions on the one hand and economic growth on the other. It turns out that the variables dealing with the guarantees of basic rights (personal immunity, freedom of expression and private property) are substantially more important that the quality of civil proceedings, tax system and political stability in a given region (notwithstanding the indisputable importance of the latter).

Nevertheless, this conclusion can be of no universal importance (with the exception of the assumption that such basic institutions as personal immunity are really important). The political stability and predictability of the authorities' actions have been a crucial factor since the emergence of the very phenomenon of stable economic growth in the eighteenth century. At the same time, democracy, as everybody knows, is not an indispensable precondition of growth, because rapid economic growth can easily become (and frequently becomes) a phenomenon of authoritarian regimes.

Our conclusion is applicable, first of all, to the development of the Russia of the existing level of economic and social development. In other words, to the development of an industrial country undergoing post-communist transformation. The ongoing Russian transformations seen in the global context represent a break-through into post-industrial society, the development of which proceeds hand in hand with the establishment and strengthening of democracy. Thus, our conclusion, while not being universal, is in good agreement with the logic of development of the given country at the given time.

Apparently, this conclusion made on the regional material can be extended to cover the character of development of the whole country.

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G. Malginov, A. Radygin and A. Yudin

Structure of Ownership in the Regions of the Russian Federation and Its Dynamics in the Period of Market Transformations in the 90s[1]

The first decade of market reforms in Russia expressly showed dissimilarity between regions as regards their capacity to adapt themselves to new economic conditions and the rate of reforms. As the ownership relations reform was an integral part of the market reforms (along with the liberalization of prices and economic conditions for business activity, and financial stabilization), the issue of such inter-regional differences is of some importance. Before we discuss that matter in detail, it is to be noted that the ownership relations reform in Russia, just like in other countries with transition economies, focused primarily on privatization of public property, which was complemented by expansion of the private sector through establishment of new businesses. Consequently, in analyzing inter-regional differences in respect of the ownership relations reform one has to take into account both the privatization process proper and the contributions made by different sectors economy to the total economic output on the regional level.

Differences Between the Regions of the Russian Federation as Regards Privatization

Analysis of inter-regional differences in privatization carried out as a part of research has revealed that on the whole Russian regions had a rather similar showing as regards formal indices of privatization (the general dynamics and the dynamics of privatization of specific types of public property) though the proportions of different types of public property (federal, constituent entities' or municipal) actually privatized differed greatly from one region to another.

Such a situation, in principle, can be regarded as natural, considering that mass privatization and initial formation of proprietary rights in Russia in the 1992-94 period were carried out by the federal authorities predominantly through issue of instructions whose execution was to be ensured by heads of administrations of constituent entities of the Russian Federation. In most cases, heads of administrations were appointed by Decrees of the President.[2] During mass privatization in the 1992-1994 period, the local authorities did not have the powers (from the quantitative point of view) to influence privatization of large enterprises which were under federal jurisdiction, primarily, enterprises of the more important industries which had been under the Union or Republican jurisdiction in the Soviet Union.

Manifestations of regional separatism were mostly of a sporadic nature (those included the following: personal privatization deposits were introduced in Tatarstan; at some auctions at which stocks of privatized companies were traded for vouchers, only bills issued in the region where the auction was held were accepted; changes

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[1] Present article was written as a result of the research project «Transformation of ownership relationship: comparative analysis of the Russian regions and general problems of the emergence of the new system of ownership rights in Russia» by A. Radygin, R. Entov, A. Yudin, G. Malginov, Y. Gritsun, V. Bondarev, O. Predeina, H. Swain, T. Goodfellow

[2] The impact of relations between the federal authorities and regions on the privatization process in Russia in the 90-s is disclosed in Section

were introduced in the schedule of and procedure for privatization of some enterprises; local Soviets passed declarative decisions (or prepared such decisions) on suspension of auctions in a number of regions in the period of confrontation between the executive and legislative branches of power at the national level in 1993.

In the following years (starting from 1995) the regional authorities gained greater opportunities to influence privatization, however, in that period their attention was drawn, as a rule, not to enterprises to be privatized for the first time, but to those which had not been sold for some reasons or the purposefully retained public holdings in enterprises which had changed the form of ownership in the period of mass privatization, though no such information was stated in the official statistical reports, either those prepared by the National Statistical Board of the Russian Federation, or those prepared by the Ministry of Public Property of the Russian Federation.

However, at the same time, with group of constituent entities of the Russian Federation the proportion of enterprises privatized after 1994 (mainly, enterprises which were constituent entities' and federal property), including joint-stock companies established during that period, is larger than the national average. However, the economic factors of that phenomenon differed much within that group.

That group includes, on the one side, constituent entities of the Russian Federation which deliberately distanced themselves from the nation-wide privatization scheme (Moscow, Tatarstan, Bashkortostan, Kalmykiya and Ingushetia) and carried out 'delayed' privatization and, on the other side, a number of regions where for some reasons (restrictions in respect of privatization and the specifics of the specialization of industries) after completion of the stage of mass privatization there remained a large number of state-owned enterprises which later became the targets of 'cash' privatization (the Moscow Region, the Perm Region, the Tomsk Region, the Kamchatka Region and the Krasnoyarsk Territory) or where after a majority of enterprises had been privatized at the auctions for bills stage of privatization privatization of new categories of objects began, such as real estate, land and debtor-enterprises (the Archangel Region, the Vologda Region and the Ivanovo Region) with the use of unconventional schemes.

In addition to the differences relating to the rate of privatization, there were also differences in implementation of privatization policy options, mostly in respect of individual components of that policy.

Privatization of small businesses turned out less profound in the Far North regions and in territories with a similar status, as well as in the regions where the local authorities pursued policies different from those of the federal authorities (many of the republics in the Volga Region and the Northern Caucasus, the Ulyanovsk Region and the Lipetsk Region).

Similarly, as regards privatization of larger enterprises it is to be that in most regions of West Siberia, Moscow and a number of national republics (Karelia, Komi, Tatarstan, Baskortostan, Ingushetia, Kabardino-Balkaria and North Ossetia) the state has managed to preserve a greater than the national average ownership control over the corporate sector in the post-privatization period (by means of retention of interests in companies and inclusion of the so-called 'Gold Shares' in the charter capital of enterprises).

Analysis of inter-regional differences in the extent of competition in privatization based on the results of transformation of large and mid-sized state-owned companies into joint-stock companies has produced quite unexpected outputs.

Insider control over newly established joint-stock companies inside regions (at least in the early post-privatization period) if assessed using the formal criteria (the

share of large and mid-sized enterprises from among former leased companies which chose at transformation into joint-stock companies the second benefit option) was less wide-spread (the proportion of such enterprises was relatively small as compared with the national figure) mainly in the regions which were less successful in adaptation to the new conditions and ensuring of further development. This cannot but question the correctness of the thesis of the early 90-s that insiders' domination of the capital structure of privatized companies was the main obstacle to modernization of the industry through restructuring and attraction of foreign investments which were much needed for ensuring a renewed sustained economic growth on the basis of market mechanisms.

Analyzing the territorial spread of unconventional (supporting) methods of privatization one can say, though rather notionally, that there was an interrelation between such practices and polices pursued by administrations of constituent entities of the Russian Federation. Indeed, they were more actively (from the quantitative point of view) and widely (as regards the range of methods) used in the regions which most successfully managed to pursue market reforms (the Vologda Region, the Yaroslavl Region, the Rostov Region, the Saratov Region and the Sverdlovsk Region). However, those practices were also extensively used in the Ivanovo Region, the Tver Region, the Kemerovo Region and the Chita Region which had depressive economies and which were among the regions with the worst social and economic situation. Taking into account the comparatively small proportion of unconventional methods in the general structure of privatized enterprises (objects), the role of that factor in the analysis of inter-regional differences in privatization can be considered to be of a secondary nature.

Though privatization in Russia in the 1992-1994 period was extensive, a vast public sector has been preserved in this country. Calculations carried out in accordance with the methods adopted by the State Property Committee showed that with 59 percent of all the enterprises that existed as of the time of privatization the form of ownership was changed by the beginning of the year 1998. In that sphere, just like in many others, there were significant differences between the regions. By that criterion, constituent entities of the Russian Federation can be characterized as followings:

1. The group of regions with the least extent of privatization, including 26 constituent entities of the Russian Federation (the Murmansk Region, the Leningrad Region, the Vladimir Region, Moscow, Mordovia, Kalmykiya, Tatarstan, the Samara Region, Dagestan, Ingushetia, Kabardino-Balkaria, Karachay-Cherkessia, Northern Ossetia, the Krasnodar Territory, the Perm Region, Bashkortostan, Tyva, Sakha (Yakutiya), the Nenets Autonomous Area, the Yamal-Nenets Autonomous Area, the Taimyr Autonomous Area, the Evenk Autonomous Area, the Ust-Orda Buryat Autonomous Area, the Aginsk Buryat Autonomous Area, the Chukotka Autonomous Area and the Koryak Autonomous Area), where less than 50 percent of the total number of enterprises were privatized. In Mordovia, Kabardino-Balkaria, North Ossetia, Tyva and Taimyr, the share of privatized companies amounted to less than 20 percent.
2. The group of regions, including 16 constituent entities of the Russian Federation (Karelia, the Novgorod Region, the Pskov Region, the Moscow Region, the Nizhny Novgorod Region, the Penza Region, the Ulyanovsk Region, Mari El, Chuvashia, Adygey, the Novosibirsk Region, the Khanty-Mansi Autonomous Area, the Krasnoyar Territory, the Jewish Autonomy, the Amur Region and the

Magadan Region) where more than 50 percent of enterprises but less than the national average (amounting to around 60 percent) were privatized.

3. The group of regions with the largest extent of privatization (where 80 percent or more of state-owned enterprises were sold) consisting of 12 regions (the Orel Region, the Ryazan Region, the Belgorod Region, the Vologda Region, the Saratov Region, the Stavropol Territory, the Orenburg Region, the Chelyabisk Region, the Tomsk Region, the Chita Region and the Sakhalin Region).

4. The group of regions where more enterprises than the national average (amounting to around 60 percent of enterprises), but less than in the third group (80 percent or more) were privatized. (It includes all the constituent entities of the Russian Federation which were not included in the above three groups.)

This classification is based on the data in respect of all types of enterprises that existed as of the time of the beginning of privatization, including not only the federal, but also municipal and constituent entities' property in all sectors of the economy.

Differences Between the Regions in the Extent of the Private Sector's Influence on Economic Development Prior to 1997.

Assessment of the inter-regional aspect of the ownership relations reform based on the analysis of contributions by different sector to the output of the economic activity seems to be more illustrative. However, such an approach is difficult to realize with the data available from the Russian statistical authorities.

Calculations of the gross regional product (GRP) carried out by the National Statistical Board since 1994 do not offer any breakdowns of the GRP by enterprises with different forms of ownership, neither in specific regions, nor nationwide. The available statistics only provide data on contribution by various sectors to the outputs of some branches of the economy (industry, agriculture, construction and commerce).

Data on specific contributions by enterprises with different forms of ownership is not available, primarily because the overall GRP indices are incomplete (with contributions by a number of industries, such as transport, communications, consumer services, housing and public utilities, financial and credit institutions, research institutions and science-related services, social services and culture, not counted in), and also because the indices used are incomplete (calculation of the GRP, just as that of the GDP, requires the value added index, rather than the gross output or retail trade turnover).

With the data on contributions by enterprises and organizations with different forms of ownership in specific regions being unavailable, analysis of differences between the regions as regards implementation of the ownership relations reform can only be done using the available data on individual branches of the economy.

The situation in industry (which can be seen as the backbone of Russian national economy) has been studied for that purpose within the framework of the project.

That analysis has shown that the differences between the regions as regards the share of the private sector in industry became insignificant after 1994. Private-sector enterprises accounted for 90 percent of the industrial output in 1997. Out of all Russian regions, in Ingushetia and Chukotka alone state-run enterprises accounted for less than 50 percent of the industrial output, while in the Republic of Altai they accounted for a little more than 50 percent of the industrial output, in the Smolensk

Region, Kalmykia and Tyva for 60 percent to 70 percent, while in the Kursk Region and in North Ossetia, for 70 percent to 75 percent.

After formal withdrawal of a large number of large and medium-sized industries from the public sector during the period of mass privatization which was completed in 1994, the indicators showing the share of the private sector in industry (the total number of industries, industrial outputs and employment) have become increasingly formal and less illustrative.

This has been confirmed by cluster analysis of the formation of the private sector of the economy.[3] Two classifications of the regions by the extent of privatization of industries and housing have been prepared. This effort has revealed an apparently high level of concentration of an increasing number of regions in the first and the second clusters in the course of the ownership relations reform (which involved privatization of state-owned and municipal industries and establishment of new private businesses, privatization of the state-owned and municipal housing and construction of new housing by private investors).

It is to be noted that the some regions (Ingushetia, North Ossetia, the Republic of Altai and the Chukotka Autonomous Area) are permanently listed in the same lower clusters. All the above constituent entities of the Russian Federation have low levels of urbanization and no major enterprises or developed infrastructure.

Volatility has been more typical of such constituent entities of the Russian Federation as have the status of republics. The composition of the group of stable regions is heterogeneous. It includes both regions with high rates of institutional transformations and the capacity to adapt to the market environment and apparent outsiders. The above suggests that the starting economic conditions the regions had before the beginning of the reforms play a significant role in their economic development in the post reform period, while the depressed regions practically have no opportunity to improve their economic situation (a kind of a vertical mobility).

At the same time, comparison of the outputs of the hierarchical cluster analysis of the extent of privatization in different regions by two groups of indices brings us to a conclusion that there are considerable differences between the formal and the real aspect of the ownership relations reform.

Analysis based on the first group of indices (the share of private enterprises' output in the total industrial output in the region; the share of workers employed at the private enterprises in the total number of workers employed in the industrial sector and the share of housing in the private sector) has revealed the growing stability in cluster distribution of the regions (which reflects the stability in ownership relations which was practically unaffected by the 1998 financial crisis). Such outputs have been obtained because indices in respect of housing built by private-sector companies were included in calculations carried out for the purpose of that analysis. That reflects the formal aspect of the ownership relations reform in Russia as a considerable proportion of housing in Russia (primarily, in rural areas and in small towns, as well as condominiums) was not owned by the state even before the beginning of the radical market reforms, while privatization which was later carried out was largely of a formal nature (no adequate changes were introduced in the system of management and services, while subsidies continued to be paid out of local budgets).

Analysis based on the second group of indices (the share of private enterprises; the share of private enterprises' output in the total industrial output of the region and the share of workers employed at private enterprises in the total number of

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[3] See Chapter 6 of the research.

workers employed in the industrial sector) has shown that the real aspect of the ownership relations reform can be seriously affected by the macroeconomic and political situation.

In 1998, considerable changes took place in cluster distribution of regions and that could not but affect stability indices of such distribution. It is to be assumed that it was the financial crisis in a broad sense, including the negative factors which started to build up as early as in September 1997, and its consequences that brought about such a state of things. In the first half of 1998, prices of oil and non-ferrous metals fell dramatically and the output of enterprises relying on imported materials, parts and intermediates went down as those enterprises had to reduce or discontinue their production after the devaluation of the ruble. It is clear that those factors primarily affected the private sector in industry which included along with natural monopolists oil companies, major iron-and steel and non-ferrous metal works and manufacturing companies with participation of foreign capital. However, at the same time many state-run and municipal enterprises which used to experience problems before August- September 1998 took advantage of the ruble devaluation to improve their economic position (primarily defense industry enterprises and those in the engineering industry and the metal-working industry where the share of state-run enterprises was much higher than in other industries).

In 1998, **a new trend** emerged: **the private sector's contribution to the total national industrial output** not only stopped to grow (as in the 1993-1995 period), but somewhat dropped, while the contribution by the public sector and the municipal sector considerably increased in a number of regions.

In addition to sheer statistical errors and private companies' being motivated to understate the scope of their business activity, **this trend can also be explained by more deep-going factors**:

- the bankruptcy procedure started to be applied under which assets of bankrupt companies became public (mainly sub-federal) or municipal property by way of payment of debts;

- industrial output fell particularly dramatically at those privatized companies where the form of ownership had been changed in a rather formal way and which had not been appropriated by an efficient owner since 1993-1994, while the 1998 crisis dealt a particularly devastating blow (to the regions where such companies accounted for a majority of industries, while the proportion of the new industrial private-sector businesses was rather small);

- Major defense industry orders (including those placed by foreign states) could play a significant role in formation of the structure of industry in specific regions. Those orders stimulated an increase in proportion of state-owned companies in the economy of the region (in conditions where civil industries were hit by depression).

Analysis of privatization's impact on the regional level (industry) based on the indices of the share of the private sector has produced more illustrative output.

For the purpose of examining that issue in greater detail, a regression dependence was studied of a number of economic outputs in 1998 (the share of loss-making companies in the total number of industries, industrial indices [two options were considered, one as against the outputs in 1993 and the other as against the outputs in 1995], the share of private investment in the total volume of investments in industry) on the above mentioned variables which show the extent of privatization in industry (the share of private sector companies in the total number of industrial enterprises, the share of the output of those enterprises in the total industrial output

and the share of workers employed by those companies in the total number of workers employed in industry).

We assumed a five-percent level of significance in that analysis. It is to be noted that no significant dependence of each of the three indices chosen for the analysis on the three factor indices was revealed simultaneously. However, it was established that each of the three indices we analyzed was significantly influenced by two factor indices.[4]

The share of loss-making enterprises in the total number of industrial enterprises

Let us examine the regression dependence of the share of loss-making enterprises on indices which show the extent of privatization in industry. Since there is autocorrelation in balances we shall apply regression to those indices using the Kokhran-Orkat transformation to neutralize autocorrelation.

Table 1

Outputs of regression analysis based on two characteristics of privatization in industry (the share of private sector enterprises and the share of workers employed at those industries)

Multiple correlation ratio (R)	0.605
R-square	0.366
Normed R-square	0.340
Standard error	7.468
Observations	78
F-statistics	21.104

	Ratios	**Standard Error**	**t-statistics**	**P-Value**
Absolute term	121.326	12.945	9.373	0.000
Share of enterprises	-0.522	0.163	-3.199	0.002
Share of workers employed	-0.258	0.082	-3.155	0.002

As can be seen from the outputs, the regression applied is significant even at the level of 1 percent (F = 21.104) as the regression ratios.

Dependence of **the share of loss-making enterprises** on the characteristics of privatization in industry is highly significant with two such indices as the share of private sector enterprises in the total number of industrial enterprises (significant negative relation) and the share of workers employed at those enterprises in the total number of workers employed in industry (significant negative relation) used as factor (independent) variables in examination.

Industrial output index

Examination of regression dependence of the 1998 industrial output index as against the 1993 index on the indices illustrating the extent of privatization in industry revealed no significant statistical dependence.

The following outputs have been obtained at examination of regression dependence of the 1998 industrial output index as against the 1995 index on the indices illustrating the extent of privatization in industry.

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[4] More detailed account of the calculations and the input data used, as well as intermediary and final outputs are contained in Paragraph 5.1. and Paragraph 5.2. of the paper *Transformation of Ownership Relations and Comparative Analysis of Different Regions of Russia*. Moscow, 2001.

TABLE 2

Outputs of regression analysis based on two characteristics of privatization in industry (the share of private sector enterprises' industrial output and the share of workers employed at those enterprises)

Multiple correlation ratio (R)	0.281
R-square	0.079
Normed R-square	0.054
Standard error	11.169
Observations	78
F-statistics	3.214

	Ratios	Standard error	t-statistics	P-Value
Absolute term	89.957	10.618	8.472	0.000
The share of the industrial output	0.472	0.208	2.272	0.026
The share of workers employed	-0.556	0.221	-2.513	0.014

As can be seen from the outputs, the regression applied is significant at the level of 5 percent (F = 3.214). The regression ratios are also significant even at the level of 3 percent.

Dependence of **the industrial output index** (the 1998 on 1995) on the characteristics of privatization in industry is significant with such two indices as the share of private-sector enterprises' industrial output in the total volume of the industrial output (significant positive relation) and the share of workers employed at those enterprises in the total number of workers employed in industry (significant negative relation) used as factor (independent) variables in examination.

The share of private investments in the total volume of investments in industry

Let us examine regression dependence of the share of private investments in the total volume of investments in industry on indices illustrating the extent of privatization in industry.

TABLE 3

Outputs of regression analysis based on two characteristics of privatization in industry (the share of private sector enterprises and the share of workers employed at those industries)

Multiple correlation ratio (R)	0.353
R-square	0.124
Normed R-square	0.101
Standard error	43.944
Observations	78
F-statistics	5.324

	Ratios	Standard error	t-statistics	P-value
Absolute term	16.887	81.445	0.207	0.836
The share of enterprises	2.130	1.028	2.071	0.042
The share of workers employed	-1.821	0.564	-3.225	0.002

As can be seen from the outputs, the regression applied is significant even at the level of 1 percent (F =5.324). The regression ratios, except the ratio in case of the absolute term, are also significant at the level of 5 percent.

Dependence of **the share of private investments in the total volume of investments in industry** on the characteristics of privatization in industry is significant with such two indices as the share of private-sector enterprises in the total number of industrial enterprises (significant positive relation) and the share of workers employed at those enterprises in the total number of workers employed in industry (significant negative relation) used as factor (independent) variables in examination.

The obtained outputs can be interpreted as follows.

In the most general case, private owners of enterprises are better motivated to carry out business activity without incurring losses than state-run companies because they cannot expect their losses to be compensated out of the state budget.

It is quite clear that new owners of enterprises are much interested in halting the recession and in ensuring economic growth (and, consequently, the rise in profits) in future, which can only be achieved if they make investments in the fixed capital as a part of the long-term development strategy. Unlike directors of state-run enterprises they cannot expect investments from the state. Change in the form of ownership (legal status) of an enterprise thus may have an important role to play in attraction of investment.

The more significant positive dependence of the 1998 on 1995 industrial output index (the 1998 on 1993 index) on the share of industrial output produced by the non-public sector can be explained by slow-down of the recession and by establishment of pre-conditions for the economic growth with development of the corporate sector which is the kernel of the non-public-sector industries. At earlier stages (before 1995), its degree of maturity was insignificant. The recession in the 1993-1994 period was of a general nature. The corporate sector in industry was in the process of formation and the motivation mechanisms generally typical of it had not yet taken shape.

At the same time, the revealed negative relation to the share of workers employed at private companies along with the low explanatory capacity of the relation in respect of the share in output illustrates the complexity of the situation Russian industry has found itself in. Excessive rate of employment remains one of the major obstacles to economic growth. As can be seen from the outputs of the analysis and from experience, that phenomenon is not only typical of state-run companies and this points to the fact that privatization in many cases was carried out in a rather formal way and the phenomenon in question is deep-rooted, technically, socially, politically and psychologically.

Changes in Inter-Regional Differences as Regards Contribution by the Private Sector in the Economic Development During the 1998 Crisis and in the Following Period

In 1998, the share of the industrial output of private companies in the national industrial output went down for the first time in the 90-s against the 1997 figure, though that reduction amounted to a mere 1.2 percent of all-time high of privatization (1997).There were also changes in the composition of the group of regions where the share of private sector companies in the total industrial output amounted to less than 75 percent. The Kursk Region left that group, while Tatarstan, the Tomsk Region and the Khabarovsk Territory joined it.

The question is whether that trend (which first emerged in Russian industry in 1998) is going to last in individual regions. With unreliable official statistical data and private companies' being highly motivated to understate the scope of their business activity and with effects of the 1998 financial crisis and its repercussions taken into account a trend cannot be identified on the basis of small changes that might happened within a year.

For more detailed analysis, it is crucial to compare the dynamics of changes in private sector parameters in 1999 as against the 1998 figure. In 1999, the contribution of the private sector to the total industrial output rose by 2 percent (to make 90.6 percent), while its share in the total number of industries and in the total number of workers was somewhat reduced (by mere 0.1 percent and 0.2 percent, respectively).

However, in 22 regions the contribution of the private sector to the total industrial output declined as against the 1998 figure (in 14 of these such a reduction amounted to more than 1 percent point). The record high reduction was registered in the Kirov Region (9.3 percent), in Moscow and Dagestan (5.3 percent) and (5.1 percent point) respectively, while in other regions it ranged from 1 percent point to 5 percent point. At the same time, in 33 regions the proportion of private companies increased (in 16 of these, such an increase amounted to more than 1 percent point). The record high increase was registered in Ingushetia (18.9 percent), Dagestan (9.2 percent) and the Jewish Autonomous Area (5.9 percent), while in some other regions it amounted to over 3.5 percent. Similarly, in 37 regions the proportion of workers employed at private companies in the total number of workers increased (in 14 of these, such an increase amounted to more than 1 percent point). The record high increase was registered in Ingushetia (24.6 percent), Mari El and North Ossetia (3.3 percent) and (3.1 percent) respectively, while in other regions it amounted to no more than 3.0 percent.

To get more sound grounds for conclusions, we have compared the data on contribution of the private sector to the 1999 industrial output to the 1995 figure (thus covering the period of four years when the heads of administrations of constituent entities of the Russian Federation were elected for the first time in Russian history at democratic regional elections which were held in the 1995-1996 period). It seems that a fall in that index by over 4 percent within those four years is an objective indicator of the trend for decline in the share of the private sector in industry observed in individual regions in the first decade of market reforms in Russia.

That analysis has shown that that trend was typical of 12 regions (the Archangel Region, the Ivanovo Region, the Ryazan Region, the Smolensk Region, the Kirov Region, Ingushetia, Udmurtia, the Omsk Region, the Tomsk Region, the Republic of Altai, Tyva,and the Khabarovsk Territory) out of 39 regions where a reduction in the share of the private sector was registered. In Ingushetia, the Republic of Altai and in the Tomsk Region such a reduction ranged from 12 percent to 18 percent.

It is to be noted that that concerns share of the private sector in the final figure (that is total industrial output), rather than source figure (the share in the total number of industries and the share in the total number of workers employed) which were less significant for Russia's transition economy and much less volatile in the 1995-1999 period. Out of 38 regions where the share of workers employed in private companies declined a decline of over 4 percent was registered only in eight. Only in three out of 17 regions where the share of private industrial companies declined such a reduction exceeded the above value.

We are not going to discuss accuracy of the available statistical data, but it is important to acknowledge the fact that the growth in contribution by state-owned and municipal companies to the total industrial output in specific regions can be explained by growth in influence of constituent entities of the Russian Federation in respect of the ownership relations in the second half of the 90-s. Such influence was exerted in two different ways.

Firstly, it was exerted through change in proportions of industries with different organizational and legal statuses. Underlying that process are such factors as bankruptcies resulting in transfer of private businesses' shares to sub-federal and municipal authorities and establishment of new enterprises belonging to the constituent members of the Russian Federation.

Secondly, it was exerted by means of rendering of selective support to individual state-owned and municipal companies without changing the legal status of those economic entities. Placement of state orders financed out of the federal budget also played an important role in that process.

That trend developed in a situation where many privatized industries found themselves facing a crisis, production continued to decline as a result of formal changes in ownership or due to prolonged vying for control and there was a lack in the industrial sector of new enterprises initially established with private capital in the past decade.

The above makes one wonder whether that tendency for growth in contribution by state-run and municipal enterprises to the total industrial output in individual regions has to do with election of new local leaders and their political orientation.

In 14 regions out of the 28 where new heads of administrations[5] were elected in the 1995-1997 period contribution by the private sector to the total industrial output in 1999 somewhat declined on the 1998 figure (in three of these, candidates loyal to the federal authorities or those nominated by the so-called 'third force' were elected, while in other regions, candidates nominated by the left-wing opposition. Of the above mentioned 12 regions where there was a considerable reduction in the share of the private sector (over 4 percent) new heads of administrations were elected in three regions in the 1995-1997 period (in two of these the new leaders were nominated by the opposition).

So, there is little evidence in favor of any direct interrelation between the dynamic of the private sector in industry and changes in leadership of some regions and (in political orientation of such leadership). It is clear that the newly elected leaders of constituent entities of the Russian Federation did not have the opportunities to reduce the share of the private sector in the economy of their regions because formal privatization of a large number of enterprises was completed in the 1995-1996 period, there was a danger of contradictions with the federal authorities, there were interests of major businesses of a national scope which could not be controlled by local authorities and there was also the routine work local authorities had to do in their depressed regions.

Inter-Regional Differences in the Structure of Ownership by the Beginning of the New Stage of Market Reforms in Russia

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[5] not counting in the autonomous areas of these (industrial output data is only available in respect of Chulotka) and the regions where elections of heads of administrations were held for the first time in 1993.

As it was shown above, the structure of ownership in regions underwent numerous changes throughout the 90s after 1997 that change was not always within the general trend towards privatization. Of considerable importance is the issue of what typology of Russian regions in that sphere was immediately prior to the beginning of the new stage of reforms which is unanimously dated from the 1999-2000 period and which was characterized by significant changes in the political situation (the election of the new parliament and the President, lessening of confrontation between the executive and legislative branches of power, the federal authorities' initiatives in respect of reforms of executive structures and strengthening of the hierarchy of power and other).

Domination on a national scale by the private-sector industries (that is, industries which were not public or municipal property) was apparent in all sectors of the economy. For instance, in 1999, 94.8 percent of all industries at which 84.2 percent of the total workforce was employed belonged to the private sector. Those industries accounted for 90.6 percent of the total industrial output. In most constituent entities of the Russian Federation that value amounted no less than to 80 percent.

At the same time, **the public sector** continued to play a significant role in economic development in a number of constituent entities of the Russian Federation. Of the data provided on a regular basis by the National Statistical Board, particularly suitable for the analysis of the role of the public sector is the data illustrating the share in the industrial output and the share in employment. As the share in the number of enterprises due to its virtual nature is a secondary index it can only be used in case of need in combination with the above indices.[6]

The group of regions (which are an exception) where the share of state-run and municipal companies in **the total industrial output** amounted to over 15 percent included Ingushetia (70.9 percent), the Republic of Altai (49.9 percent), the Smolensk Region (42.3 percent), Chukotka (41.1 percent), Tyva (34.1 percent) and the Tomsk Region (33 percent), five regions (Mari El, Dagestan, North Ossetia, Udmurtia and the Khabarovsk Territory) where the value of that index ranged from 20 percent to 30 percent and 13 regions (Moscow, the Archangel Region, the Tver Region, the Kirov Region, the Kursk Region, the Tambov Region, the Penza Region, Chuvashia, Kalmykia, Kabardino-Balkaria, the Sverdlovsk Region, the Novosibirsk Region and the Jewish Autonomous Region) where that value amounted to 15 percent to 20 percent.

The share of workers employed at state-run and municipal companies in **the total number of workers employed in industry** was more significant than the national average (over 20 percent of the total workforce) in the Chukotka Autonomous Region (64.2 percent), in Ingushetia (61.4 percent), in the Archangel Region, North Ossetia and Tyva (40 percent to 41 percent), in Kalmykia, Dagestan and the Tomsk Region (30 to 31 percent), while in 16 regions (the Murmansk Region, the Smolensk Region, the Tambov Region, the Penza Region, Mari El, Mordovia, Chuvashia, Tatarstan, Bashkortostan, Udmurtia, the Sverdlovsk Region, the Novosibirsk Region, the Omsk Region, the Republic of Alatai, Yakutia and the Khabarovsk Territory) it amounted to 20 percent to 30 percent.

The share of public-sector companies and organizations in construction was not the same in respect of different jobs; in the volume of contracts for construction

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[6] As no data on industrial output in1999 in autonomous areas (except Chukotka) is available, further analysis is carried out without taking into account the data on those constituent entities of the Russian Federation (though the data on construction and commerce is available).

work it amounted only to 11.8 percent, while in the volume of design and development work, to 31 percent.

The share of public sector companies (not counting in municipal companies) in **the total volume of construction work done on a contractual basis** was the highest (20 percent or over)   in the Jewish Autonomous Region (42.3 percent), the Kostroma Region (40.1 percent) and in Dagestan (40.1 percent). In six regions (Kalmykia, Udmurtia, Tyva, the Chita Region, the Chukotka Autonomous Area and the Khabarovsk Territory) that figure amounted to 30 percent to 40 percent, while in 16 regions (Karelia, the Murmansk Region, the Kaliningrad Region, the Leningrad Region, the Bryansk Region,the Vladimir Region, the Ivanovo Region, the Saratov Region, Mari El, Adygeya, Kabardino-Balkaria, Karachay-Cherkessia, the Kurgan Region, the Republic of Altai, the Altai Territory and the Maritime Territory) to 20 percent to 30 percent.

The share of public sector companies (not counting in municipal companies) in **the total volume of design and development work** was the highest in Ingushetia (100 percent), the Kranoyarsk Territory (72 percent), Mari El (65 percent), Khakasia (63 percent), the Leningrad Region (53 percent), the Chita Region (51 percent), the Stavropol Territory (50 percent) and Yakutia (50 percent). In nine regions, such as Moscow, the Vladimir Region, the Saratov Region, Chuvashia, Bashkortostan, the Altai Territory, the Kemerovo Region, Tyva and the Magadan Region) it amounted to 40 percent to 50 percent, while in five regions (the Archangel Region, the Novgorod Region, the Smolensk Region, the Tambov Region and the Kurgan Region), to 35 percent to 40 percent.

In 1999, private-sector companies accounted for 95 percent of **the total volume of retail trade** in Russia.

In a number of regions, that figure differed from the national average, namely, in the Chukotka Autonomous Area (38.5 percent) and Tyva (24.9 percent) where the share of state-run and municipal companies in trade was the highest, while in 12 other regions (the Bryansk Region, the Tver Region, the Ulyanovsk Region, the Kirov Region, Mari El, Mordovia, Chuvashia, Dagestan, Karachay-Cherkessia, Udmurtia, Yakutia and the Khabarovsk Territory) that figure ranged from 10 percent to 20 percent of the total volume of retail trade.

The share of state-run and municipal companies in **the total volume of wholesale trade** was the highest in Dagestan (86.8 percent), North Ossetia (82 percent), the Jewish Autonomous Region (63.8 percent), Tyva (49 percent), Kalmykia (43 percent), Yakutia (41.5 percent) and the Pskov Region (27.7 percent). In nine regions (the Tver Region, the Yaroslavl Region, the Ulyanovsk Region, Tatarstan, Adygeya, Udmurtia, the Chukotka Autonomous Area, the Amur Region and the Sakhalin Region) that figure amounted to 10 percent to 20 percent (while the national average value in 1999 amounted to 3.5 percent).

Having analyzed the total data on the share of the public sector in the above sectors of the economy it can be safely said that the state's role in business activities is the greatest in such constituent entities as Mari El, Chuvashia, Kalmykia, Dagestan, Udmurtia, Tyva, Yakutia, the Jewish Autonomous Area, the Chukotka Autonomous Area and the Khabarovsk Territory. In those regions, the contribution by the state-run and municipal companies to business activity was higher than the national average, in industry, construction and trade a like (at least in respect of one of the above indices in each branch of the economy).

The role played by the state as an economic entity in Moscow, the Murmansk Region, the Archangel Region, the Smolensk Region, the Tver Region, the Kirov

Region, the Tambov Region, Mordovia, Ingushetia, Kabardino-Balkaria, North Ossetia, Tatarstan, Bashkortostan and the Republic of Altai is somewhat less important, but important still. In those regions, the share of public-sector and municipal companies was higher than the national average, except in industry (at least in respect of one of the indices) and at least in respect of one of the indices related to construction or trade.

After we have studied the group of regions where the public sector's role was greater than elsewhere it is important to consider those regions where the private sector played a dominating role.

It is to be noted that the relevant classification used by the National Statistical Board includes along with the public and municipal property private property, non-governmental organizations' property, Russian property with mixed ownership and foreign property with mixed ownership.

In our analysis of specific industries that classification was used to different extents. Depending on the form of ownership, the statistical data on industry (the number of enterprises, the output volumes and the number of workers employed) and on retail trade volumes was available for the public and municipal companies (in combination) and for non-public businesses with various forms of ownership,[7] while data on construction, on public, private and Russian mixed-ownership companies (companies with other forms of ownership are not taken into consideration because their role is insignificant), and data on wholesale trade, on public and municipal companies (in combination), and private companies, Russian mixed ownership companies and other (in combination).

As can be seen from the National Statistical Board's approach the non-public sector of the economy includes private companies and mixed-ownership companies.

Defined as 'private property' in Russian statistics is any property owned by individuals or legal entities. The definition of the mixed ownership is more complicated.

Russian mixed-ownership property is defined by the National Statistical Board as property which is owned by a Russian legal entity and is a pool of property with different ownership statuses.[8] Such a definition makes it difficult to identify industries and organizations with participation of the state though it is obvious that those companies are the kernel of the mixed ownership sector. The national classification of forms of ownership (OK-027-99) has been, obviously for that reason amended (Amendment № 1199). Instead of Russian mixed-ownership property statistical reports should use a new classification, including 'Russian mixed-ownership companies with participation of the federal center', ' Russian mixed-ownership companies with participation of constituent entities of the Russian Federation', 'Russian mixed-ownership companies with participation of municipalities', and 'Russian mixed- ownership companies with no participation by the state' (there is no mention of municipalities in this respect). However, they keep using old forms of classification in official statistical reports.

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[7] In industry, private businesses' and non-governmental organizations' property emerged in addition to public and municipal property in 1999.

[8] The Russian Statistical Year-Book: Collected documents/ The National Statistical Board. Moscow, 2000. p. 297

The state can hold stocks (shares) in companies with participation of foreign capital (joint-ventures, industries operating under agreements on division of the produce output and other) which can be defined as 'foreign mixed ownership property'. However, the role played by such property in Russian economy is insignificant.

Proceeding from the general trends in market-economy reforms in Russia, seen as 'private' should be such businesses as have been created by private capital from scratch and also fully privatized enterprises; while seen as 'mixed-ownership' should be privatized and newly-established companies with holdings by the state. It is to be noted in that context that by the late 90s despite the momentous privatization program and fast development of private capital the state retained an important proprietary role in the economy, not so much through its ownership of public/municipal unitary enterprises as through its holdings in major joint-stock companies which were created as a result of corporate transformation of major and medium-sized enterprises (which holdings were secured by the state through appropriation of controlling interests or issue of 'Gold Shares').

For that reason used as a criterion in assessment of development of the private sector in specific regions should be contribution by **private companies proper** rather than that of the entire non-public sector.

In 1999, around 88.5 percent of **industrial** enterprises in this country (at which around 40 percent of the total workforce was employed) belonged to the private sector; those industries accounted for a mere 30 percent of the industrial output, however.

The figures in respect of proportion of private companies in the total number of industrial enterprises do suit the purpose of analysis of differentiation of the ownership reform between regions, since in 25 constituent entities of the Russian Federation the proportion of such companies in the above period was less than 80 percent. Just like in analysis of the role played by the public sector, data in respect of the contribution to the total output and the share of workforce employed are more important criteria.

The highest contribution by private-sector companies to total **industrial output** was observed in the Kamchatka Region (84 percent) and Karachay-Cherkessia (81.6 percent) followed by the Belgorod Region (71.5 percent), the Pskov Region (70.8 percent), the Republic of Adygeya (68 percent) and the Voronezh Region (61 percent); in 12 other regions (the Leningrad Region, the Bryansk Retion, the Vladimir Region, the Ivanovo Region, the Kostroma Region, the Moscow Region, the Tver Region, the Kursk Region, the Tambov Region, the Krasnodar Territory, the Altai Territory and the Sakhalin Region) that figure ranged between 50 percent and 60 percent.

Private-sector enterprises had the highest **shares of workforce** in the Belgorod Region and Karachay-Cherkessia (72.6 percent); in eight other regions (the Pskov Rehion, the Voronezh Region, the Republic of Adygeya, the Stavropol Territory, the Altai Territory, Khakassia, the Kamchatka Region and the Sakhalin Region) that figure ranged between 60 percent and 70 percent, while in ten regions (the Bryansk Retion, the Ivanovo Region, the Kostroma Region, the Smolensk Region, the Tver Region, the Nizhny Novgorod Region, the Kursk Region, the Tambov Region, the Saratov Region and the Krasnodar Territory) it ranged between 50 percent and 60 percent.

In construction, private-sector enterprises had the highest shares of **jobs done** (on a contractual basis) in the Archangel Region, the Pskov Region, the Orel Region, the Belgorod Region, the Voronezh Region, the Volgograd Region, the Republic of Adygeya, the Republic of Ingushetia, the Chelyabinsk Region and the Kemerovo Region (70 percent to 80 percent), and in 23 other regions (the Republic of Karelia, the Republic of Komi, the Murmansk Region, the Kaliningrad Region, Saint Petersburg, Moscow, the Moscow Region, the Vladimir Region, the Republic of

Chuvashia, the Kirov Region, the Nizhny Novgorod Region, the Lipetsk Region, the Tambov Region, the Saratov Region, the Krasnodar Territory, the Stavropol Territory, the Rostov Region, the Perm Region, the Sverdlovsk Region, the Republic of Altai, the Altai Territory, the Omsk Region and the Tomsk Region) that figure ranged from 60 percent to 70 percent, while the national average was 57.5 percent.

In the total volume of **design-and-development work** done in construction, the shares of private companies were the highest in the Republic of Karelia (89 percent), Buryatia (87 percent), the Ryazan Region (86 percent), the Tyumen Region (84 percent) and the Sverdlovsk Region (83 percent), in seven other regions (the Volgograd Region, the Murmansk Region, the Bryansk Region, Dagestan, the Orenburg Region, the Perm Region and the Irkutsk Region) that figure ranged between 70 percent and 80 percent and in 12 regions (the Archangel Region, the Novgorod Region, the Pskov Region, the Kaliningrad Region, the Moscow Region, the Tver Region, the Yaroslavl Region, the Kirov Region, the Belgorod Region, the Penza Region, Karachay-Cherkessia, and the Chelyabinsk Region) it ranged between 50 percent and 60 percent, while the national average was 33 percent.

In **wholesale trade** [9], the share of private companies nationwide amounted to 45.3 percent. It was the highest in the Magadan Region, the Archangel Region, the Leningrad Region, the Nizhny Novgorod Region and the Voronezh Region (between 90 percent and 98 percent). In eight other regions (the Murmansk Region, the Bryansk Region, the Rostov Region, the Stavropol Territory, the Chelyabinsk Region, the Krasnoyarsk Territory, the Maritime Territory and the Sakhalin Region) it ranged between 80 percent and 90 percent and in 11 regions (Karelia, the Vladimir Region, the Kirov Region, the Samara Region, the Saratov Region, the Sverdlovsk Region, the Novosibirsk Region, the Irkutsk Region, the Altai Territory, the Khabarovsk Territory and the Kamchatka Region) it amounted to 70 percent to 80 percent; in 11 other regions (the Vologda Region, the Kaluga Region, the Yaroslavl Region, Chuvashia, the Belgorod Region, the Kursk Region, the Volgograd Region, the Krasnodar Territory, Bashkortostan, the Tomsk Region and the Chita Region) it ranged between 60 percent and 70 percent, while in eight regions (the Kaliningrad Region, the Tver Region, the Ulyanovsk Region, Kalmykia, the Republic of Altai, the Kurgan Region, the Perm Region and the Amur Region) it was between 50 percent and 60 percent.

Output of comprehensive analysis of data on the private sector's share in all the above segments of the national economy shows that if such a formal quantitative criterion is to be used as the extent of contribution to economic activities, the private sector will be found to be particularly well-developed in the Vladimir Region, the Nizhny Novgorod Region, the Belgorod Region, the Voronezh Region, the Saratov Region, the Krasnodar Territory, the Stavropol Territory and the Altai Territory. It those regions, the private sector accounts for over 50 percent of industrial output or workforce (or both), at least 60 percent of the construction work done on a contractual basis (in addition to that, in some of those region the private sector also accounts for 50 or more percent of the construction design and development jobs) and for at least 50 percent of the volume of wholesale trade. Nearly as high has been the share of the private sector in the Leningrad Region, the Pskov Region, the Bryansk Region, the Kostroma Region, the Moscow Region, the Tver Region, the Kursk Region, the Tambov Region, Adygeya, Karachay-Cherkessia, the Kamchatka Region and the Sakhalin Region. In those regions, private companies accounted for at least 50 percent

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[9] No separate statistical data is available on the share of all-private enterprises; the available data is on the share of the non-public sector as a whole.

of the industrial output and/or industrial workforce, and also either for over 60 percent of the construction work done on a contractual basis or for over 50 percent of the construction design-and-development jobs or 50 percent of the volume of wholesale trade (the combinations of the above figures in respect of construction and wholesale trade differ from region to region, but at least one of those indices is at the above level or over).

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The findings of the study of inter-regional differences in the structure of ownership in Russian as of the beginning of the Year 2000 have been as follows. Comprehensive analysis of companies' contributions to the economic output in three sectors of the economy (industry, construction and trade) has revealed that there were in the period under review two groups of regions which were each other's antipodes in the structure of ownership.

The regions where the state played a particularly active role in the economic sphere were mostly ethnoterritorial entities (including most of the former autonomous republics in the North Caucasus, the Volga Region, the Urals Region, Siberia and the Far East). The reason behind that situation was that the authorities in such constituent entities of the Russian Federation had more opportunities (as compared to the authorities of territories and regions) to influence the structure of production, jobs and services in the areas under their jurisdiction through retention under regional control of industries which could otherwise be privatized, establishment of new unitary enterprises under regional jurisdiction and stimulation of the volumes of output and rate of employment by securing for those industries of state orders, either federal (through lobbying in Moscow) or local, and also of subsidies out of the state budget. It is also to be noted that some of those regions had rigorous climates, so separate companies were needed for provision of the necessities essential for survival (in particular, Yakutiya and Chukotka).

With other regions in that group, retention by the state of an important role in the economic sphere can be explained by specialization of the local economies (in particular, a large proportion of defense-industry enterprises) or a slow rate of privatization due to political reasons, as in Moscow, the Smolensk Region, the Tver Region, the Kirov Region and the Tambov Region. In some regions, in particular, in the Archangel Region, the Murmansk Region and the Khabarovsk Territory retention by the state of a major role in the local economies was caused by a combination of several different factors.

On the whole, that corroborates the outputs of the analysis of differentiation of the privatization process between regions carried out within the framework of the project on the basis of such criteria as the extent of small-business privatization, use of procedures for retention by the state of proprietary control over the corporate sector in the post-privatization period and other.

The group of regions on the opposite end of the scale (one that includes regions where over half of the major non-agricultural sectors of the economy are controlled by private businesses) was even more heterogeneous. In the 90s, regions which currently belong to that group treaded very different paths economically and politically. Along with regions known for their adherence to the cause of reforms (the Nizhny Novgorod Region and the Sakhalin Region in the early 90s and the Saratov Region in the late 90s) it embraces those with very different political aspirations and large agrarian sectors, including those that are in a state of depression (the Pskov Region, the Bryansk Region, the Kostroma Region, the Tver Region, the Voronezh

Region, the Kursk Region, the Tambov Region, Adygeya, Karachay-Cherkessia, the Krasnodar Territory, the Stavropol Territory and the Altai Territory). A median position has been occupied by the Leningrad Region, the Moscow Region, the Vladimir Region and the Kamchatka Region. The Belgorod Region occupies a position all of its own, being the most successful example of clever economic policy and clever adaptation of the economy to the new market environment among the regions of the so-called 'red belt' of European Russia.

With most of the numerous constituent entities of the Russian Federation belonging to neither of the above groups, companies with mixed ownership have an important role to play. [10] More detailed classification of those regions on the basis of analysis of the formal and the actual extent of privatization is outside the scope of this paper.

Interpretation of the obtained outputs has been done in accordance with the conclusions on interrelation between the formal and the actual aspects of the reform of ownership relations which were drawn within the framework of the project on the basis of cluster analysis of the extent of domination of the non-public sector in various regions of Russia[11].

If formal quantitative criteria are to be used, one has to conclude that accelerated development of the private sector has not contributed to fast overcoming of the economic crisis. Domination of an economic segment by private-sector enterprises does not necessarily mean that the public sector is mature enough to ensure economic development of the region. Of much greater significance are the starting conditions which existed prior to launch of the market reforms and also influence of macroeconomic and political factors.

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[10] The Tver Region and the Tambov Region can be seen as antipodes to that vast group of regions. They belong both to the group with a comparatively large public sector (larger than the national average) and to the group with a comparatively large private sector, which means that the role played by companies with other forms of ownership, in particular, those with mixed ownership, is very insignificant there.

[11] It is to be noted that the analysis was carried out not in respect of the entire regional economies, but in respect of such economic segments as are continuously monitored by the State Statistical Board of the Russian Federation, namely, industry, construction and trade. If a more accurate typology of Russian regions from the point of view of structure of ownership is to be devised in future, the following factors need to be taken into account: 1) obtaining of information in respect of specific sectors' contribution to the outputs of economic activity in all branches of the regional economy contributing to the gross regional product and aggregation of that information; 2) analysis of the economic outputs of the regional economy with breakdown by the form of ownership taking into account the existing structure of capital/fixed assets and investment (including sources of financing); 3) taking into account of such aspects of reformation of ownership relations as reforms in agriculture, development of small businesses, situation in the financial sphere, especially in the banking sector, activities of holding companies of a national scale; 4) analysis of the existing levers of control over and influence on the non-public sector by the state, both formal (through the state's holdings and 'Gold Shares') and informal (mutual influence by businesses and the authorities, preferences, management of money flows, bankruptcy procedures and the like).

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Reformation of Ownership Relations in Russia in the 2000-2001 Period: Privatization and Problems Related to Management of Public-Sector Enterprises[1]

Approaches to Handling of Post-Privatization Problems and the Proposed Policy in Respect to Ownership Relations at the Federal Level

The principal trend in Russia's development in the past three years has consisted in gradual overcoming of the consequences of the 1998 financial and economic crisis through resumption of economic growth. The new stage of economic reforms which began in mid-2000 brought to the forefront the need for and practicability of modernization of Russia's national economy and resolution of the social problems faced by this country. It is a practically universal belief that those objectives cannot be achieved unless the state's weakness is overcome and performance by the state of its functions improved

In respect of the sphere of ownership relations, state regulation of the economy can be notionally divided into two components: 1) management/participation in management of public property; and 2) regulation of the activities of economic entities with any other forms of ownership. The latter line in the state's regulatory activity (which involves creation of a favorable business and investment climate by means of protection of property rights (primarily those of stockholders/investors and creditors), development of the entire range of financial markets and the landed property and real estate market) is not handled in this paper.

The Government's Present Stance on the Issue of Management of Public Property and Assessment of the Privatization Program

The program *Guidelines for the Government of Russia's Long-term Social and Economic Policy* (approved by the Government of the Russian Federation in the summer of the Year 2000) proceeds (and with good reason) from the presumption that in the present situation the principal guidelines of the state's policy in the sphere of management of state property should be:

- Enhancement of efficiency in management of such property as has remained in the public sector; and
- Privatization of a considerable proportion of public property.

Three principal subjects of that policy have been identified: 1) state-run enterprises; 2) economic entities with participation by the state; and 3) real estate. The actual program of measures has been devised proceeding from that set of subjects.

In respect of public-sector enterprises, such measures include transformation of such enterprises into joint-stock companies with 100 percent of the stock owned by the Federal Government or contribution of such property to the authorized capital of another joint-stock society (over 75 percent of whose stock belongs to the Federal Government) with waiver of the right to perform managerial functions. In respect of economic entities with participation by the state,   they include optimization of state participation in economic entities through passing of decisions on perpetuation of state ownership of the stock of the economic entity in question, transfer of the stock to sub-federal or municipal-level authorities, sale of such stock or liquidation of the economic entity as such (in case of perpetuation of state ownership of an economic entity's stock, the objectives of such participation by the state in the economic entity's capital and the ways of attainment of those objectives are to be clearly formulated in the contract concluded with the manager).

More detailed is the program of measures in respect of state-owned real estate. It includes compilation of a complete register of real-estate objects owned by the Federal Government, clear-cut delimitation and coordination of the powers of all state authorities involved in that process (with setting for all the Constituent Entities of the Russian Federation of a single procedure in respect of decision-making on use of landed property under federal jurisdiction); use of the market-price assessment mechanism in utilization of real estate (for the purpose of bringing of the rates of rent charged for use of state-owned real estate in accordance with the rates prevalent on the market); inspection and introduction of strict control over use of real estate by state-run enterprises and institutions (use of the property for the authorized purpose only, market rent rates, nature of the privileges, grounds for discontinuation of the lease), establishment of a legal base in respect of the mechanism of use of public property, including the issue of reimbursement of expenses involved in management of state property; and provision of personnel.

The privatization strategy contained in the Government's Program is of a general nature only providing for a general scenario forecast and individual basic principles, including the need for enactment of a new law on privatization, approaches to transfer of title to intellectual property and plots of land and regulatory measures in respect of participation in privatization by foreign capital. To a great extent, those principles were implemented by the beginning of the Year 2002 when a new Land Code and a new law on privatization were adopted (that issue is discussed below). The main questions that arise in that connection are whether or not those documents are actually going to work and how they are going to influence the social and economic situation in Russia.

Taking a general view of the approaches to management of public property that are provided for in the Russian Government's Program, it is to be noted that on the whole that program is based on an aspiration towards optimization of the structure of ownership (mostly by means of reduction of the number of objects owned by the state) for the purpose of creation of favorable conditions for economic growth, which aspiration is only natural in conditions of market reforms. At the same time, that program may be hampered by the existing serious contradictions which first manifested themselves during the 1995-1998 'cash privatization'. The most important among those contradictions are:

- The contradiction between the need to ensure the maximum income for the budget by means of sale of public property (both blocks of shares and whole companies) and a lack of solvent demand (especially in respect of

losing and low-profit companies), and also a very real danger of collapse of the stock market;

- The contradiction between the theoretical possibility of sale of the more attractive companies (or blocks of their shares) and actual inefficiency of such sales (which is due to obvious under-estimation of their assets and lobbying by major financial groups, various departments and authorities, which lobbying is typically disguised as a structural and legal reorganization).

The problem is that most of the property remaining in the state's possession consists of objects which are insufficiently attractive to Russian investors due to the need of major investment and very attractive objects (in particular, controlling or blocking interests in national monopolies) which can only be sold at an adequate market price and with certain preconditions.

Even with the political situation permitting eradication of the latter contradiction (of which the experience of the past several years gives grounds for hope) and the state not seeking the maximum fiscal revenues from sale of certain categories of property, the problem of lack of solvent demand in respect of losing, low-profit and also specialized capital-intensive enterprises may become very prominent, just as the danger of stock-market shocks.

For that reason, the quantitative estimates contained in the scenario forecast in respect of privatization seem to be exceedingly optimistic and radical. The proposed public-sector reduction to 1,500 to 2,500 federal enterprises by the beginning of the year 2004 means that around 3,000 to 3,500 enterprises need to be privatized annually. That figure does not seem very great in itself, but it should be compared to the figure in respect of the number of state-owned enterprises/objects privatized in the course of the cash privatization: in 1995, 10, 152 enterprises/objects; in 1996, 4,997 enterprises/objects; in 1997, 2,743 enterprises/objects; in 1998, 2,129 enterprises/objects; in 1999, 1,536 enterprises/objects. It is to be noted that the above official statistical data covers privatization of every kind of public property, down to municipal, rather than federal property alone, and a majority of those deals consisted in purchase of premises of earlier privatized enterprises and grounds thereof. The actual rate and scope of privatization is best illustrated by the result of the privatization effort in the Year 2000. In that year, out of the 2,274 enterprises/objects privatized only 170 had been federal property, while 60 percent of the objects privatized were buildings and grounds which were purchased to constitute part of privatized enterprises' property. In addition, it is to be noted that realization of the above scenario requires as a necessary prerequisite complete discontinuation of the process of establishment of new public-sector enterprises in those years and an in-depth adjustment of the privatization procedure, and in certain cases also pre-sale measures requiring certain expense. It is true that in addition to privatization there is another way of reducing the public sector, namely, forced integration in holding structures of enterprises which have been transformed into joint-stock companies. However, that scheme can only be applied on individual occasions, since its practicability depends on specific of the economic branch in question and the assets remaining in the state's possession.

In the scenario forecast in respect of privatization of public property, reduction in the number of public-sector enterprises and institutions is linked to the volume of financing by the state (in the form of direct financing from the budget and in the form of payment for executed government orders), which can hardly be deemed correct. In developed market economies, government orders are placed with enterprises with

different forms of ownership. Moreover, companies belonging to the private sector have for decades seen government orders as most lucrative, and there has been tough competition for such orders. The real problem is posed by the extent of maturity of economic entities constituting Russian national economy's private sector,
The extent of their ability to attain objectives of national significance and the need for clear-cut coordination of those objectives with the general strategy of this country's economic development. An approach under which the number of public enterprises and institutions is directly linked to the state's financial potential can only be used in some specific cases.

Another principle contained in the above government document, that of simultaneous transfer of title to buildings and grounds thereof is on the whole correct. To a great extent, it is an extension of the approach (adopted in connection with the measures in respect of management of the real estate in the state's possession) under which preferential right to purchase real estate at low prices is granted to specific categories of persons (in accordance with the law on privatization). It is proposed that the above preference will be preserved, but only for a limited period of time, after which sale at market prices will be introduced.

The above approaches have been largely realized in the new Land Code and the new law on privatization (both enacted in 2001). It is to be remembered, though, that those statutory acts are to be implemented in an environment where even now there are numerous exceptions from the above rule. In particular, many of the joint-stock companies established in the course of privatization have not purchased their premises' grounds.

The above approaches can only be directly realized in respect of a relatively small group of enterprises that fully belong to the private sector (with the objective being sale of the entire property, the principal and the appurtenances alike, or making the facilities and equipment of liquidated public enterprises available to new businesses). In fact, there is a very close interrelation between privatization of public property and measures taken in management of public property (in the sphere of creation of favorable conditions for attraction of investment into the 'real' sector of the national economy through stimulation of extensive economic use of real estate, including by making incomplete construction projects available to investors on favorable terms). Most of those measures are absolutely necessary but at the same time difficult to implement. This in particular applies to introduction of new market mechanisms of disposal of federal property, such as mortgaging, placement in trust and contribution of entitlement to use of such property to companies' authorized capitals.

The provision to the effect that perpetual use of plots of land can only be granted to organizations financed from the budget and to private individuals (for non-commercial use) requires some elaboration. At present, it often happens that organizations which do not get sufficient financing from the budget secure for themselves other sources of income, some legal, some illegal. Covert 'business activities' have been typical, in particular, of many institutions in the social sphere. However, they should hardly be denied the use of their premises' grounds for that reason. It seems that a more fair approach could consist in introduction of criteria for assessment of such activities' objectives.

Review of the Microeconomic Policy in Respect of Public-Sector Economic Entities

Compared to management (including privatization) of real estate, the object of which consists in material assets (such as buildings, parts of buildings and plots of land), the state's ownership policy in respect to enterprises which fully (unitary public enterprises) or partially (companies with state holdings) remain in the public sector has distinct features of its own, such enterprises and companies being juristic persons which have property of their own, pursue their own business activities and occupy their own niches on the goods and services markets. Naturally, in case of liquidation of such an enterprise, the procedures may be similar to those involved in sale of real estate, however, in the present situation that would be an exception from the rule.

The approach provided for by the Government Program in respect of **unitary public enterprises (UPEs)** proceeds from the need for   fast transformation of these into corporations. The proposed measures consist in full (but for facilities required for national security purposes) privatization of industries which have a potential for survival and growth with attraction to such industries of domestic and foreign investment and trading of such companies' shares on the stock market. The program for transformation of UPEs into joint-stock companies with 100 percent of the shares belonging to the Federal authorities was expected to be completed by the end of the Year 2001.

If a purely formal view of the matter is to be taken, realization of such an approach may be expected to make privatization of those enterprises easier. However, it is to be remembered that hasty transformation of UPEs into corporations naturally narrows the sphere of restructuring-based privatization where the enterprise is sold as a 'complete set' with production equipment, buildings, other structures and the grounds all going as a single lot (that privatization scheme was widely used in the former GDR). With an enterprise transformed into a joint-stock company problems related to division of the charter capital into blocks of shares meant for sale and evaluation of those blocks of shares are more likely to arise. At the same time, a likely option consists in liquidation of the public-sector enterprise and making of the thus vacated premises and equipment available to new businesses (which is tantamount to use of the restructuring-based privatization scheme).

Another argument in favor of fast transformation of public-sector enterprises into joint-stock companies with 100 percent of the shares in the state's possession has been poor performance by the state as an owner. However, in the current situation (where the Russian national economy is still in the process of transition and many privatized enterprises have failed to show the expected efficiency and manageability even under new private-sector owners) one can hardly expect that a mere change of the form of ownership at industries remaining within the public sector can improve those industries' performance fast. This point is vividly illustrated by the experience of major joint-stock companies with participation by the state. [2]

Utterly erroneous is the use of a single criterion of 'potential for survival and growth' in decision-making on privatization of specific enterprises. The developments in the national economy in the 90s have vividly shown that a potential for survival

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[2] That the desired results will be attained by the proposed transfer of Russian railways (currently Federal property managed by the Ministry of Railways) into a joint-stock company (Russian Railways) with 100 percent of the capital belonging to the state is doubtful to say the least. The power generation and gas production industries which were transformed into joint-stock companies back in 1992 and are currently controlled by major holding companies (RAO UES and Gazprom) with controlling interest belonging to the state have never shown greater efficiency than the railways, which, just like the above holdings, have effected certain internal transformations within the framework of the natural monopolist reformation program. In the past three years, all three industries faced similar problems: lack of money flow transparency, cross-subsidizing and near-critical extent of aging of the fixed assets.

and a potential for growth are two different things, not to mention such well-known factors as extremely low rate of outside investment even with the most attractive Russian companies from among the few that have their shares listed on the stock market. In respect of companies fully owned by the state at present, the above-mentioned prospects seem very dubious to say the least.

Proceeding from the above, the scheme offered in the Concept of Management of Public Property and Privatization in the Russian Federation (September 1999) seems to be more realistic. That scheme provides for gradual reduction of the number of state-owned and municipal unitary enterprises with simultaneous taking of measures towards improvement of management of the remaining ones. The above measures include:

Determination:
- Of the range and number of unitary enterprises required for performance by the state of its functions;
- The state's objectives in respect of each enterprise or institution;

Setting:
- Of a procedure for reporting by managers of enterprises/heads of institutions on progress made in implementation of the adopted program/plan;
- Of a procedure for taking of administrative decisions in case of failure to attain the objectives set by the state/failure to implement the adopted program/plan;
- Of a procedure for contribution by enterprises of part of their profit to the budget and criteria to be used in calculation of the amounts payable;

Introduction of stricter control of the activities of such enterprises/institutions and their managers/heads.

Implementation of the Government Program's guidelines in respect of **companies with participation by the state,** most of which are **joint-stock companies,** may contribute to better realization of the state's interests in the sphere of corporate management, however, much will depend on the methods and mechanisms actually used. Some of those methods and mechanisms are discussed below.

In the sphere in question, a whole set of measures is practicable and necessary. Some of those measures are of a short-term nature, while others, medium-term or long-term. The short-term measures (to be taken within one year) may include re-certification of representatives of the state and inquiry into instances where they have voted at joint-stock companies in favor of motions which meant erosion of the state's interest (to be followed by examination of the situation at those joint-stock companies in respect of compliance with the law). Some moves in that direction have already been made. For instance, in 1999, over 150 state representatives at joint-stock companies were replaced.

Of the medium-term measures (those to be implemented within two or three years) the most important one is specification of the state's title to interest in specific joint-stock companies. The most important of the criteria to be used in such specification is the state's share in the joint-stock company's authorized capital. In cases where the state has a majority interest (38 percent of the authorized capital or more), a set of such norms and procedures could be applied as would permit the state as the strategic owner to exercise the managerial functions, while in cases where the state has a minority interest (25 percent or less), a set of such norms and procedures as would permit the state as a co-owner to exercise control of the company's activities.

The task of determination of the state's proprietary title with various joint-stock companies at present requires attainment of three objectives: 1) stricter and more clear-cut requirements should be adopted in respect of the activities of the state's authorized representatives with joint-stock companies (through amendment of the existing statutory acts on that matter, mostly outside the Federal Assembly of the Russian Federation); 2) adoption of basic mechanisms for control of money flows and the process of at least simple reproduction of capital with joint ventures in which the state participates and introduction of those mechanisms in the schemes of activity of the state's authorized representatives with joint-stock companies; and 3) inventorying and classification the state's existing interests by the region and by the economic branch for the purpose of assuring collection of the required revenues by budgets at every level, carrying out of the institutional reforms and, probably, adoption in future of more active policy in respect of industries' structure.

The Concept of management of public property and privatization with simultaneous improvement of management of joint-stock companies with participation by the state (adopted by the Government of the Russian Federation as guidelines for long-term effort to reform the ownership relations) justly proceeds from the assumption that strictly-termed contracts need to be concluded with the managers with the responsibility for performance indicated, introduction of continuous economic monitoring and starting of an economic efficiency register with the enterprise's future performance indicated on the basis of the same principles and approaches as were described above in the section where unitary enterprises were discussed.

Attainment of the above objectives may be facilitated by taking of such long overdue measures as introduction of standard forms for reports of the state's authorized representatives with open-end joint-stock companies (October 1999), passing of a decision on starting of a register of economic efficiency of federal public unitary enterprises (FPUEs) and joint-stock companies in which the Federal Government has interest (January 2000), introduction of practice of annual adoption for FPUEs and joint-stock companies with Federal participation of over 50 percent of economic efficiency objectives, control of implementation of those objectives and use of the property, determination of the share of an FPUE's profit to be contributed to the budget and the recommended amounts of dividends to be voted for by authorized representatives of the Russian Federation in governing bodies of open-end joint-stock companies (February 2000), setting of a procedure for appointment of representatives of the state and such representatives' interaction with the Ministry of Ownership Relations and sectorial governing bodies, depending on the extent of the state's participation, including time-limits for notifications, lodging of propositions, authorizations, issue of written instructions and reports on participation in activities of enterprises' governing bodies (March 2000).

It seems that for the purpose of further improvement of management of the interests owned by the state the following measures should be taken:
- the Standard Contract (approved in May 1996) concluded with authorized representatives of the state's interests should be brought in accordance with the above-mentioned documents;
- For the purpose of minimization of chances of opportunistic or self-seeking behavior by authorized representatives of the State, agents and civil servants alike, their powers of independent decision-making on issues requiring authorization should be withdrawn (but for cases where they have already received instructions from superior authorities);

- Incentives should be devised for actual stimulation of each of representatives and agents of the state in the form of payment to such representatives/agents of part of the amount of dividend revenues yielded by the interests owned by the state (the Concept of Management of Public Property and Privatization provides for allocation of at least 10 percent of the amount of dividend income yielded by state-owned shares for reimbursement of the costs related to management of those shares, but does not offer any specific schemes of such allocation);
- It should be ensured that the state's interests at the largest and most important joint-stock companies are represented by staff members of state authorities who could be doing such jobs full-time (upon approval by the Government of the yearly programs of their work);
- Amendment (through specification of the limits of remuneration of the trustee and reimbursement of the costs thereof; devising of regulations in respect of trustee licensing in accordance with provisions of the Law on Stock Market; and starting and keeping of a register of trustees) and gradual expansion of the practice of the use of trustees' services for management of state-owned shares by companies that are not of strategic significance should be carried out;
- For the purpose of selection of career personnel and prevention of instances of abuse of office, provision should be introduced to the effect that persons who have earlier been dismissed from their offices on grounds of having acted in bad faith (with a detailed description of the misdeeds and penalties therefor) cannot be appointed representative of the state; a database should be established with detailed data on every person who has ever performed the functions of representative of the state at a joint-stock company.

The issue of inventorying and classification the state's existing interests by the region requires a somewhat more detailed discussion. A key provision of the above-mentioned Concept is related to transfer of title to interests to constituent entities of the Russian Federation by way of meeting of the Federal budget's liabilities on conditions of acceptance by the regional authorities of the existing programs for development of the industries in question.

However, it seems reasonable that the above-mentioned mechanisms should apply to property of constituent entities of the Russian Federation (or at least to the interests the Federal Government intends to transfer to the regions) as well as to the federal property. That measure should be preceded by careful study of the situation at the industries whose shares have already been transferred to regional authorities. Decisions on transfer of federal blocks of shares to regional authorities should be passed taking into account the number of blocks of shares already owned by those regional authorities (including municipal), the time of their de-blocking, efficiency of the previous sales, with inclusion of all those issues in official documents related to inter-budgetary relations.

In the light of the Federal government's initiatives in reformation of the government structures and consolidation of the hierarchy of authority (which initiatives were voiced in decrees by the President of Russia and draft laws made public in May and June 2000) of particular importance is the issue of strict delimitation of the powers of the Russian Federation, constituent entities of the Russian Federation and municipalities in the sphere of reformation of ownership relations, including management of property. New opportunities for assuring of the

federal government's interests at joint ventures and control over the quality of representation of the federal government's interests have been created by introduction of the offices of authorized representatives of the President of the Russian Federation (such offices have been established at seven Federal Districts).

Speaking of long-term measures (such as may be realized within five years), a systematic scheme could be devised for management of the state's interests in joint-stock companies and other enterprises with mixed ownership on the basis of individual approach to each of the objects of management and goal-oriented programs. That presupposes determination of the purpose of the state's participation in the capital of each particular enterprise, clear-cut formulation of the tasks related thereto and documented fixation of the ways of influencing the object of management with effective instruments of control available.

At that stage, apart from medium-term goals (more or less conscientious performance by enterprises with participation by the state of their functions specified at appropriation by the state of interests in their capital and growth in non-tax-related revenues of budgets at every level), the state could pursue a number of other goals related to assuring of lasting favorable conditions for economic growth.

The Concept of Management of Public Property and Privatization justly describes as separate objectives of management of public assets at joint-stock companies stimulation and diversification of production, improvement of financial and economic performance by such companies, attraction of investment, optimization of the managerial costs and institutional reforms in the economic sphere. The methods for attainment of the above objectives include use of blocks of shares owned by the state for securing of loans and investments, capitalization of enterprises' liabilities to the budget and contribution of plots of land to joint-stock companies' charter capital with subsequent sale or placement in trust of newly issued shares, creation of vertically integrated corporate structures, restructuring of enterprises with segregation of the property required for attainment of national objectives and sale of the rest of the property, and also use of various privatization procedures.

In that context, it is to be noted that any effort towards restructuring of an enterprise with segregation of individual processes requires much care and a lot of time due to the need to take into account all the related circumstances, first and foremost, the need to assess feasibility of partition of projects which were designed and built as a single technological facility and elaboration of the technical aspects of that issue. Quite complicated is also the task of creation of competitive holding structures with state participation, since in addition to the need to take into account the technical aspects of the matter (compatibility and interrelation of the enterprises thus integrated and their ability to complement each other) there are the requirements in respect of concentration of state-owned assets to a level where effective control is possible at minimum managerial costs.

Privatization in 2001 and Prospects of Privatization in Russia

In 2001, the same trends were to be observed in privatization as had emerged in the late 1990s.

Under the plans of the Ministry of Ownership Relations of the Russian Federation, the proceeds from sale of public property (notably, such proceeds had not been not entered on the 'revenues' side of the federal budget since 1999) were to amount to at least 18 billion rubles in 2001. In Article 24 of the Federal Act on Federal Budget for the year 2001, of December 27, 2000 (No. 150-ФЗ) the following

revenues were included among others in the list of revenues from public property and activities (which were to amount to 26.8 billion rubles in 2001): dividends on shares, 2 billion rubles; proceeds from leasing off of property, 5.6 billion rubles (including 3.2 billion rubles from lease of land); revenues from public sector enterprises, 9.5 billion rubles. The latter figure mostly refers to revenues from activities of the joint venture Vietsovpetro rather than to contribution to the budget of portions of the profit earned by unitary public enterprises.

Selection of enterprises for privatization in 2001 was complicated (apart from the yearly conflicts concerning the government's powers and specific enterprises to be included in the list) by a provision of Article 100 of the Federal Act on Federal Budget for the year 2001, namely, the provision in accordance with which shares of joint-stock companies whose book value (on the consolidated balance with affiliated and related companies) exceeded as of January 1, 2000 the amount equivalent to 50 million minimum wage amounts (MWAs) could not be sold prior to entry into force of the federal act on state privatization program (which was due in the year 2001).

There were plans to sell around 700 blocks of shares in 2001. In the first quarter of 2001 the Government failed to have Article 100 repealed [3], so the Ministry of Ownership Relations drew such lists of enterprises earmarked for privatization as did not contradict the above provision; those lists contained 19 units to be put up for sale in the first half-year and 81 units to be put up for sale in the second half-year. The Russian Fund of Federal Property intended to auction off (including at specialized auctions) shares of seven joint-stock companies in the first half-year and of 32 joint-stock companies in the second half-year. Naturally, a more radical solution was to be provided by enactment of the law on privatization, for which intensification of work on the draft law was essential. The Law in question was actually enacted late in 2001.

The traditional fiscal orientation of the privatization process brought about in 2001 (just as it had in the previous years) a situation where the dynamic of revenues from privatization was of a seasonal nature. In the first quarter of 2001, the total revenues amounted to 5.11 billion rubles (which figure exceeded the planned one by around 33 percent), but only one-seventh of those proceeds came from sale of property. Most of that year's proceeds from sale of property were obtained towards the end of the year, after major blocks of shares were sold in the fourth quarter (it was only by that time that lists of such shares were approved by the Government).

The total proceeds from privatization and use of public property amounted to 39.2333 billion rubles in 2001(see Table 1), with the Russian Federation's share of the Vietsovpetro company's profit and proceeds from sale of land and intangible assets accounting for 10.111 billion rubles out of that amount; dividends, for 6.478 billion rubles; proceeds from leasing off of federal property, to 4.896 billion rubles; proceeds from leasing off of land, for 3.917 billion rubles, while contributions out of federal unitary public enterprises' profit, for 0.209 billion rubles.

TABLE 1

Principal parameters of privatization and use of public property and the role played by these in respect of the federal budget in the 1995-2001 period (in current prices).

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[3] Proceeds from sale of 20 companies' shares (which was blocked by provisions of Article 100) were, according to the Government's published plans, to be used for settlements with the Paris Club.

	1995	1996	1997	1998	1999	2000	2001	2002 (Plan of the Ministry of Ownership Relations)
Actual number of privatized enterprises	6,000	5,000	3,000	2,583	595	320	150	500
Proceeds from privatization of property (nonrenewable source)								
Approved budget, rubles.	4.991 trillion a	12.3 trillion.	6.525 trillion	8.125 billion c d	15 billion.cf	18 billion cf	18 billion. C	35 billion
Actual revenues, rubles	7.319 trillion	1.532 trillion	18.100 trillion b	15.442 billion e	8.547 billion c	31.368 billion c	10.111 billion	-
Actual revenues from use of public property (renewable sources)								
Dividends received on shares held by the federal government, rubles	92.8 billion	118 billion	270.5 billion	0.575 billion (200 companies)	0.848 billion (600 companies)	3.675 billion (1050 companies)	6.478 billion	10 billion.
Proceeds from leasing off of property, rubles	116.7 billion	No data available	305 billion	0.466 billion	2.191 billion	3.427 billion	4.896 billion, from leasing off of property; 3.917 billion, from leasing off of land	6 billion. – from leasing off of property; 6 billion – from leasing off land
Contributions by/income from public-sector enterprises, rubles	-	5 billion	26 billion	0.783 billion, Vietsovpetro	5.675 billion, Vietsovpetro	11.687 billion, Vietsovpetro	13.622 billion Vietsovpetro; 0.209 million, FPUEs' profit	12.4 billion – Vietsovpetro; 1.23 billion - FPUEs' profit
Total revenues	209.5 billion	123 billion	601.7 billion	1.824 billion	8.714 billion	18.789 billion	29.122 billion	35.6 billion.
Total revenues from privatization and use of public property								
Actual revenues, rubles	7.529 trillion	1.655 trillion	18.702 trillion	17.266 billion	17.262 billion	50.157 billion	39.233 billion	70.6 billion - g

a - The approved budget was adjusted in December 1995; 70.8 percent of the actual proceeds was yielded by shares-for-loans auctions; b - including 1.875 billion dollars yielded by sale of the Svyazinvest holding; c – proceeds from sale of property alone; d – altered in April 1998 to amount to 15 billion rubles (at the Government level); e - including 12.5 billion rubles from sale of 2.5 % of RAO Gazprom shares; f – not stated on the budget's income account; g– plan for the Year 2002 as amended by the Ministry of Ownership Relations of the Russian Federation in December 2001.

As can be seen from Table 1, the year 2001 saw considerable change in the structure of the federal budget's revenues from privatization and use of federal property. Almost 75 percent of such revenues came from renewable sources (income from participation, dividends, rent and contributions from profit). It is to be noted for the sake of comparison that in 1997 that figure amounted to a mere 3 percent. It is also to be noted that for the first time since completion of bill privatization income from renewable sources accounted for more than half (around 60 percent) of total revenues from privatization and use of property inside Russia (with income from Vietsovpetro not counted in). In 1999, income from use of property only equaled that from privatization thanks to participation in that joint venture.

The share of income coming from nonrenewable sources dropped from 97 percent in 1997 to a mere 26 percent in 2001 (in fact, only half of the amount of revenues from such sources planned for the Year 2001 was received). The biggest privatization deals in 2001 were related to sale of blocks of shares of Kuzbassugol (79.73 percent), Kuznetskugol (69.09 percent) and Vostsibugol (27.62 percent) [conclusion of those deals can be seen in a way as completion of privatization in the coal-mining sector); and also shares of the Norsi-Oil holding (oil refining and sale of oil products, 85.36 percent) and of Rosgosstrakh, Russia's oldest insurance company (49 percent).

Conclusion of most of the major privatization deals, both those effected in 2001 and those postponed till 2001, has not provided an automatic solution to the corporate control and governance problems. For instance, at Kuzbassugol the auction procedure and the final alignment of forces further kindled corporate strife which is not likely to come to an end in the foreseeable future. Both the dominating shareholders (the alliance of the Magnitogorsk Iron-and-Steel Works and Severstal [based in Cherepovets] on the one side and the alliance of Evrazholding, the Novolipetsk Iron-and-Steel Works and Belon [trade in coal] on the other side) which hold, respectively, 52 percent and 44 percent of the coal holding's shares, each got five seats on the board of directors. In addition to the personnel-related differences between them, there situation has been made worse by the Kemerovo Region Administration's aspiration to get 'the gold share'. Issue of such a share was provided for in the terms of the company's privatization. So far, it has been at the disposal of the Ministry of Power Industry of Russia, which on those grounds also has a seat on the board of directors. The confrontation has already caused repeated failures to hold a general meeting of stockholders and problems with holding of meetings of the board of directors and election of a director general.

Enactment of the new Law on privatization of public and municipal property (of December 2001, No. 178-ФЗ) was an important event for this country's national economy.

For the purpose of enhancement of fiscal efficiency of privatization, the Law provides for orientation towards continuation of the individualized strategy of sales with the use of analysis of the market (solvent demand) and advanced methods of privatization. While the emphasis still remains on major single deals in respect of liquid blocks of shares with sale of such blocks of shares at auctions and specialized auctions, where the above method has failed such new methods may be used as sale through public offering with no price stated or sale proceeding from the results of management by a trustee. In this way there will be no need to devise such new methods of privatization (in addition to simple transformation of a public-sector enterprise into a joint-stock company) as would allow the state to dispose of its

nonliquid assets while stimulating the maximum demand on the part of private individuals and small businesses.

On the whole, 10 different schemes of privatization can be used, depending of the size of the enterprise, its liquidation or the results of primary sales:

- Transformation of a unitary enterprise into an open-end joint-stock company;
- Auctioning off of public or municipal property;
- Auctioning off at a specialized auctions of open-end joint-stock companies' shares;
- Sale of public or municipal property at tenders;
- Sale abroad of shares of open-end joint-stock companies held by the state (through issue and placement of depository receipts);
- Sale of open-end joint-stock companies' shares using the services of stock-market traders;
- sale of public or municipal property by means of public offering (using the Dutch auction procedure with lowering of the price to the minimum equal to the original price in case of absence of bidders at the auction;
- sale of public or municipal property without statement of the price (in case of failure to sell a small or medium-sized enterprise by means of public offering;
- contribution of public or municipal property to authorized capitals of open-end joint-stock companies;
- sale of open-end joint-stock companies' shares taking into account the results of management by a trustee (blocks of shares amounting to 51 to 100 percent of the authorized capital with reservation of the right to repurchase the shares at the price that was valid as of the day of signing of the contract.

It is to be noted in connection with the above that shares of enterprises whose value exceeds 5 million minimum wage amounts can only be auctioned off (including at specialized auctions or sold abroad.

Approval of the above draft Law by the National Assembly of the Russian Federation was secured thanks to the compromise provisions on multi-level decision-making on privatization of projects belonging to various categories. The President of the Russian Federation is in charge of industries of strategic significance (atomic power generation, defense industry and the like) and drawing of the list of industries that cannot be privatized; while The State Duma of the Russian Federation, of the natural monopolists (such as the Ministry of Railways, RAO UES and RAO Gazprom), and Government of the Russian Federation, of all the other enterprises. Privatization of property held by regional governments and municipalities is to be done by an authorized local authority. The draft Law does not include any of the traditional lists of banned items, which means that theoretically practically any facility can be privatized. So, there will be no more confrontation between the legislative and the executive authorities (which has been typical of the past few years) in respect of annual approval of lists of projects to be privatized and enactment of the Act on privatization program (which has never been passed in the 1998-2001 period). From now on, the Government will annually (in August) submit a draft budget with the proposed list of federal projects to be privatized appended to it.

Other important innovations include sale of the grounds as a part of the property being privatized (that is required under the new Land Code of the Russian Federation) and increase in the authorized capitals through counting in of title to intellectual property (that is important in transformation into joint-stock companies and privatization of science-intensive enterprises). Also, the practice of 'application privatization' has been discontinued. While before, an application from a private person or organization (apart from the Government's initiative) was deemed sufficient grounds for beginning of privatization, under the new draft Law such a request does not have necessarily to be granted. It is also important that that Law's provisions are the same for the authorities at every level.

The new Law's principal shortcomings are as follows:

Firstly, the draft law has created more opportunities for arbitrary actions by bureaucrats (in particular, the terms of a tender and the winner's obligations after conclusion of the contract can be changed) and has caused an even greater inequity among potential participants (that particularly concerns the procedures for application of new schemes of privatization), even though provision on equity of buyers is contained in Article 2 (1).

Secondly, procedures for privatization of enterprises that are eligible for privatization have been made more complicated and arduous (which concerns, in fact, a considerable proportion of the state's holdings which have not yet been sold yet, for some reasons or other). While in respect of the 720 companies that have strategic significance [4] such restrictions are well-grounded, in respect of non-blocking minority interests their reasonableness is dubious.

Thirdly, it is clearly a shortcoming that there is still no clear-cut long-term privatization strategy, apart from the fiscal objectives. Seen as a starting point in development of such a strategy should be drawing of a list of enterprises/industrial sectors which should remain public property at all time. Only after that any discussion can be started of sales to be carried out in the short, medium and long term, with such sales divided into two categories: liquid assets attractive to investors and nonliquid assets, whatever the cause of nonliquidity, their financial and economic parameters or the existing structure of ownership.

The background of privatization in Russia is characterized by a lack of transparency of deals and lack of equity of buyers in conditions of rampant corruption. The sales techniques used are but of secondary significance in such conditions.

The 2002 privatization program largely relies on the innovations introduced by the new law. As an indispensable component of the budget it was approved by the Government back on August 2, 2001. (Quantitative parameters of that program are discussed in Table 2.

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[4] Listed in the Decree of the Government of the Russian Federation on public-sector joint-stock companies whose products/services are of strategic significance for national security and whose shares cannot be sold before time (Decree No. 784 of July 17, 1998, as amended).

TABLE 2.

Federal Property as of January 1, 2002.

	Total property of the Russian Federation, units	Percentage of the total number of companies registered in the Russian Federation	To be privatized in the Year 2002, units
Public unitary enterprises	9,394	12	152
Joint-stock companies in which the Russian Federation has holdings	4,407	0.9	426
Including those with state holdings of: 100 % of the authorized capital	90	-	6
over 50 % of the authorized capital	646	-	33
25-50 % of the authorized capital	1,401	-	127
25 % of the authorized capital or less	2,270	-	260
gold share	750		-

Source: data contained in the draft privatization program for the Year 2002 which was submitted to the Government by the Ministry of Ownership Relations in August 2002 and on the departmental site www.mgi.ru (March 2002). The register of state property has been constantly updated. The data shown in the table can be compared with the data as of September 1, 2001: there were 9,855 federal public unitary enterprises and 4,308 holdings in joint-stock companies. According to some estimates, the number of joint-stock companies with state holdings currently exceeds 6,000; the register of FPUEs is also far from being complete.

The largest deals proposed are sale of blocks of shares of oil companies (LukOil, 5.9 percent; Slavneft, 19.68 percent; a VNK, 36.816 percent), coal-mining company Vorkutaugol (38.41 percent), and the Magnitogorsk Iron and Steel Works (17.77 percent). The Government of the Russian Federation has approved the proposal by the Russian Fund of Federal Property on sale in 2002 of blocks of shares of the Murmansk, Taganrog and Tuapse seaports. The actual initiators of that proposition and hence potential buyers may be major financial groups engaging in export of fuel and metal which are proprietors of a number of seaports even now. A block of shares of the telecommunications holding Svyazinvest (25 percent minus two shares) has been on the lists of eligible objects of privatization for years, though its sale has so far been delayed. Further privatization of Svyazinvest can only be carried out after its restructuring, including merger of the regional affiliates, and thorough pre-sale preparation. Sale of most of the minority holdings has also been considered for some time, since they do not entitle the state to participation in management and yet require certain spending. In addition to that, the list of enterprises of strategic significance which cannot be privatized in accordance with provisions of the Decree of the Government of the Russian Federation of July 17, 1998 (Decree No. 784, as amended) is to be reduced.

The original forecast as to the revenues from sale of property which took into account the need for certain organizational measures and was based on the assumption that the conditions on the market were going to be favorable, amounted to 18 billion rubles, but later was increased to 35 billion rubles. The fiscal objective in respect of income (in the form of dividends and rent) from use of public property and

enterprises' activities (income of joint ventures and contributions out of FPUEs' profit) for the year 2002 amounts in accordance with the Act on Federal Budget for the Year 2002 of December 31, 2001 (Act No. 194-ФЗ) to around 29 billion rubles (which figure was adjusted in December 2001 by the Ministry of Ownership Relations to make 35 billion rubles), including proceeds from leasing off of property, 4 billion rubles and 6 billion rubles; dividends, 7.6 billion rubles and 10 billion rubles; leasing off of land, 4.4 billion rubles and 6 billion rubles; contributions out of FPUEs' profits, 0.5 billion rubles and 1.2 billion rubles and income from the holding in the joint venture Vietsovpetro, 12.4 billion rubles and 12.4 billion rubles, respectively.

As can be seen from the notes to Table 2, reformation of management of public property constitutes a necessary condition of further development of ownership relations in Russia. Such a reform could be based on simple inventorying of that property, which inventorying could include apart from the quantitative account also a strict delimitation of the powers of authorities at different levels in disposal of various kinds of property.

Ownership rights and the federal state in Canada

Responsibility of the federal and provincial governments

The concept of ownership rights in Canada results from the principles, which are in the basement of the British law and practice and the French Civil Code. Ownership rights is a regulated right to exploit property and appropriate its «fruits» - be it a harvest, corporate dividends or remuneration for the use of the intellectual property. Restrictions placed on this right reflect a policy of the state which is the main subject of the present chapter. There is a large list of literature on this issue. Our study will not be complete due to understandable reasons.

Although based on older legal traditions, Canadian legislation related to the ownership rights in its practical part was strongly influenced by the provisions of the Constitution Act (1867) that was an important constitutional document. The Constitution Act (1867) allocated powers to the provincial governments in the sphere of property and civil rights on their territories and the administration of those rights. Provinces have total jurisdiction over the development of lands and resources, which is not transferable unreservedly to private parties. Possession of these rights guaranteed and guarantees now enormous power in such resource dependable economy as a Canadian one. In these spheres the law and legal acts are in the jurisdiction of the provinces.

Such subordination to the realities of the time represented a threat to the development of numerous parallel and in some aspects contradictory legal systems with potentially negative results for the creation of an integral national economy. However, thanks to a number of factors the outcome was not particularly negative. Such important sectors of the economy as the banking system and transport together with the criminal law remained under the jurisdiction of the federal government. Reasonable lawmakers on the provincial level were active not to allow a legal confusion. Many of them turned for consultations to the supreme imperial power, which resulted in the fact that the Canadian legislation at the provincial level (and the federal level) has many borrowings from British law, legal language and precedents. Courts very often postponed their verdicts before they consulted with the British law and precedents. The province of Quebec, which uses the Napoleonic *Code civile*, the court procedure followed the English model. As a result, Canada has a strong and

harmonious system of laws on property, based on legal acts and practice and interpreted, as a rule, on the basis of centuries-old legal precedents. Moreover, such system appeared in a federal state where provinces long since rather jealously observed their rights and autonomy.

Example: securities law

The securities law represents an example of functional coordination and responsibility of the legal system at the provincial level. Each of the ten provinces (and in principle, in three northern territories) there is a regulatory agency that supervises over the securities market. Contrary to the United States, where there is a single Committee on securities and stock exchanges at the federal level, Canada whose population is only one tenth has thirteen such institutions. Corporation that wants to publish a prospect must in principle ratify it in thirteen jurisdictions (and in two languages) in theory guaranteeing its correspondence with the existing in each jurisdiction different legal and procedure requirements. In practice and partially for the purpose that they should not grumble in Ottawa that it is high time to create a national securities committee, the provinces and territories have invented a «virtual» regulatory mechanism based on their cooperation. National institution, Canadian administrators of securities, organizers them with the aim of developing general rules and more harmonious cooperation. There is a system which depending on the location and the nature of the issuer one regulatory agency as a rule takes responsibility and acts in the name of the other. Moreover, Canadian administrators of securities represents Canada in the issues related to regulation of international securities. Such regulating «tuning» allows more or less not lagging behind of the changes that have been taking place in the markets lately. Among its current asks one can mane development of the rules that would have required a wider openness of the information about all material facts as well as the rules designed to eliminate possible abuse in prospering branch of mutual funds[5]. Finally, all these rules are based on the

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[5] The first is caused by the US example, the second- by dubious if not openly illegal practice of companies that dispose of material assets. The Ontario Securities Commission recently instituted proceedings against the former president of a mutual fund for the fact that he while calculating daily asset net value per a share set prices on some securities without the help of electronic data. Aggregate difference from the final market value according to some calculations amounted to about 300 thousand US dollars per portfolio amounting to 3 billion for the period of about six months. This case looks ambiguous due to a lack of special prohibition to set "by hand" prices on liquid securities. This fact will undoubtedly lead to a better specification of the current rules. In case of a more serious case related to a "high closure" which is a method of manipulating of final prices at the end of the day used for accounting (which is specially prohibited) the decision was take not in favor of the management of RT Capital – a branch of major banks in the country. In that case the damage to the firm's reputation as

principle of protection of clients and investors. The more sophisticated the rules the higher the trust of the clients and the more efficient the capital market.

Federal powers

Supremacy of the legislation of a province gives way to the federal legislation when the case relates to the jurisdiction of the federal constitution or when the company is incorporated according to the provisions of the *Canada Business Corporations Act* (CBCA) and not according to act adopted in the province. In latter case CBCA regulates certain spheres of activity. For example, deals related to transfer of controlling packets of shares, issues related to powers of attorney for voting in the name of shareholders and cases of illegal operations using insider information of a joint-stock company. Under the federal constitutional jurisdiction are certain sectors named *ab initio* such as banks, insurance companies and railways and other branches which can later be named of national interest. Nuclear power is one example. Moreover, there are a number of economic activities that the Constitution Act (1867) somewhat arbitrarily attributed to the federal government competence. One of them – bankruptcy and insolvency. Correspondingly, federal laws were adopted which determined the order for redistributing assets of insolvent companies (for example, "Act on bankruptcy and insolvency" and special acts determining the order for liquidating financial institutions), intellectual property ("Act on patents", etc.) and management of specter ("Act on radio communications".) Each of those acts determined creation of a regulatory agency separate from the government. An Office of the Supervisor of Financial Institutions (OFSI) and the Bank of Canada are most important among them due to the fact that financial institutions take a central place in any economy. Thus another aspect of specialization of two upper levels of government de facto became a law. OFSI and the Bank are mainly concerned with the soundness of the banking system . In contrast, the provincial governments, with their general mandate to look after the interests of customers, regulate the conduct of financial institutions and their agents with respect to their day-to-day interaction with customers.

The Constitution Act, 1867, determines one clearly defined sphere of federal jurisdiction which has great importance – general powers to regulate trade and

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well as the overall value of closed accounts was greater than the sums in several million dollars paid by the firm and the management in penalties.

commerce. In practice, this means trade and commercial issues that are not unquestionably transferred to the provinces including all trade matters that arise at the provincial and international levels. Victorious offensive of the new technologies means that the provincial jurisdiction is much more confined to the local issues.

Finally, the Canadian constitution gives the federal government the residual powers. All that that was not unquestionably assigned to the provinces in 1867 including not invented at the time telecommunications and air transportation automatically went under the jurisdiction of the federal authorities.

Out of all this comes the image of a country that one and a half centuries ago decided to limit the powers of a potentially super strong central government by way of assigning part of its powers to the lower levels of government in the framework of constitution which as time showed inbuilt capacity to resist change but is rather viable in practice. At the same time, technological progress and political factors together created a somewhat less homogeneous system that is full of nuances that one could have expected from literal understanding of the constitution. For example, the federal government for a long time has been worried by the initiative from below directed at limiting the freedom of commerce between the provinces by way of setting barriers in the form of "local procurements", prohibition for non-residents to participate in state contracts, compulsory certification of the labor force, etc. So far, it has not used its unquestionable constitutional right to repeal provincial protectionism preferring the power of persuasion to the power of law. In other spheres, when private interests of the provinces contradicted the national interests with respect to rights and services which should be available to the citizens such as health-care and special and higher education the federal government provided subsidies to those provinces that distinguished themselves with "good behavior." Sometimes the standards of such behavior are incorporated in the law, as in the case of the Canadian Health-Care Act.

Dispute settlement

The provincial courts settle disputes related to the property rights in the majority of cases, whose judges are appointed by the provincial authorities or the federal government depending on the court level. Appeals against the courts' decisions or specialized administrative bodies are submitted to the provincial courts of appeal. After that the case can be appealed in the High Court. Thus, there is one more

mechanism to harmonize provincial and federal legislation although this mechanism is very slow which is determined by the nature of the legal system.

Court cases are complicated, protracted do not guarantee the desired results and are expensive. The parties that have a dispute have all the reasons to try to settle it by some other way. Correspondingly, many contract determine that disputes should be settled quickly and often without the right of appeal in the arbitrage that acts according with the provincial or federal law regulating this sphere of economy in order that each party pays for its expenses and equally reimbursed the cost of arbitrage which usually consists of resigned judges who specialize in the administrative law or property law or distinguished lawyers.

Complicated issue of land rights

Here we mainly discuss the issues of privatization of assets of publicly held corporations. One of the advantages of mass transfers (compared with block transfers) represents a possibility for the citizens to increase their household savings. In this case, it is worth noting such forms of property as bank accounts, insurance police, mutual funds, housing, and what is particularly important for the rural population (although does not exclude other categories of the population) ownership rights of agricultural land and plots of land used for recreation and entertainment. In case of Russia the most important issue consists in directing agriculture in the way of increasing productivity. Land privatization can cause more acute economic and social problems in the near future.

Land assets have a number of features that are not characteristic of liquid securities. They are highly specific and due to that are not liquid. Skilful financial mediation is required inn order that people with modest means could buy relatively expensive real estate. Moreover, there is an empirically observed tendency reported in all bourgeois societies speaking about rapid transformation of potential income applied to land assets in the capital value of the plot of land. However the land value is "glutinous", i.e. once the price goes up it as a rule goes down slowly even when, for example, the fall of prices of agricultural products depreciates the land. Thus, farmers in the market oriented economies usually posses in relation to the rest of the population wealth which highly surpasses their current income which is a phenomenon that has political consequences.

Problems Related to Management of Public Sector Enterprises

The general strategy in respect of the **unitary enterprises** sector has largely been set in the Decree by the Government of the Russian Federation on Federal Public Unitary Enterprises with the Right to Conduct Business of December 6, 1999, Decree No. 1348 (That Decree was adopted by way of elaboration on provisions of

the Concept of Management of Public Property and Privatization in the Russian Federation.) The decree provided for lodging by sectorial governing bodies to the Ministry of Public Property of the Russian Federation of substantiated propositions in respect of the future of federal public unitary enterprises (FPUEs) in their charge. All-in all, there are five different options of transformation of such enterprises' organizational and legal status: 1) reorganization of enterprises, including their transformation into open-end joint-stock companies; 2) establishment with the use of such enterprises' facilities of new federal public-sector enterprises; 3) sale of such enterprises as single lots; 4) liquidation; and 5) preservation of such enterprises' status as unitary enterprises with the right to conduct business.

The most radical approach to that issue proceeds from the need to eliminate FPUEs altogether (as an institution). However, the low liquidity of their assets and the specific of their business make more realistic a scenario where the number of public unitary enterprises could be gradually brought in accordance with the state authorities' managerial potential (which means reduction of public-sector enterprises to 3,500) with simultaneous taking of measures (provided for by the above-mentioned Concept) towards upgrading of efficiency of management of public-sector enterprises. That such an approach is more advisable is also evidenced by the fact that the forecast (contained in the medium-term program of the Government), according to which the process of transformation of public unitary enterprises into joint-stock companies with 100 percent of the shares owned by the state was to be completed by the end of the Year 2001, has proved very unrealistic. It is to be remembered that by the beginning of the Year 2002, there were 9,394 FPUEs and only 90 joint-stock companies with 100 percent of the capital belonging to the Russian Federation. In the three years after the passing of the 1997 Act on Privatization (1998-2000) just one such joint-stock company was established using state-owned facilities (in 1998).

In its medium-term plans, the Ministry of Public Relations of the Russian Federation favors transformation of most of the existing FPUEs into corporations (with gradual sale of their shares). With such a transformation carried out, there would be no need to use any special mechanism of management of public unitary enterprises. Instead, a scheme which has become quite widespread in the past few years could be applied, namely, representation of the state's interests on joint-stock companies' boards by the state's authorized representatives. In 2001, preparations were carried out for transformation of FPUEs into corporations. In respect of around 66 percent of the existing FPUEs, recommendations as to their restructuring have been formulated (in 1,669 cases, reorganization has been recommended, while in 531 others, liquidation).

Whichever scheme is selected for transformation of a unitary enterprise, such a transformation requires thorough inventorying (which should include apart from inventorying of the property also drawing of a record of the management's activities). The need for creation of a comprehensive register of public property became obvious back in the early 90s. However, for a long time that effort was somewhat sluggish. It was only enhanced after adoption of the Concept of Management of Public Property and Privatization in September 1999.

While by September 1999 just around 10 percent of legal entities using public property on some or other terms were on that register, by the summer of 2000 (after some pressure), 83 percent, or 52,000. Those included 11,200 public unitary enterprises; 32,700 federal institutions, 3,500 joint-stock companies from among those in which the state had holdings or which used federal property and 4,500 legal

entities of other categories. Updated data in respect of the Register of Property of the Russian Federation in 2001-2002 are shown in Table 2 above.

It has become obvious that such registration stimulates growth in the federal budget's revenues. In the Vladimir Region, the number of lease contracts grew from 480 in 1998 to 6,100 in 1999. In Moscow, however, just 12 percent of such legal entities have been registered. According to the Public Property Inventorying Department of the Ministry of Ownership Relations of the Russian Federation, in 69 constituent entities of the Russian Federation 1,232 legal entities have been discovered which have been deemed federal, but in reality have not been registered with or supervised by any federal departments. In 2001, it was revealed that with over 300 joint-stock companies whose stock was held by the federal government the rights vested in stockholders were actually exercised on behalf of the Russian Federation by regional authorities or other parties that were not authorized to do it. In addition to that, in the 1998-1999 period the Ministry of Public Property of the Russian Federation discovered that administrative buildings, production facilities, warehouses and incomplete construction projects with a total floorspace of five million square meters stood unused.

Some of the statutory acts adopted for the purpose of furthering of the principles introduced by the Concept of Management of Public Property and Privatization have provided for introduction of restrictive mechanisms to prevent non-registration of part of FPUEs' property. In particular, there is a provision to the effect that for purchase or transfer of holdings in authorized capitals of companies, organizations and other legal entities active on the financial services markets, including banks and non-banking credit institutions, authorization from the responsible federal executive authority (one in charge of coordination and regulation in the sector in question) will be required. [6] However that provision does not provide a solution to the fundamental problem of withdrawal of assets through long-term investment since for investment in establishment of branches no authorization by the Ministry of Ownership Relations of the Russian Federation is required.

Another problem is related to monitoring of CEOs' activities and stimulation of contribution by public unitary enterprises of part of their profit to the federal budget. The former objective is hardly attainable, even if the departments in charge of specific sectors of the national economy develop the applicable standards. On such grounds, termination of the contract (just like a decision by an examination board) can be contested in court. Of great significance for resolution/non-resolution of problems related to managerial personnel of unitary enterprises will the practice that is to take shape following adoption of the new Labor Code (the old Labor Code afforded managers too many levers for protection of their position). Though contribution by public unitary enterprises of part of their profit to the budget is provided for by the law (Article 295 of the Civil Code of the Russian Federation), that rarely happens in practice. Effective monitoring could be assured by regular audits and audits by independent auditors, but that requires considerable spending.

In addition to practical enforcement of the numerous statutory acts adopted for the purpose of furthering of the principles introduced by the Concept of Management of Public Property and Privatization in 2000-2001, the following important tasks need to be handled in 2002:

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[6] That provision was contained in the Decree by the Government of the Russian Federation of February 16, 2001 (Decree No. 121) and included in the Standard Statute of an FPUE by order of the Ministry of Ownership Relations of the Russian Federation of March 6, 2001 (Order No. 548-p).

Firstly, if fiscal revenues from public unitary enterprises' profits are to be increased, the Government should clearly define the principles of contribution by public unitary enterprises of part of their profit to the federal budget. As of the beginning of the Year 2002, there were several different approaches to that matter. The Auditing Chamber of the Russian Federation recommended introduction of a uniform rate of 95 percent for all public unitary enterprises. The Ministry of Economic Development and Commerce of the Russian Federation voiced the opinion that the rates should be calculated individually for each such enterprise. Such an approach requires that a register be established of economic efficiency of public unitary enterprises and joint-stock companies in which the Russian Federation has holdings (establishment of such a register was provided for by the Decree by the Government of the Russian Federation on Stricter Control over Activities of Federal Public Unitary Enterprises and Management of Joint-Stock Companies' Shares Held by the Federal Government (Decree No. 104 of February 3, 2000, as amended on February 16, 2001). A joint order by The Ministry of Economic Development of the Russian Federation, the Ministry of Ownership Relations of the Russian Federation and the Ministry of Taxes and Duties of the Russian Federation in which the relevant criteria are listed and the procedure for their determination is set was registered by the Ministry of Justice of the Russian Federation on November 19, 2001.

Secondly, an important innovation could consist in adoption of a Procedure for Protection of the Rights of the Russian Federation as a Proprietor (which would provide for making representation of the interests of the state a full-time occupation). It is obvious that for introduction of such an innovation two important preconditions are required: stricter requirements to prospective representatives of the state on joint-stock companies' boards of directors and assignment of sources of financing of their activities.

Thirdly, there is an issue which has not been discussed yet and which consists in development of a system of penalties for unsatisfactory performance by representatives of the state (employed full-time) of their duties (that effort could include, among other things, amendment of the Criminal Code of the Russian Federation).

Proceeding from the above, the following practical measures could be taken in respect of management of **public holdings:**

- introduction of an office of full-time representatives of the state at joint-stock companies;
- quantitative standardization of the state's holdings (100 percent and also 75 percent, 50 percent, 38 percent and 25 percent plus one share) at enterprises from the strategic list contained in the Decree by the Government of the Russian Federation of July 17, 1998 (Decree No. 784), as amended;
- transfer of minority holdings (under 25 percent), except such holdings in major, financially important companies;
- introduction of a differentiated approach to efficiency of work of representatives of the state depending on the size of the state holding and the available levers of influencing the decision-making;
- wider use of management by trustees with trustees selected by means of tenders (or even use of management by trustees as the only form of management), though with the existing legislation and practice that objective may be difficult to achieve.

The sphere of ownership relations has been affected by the obvious trend towards strengthening of the federal hierarchy of authority, just like many other spheres. In particular, a momentous effort is being planned to revise the agreements under which regional authorities have had the use of federal property in cases where income from the use of such property (in the form of rent and the like) has dropped (which in 2001 was the case with at least 25 percent of constituent entities of the Russian Federation). In the regions where the policy of the Committees for Management of Public Property has not been to the Government's satisfaction, those committees' functions and powers will be assigned to specialized territorial authorities. Such authorities (which have already been established in Moscow, Voronezh and Irkutsk) are under Federal jurisdiction. So far, the planned measures thus boil down to carrying out of an administrative reform whose avowed purpose consists in assuring higher fiscal revenues and introduction of clear-cut criteria for delimitation of Federal and regional/municipal property. It seems that legislation on that matter will be needed.

At the same time, transfer of Federal property to regions (which began in the late 90s) has continued. Provision on transfer of title to FPUEs to constituent entities of the Russian Federation is contained, in particular, in Decree by the Government of the Russian Federation of December 9, 1999 (Decree No. 1366). A practical example of such policy is transfer in accordance with Decree by the Government of the Russian Federation of December 15, 2000 (Decree No. 974) to Moscow of blocks of shares of a number of companies by way of a partial compensation for performance of the functions of this country's capital. Early in 2002, 49-percent interest in the Svoboda factory (perfumery and cosmetics) and 60-percent interest in the Khimavtomatika production association were transferred to the Moscow administration.

Results and prospects of the reform of the ownership rights in Russia in the context of the international experience

On the whole it is to be noted that a clear-cut notion is needed of the overall purpose of privatization and reform of public property management.

In the early 90s, the key objective of privatization consisted in securing of the structural change and institutional base for a system transformation, including the informal contacts required at that time: without goodwill on the part of CEOs of public-sector enterprises, all privatization plans would have been doomed at the inception. At present, that system objective has largely been shifted to the sphere of corporate management. Another objective of privatization, the fiscal one, was achieved in the late 90s, though with many criticisms. At present, that latter objective is insufficient for stimulation of the privatization process. In such a situation, the emphasis has quite naturally been shifted to such part of the public sector as to be remain unaffected by any change in respect of from of ownership. The third objective, the one related to the issue of investment, has not been achieved in the least, partly due to objective factors (such as the need to handle fiscal and system tasks), partly due to the existing subjective factors (the latter were mostly related to use of investment objectives for the purpose of elimination of competitors, assuring of self-purchase of companies, and the like).

Multiple setbacks during the privatization campaign in Russia make it urgent to study foreign experience.

The Canadian experience, which imbibed two decades of mistakes, setbacks and victories, testifies about the possibility to achieve main privatization goals on condition that sufficient attention will be paid to the efficiency of the process.

Attainable goals

Main reason for privatization of certain branches of industry or companies is the need to raise their economic efficiency. Main reason for denial of privatization of a certain facility can be a politically important function performed by it, which in the context of a specific region can be viewed as too important to be risked by market accidents.

There are several sources of efficiency. At the level of average employee the most productive way of organization consists in employing fewer people but with higher qualification, who work more intensively and use sophisticated equipment. Quite often this scheme is hard to implement in bureaucratic organizations where remuneration is not proportionate to the labor input. In those organizations diligent and creative work does not guarantee appreciable remuneration.

At the management level as a rule possibilities increase to intensify work making it more flexible and concentrating on specific tasks. Moreover, implementation of new methodologies is not restricted to only to production process at specific tasks. New methods of internal management, marketing, organization of supply net, relations with clients and innovations in many other areas—all that is written in manuals—are very important in achieving success. In private corporations it is much easier to create a flexible system of incentives for such development than in state organizations where a principle of equality as a rule is more important than efficiency. Flexibility leads to quick reaction to changing circumstances or appearance of new chances, as they say "to turn on the spot." Flexibility is incompatible with the presence of complicated hierarchy and centralized system of decision making although the latter represents the most convenient organizational form in those cases when the final targets and functions are not clearly defined and when the system is oriented rather to punish for the mistakes than to reward for the achievement of the set goals. Such result orientation works when organizations and all the staff clearly understand the final goal. Such simplicity is unattainable in life full of ambiguities related to decision making at the government level.

Increased efficiency of recently privatized organization results in an increased efficiency of those facilities that remained in the state ownership. This phenomenon is rarely mentioned but is no less important than the first one. This 9shrinking in size) organization willy-nilly narrows the scope of tasks. Due to political reasons its duties include control over several corporations, even small increase in quality of work can bring visible results.

Privatization can result in new "healthy" branches of the economy that appear in place of former bureaucratic structures. These new private firms can better use investment and successfully compete not only in the country but abroad as well. This will lead to increased national income and more efficient national economy.

Finally, the state budget sheds expensive outlays. Simple calculation of the value of long-term credits does not provide a real picture of all capital outlays of the government. If it is possible to turn some "holes" where funds disappear without trace into sources of revenue there appears a chance for a better financing of those functions that are purely public and constantly require funding.

Development of new types of financial instruments and mechanisms

Features of the financial process, which is being used in privatization of an enterprise, play a considerable role but their importance should be overestimated. The purpose is to maximize public revenue, which can be constrained by considerations of the current policy. In this connection there are some main rules, which as experience demonstrates, determine selection of this or that financial process but very often local features can be final. Taking into account the value of typical transactions the first rules always says: "Contract the best consultants irrespective of the cost." There are very few who can replace the services of competent and experienced bankers working with investments and of competent lawyers. They can help you with evaluating the cost of the object and with its preparation for the sale, marketing, negotiations, taxation issues, drafting the documents, and also in case of force majeure. They can estimate the state of domestic markets and give advice what is best to do in the circumstances: private placement of securities, public issuance of new shares, sale at a stipulated price or at a well organized auction.

When solving the privatization strategy governments of Canadian provinces usually preferred to avoid "market administration" and used the services of the shares market. In Russia there is nearly a religious belief in that corporations with a large

number of co-owners is always better than corporation under direct control. There is always a chance that the management can fall in the hands of undesirable people or will serve objectionable interests or in case of financial institutions will be in the center of the conflict of interests of main owners, on the one hand, and the interests of financial institutions, on the other, because the latter being confidential agents of the investors should protect the interests of the latter. Nevertheless, control is a very important thing in itself, and if the profit maximization remains the goal then one should think well about it. In case of absence of control there appears danger that executives and boards of directors become eternal the shareholders' interests will remain ignored.

Openness, punctuality and transparency are very much appreciated in the financial markets. Investors' comfort will directly depend on how unclassified is the privatization process from the very start.

Privatization process in a broad sense of the word

In addition to purely financial issues one should pay attention to other problems from the start of the privatization. The shareholders require motivation, enterprises before the start of privatization need preparation. "Political will" should be guaranteed. All aspects of the current government policy should be carefully analyzed and characterized.

Politically it is not difficult to "push through" privatization of the facilities that lost their political importance. In practice in the majority of cases the ways of privatization are so unclear that usually there is a need that somebody at the top gives his opinion and only then privatization can attract any serious investment. Specification of the current obligations of the firm should be compiled carefully and independently of the opinion of the former owner. Recent Canadian privatization projects, for example, privatization of a large national aircarrier "Air Canada" (1988-89), Canadian national railway "CN" (1995) and the air navigation service "Nav Canada" (1996) have benefited from the accuracy and transparency of the privatization process. Adoption of a corresponding legislation has contributed to favorable conditions required for successful implementation of privatization. An important lesson consists in the fact that financial markets agree with reasonable political decision making if they are clearly defined and will not depend in the future on somebody's political whims.

Stability of once given political evaluation is very important for the privatization process to keep trust among interested parties. At present negotiations

about contracts on building water supply system for the city of Halifax at $400million which is planned to be as a partnership between the state and private business are at a standstill because the municipality could not stick to its own promises due to a pressure from the Canadian union of civil servants that is in principle against any participation of private business in all projects related to the water supply. Such participation the union considers very undesirable. Indecision results in expensive delays in an already protracted process and put the seller in a stupid situation. At the time, it is worth noting that success in all privatization projects—creation of partnerships between the state and private business, providing services on the alternative basis—depends on the formation of a nucleus of highly qualified and experienced civil servants. Mishaps as in the case of Halifax can have consequences that are far beyond any specific deal.

Canadians are skeptics by nature. In the whole number of cases we were given a good lesson: in order that society trusts in a deal transparency and availability of information are necessary. Canada still has to do a lot in that respect.

Enterprises need to prepare for privatization. As in the case of sale a little bit of paint and gloss will always repay. In case of public corporations one should pay attention both to the corporation itself and to the political climate around it. For example, "CN" needed a new executive manager—businesslike and purposeful. They need to improve its balance, get rid of unnecessary property and everything that was important and develop a plan for improving its performance before putting it for sale. It was also important that the government made sure of the political climate for the new private company to work in will not result in closure of unprofitable activities which will not lead to an arbitrary increase in freight will not block investments both from the country and abroad.

Finally, all these not simple deals turn to become successful if shareholders have some sort of motivation. As for the employees and trade unions, their principal concern is to preserve already signed contracts and chances to improve economic gains. Canadian experience demonstrates that the reduction of the staff is possible when the redundant workers are generously paid. In case of "CN" an agreement was reached according to which the severance pay amounted to two-year salary. Moreover, employees with a long work record received pensions. "Game of survival" and payment for resignation can work for several years causing less pain than a single action but the damage done to the organization will long-term and considerable one.

European Union legislation is very instructive in this respect. It requires that each country-member guarantee in its legislation corresponding rights which, by the way, are always guaranteed in Canada[7]. Shareholder should be attracted to one's side. Creation of political allies in support of this or that deal can be decisive. In principle, how it is achieved is not very important. Either promises of future benefits from increased efficiency—they should be addressed to those managers and employees who have a future in the company or simply give shareholders to understand that the best way out for them is to accept the proposed agreement. In case of "Nav Canada" the decision added up to "place at the head of the clinic patients themselves", said a commentator. The company was turned into a consortium of shareholders but not before the expertise persuaded the seller that the combination of private invectives that would result from the upcoming operation in no less degree serve the state interests.

Public partnerships with private business

Recently appeared version of privatization of industrial or commerce enterprises, which were in public ownership before represents implementation of governmental programs or goals by way of signing contracts with private sector.

Consistent with the steering vs. rowing metaphor and also taking into consideration that financial and budgetary pressure that was exerted on the governments in 1980s and 1990s, a number of countries started to experiment in the sphere of public partnerships with private business. Although in many countries public partnerships with private business have already existed on a one-time basis and in a number of countries such policy was institutionalized as a standard approach to business, nothing can compare with the zeal of Great Britain that later than other turned to new faith took to implementing its "private finance initiative."

Implementation of a new approach started with the appointment of Sir David Hancock, high ranking government official, who had served 23 years in her Majesty's Treasury, on the post of the permanent secretary on education and science in the cabinet of Margaret Thatcher. According to the rules of the centralized British system, Hancock was in charge of all infrastructure of the system of education in the kingdom—starting with kindergartens to Cambridge. The former official of the

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[7] British version of the law is entitled "Law on transfer of obligations" (law on civil servants). It played an important role in acieving the progress that was observed in Great Britain lately.

Treasury as nobody else realized how limited are the possibilities for the revival of the system of education in Great Britain with all urgency of this issue due to constraints caused by the requirement of the public sector in borrowed assets. In mid 1980s he described in a letter main principles, which later would be the basis for the "private financial initiative" but there was not reaction from the Dawning Street. Hancock left the public service in 1989 to take the post of the director of "Hambros" bank, one of the few survived old merchant banks in Great Britain. That bank besides was an institution that welcomed new ideas and aggressive invention of new financial products. He as usual wrote down his ideas. The historical moment came in 1992 when the cabinet of John Major and his chancellor Norman Lamont faced the problem of the exchange rate crisis. The government simply had to make a statement in order to mend the prevalent impression according to which the finance minister badly copes with his responsibilities. The chancellor informed about a new promising way for operation of his affaires immediately proclaimed about the transition to "private financial initiative." Conclusion, everything should be done on time.

"Hambros" realized that the key to success was to be an effective and committed team of civil servants and decided to play a role of a consultant of the government during the first years of the implementation of the new scheme. According to this, it developed recommendations for the Office of motorways on the projects of the first seven motorways constructed according to the scheme "Design, Build, Finance, Operate" (DBFO) in the framework of a new policy. Precisely on Hancock's advice the Treasury formed a task force consisting of highly qualified civil servants whose aim was to assist departments and ministries that wanted to get proper quality for the funds spent on procurement of services in infrastructure. External administration was performed from the City.

Out of these first shoots has sprung a flourishing branch of the economy, which was very successful in exports and explained by a versatile experience accumulated on the domestic market. Motorways, railways, ports, hospitals, prisons, airports, military housing facilities and education institutions have been built or renovated in the framework of public partnership with private (PPP) business on the amount of more than 13 billion Euro. "Brach of the economy" is the correct term which is quite appropriate in this context because in addition to a large number of efficient and competitive companies operative on a scheme "engineer, provide, construct" (EPC) as well as operator-companies which administer this or that project

and which very often form a quasi permanent consortiums. For the moment a large number of experienced financiers, lawyers, accountants and other type professionals have already been trained. In general the government's policy consisted in making out of civil servants experienced purchasers of such services and not limit itself with offering assistance (beyond the framework of public programs) to domestic export champions.

In Canada they turned to the PPP scheme due to a shortage of budget funds. For example, according to the constitution the federal government was responsible for providing permanent ferry service between the Prince Edward Island and the mainland. Full cost reimbursement by fare was impossible due to political reasons. That is why the size of the subsidies provided for these services amounted to 35 million dollars by mid 1980s and there was no end to an increase in costs. On the basis of a tender the government chose a consortium of private firms that was to design, built, finance and operate a bridge of 22 miles long during the period of 30 years of the life of concession, following which the bridge would revert to federal ownership. Government's contribution was determined in the amount of its current costs the upper level of which was fixed in nominal dollar terms. Within stipulated limits the consortium could set the fare at its will. However, dramatic raise of fares was impossible one of the old ferries continued to operate.

PPP scheme was used in Ontario when building a new by-pass road, Highway 407, around the northern edge of "Great Toronto." This large project total amount of construction work that was estimated at 1.6 billion dollars was to be implemented at first according to British DBFO scheme. Bidders participating in the tender required to submit full financial proposal. However, the funding organization in the face of the provincial government arose doubts relating to the financial side of the deal. It was decided that the profit from the reduction of costs on government loans greatly surpasses for the latter possible risks of demand, which it would have taken at that. As a result, the consortium that won the tender got the contract only on the design, build, operate scheme. Five years later, when the new motorway has already proven its value for the society and the forecasts for its exploitation have been surpassed, and precisely on those forecasts initial calculations of future revenues and financing were built, the provincial government decided to take off all financial responsibility for the project. Second large tender was announced and the winner would have paid the debt of the province, would have made longer the motorway and would have paid additional sums for the concession. In that case the province received 3.1 billion dollars while the debt amounted to 1.6 billion dollars, which was a fabulous present from the social-democratic administration that initiated the project to the conservative government that reaped the fruits of refinancing.

Canada similar to the majority of the Western states disposes today both industrial capacity and financial mediation potentials in order to carry out large-scale PFBA schemes. They seem to be the most effective when:

- What is required is a service from an expensive (usually over 250 million dollars) object of infrastructure;

- for which directly or indirectly a price can be charged;

- when sufficiently objective performance standards and service quality parameters can reasonably be described;

- there is a keen competition for providing these services; and

- the risks linked with the project can be divided between the state and the private sector.

Air navigation system mentioned above as an example of "pure" privatization with the same success could have been implemented by PPP scheme. However, in the latter case the success of the undertaking would have depended on attracting of foreign firms to the tender. However, for political reasons the government was not ready to accept this. In Canada the majority of the most attractive projects that potentially can be implemented on PPP scheme are related to regional, provincial and municipal levels because precisely those levels of government possess the most part of the country's infrastructure. Recently water supply sector is the most active one. Large-scale projects are proposed for tenders in the provinces of Nova Scotia, Ontario and British Columbia. As a result, concessions are granted on the DBFO scheme.

The largest projects undertaken in Canada under the on PPP scheme are 13 kilometer bridge from New Brunswick to the Prince Edward Island and the construction and refinancing of the Highway 407, a 3.1 billion dollars by-pass road around the northern edge of the Greater Toronto. These and other projects are described in SG Hambros (1999).

As was already mentioned, PPP scheme is an alternative form of providing services, which up till now were identified with public good and were not linked with the activity of commercial enterprises as such. In their structure these types of partnerships are closer to "pure" privatization and the only difference consists in the fact that if the last case the firm's efficiency does not represent any interest for the government from the point of view of the state policy. PPPs make it possible financing that is not reflected in the balance and also provision of services on a competitive basis for which the government carries only fiduciary responsibilities. At

present there is a long list of literature dedicated to how correctly to organize PGC and the majority of the investment banks and many companies that are consulting on the management issues express their full readiness to receive payment for the services both from the financing organizations and from the firms that are participating in different sort of tenders.

Some lessons for Russia

Emergence of the public sector in Canadian economy similar to other countries with developed market economy was linked, firstly, with the obvious failure of markets, which fully demonstrated itself in the period of great depression (1929-1933), secondly, with successful mobilization of the economy during the Second World War (1939-1945) that determined nationalization public consensus with respect to nationalization of a number of branches of infrastructure and social services sector, thirdly, urgency to prevent negative consequences from the closure and bankruptcy of large industrial companies which profitability could not be guaranteed by private owners.

In spite of the fact that the first approaches to privatization appeared in the country in 1970s, direct privatization in Canada was preceded by serious changes in the political situation in the framework of the general liberal-conservative shift, which took place in the West in 1980s. In "technological" aspect experience of two decades of privatization in Canada can be useful for the modification of the Russian privatization policy.

First, taking into account specificity of this or that branch the methods for changing the form of ownership was chosen. Among them dominated direct sales on the basis of negotiations, auctions, and public placement of shares on the securities market.

Second, attainability of the main goal of privatization—considerable increase of economic efficiency of economic agents is being postulated. Sources for such positive shifts exist both in the sphere of labor (employment of less number of more qualified staff that has greater motivation due to adequate remuneration for the labor) and in the sphere of management getting incentives to implement new technologies, introducing marketing, and flexible behavior in response to changing external circumstances.

Third, importance of attracting to the preparation of privatization best consultants capable to replace investment banks and lawyers is being declared.

Fourth, need to support trust to the selected privatization strategy and fears that control over the privatized company can get into the hands of undesirable interests determined preferences of the Canadian government in favor of implementation of certain control procedures during privatization in counterbalance of the stock market.

Fifth, success in privatization required motivation in investors—future shareholders and also certain preparation of privatized enterprises. This conclusion needs to be described in detail.

Successful privatization requires a proper political support. At the same time, this includes not only political will at the top for the implementation of this decision but also clarity and transparency of the legislation, stability of the general political situation, scrupulous adherence of the developed and announced future plans. The latter is very important during the period of preparation of the company for privatization when requirements for the future owners are being developed. Especially, it concerns companies operating in the infrastructure sector and public services where there is a strong dependence of post privatization functioning on the government's policy towards the public sector in general.

Development of a proper motivation for all the participants in privatization transactions presupposes the solution of not only procedure transparency issues *per se* and guarantee of the principle of disclosed information that is critically important for the financial market but securing certain social justice. First of all, it applies to adherence to former agreements in social and labor sphere (contracts, trade unions) with respect to the staff remaining with the company after the privatization and certain generosity (large benefits, early retirement pensions) with respect to those who as a result of the following reorganization can loose their work places.

Unquestionably, interpretation of these conclusions in the circumstances of the Russian reality differs substantially from the genuine Canadian practices.

In Russia, the achievement of a considerable enhancement of economic agents' economic efficiency upon their privatization is far from being evident. There are several reasons for that: the specifics of the Russian privatization process in early 1990s (a giant role played by managers, prevalence of "insiders in the primary post-privatization ownership structure, due to respective privileges) has led to many

privatized companies' failure to get a new efficient owner. The subsequent capital redistribution took a lot of time, which encouraged the continuous degradation of enterprises' production capacity and decreased their weakness in terms of adjustment to new conditions. Furthermore, the 1997-98financial crisis has proved the genuine concern about the ability of the Russian commercial banks (along with a number of other categories of 'outsiders'), lacking both financial capacity and managerial skills, to efficiently exercise the corporate control and strategic ownership of shares. In many cases such shareholders have proved to be incapable to ensure an efficient restructuring of the acquired enterprises of the real sector and to bear the costs related to the control over them.

The current structure of the Russian economy also poses an obstacle to the increase in economic efficiency in the post-privatization period. The transformational decline experienced by the Russian economy during 1990s primarily battered the processing sector. The primitivization of the production structure along with the shifts towards the mineral production has caused the Dutch disease. The potential room for managers' innovations has become narrowed, while the effect of the labor market mechanisms has proved to be yet more imperfect (latent unemployment, the limited mobility of the labor force).

Similar to the Canadian practice, the privatization strategy pursued by the Russian government implied the authorities holding certain control instruments over the situation at the privatized enterprises, although the devices (fixing of stakes, issuance of the "Gold Share", restrictions in terms of the composition of participants in privatization deals, putting forward investment and social conditions in the course of the change of ownership) differed considerably from the Canadian ones.

However the government control instruments over the privatization process were not in conjunction with other directions of the government economic policy (anti-trust, social, and industrial policies). It is only now that the RF government began to elaborate the ways to restructure natural monopolies and to tackle the problem of adequate social policy. The authorities also undertook the first sound steps on the way to improve their control over public property and the respective raising of budget non-tax revenues.

Russia's experience fully proves the conclusion of the necessity of political support to the privatization process. At the same time we regret to argue that the practical apprehension of this solution based on the Western experience was reduced

to a mere understanding of the arbitrary employment of the factor of political will at the high level of authority, without backing that up with a detailed and ambivalent law and ensuring transparency of the respective transactions. In the Russian conditions of the '90s (a weak judiciary system, informal ties between single government authorities and businesses, unjustified preferences granted to certain structures compared with the others, elements of corruption and crime), that has led to highly negative results.

Thanks to the tangle between the government authorities and businesses, the rent-oriented behavior characteristic of managers of single enterprises in many cases has outspreaded over groups of companies and the whole sectors of the economy. The intense conflicts of interests between various bureaucratic structures within the government system, large financial structures, top management and their lobbying of their interests camouflaged under structural and legal restructuring made direct sales based upon negotiations and auctions (that were the main privatization methods in Canada) ineffective.

The instability and the loose development of the Russian stock market, which is attributed to "emerging markets", have determined the impossibility of the implementation of a wide-scale privatization through public placement of shares on the securities market. Such a background extremely complicates the implementation of the pre-privatization preparation of enterprises and selection of financial consultants within the country. The chances to attract foreign consultants were originally constrained by Russia's small financial capacity and, in many cases, the former lacking expertise of the Russian specifics. The existence of rather a perfect corporate law found itself in conflict with the information disclosure problem, and in many cases the information was made unavailable for potential investors. The bankruptcy procedures tended to be used mostly against owners rather than managers, which became especially notable at the stage of the monetary privatization of 1995-2000, when the suppressed inflation and the growing stock market created relatively good prospects for the economic growth renewal.

At the first sight, the Russian privatization has not faced any serious counteraction on the part of employees of the enterprises concerned and trade-unions, thus it would not require an implementation of costly social programs. In reality, however, the need in arranging compromise between the government and the parliament and various social groups in 1992, at the stage of mass privatization,

forced the government to introduce a huge system of privileges for employees at privatized enterprises (including their managers singled out as a special category). Initially, such a scheme in many cases led to the emergence of the situation of 'informal contract' between managers of the privatized enterprises and their employees, providing that underlying such a 'contract' there was the 'closeness of capital and *status-quo* for managers in exchange for maintenance of jobs and some social benefits at the enterprise' principle.

Then, however, in the course of the continuous production decline, the formal nature of such an employment was becoming increasingly evident, and the positions of the staff at such enterprises were increasingly deteriorating. The managers at newly privatized enterprises proved to be absolutely uncontrolled, while the new owners that appeared at the enterprises after capital redistribution were holding no obligations, both formalized (as it would have happened in the case of the government sales of its assets) and informal (within the framework of the labor collective) alike. In the context of the government's permanent failure to fulfill its social obligations due to the budget crisis, such a situation created a very specific social tension, which at the same time became incorporated into the overall social instability characteristic of the post-reform Russia. It is not hard to understand that the latter differed substantially from the traditional contradictions within 'trade-unions-capital-government" triangle inherent of the developed market economies.

All the above, of course, does not mean that the aforementioned conclusions arising from the Canadian privatization experience are not attributable to Russia, - on the contrary, their adequate borrowing may seriously help reform the ownership relations in the Russian transitional economy. However that necessitates improvement of the current law, cutting off the influence of narrow corporate (private and/or/ departmental) interests through the consistent following the spirit and letter of the law, establishment of the transparent and strict control and responsibility mechanism, and protection of the law from the criminal and lobbyist efforts. The current favorable political conditions and the practice over the last two years clearly show the chances for positive changes in this respect. Due to a huge size of Russia's public sector, the positive effect of privatization is fairly important to public companies of similar profile in terms of improvement of the quality of their operations.

What is needed at present is optimization of the structure of property, both at the micro-level and at the level of the national economy as a whole. In that sphere,

there have been a number of restrictions which are to remain valid for rather a long time.

Firstly, there are the objectives related to inventorying of public property. That process will inevitably accompany the proposed enhanced privatization process.

Secondly, there are objective quantitative restrictions of a long-term nature. Carrying out of another program for mass privatization in Russia is hardly feasible (due to considerable heterogeneity of the remaining projects eligible for privatization), while the proposed sale of transformed public unitary enterprises is going to take many years. Besides, in the process of the above-mentioned inventorying formerly unregistered public unitary enterprises are bound to be revealed.

Thirdly, further intensification of the privatization process is going to be held back by the rate of transformation of the existing public-sector enterprises into joint-stock companies. Mass transformation of public-sector enterprises into joint-stock companies can only be practicable in conditions of availability of clear-cut mechanisms of subsequent functioning of such enterprises (it has to be specified whether they should have a special status or be full-fledged joint-stock companies functioning in accordance with the existing law on corporations).The trend towards enhancement to the state's participation in joint-stock companies (which was observed in 2000 and 2001) also has a role to play in that process.

Fourthly, the situation in respect of prices needs to be favorable. In this respect both the situation on the goods and raw materials markets is important and factors related to redistribution of property and value of companies' securities. The latter process became enhanced following the 1998 financial crisis, and new developments in that sphere are expected.

Fifthly, there is the government's indecision in respect of the issue nationalization. It seems that politically (in the sphere of ideological approaches) that process is impracticable. Speaking of the actual developments in that sphere, nationalization has got underway long ago: there have been attempts to revise the results of investment tenders, court rulings on nullity of some of the privatization deals and a growth in the number of unitary enterprises at the regional level (due to bankruptcies of private businesses which had liabilities to the budget; restructuring of debts with their conversion into shares, instances of return or pledging of blocks of shares to state authorities, transfer to blocks of shares to state-owned holdings, and the like. [8]

The latest example of this kind is related to the first incident in Russian history of legally approved return of property which has actually been sold. In accordance with provisions of Article 79 of the Federal Law on Federal Budget for the Year 2002

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[8] Example: On the basis of findings of an audit, the Auditing Chamber of the Russian Federation has recommended the Government of the Russian Federation revision of the results of privatization of two airlines (Aviakor [based in Samara] and Aviastar [based in Ulyanovsk]). In the summer of the Year 2000, the State Duma lodged with the Auditing Chamber an inquiry in respect of privatization of a block of TNK shares (439.806 percent of shares for 66.7 million USD plus an investment program for 185.2 million USD). There is also the problem of re-transfer of shares to the state as a result of termination of contracts concluded prior to enactment of the 1997 Act on Privatization with winners of commercial tenders (the Volzhski Pipe Works, and the Ust-Ilim Lumber Plant). In 2000, a court of law passed a decision on nullity of the results of a 1994 auction where 29 percent of the shares of the Moscow Saphire Factory (defense industry) was sold and ruled that the buyer return the shares to the Russian Fund of Federal Property. In the 2001-2002 period, due to stepped-up rivalry between different financial groups, legality of the procedure used earlier in privatization of a number of lumber and cellulose-and-paper industries has been questioned.

(No. 194-ФЗ), for the purpose of freeing from pledge of shares of two steam lines, (OAO Novoship and the North-West Steam Line) the Government of the Russian Federation is to secure meeting of liabilities under the related loan agreements concluded in accordance with the Decree by the President of the Russian Federation on Procedure for Pledging as a Security of Shares Held by the Federal Government in 1995 (decree No. 889 of August 1995) by means of amendment of the above contracts through introduction of provisions in respect of meeting of those liabilities out of the 2002 Federal budget with simultaneous termination of the contracts on pledging of those open-end companies' shares.

   All processes of this kind require a unified approach and a civilized legal background. No law on nationalization was passed in the 2000-2001 period. Such a document should, in fact, be a statement of intent where in addition to sanctions for misdeeds committed prior to enactment of that document compensations to buyers in good faith should be provided for, as well as the exact amounts of such compensation. That requires handling of a number of issues, such as determination of the stance to be taken in respect of a buyer in good faith (after there has been a series of re-sales); provision of funds for payment of compensation (for that, a separate line in the budget will be needed, as well as planning of the relevant amount for each year); and development of methods to be used in evaluation of shares, privatization bills/vouchers and pieces of property/enterprises.

   Limitations in respect of privatization deals will also need to be set (that is a major legal problem in that sphere). Neither the Civil Code of the Russian Federation, nor the formerly effective Law on Privatization of Public Property and the Principles of Privatization of Municipal Property in the Russian Federation (Law No. 123-ФЗ of July 21, 1997) have specified any limitation of action concerning nullity of privatisation deals. So, to privatisation deals the general limitation applies that is provided for by Article 181 for all cases of null and void deals (ten years).

   With such a limitation, practically any earlier privatised enterprise in Russia can be de-privatised with 'substantiation' (such as deliberate breaches of the law, insignificant formal errors and or even far-fetched arguments) easy to provide. That creates a breeding-ground for mass-scale de-privatisation and instances of de-privatisation by mobsters that may be hired to transact such 'deals' for political and/economic reasons. That also creates levers of administrative pressure on companies on the federal and administrative levels. The fact that any property may be de-privatised in case of disclosure of breaches of privatisation legislation has been seen by practically all the investment institutions active in Russia as the chief argument against investment in Russian companies.

   Yet, it is to be noted that de-privatisation on a mass scale would be difficult from the 'technical' point of view, since no solutions have been provided to the problems related to assessment and compensation of buyers in good faith. There are also 'security systems' (which only major companies can afford). As an example, one can examine the developments related to restructuring of the RAO Norilski Nikel (carried out after it received from the Office of the Prosecutor General of the Russian Federation a recommendation to compensate the state for the amount under-paid by it at privatisation).

   A certain reduction of limitation of action in respect of privatisation deals is certainly needed. On November 31, 2001, an amendment of the Civil Code of the Russian Federation on reduction of the limitation in respect of privatisation deals from ten years to three years was submitted to the State Duma. It was not passed, however. It is also notable that even though that amendment was to be passed, that would not

provide a full solution to the problem in question. The Criminal Code of the Russian Federations sets limitations in respect of a number of categories of crimes at ten years. Passing of a decision on reduction of limitation of action on privatisation deals would be tantamount to an amnesty to infringers of tax regulations and is bound to meet with opposition both on the part of various groups of the elite and on the part of most of the general citizenry.

One of the key problems related to the prospects of further development of the privatisation process is a **contradiction** between a considerable potential for development of privatisation in the medium and long term and existence of serious institutional barriers to effective privatisation. What is meant is a general institutional background for launch of new methods and enhancement of efficiency of the existing ones: efficiency of enforcement of the effective legislation, protection of proprietary rights, institutional structure of corporations [9], corruption, enforcement, the judiciary system and law enforcement proceedings.

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[9] See: A. Radygin and I. Sidorov. Russian Corporate Economy: One Hundred Years of Solitude. Voprosy Ekonomiki, 2000, No. 5, p.p.45-61 (in Russian).

S. Sinelnikov-Murylev, P. Kadochnikov, I. Trunin

INTERGOVERNMENTAL TRANSFERS AND FISCAL BEHAVIOR OF RUSSIAN REGIONAL AUTHORITIES IN 1994-2000[1]

Introduction[2]

The process of decentralization of expenditure and taxing powers currently under way across many countries worldwide is accompanied not only by same advantages for individuals and businesses, but also some disadvantages in terms of both economic efficiency and equalizations.

In the meantime, the economic researches of impact of intergovernmental transfers focus only on some effects that grants-in-aid of various types have on decisions made by regional governments receiving the financial aid. In so doing, they disregard how specifically policies of the national governments and, in particular, the mechanism for distribution of the equalizing transfers influence the decisions made by the subnational governments in the field of taxation and fiscal policy.

Our paper shows that under certain conditions not only a specific type of grant-in-aid, but also a specific mechanism for its allocation might set up some negative fiscal impetuses for subnational governments. In other words, under certain conditions of allocation of grant aid, an increase in the size of a transfer can lead to decreased tax revenues into the budgets of the grant-in-aid recipients, rather than to an increased supply of public goods at a local level, which is mostly the target of the financial aid. The current paper deals with a hypothesis that these stimuli depend on whether equalizing transfers are distributed on the basis of actual revenues and expenditures of regional budgets or are based on some estimates of taxation potential and expenditure needs of subnational governments.

In order to investigate a mechanism for developing fiscal stimuli for regional authorities as part of equalizing transfer distribution rules, this paper uses a simple model of behavior of subnational governments under conditions of federal center-developed parameterized formula of allocation of financial aid for the purpose of intergovernmental equalization. The empirical part of the paper which is based on some panel data gives economic estimates of the parameters of the aid allocation model and checks how the federal financial aid allocation rules in effect across the Russian Federation in 1994-2000 stimulated the regional governments to change the volume of public and private goods provided over their territory. The conclusions of our study reveal that should the rules of allocating the federal financial aid change and due regard be taken for a specific type of fiscal aid and a specific type of a region, we could find out a variety of effects on decision-making at the subnational level in the field of both tax revenues and budget expenditures.

Economic theory of fiscal federalism and problem of impact of the mechanism for intergovernmental transfers on subnational decision-making

Intergovernmental transfers in the context of the economic theory of fiscal federalism

One characteristic feature of the present-day mechanism of most governments worldwide, whatever their form, is that there are a few tiers in the management of the state affairs, such as the central government, which is responsible for achieving certain goals and carrying out specific tasks at the state level, and some other governmental bodies functioning at the level of a region, State, province and municipality, which are authorized to obtain revenues in accordance with the legislation-delegated expenditure commitments. Such an institutional structure of governmental agencies leads to emergence of a respective branch of economy of the public sector that studies its vertical structure. The subject matter of the branch is a normative and positive analysis of distribution of functions among a variety of governments, as well as interaction of these governments by means of such arrangements as intergovernmental transfers[3].

The traditional theory of fiscal federalism is based on the analysis of distribution of the powers among various governmental levels, as well as distribution of fiscal arrangements among them for execution of their powers, see two basic researches in the field - Musgrave (1959) and Oates (1972). The key conclusion that follows from the analysis is that the national (central) government should concentrate powers in macroeconomic regulation and redistribution of revenues among the individuals through social support for low-income population. At the same time, there are some public goods that should be provided only at a subnational level, otherwise public welfare cannot be maximized. The scale of growth in the public welfare resulting from a decentralized provision of public goods is in negative dependence on elastic demand for priced public goods[4].

An analysis of an efficient structure of distribution of taxing powers among the governments demonstrates that the basic guideline in their distribution is that subnational governments should refrain from imposing taxes on the economic units of a high level of mobility, whether they are a housewife, a capital or goods/services, see Oates and Schwab (1991), Gordon (1983).

At the same time, a number of subsequent researches based on the theory of distribution of expenditures and taxing powers revealed that availability of goods as a result of decentralized powers of subfederal governments cannot be taken for granted. As an illustration, we cite Boadway (2000) who says that the decentralization processes taking place in the present-day federative state are accompanied by both advantages and disadvantages that are of three basic types[5]. First, decentralization of powers leads to interregional differentiation of net fiscal benefits, i.e. a difference between the size of obtained benefits resulting from provision of subnational public goods and the level of tax payments; such differentiation gives stimuli for out-migration of individuals and businesses elsewhere and also results in violation of the principle of horizontal justice. Second, a high degree of decentralization is characteristic of horizontal fiscal external effects, which is primarily due to attempts of subnational governments to achieve their own goals at the expense of the other regions (illustrations of such a kind are unfair taxation competition, an export of a tax burden and so on). Third, a federative state is also characteristic of vertical fiscal external effects, which imply efforts of subnational governments to shift their tax and expenditure burden onto respective national governments.

In part, the balance of advantages and disadvantages is regulated by constitutional and legislative provisions concerning the differentiation of competence and jurisdiction among the governments. However, a basic and most important role in achieving efficient functioning of public finances in a federative state belongs to various fiscal arrangements. One of such arrangements is maintenance of a certain vertical imbalance of the budget system. Although an optimal degree of

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[3] See: Oates (1972), pp. 16-17
[4] See a summary of researches on the problem in: Rubinfeld (1987)
[5] See Boadway (2000), pp. 44-45

such imbalance depends on a great variety of factors and cannot be defined in a universal way, it can be assumed that decentralization of the expenditure powers is much more efficient than that of taxing powers[6]. Another arrangement is vertical and horizontal coordination and harmonization of taxation and budget policies among various governments. A third important arrangement is intergovernmental transfers. Their purposes are three-fold: compensation for the effects arising as a result of a flow of benefits from governmental activities of one administrative-territorial division to some others, interregional equalization of revenues of subnational budgets and redressing of the flaws of the taxation system[7].

In the context of the above, as well as given the subject matter of our research, it is interesting, first, to study approaches of national governments to performing a task of efficient allocation to subnational governments of financial resources required to carry out their assigned missions and, second, investigate an effect of a particular mechanism for provision of intergovernmental financial support on decisions made by the subnational governments in taxation policy and defining the size of production of public goods. It is obvious that the two goals mentioned above are closely interrelated, which means that depending on the expected response of recipients the national governments apply to a particular principle of intergovernmental equalization.

Models of effects of intergovernmental grants on fiscal and expenditure decisions made by subnational governments

Traditional models of effects of intergovernmental grants on fiscal and expenditure decisions made by subnational governments. One of major prerequisites of the traditional models used to analyze the effects of intergovernmental grants-in-aid is an assumption that the principles of decision-making by subnational governments are in conformity with behavior of a certain representative of electorate voting for the given government. In other words, it is assumed that the subnational governments as well as an individual maximize their utility, making a choice between consumption of certain sets of both public and private benefits and availability of incomes in the form of tax revenues and intergovernmental transfers.

According to the traditional models the intergovernmental grants-in-aid are generally classified by their effects on decisions made by subnational governments. For instance, Gramlich (1977) divides all grants-in-aid given to low-level budgets into three types.

First, given a flow of benefits from a certain type of public goods, it is necessary to furnish grants-in-aid for production or acquisition of the public goods in the territorial division where they are produced. This can be done by means of the so-called Pigovian price-reduction grant whhen the central government co-finances all the expenditures of a subnational government used for production of public goods[8].

Second, another purpose of a transfer may be redistribution of the income from high-income territories to low-income territories or allocation of a certain part of tax payments that are collected more efficiently at the national level into subnational budgets. The transfer proves to be directed only at a change in the incomes of lower-level governments and does not lead to a change in the relative prices of the state services for them[9].

Another separate intergovernmental transfer is grants-in-aid that are extended because of some political commitments, under which the national governments should provide for a minimal or standard level of state services across the country regardless of what level of budget is used to finance the respective public good. In order to maintain a certain level of furnishing public goods, the national government uses a mechanism of target-allocated grants-in-aid designed to finance specific types of public goods. It is obvious that given such grants-in-aid, the subna-

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[6] See more details in: Boadway and Keen (1996)

[7] See a summary of researches on the problem in: Oates (1999)

[8] See: Thurow (1966)

[9] Netzer showed that such grants-in-aid should be directed at supporting the low-income administrative-territorial divisions.

tional governments are not so free to make decision as regards their own expenditures as is the case with the use of unlimited transfers used to reduce the cost of the state services. The national governments normally set rather strict conditions under which the funds are given and used, including terms of joint financing[10]. Such transfers affect both the relative prices of public goods for subnational governments and their incomes and are oftener used in multi-level budget structures as target-earmarked grants than the former.

The traditional models of behavior of subnational governments are generally built around the standard theory of optimization of consumer's utilities used when a specific limitation is imposed on the budget. See more details about the mechanisms for impact of a specific type of grant and terms of its extension on recipients' decision making in: Scott (1952), Bradford and Oates (1971), Richard A. Musgrave (1989), Rosen (1998), King (1982) and Wilde (1971).

Models of behavior of subnational governments when obtaining grants with due regard for their own priorities at the subnational level

Empirical studies demonstrate that the effects of an increase in the income of the community in the form of a grant-in-aid obtained is not always in agreement with an increased income of each individual, for instance, through providing tax exemptions. For the first time the phenomenon was mentioned in Gramlich (1977) and called a flypaper effect or flypaper theory of incidence. It often follows from here that while obtaining a grant politicians and officials do not take decisions on reducing their own taxes – a measure that is necessitated by models based on a prerequisite of their maximized public welfare or that of a median elector.

Model of Niskanen. According to Niskanen, the discrepancy between the results of obtaining a grant and preferences of the electorate is due to the fact that there is disagreement between the functions of the welfare as maximized by electors and representatives of the governments[11]. In building models of officials' behavior, it is claimed that the welfare of officials depends on such variables as salary, benefits of holding a specific position, reputation, the size of power, etc, which are dependent on the size of the institutional budget, i.e. the government. Thus a variable maximized by the officials is the size of a budget of a respective institution. In the model, the government is interpreted as a monopoly that exercises its own services for electors or as its representative. Receipt of a lump-sum grant, which allows the governments to reduce the level of taxation and consequently reduce their own budget against the situation when the grant is conditional, makes subnational governments act as if the grant obtained were conditional.

Model of Romer-Rosenthal. In the model of Romer-Rosenthal (1980), like in Niskanen's model, it is assumed that subnational governments maximize the size of their own budget, involving, however, electors into defining the size of production of public and private goods. Annually governments fix the expenditures of their own budget at a certain level on their own, unless the electors have voted otherwise at a referendum. The authors' hypothesis is that in order to maximize their own budget officials hold a referendum on changing the expenditures of the region's budget, only in case the actual expenditures of the projected budget are financed at a level which is lower than an optimum for electors, i.e. a referendum is held only on whether the electors approve or not an increase in the expenditures projected in the budget. In so doing, the governments propose a new level of expenditures at a level that is higher than the optimum. In this case electors authorize a proposed variant of increased expenditures, even if the proposed level of expenditures is higher then the optimal one, i.e. such a level is the only option put on the referendum.

According to the authors of the model, the flypaper effect is due to the fact that an increase in the incomes of the electors make them decide to revise the level of the expenditures only in case the optimal level of consumption of the public goods which is in agreement with the in-

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[10] Schutze (1974) showed that the most efficient way of utilizing such a mechanism is contractual relations between the national and subnational governments.
[11] Niskanen (1968), Niskanen (1971). Breton and Wintrobe (1975)

crease proves is higher than the actual one. As a result, in case any grant-in-aid is received, the expenditures projected in the subnational budget are expected to grow by a figure that is equal to the grant size, and if the optimal level of consumption which corresponds to the volume and terms of the grant is higher than the actual level of the projected expenditures, the increase will be much higher as well.

Oates' model. In some models, attempts were made to explain the flypaper effect through the use of a concept of fiscal illusion, i.e. an asymmetry of information as regards the market situation. For instance, Oates (1979) assumed that the subnational governments define the size of projected expenditures in accordance with the preferences of a medium elector, although without informing the electors in full about the condition of the state finances in a region. If it is granted that the population of a region opts for a level of production of the public goods on the basis of their tax price, that is a ratio of tax commitments and a size of offered public goods in a region, then in case of agreement between the population's preferences and those of the government a receipt of a lump-sum grant is regarded by the regional governments as a total increase in the regional incomes. However, another option is that the regional government informs the population that it impossible to produce public goods at a new (subsidized) tax price. Once the information is given, electors take a decision whether to increase consumption of public goods depending on an elastic demand for public goods at the price or not.

Break's model. Break (1980) assumes that electors of a subnational division are also those who vote for the national government which distributes the intergovernmental transfers. Even if the subnational governments (electors) plan to increase the level of the projected expenditures in case of increased individual incomes, they might apprehend negative effects resulting from a decreased amount of the financial aid. In this case an increase in the individual electors' incomes does not lead to a decision on increasing the expenditures projected in the subnational budgets; however, the equivalent gain in an amount of grants-in-aid is mostly used to add up to the level of the budget expenditures.

King's model. King (1984) notes that neither of the traditional models available explains why in spite of the flypaper effect, that of a lump-sum grant used for expenditures of subnational budgets is mostly lower than the one of a shared grant, as it follows from the traditional models. The basic different feature of King's model is that it gives additional prerequisites concerning the target function of a median elector. His/her goal is maximization of own utility through a selection of an optimal set of public and private benefits, unless the taxation effective at a subnational level should impair the welfare of the poorest population in the region below a certain level as determined by a median elector. In this situation, should the electors' incomes increase as a result of the reduced federal tax rates, the limitation of a budget looks like a curved line, which allows for a substantial rise in the expenditures of the subnational budget. At the same time, provision of a grant-in-aid leads to the effects described in the traditional models. Still there some other papers that explain reasons for a deviation of the observed effects that intergovernmental grants make on the expenditures of subnational governments. For example, Zampelli (1986) analyses specific features of target-allocated types of intergovernmental transfers. In particular, he claims that unless a rise in the expenditures for production of subsidized types of public goods over a certain level is not high-priority for the governments-recipients of target-allocated grants-in-aid, the governments cut their own expenditures for production of these types of public goods and direct the released funds for financing of the other types of public goods. Thus, once there are no limitations on the size of own expenditures of grant recipients for production of subsidized public goods, the target-allocated grant-in-aid is a more complicated type of non-target-allocated transfers that to a greater degree increase recipients' incomes, but do not result in a considerable change in the relative price of public goods and private benefits.

Models of distribution of intergovernmental equalization transfers

Let us consider the second part of the problem of intergovernmental grants' effects on the fiscal behavior of subnational governments, namely the principles of equalization that can be used by national governments in distributing the aid. Models of distribution of fiscal aid by the national governments proceed, above all, from some assumptions about the priorities of the latter in allocating financial resources and mostly disregard specific aspects of associated decisions made by the recipients.

Models of distribution of financial aid provided to subnational territorial divisions can be divided[12] into those that introduce some restrictions on the funds of the national budget used for intergovernmental equalization[13] and those that take account of limited resources of the federal budget and assume that budgets of the donating territories should be sources of the funds for equalization transfers[14].

In fact, the national budget obtains revenues, including for intergovernmental equalization, through collecting taxes across regional territories. Then the process of distribution of financial aid can be given by some equations describing both the size of subsidies extended to regions and criteria of equalization. However, their analysis gets more complicated, once we introduce an amount of the national budgets into the model of transfer distribution[15]. That is why in what follows we shall dwell on the models assuming that the national budget has sufficient funds to be distributed as financial aid. We can list a few basic variants of models used to estimate the size of the financial aid offered to regions per one consumer of public goods[16].

The first group of models of grant distribution assumes that they are used to offset the difference between estimated expenditure and revenue indices of subnational budgets. One of the simplest variants used to calculate sums of financial aid extended to subnational budgets is to cover the gap between the expenditures and revenues of subnational budgets or a certain estimate of their mean amount. This technique of transfer estimate includes the following basic forms of calculation of financial aid amounts.

1. Provision of a transfer depending on an actual amount of the own incomes and expenditures of the territorial budget, i.e. cover of the gap between the incomes and expenditures of subnational budgets. Such a form of financial aid distribution is generally used in countries with a low degree of autonomy of subnational governments in determining both expenditures and incomes of subnational budgets, e.g. a system of subsidy distribution in the USSR, system of allocation of unconditional transfers in Spain[17].

2. Transfers extended so that the expenditures of subnational budgets should be established at a standard level whatever the tax potential of a territory is. If there is need to stimulate efforts of the grant recipients aimed at collecting their own taxes, the formulae can also include indices of tax potential[18]. The scheme described above is used for both distribution of equalization transfers and provision of specific types of financial aid, such as additional financial aid given to länder (states) in the FRG[19] and annual block grant used in Great Britain[20].

Policies of distributing financial aid among the lower-level budgets can combine criteria of actual and normative indices, while the national governments can set a criterion of sufficiency of their own funds required to cover their own expenditure needs and provide financial aid, stem-

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[12] Outside of our analysis are the grants designed to compensate for the external effects that are created by subnational governments, are of more selective character. Such grants do not fit any common models of their distribution.

[13] See, for instance: Smart (1961), Fisher and Papke (2000), Inman (1988)

[14] See: Musgrave (1961). Chernik (1979) also uses a function of distribution of target-allocated grants with a due account for limited resources of a grant donor.

[15] More details can be found in: Musgrave (1961).). Chernik (1979) also uses a function of distribution of target-allocated grants with a due account for limited resources of a grant donor.

[16] See a detailed summary of models of financial aid distribution in: Musgrave (1961) or King (1980).

[17] Emiliani, Lugaresi and Ruggiero (1997), pp. 267-268

[18] The concept of tax potential and techniques of its estimation can be found in more detail in: Lugovoi, Sinelnikov, Trunin (2001)

[19] See Spahn and Fottinger (1997)

[20] See Potter (1997, p.347)

ming not from an absolute amount of discrepancy between the expenditure and income indices of regional budgets, but from a certain top value of the discrepancy, such as in relation to the regional normative expenditure, which should be subsidized by transfers , e.g. extension of British tax grants called capping[21].

Another group of models of equalization transfer distribution includes those that are used to put the regional fiscal indices in conformity with the average or normative indices, i.e. depending on the ratio of the tax potential of recipient governments and the standard index of tax potential[22]. Since the use of such a scheme can make the regions increase an amount of a grant through a higher level of tax rates and accordingly boost the level of budget expenditures (see Oates (1977), King (1973)), the above mentioned scheme of intergovernmental equalization is not widely used. However, as an illustration we would like to cite a Canadian system of distribution of funds within the frameworks of a program of equalization payments[23].

In addition, we can also cite transfers provided depending on the correlation of expenditure indices, i.e. correlation of the normative needs of subnational budgets for exercise of expenditures and actual subnational budget expenditures. Such a system of financial aid distribution can be used in countries with a low degree of interterritorial differentiation of taxation basis as well as in case a transfer is used to finance specific types of expenditures regardless of availability and size of income sources, such as target-allocate grants which are given to subnational budgets for development of transport in Italy[24].

We have analyzed various schemes of intergovernmental equalization based on the simplest expenditures and income indices of subnational budgets. In the meantime, there are some more complex equalization mechanisms as well. For instance, a system of intergovernmental transfers can be built to equalize such indices, as a rate of changes in the expenditures of subnational budgets, with differentiation of expenditure demands taken into account while changing the taxing efforts of subnational governments or elasticity of changes in the subnational budgets. King (1980) cites a number of options for building such a formula.

The group of models described above takes an insufficient account of an effect of a particular scheme of transfer distribution on tax decisions made by subnational governments and is confined to analyzing the budget limitation of recipient governments, with the subnational budget expenditure being equal to a sum of incomes and financial aid. The above-mentioned models describe effects of grants on decision taken by subnational governments and leave out the priorities of the governments in charge of distribution of financial aid, as well as schemes of financial aid distribution. However, it can be assumed that the effects of intergovernmental transfers on the decisions of the recipients depends not only on a type of a transfer, but also on a scheme of financial aid distribution.

It is our understanding that another important and still unclear aspect of functioning of a federal system of financial aid to subnational governments is effects of various equalization schemes on the choice of parameters of financial policy by the subnational governments. Therefore, we find it natural to assume that their choice depends on both a model of financial aid distribution, including a type of a grant offered, and preferences of subnational governments, characteristics of the public and private goods at the subnational level and so on. Taking the above assumption into consideration, we are going to analyze the specifics of equalization transfer distribution across the Russian Federation and integrate the scheme of financial aid distribution based on the above models into a classical model that describes grant effects on the decisions of subnational governments opting for a specific size of the public and private benefits provided across the region.

Modeling financial behavior of regions

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[21] Potter (1997, p.350

[22] The scheme is similar to the one given in: Musgrave (1961), p.104

[23] Courchene, Martinez, McLure, Webb (2000), pp. 101-103; Krelove, Stotsky and Vehorn (1997)

[24] Emiliani, Lugaresi and Ruggiero (1997), pp. 272

Distribution of financial aid among the regions across Russia

The federal center has been directing financial aid to Russian regions via many channels, with their size varying within a substantial range over the last few years. The basic channels used to extend funds from the federal budget to regions are transfers from the Federal Fund of Regional Support (FFRS), subventions used to finance federal mandates, grants-in-aid, means as part of mutual clearings. Table 1 gives data about the size of specific types of federal financial aid rendered to the administrative divisions of the Russian Federation in 1992-2002.

Table 1. Federal financial aid to administrative divisions of the Federation in 1992-2002 (per cent of GDP)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*
Subsidies and subventions	0,00	0,02	0,09	0,06	0,09	0,13	0,10	0,06	0,15	0,54	0,34
Subventions**	0,79	0,69	0,42	0,12	0,12	0,09	0,02	0,20			
Transfers from the FFRS	0,00	0,00	0,36	1,17	1,04	1,22	1,12	0,99	0,96	1,14	1,62
Subsidies and subventions from Compensation Fund										0,37	0,45
State support for road management								0,18	0,11	0,27	0,33
Funds given as part of mutual clearings	0,61	1,95	2,54	0,42	0,81	0,43	0,36	0,14	0,28	0,05	0,00
Other types of financial aid***	0,09	0,03	0,02	0,06	0,28	0,64	0,00	-0,20	0,03	0,19	0,29
Total: funds given to budgets of the other governments	1,49	2,7	3,4	1,8	2,3	2,5	1,60	1,36	1,54	2,56	3,03

* planned
** Prior to 1999 the subventions were a separate entry in reports on carrying out the federal budget
*** also includes the net for federal budget loans
Source: Ministry of Finance of the Russian Federation, estimates of the authors

In order to substantiate the hypothesis as to what principles were used as a base for providing financial aid to regions, we are going to dwell in short on the official mechanism for distribution of some types of aid. Our analysis of the policy of transfer distribution from the FFRS and techniques of distribution of additional financial aid in 1994-98 shows that they were directly designed to offset the predicted or actual discrepancies between the incomes and expenditures of regional budget[25].

The year of 1999 saw introduction of a new policy of the FFRS transfers distribution, under which the bulk of transfers are allocated in direct ratio to deviation of the per capita tax potential of the administrative entities of the Russian Federation from the national average level, given an index of intergovernmental differentiation of a size and cost of expenditures for provision of regional public goods across the Russian Federation which is called a budget expenditure index. The index reflects the intergovernmental differentiation of costs and sizes of budget expenditures on the basis of some indirect factors which determine demands for provision of specific types of public goods in various regions depending on the intergovernmental differences in the age structure of the population as well as in geographical, climatic and other conditions.

Thus, in accordance with the currently used policy an amount of a transfer which is extended from the FFRS to a region is in direct proportion to a value of the budget expenditure index and in inverse proportion to an estimate of the tax potential for a particular region. As a result, it can be claimed with a fair degree of convention that the distribution of transfers proves to be used to cover the gap between the tax potential and expenditure needs as reflected by means of a

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[25] See more details on how the federal financial aid is distributed among the regions in: *Rossiyskaya economika: tendentsii i perspektivy / Russian economy: tendencies and prospects,* annual summaries of the IEPP 1996-2000.

budget expenditure index. It should also be taken into account that in actual practice transfers have been distributed, among other things, with a due account for their size established in the previous years, i.e. directly with account for a gap between the regional income and expenditure indices.

Some grants-in-aid, subventions, as well as the funds extended as part of mutual clearing are nonformalized irregular types of financial aid, with their current amounts still being significant. In general, it is claimed that the distribution of the above means is used to cover the current gaps in the regional budgets.

As noted above, the financial aid designed for interterritorial equalization of capabilities of furnishing public goods can be used to compensate for a cut in the regional incomes, i.e. the below-the-average level of incomes, increase the regional budget expenditures or compensate for the gap between the necessary (in terms of the grant donor) regional budget expenditures and a certain estimate of regional incomes. As for the Russian Federation, counter to the claims available to the Budget Code (see article 135 BK) to the effect that the non-targeted federal financial aid is used to equalize the minimum budget support for the regions, which implies provision of equal opportunities for regional governments in furnishing public goods through equalization of obtained budget incomes, the actual analysis of the budget practice demonstrates that the system of interbudgetary aid pursues the goals other than that. From the above it can be hypothesized that the federal aid is provided to the Russian regions in order to cover the gap between the legislatively prescribed expenditure commitments and potential budget expenditures calculated in accordance with the estimates of the federal center. In actual practice, estimates of the expenditure commitments and potential incomes were based, to a more or less degree (which has been varying in the last years) both on actual amounts of incomes and expenditures and on the normative values of expenditure needs and tax potential.

In formal terms, a similar process of interbudgetary equalization can be described by a model of financial aid distribution by using various functions of the public choice. Within the class of the simplest models of financial aid distribution, it is expedient to use the Rolls (minimax) type of a function of national government utility which implies equalization of the welfare of various regions used to achieve an optimum. In exploiting the minimax criterion of choosing sizes of financial aid, the fairest distribution of financial aid seems to be used for utility maximization across the poorest regions.

Therefore, there arises a question concerning the criterion of regional poverty which can be used for interbudgetary equalization. Among the options are such traditional indices of poverty as the size of incomes or expenditures of the regional budget, an amount of the per capita gross regional product, the size of incomes available to the population of the region, indices of differentiation of population incomes (Jennie's coefficient, a share of population with incomes which are lower than the cost of living) and indices that take into account not only incomes across various regions, but also the need to carry out expenditures for private and public goods.

Should the national governments have estimates of regional incomes and those of amounts of desired, from the point of view of the Center, expenditures of the regional budget, then the degree of poverty for various regions should be not the level of its incomes, but the size of incomes matched to the expenditure needs of the given region. Such a value might be a gap between an estimate of potential or factual incomes of the regional budget and the normative or factual expenditures of the regional budget or their interrelationship. It is noteworthy that the results of estimating the dependence of the difference between the normative expenditures and potential incomes of a region on the value of the gross regional product as analyzed against the panel data of 1994-2000 for 88 Russian regions show that there is a steady significant negative dependence of our estimated budget deficit on the amount of the per capita gross regional product.

Given the above interpretation of the need, as the simplest case for each region the national government chooses a share of the amortized gap between the normative expenditures and the tax potential, thereby co-funding the gap between the capability of mobilizing tax incomes and

expenditure commitments, in case there is a budget limitation on an aggregate amount of financial aid from the national budget. In this case the optimization task of financial aid distribution can be described as follows:

$$\min_i \left\{ \frac{Tr_i}{\widehat{E}_i - \widehat{T}_i} \right\} \to \max_{Tr_i} \text{ given a limitation } \sum_{i=1}^{N} Tr_i = Tr, \tag{1}$$

where

Tr_i is the size of financial aid obtained by i region from the federal budget;

$\widehat{T}_i$ is potential incomes of the financial aid recipient;

$\widehat{E}_i$ - an estimate of the necessary (normative) expenditures of the recipient's budget;

Tr - an aggregate amount of the federal financial aid to regions.

The problem can be solved through the following equation of financial aid distribution:

$$Tr_i = \gamma \left(\widehat{E}_i - \widehat{T}_i \right), \tag{2}$$

where γ can be found from condition

$$\sum_{i=1}^{N} \left(\widehat{E}_i - \widehat{T}_i \right) = \frac{Tr}{\gamma} \tag{3}$$

As a result, an optimal strategy to be chosen by the federal center is to allocate each region such a financial aid that can be used to fund the same share of the observed gap between the normative expenditures and the tax potential for a given particular region. In this case the share of an amortized gap is common for all the regions and is equal to the ratio between the means allowed for financial aid to the regions and an aggregate (for all the regions) normative requirement for funding the gap between the income potential and expenditure demands. A similar formula of estimated financial aid can be given, when the federal center proceeds not from the normative values of expenditures and incomes, but from actual values or when both are taken into account at the same time.

In summing up, our analysis allowed us to formulate a hypothesis that in Russia the federal government allocates funds to the regions so as to cover the gap between the expenditures and income indices of regional budgets, which conforms to the model of distribution of financial aid among the regions by the federal center on the basis of Rolls criterion of equalization. Subsequently we are going to make use of the hypothesis in constructing a theoretical model of fiscal behavior of regional governments, while its conformity with the statistical data will be checked in the empirical part of the paper.

Description of a model of fiscal behavior of regional governments

In order to analyze the fiscal behavior of regional governments we are going to construct a simple theoretical model. Let us assume that the federal center establishes rules of creating an income base which are common to all the regions, such as a share of federal taxes allowed for regional budgets, a list of regional and local taxes, techniques used to calculate an amount of financial aid extended to the regions in need. Based on the given rules, the regional governments make decisions on building up incomes of the regional budget and execution of expenditures for provision of public goods. Let us also suppose that the regional governments make the respective decisions to this effect with a view of gaining maximum public support from the population of the region. At the same time, we assume that the most important criteria by which the electorate judges the regional government are the size and structure of public goods provided in the region, as well as the level of tax load, such as a size of regional tax rates, a scale of tax exemptions offered and so on. Given the above assumptions, we find out a certain correlation between the

preferences of the governments and those of the population, which seems to be natural in a system where regional governments are elected.

Let the goal function depend on two indices – an amount of expenditures of a region's consolidated budget (positive) and tax incomes collected for a region (negative). The regional tax incomes are calculated according to the selected level of regional and local tax rates and normative deduction of federal taxes into regional and local budgets. Thus

$$U\left(E^{(+)}, T^{(-)}\right) \rightarrow \max_{E,T} , \qquad (4)$$

where E is expenditures of the consolidated budget of an administrative division of the Russian Federation as an indicator of the level of provision of public goods across the region;

T - tax incomes of the consolidated budget of the administrative division of the Russian Federation, such as revenues from local and regional, as well as federal taxes going to regional and local budgets.

In considering the utility function in this form, we assume that the regional expenditures do not include transfers given to the population, while the revenues are tax incomes which lead to a cut in the consumption of private benefits. Given such premises, the above formulation of the model can be described as a problem that is similar to a classical problem of household choice between a private and public good[26].

Formula (4) can also be written as

$$U\left(E^{(+)}, (Y-T)^{(+)}\right) \rightarrow \max_{E,T} ,$$

where Y is a gross regional income.

Such a formula takes into account that a rise in taxes results in reduced income available and cut consumption of public goods.

Regional governments maximize the utility function (4) or (5) on condition that the expenditures of the regional budget should not be more than the sum of their own incomes and financial aid obtained[27]:

$$U\left(E^{(+)}, (Y-T)^{(+)}\right) \rightarrow \max_{E,T} , \qquad (5)$$

where Y is the gross regional product.

The equation takes account of the fact that growth in taxes leads to a cut in the incomes available and a fall in the consumption of private goods.

The regional governments maximize the utility function (4) or (5), given the limitation that the expenditures of the regional budget should not be more than the sum of own expenditures

$$E \leq T + Tr, \qquad (6)$$

where Tr is the size of financial aid offered by the federal center to a region.

As demonstrated above, we shall assume that the size of financial aid is directly proportional to a gap between the estimate of expenditures and that of incomes as part of the regional budget plus a certain coefficient γ. Let us also suppose that the estimates of expenditures are calculated as a sum of factual expenditures with weight a and normative expenditure needs of a region with weight *(1-a)*. Similarly, an estimate of incomes is calculated as a weighted average between the factual regional incomes with weight β and potential own incomes (tax potential) with weight *(1- β)* respectively.

The values of coefficients a and β show how the Center's estimates of value of regional financial aid depend on factual and normative (potential) indices of incomes and expenditures,

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[26] Samuelson (1954), Williams (1966)

[27] In this section, unless specified otherwise, we use terms 'financial aid of the center' and 'regional transfer' as synonyms.

while γ shows how the results of the financial aid distribution affect the budget security of recipient regions. How factual and normative (potential) expenditures and incomes of a region are taken into account in distributing the financial aid can be interpreted as a degree of co-financing of the factual expenditures of a region by the federal budget (co-financing of production and consumption of public goods or reduction in the price of a public good) and its involvement in formation of region's incomes[28] (co-financing of consumption of a private good across the region or cut in the price of a private good). The coefficient γ can be interpreted as a degree of the Center's participation in financing the gap between estimates of regional expenditures and incomes.

Thus the model, under which the center distributes the financial aid among the regions, is as follows:

$$Tr = \gamma \left\{ \left[\alpha E + (1-\alpha) \cdot \widehat{E} \right] - \left[\beta T + (1-\beta) \cdot \widehat{T} \right] \right\}, \tag{7}$$

where $\widehat{T}$ is tax potential of a region as calculated on the basis of own and regulated tax incomes;

$\widehat{E}$ is the norms of the region's expenditure needs.

The given model uses such parameters as estimates of regional tax potential and norms of expenditures in the regional budget. In the course of our theoretical analysis we consider them as exogenous values. For empirical estimates (see below), we made use of our own estimates of tax potential and normative expenditure demands of regions. The estimates of the tax potential are theoretical values of commitments for all types of taxes fed to the regional budgets in a regressive equation, where estimates of the size of tax base for separate types of taxes are used as explanatory variables[29]. Estimates of normative expenditure needs are a total of theoretical values of regional budget expenditures for separate articles obtained from equations where the explanatory variables are incomes of regional budgets and a set of factors describing both the required size of the corresponding public goods provided and expenditures for their provision (economic, geographic, social and demographic factors)[30].

Analysis of a model of financial behavior of regional governments

The model we offer is rather simple and is essentially similar to that of consumers' choice between a good (expenditures for provision of public goods) and an antigood (tax levies), with budget limitations given as a parameter. The first-order conditions, which are essential and sometimes sufficient conditions with suppositions of elasticity of the utility function and indifference curve, once transformed and with exception of the Lagrange variable, give the following condition of optimum in this simple model (5)-(7) – correlation for a norm of replacement between an increase in expenditures and a cut in the tax load:

$$MRS_{ET} = -\frac{U_E}{U_T} = \frac{1 - \alpha\gamma}{1 - \beta\gamma}. \tag{8}$$

Thus, the top normative replacement of a change in the regional budget expenditures with that in the regional tax load depends on the rules, which define distribution of regional financial aid, i.e. on the values of parameters *a*, β and γ (it is our assumption that all values of the parameters are not more than 1).

It follows from equation (7) that $a\gamma$ and $\beta\gamma$ are a share of co-financing by the federal center of deviations in the factual expenditures and incomes from their normative or potential values. Therefore the ceiling norm of replacement (8) is a ratio of a share of their own financing of

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[28] Co-financing of expenditure means that as the factual expenditures increase by one unit, the transfer goes up by a value equal to $\gamma\beta$. At the same time, the participation in formation of incomes means that as the factual budgetary incomes increase by one unit, the transfer goes up by a value of γa. Accordingly, as the factual incomes go up, the size of financial aid from the center goes down.

[29] See in more detail: *Lugovoy, Sinelnikov, Trunin (2001)*.

[30] See in more detail: *Kadochnikov, Sinelnikov, Trunin (2001)*.

the deviation of the budget expenditures from the normative expenditure needs and a share of their own financing of deviations of budget incomes from the tax potential. It is not the shares of the own financing themselves that are of key importance, but the differences between them, i.e. whether the federal center takes an equal part in co-financing the deviations of both incomes and expenditures from their normative (potential) values.

In order to obtain more detailed results of the analysis, let us consider as an example a model that incorporates a function of utility of regional governments as that with constant elasticities. The premise that the utility function has such a form allows us, given some limitation in generality, to simplify the use of our model for the purpose of analysis of comparative statics. Our variant of the utility function is as follows:

$$U(E, T) = \ln E + \omega \ln (Y-T),\ [31] \tag{9}$$

where ω is a parameter of the utility function.

For ease of further statement, we shall transform the model's limitations through inserting the equation used to find the size of financial aid (7) into the limitation (6) and grouping together components with E and T. It will result in the only limitation for a problem of utility maximization:

$$E\,(1-\gamma\alpha) - T\,(1-\gamma\beta) = \gamma A, \tag{11}$$

where

$$A = (1-\alpha)\,\widehat{E} - (1-\beta)\cdot\widehat{T}. \tag{12}$$

Expression A (11), which is multiplied by parameter γ, is part of the financial aid given to a region on the basis of exogenous characteristics of the region (the normative expenditure needs and tax potential) and does not depend on their factual values. Accordingly, value $Tr - \gamma A = \gamma(\alpha E - \beta T)$ is part of the financial aid which is given on the basis of factual values of incomes and expenditures of a region adjusted for parameters a and β.

In solving the utility problem (9) given limitations (10) and (11), we can obtain the following expressions for optimal E^* and T^*, which depend on the parameters of the problem:

$$E^* = \frac{1-\gamma\beta}{1-\gamma\alpha}\cdot\frac{Y}{\omega+1} + \frac{\gamma}{1-\gamma\alpha}\cdot\frac{A}{\omega+1} \tag{13}$$

$$T^* = \frac{Y}{\omega+1} - \frac{\gamma}{1-\gamma\beta}\cdot\frac{\omega A}{\omega+1}. \tag{14}$$

Based on the analysis of expressions (12)-(13), we can examine how a change in various parameters which make up the model and determine the character of a policy of financial aid distribution by the federal center affects the fiscal behavior of regional governments and, specifically, the choice of a level of the tax load and budget expenditures (a more detailed analysis is given in *Kadochnikov, Sinelnikov, Trunin, Shcrebela (2001)).*

The analysis of comparative statics carried out by means of the model (signs of derivative optimal expenditures and tax levies within the regional budget) led to some results which can be represented in the following Table 2:

Table 2. Signs of partial derivatives of optimal tax incomes and expenditures, with a region as a recipient of financial aid.

	Y	$\widehat{E}$	$\widehat{T}$	α	β	γ
Derivative E^*	+	+	−	+	−	?[#]
Derivative T^*	+	−	+	+	−	?[##]

[#] -   "+", if $\alpha \geq \beta$; depends on ratio $Y(\alpha-\beta)$ and A, if $\alpha<\beta$;
[##] -   "+", if $A<0$; "−", if $A>0$.

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[31] Provided the goal function is a function of (9) type, straight line $Y=T$ is an asymptote. It is assumed that $0 < T < Y$.

As is evident from our analysis, the on-going increase in the pre-tax income of economic agents across the region which is due to either an increase in the level of economic activity or a transfer to the income of economic agents leads to a rise in both the level of tax levies and expenditures from the regional budget. In this case, a degree of a rising rate of tax collection depends on preferences of the regional governments when sizes of private and public goods consumed in the region are compared, and does not depend on the formula of estimating the regional financial aid. At the same time, as the incomes rise, the higher the value of the ceiling norm of replacement of the level of taxation with the size of the expenditures at an optimal point, the faster the expenditures from the budget grow. Thus the less β (the more the Center is oriented on factual expenditures of the budget) in providing financial aid to a region, the higher is the increase in supply of public goods, given increased incomes of the economic agents.

In developing the policy, it is essential to adequately estimate the tax potential of a region and its expenditure needs. As shown in the table, the higher is the value $\hat{E}$, the more important is an optimal size of budget expenditures and the less is the value of the size of the tax load collected by regional governments. The effects of estimating an amount of the tax potential $\hat{T}$ are inverse: the higher is $\hat{T}$, the more are tax levies collected and the less is the expenditures from the regional budget. However, it should be noted that the normative expenditure needs and estimates of the tax potential cannot be used to set up some stimuli for the behavior of regional governments. While being parameters of the policy for distribution of financial aid, these estimates are determined individually for each region; therefore any variation of them leads to redistribution of the financial aid among the regions. A study of the effects resulting from that are beyond the scope of the paper.

In analyzing the effects of the size of Center's coverage of the gap between an estimate of expenditures and incomes of the region on the choice of the optimal amounts of incomes and expenditures from the budget by the regional governments, we should keep in mind that the effects of particular changes in the parameter are not the same. The model demonstrates that, given various values of the other parameters of the problem, such as a degree of co-financing of the region's expenditures by the federal government, participation in forming incomes, amounts of normative expenditures needs and tax potential, the effects of a change in the amount of financial aid on the taxes collected in the region and expenditures may vary.

With a symmetrical model of distribution (equal orientation of the Center both on the tax potential and the normative expenditure needs in estimating the size of financial aid), a proportional increase in the financial aid leads to increased budget expenditures and reduced tax incomes, and an increase in the gross regional income brings about increased consumption of private and public goods across the region. The same situation also occurs when the center ignores the factual incomes and expenditures of the region and relies only on their normative (potential) values. It allows us to conclude that if the center seeks to avoid building up stimuli for a change in the regional financial policy for the purpose of influencing the amount of the allocated financial aid, the federal governments should apply to a policy of estimating its amount, which is based on symmetrical rules of consideration of the normative values of incomes and expenditures. In this case the financial aid provided will affect only the incomes, i.e. increase the expenditures from the regional budget for provision of public goods worth less than the provided financial aid and also lead to a lower cut in the tax load, thereby permitting economic agents to increase consumption of private goods.

In case the model is non-symmetrical and takes into account to an increased degree, for instance, the factual expenditures (tax incomes), then in addition to the income effects, there arises an effect of replacement due to a shift of the budget limitation towards a rise in the expenditures (a fall in the income). As a result, the proportional increase in the financial aid might lead, given certain correlation of the parameters of the problem, to both an increase and decrease in the outcome and expenditures from the regional budget, see Table 1.

With increased reliance of the financial aid distribution model on factual expenditures (*a*), additional co-financing of expenditures by the federal budget is expected to stimulate increased

expenditures. If the co-financing is carried out in part, the regional governments even somewhat build up tax incomes, thereby compensating for a reduction in the utility through increased expenditures. Conversely, once the financial aid distribution model relies more on the factual incomes (β), the regional governments seek to reduce the budget incomes (cut the tax load), since the decrease in the incomes will be replaced with the federal aid accordingly. If the co-financing by the federal center is incomplete, there is some decrease in the expenditures of the regional budget.

The results obtained make it possible to assume that by varying the parameters of the financial aid distribution model, the federal government can create various stimuli depending on the aims of the economic policy in process. For instance, if the center seeks to minimize the scale of an outflow of the given financial aid into the private sector, it should establish rules providing for a greater degree of co-financing of the factual expenditures than the participation in setting incomes (a should be considerably higher than β). And on the contrary, if the center's priority is to reduce the expenditures, then a considerable excess of a over β as a result of a growing amount of financial aid would trigger a replacement effect and lead to a cut in the tax incomes and, depending on the ratio of the parameters, a decrease in the expenditures, i.e. the financial aid would be exploited in full for increased consumption of private goods.

Estimating the model of financial aid distribution to Russian regions by the federal center and testing hypothesis of fiscal stimuli available to the system of intergovernmental relations

The first part of this section checks how our model of financial aid distribution conforms to the respective mechanisms actually in use in the Russian Federation. With this goal in view, we have conducted econometric estimates of the corresponding equation. In general, given the parameters discussed in the first part of the paper, the model of financial aid distribution may be written as follows:

$$Tr_{i,t} = f\left(T_{i,t-s}, \widehat{T}_{i,t-s}, E_{i,t-s}, \widehat{E}_{i,t-s}\right) + \varepsilon_{i,t-s}, \; s = 0,1,2 \tag{15}$$

where $\varepsilon_{i,t-s}$ is deviation of the factual financial aid given to an i-region in the year t from an estimated value on the basis of the data as of the year t-s according to the model (the estimates made use of the values separated by a 0 to 2 unit-lag), which may be due to unaccounted factors depending, let's say, on the political strength of regional governments, as well as some occasional perturbations.

In the second part of the section, we intend to check some of the hypotheses which were described in the theoretical part of the paper and deal with the fiscal behavior of regional governments receiving federal financial aid. In evaluating the fiscal stimuli, we shall check the reversed effects as against those given in equation (14), namely how a change in the financial aid affects the size of incomes and expenditures of the regional budget. It means that a similar equation where the explanatory variables were taken without a lag should be evaluated within a system of equations; otherwise we can violate the condition of predetermination of the explanatory variables. Consideration of values with lags 1 and 2, which is justified in terms of the contents of the budgetary process, also allows us to give correct estimate of the financial aid distribution model and the equation used for evaluation of the fiscal stimuli separately.

In closing, we shall draw conclusions and offer some recommendations on the economic policy.

An estimate of the linear model of distribution of financial aid among the regions

The high values of correlation between the factual and normative values of incomes and expenditures do not permit us to directly evaluate equation (14). The model of financial aid distribution can be written in a form that includes co-financing of incomes and expenditures from

the regional budget by the federal center, as well as filling of the gap between the normative expenditures and potential budget incomes, the so-called normative deficit. The corresponding equation of linear regression (with a constant) can be written as follows:

$$Tr_{i,t} = a_0 + a_1(E - \hat{E})_{i,t-s} + a_2(T - \hat{T})_{i,t-s} + a_3(\hat{E} - \hat{T})_{i,t-s} + \varepsilon_{i,t-s}, \quad s = 0,1,2 \qquad (16)$$

Based on the analysis carried out in the previous section and given conformity between coefficients of equation (15) and parameters of the financial aid distribution model ($a_{3=}\gamma$, $a_{1=}a'\gamma$, $a_{2=}\beta'\gamma$), we can formulate the following hypothesis for the coefficients:

$a_0=0$, i.e. *the size of financial aid does not contain a component that is calculated as a certain per capita total which is common to all the regions;*

$0 \le a3 \le 1$, *which corresponds to assumption* $0 \le \gamma \le 1$; $\qquad$ (16)

$0 \le a1 \le a3$, *which, given the correlation* $a1=\square . \square \square$ *and condition for a3 corresponds to assumption* $0 \le \square \le 1$;

$0 \le -a2 \le a3$, *which, given the correlation* $a2=\square . \square \square$ *and condition for a3 corresponds to assumption* $0 \le \square \le 1$.

The statistics used includes the data for 86 regions, except for Chechen Republic, Khanty-Mansiysky and Yamalo-Nenetsky autonomous districts. Estimates were based on the data of the regional budget statistics for Russia in 1992-2000[32], as well as estimates of tax potential and normative expenditure needs as calculated by the IEPP[33]. Estimates were made for per capita indices. In order to make the indices of prices comparable among different years, we made use of a deflator of nominal GDP. Given the fact that the price differentiation among the regions is also very large, we made use of a relative interregional index for cost of living to make the interregional prices comparable.

If in estimating the equation *Tr=E-T, we* interpret value *Tr* as the total financial aid received by regions, then we shall evaluate not the financial aid distribution model, but an identity of a budget limitation under which an amount of expenditures should be equal to a sum of incomes plus financial aid[34]. Estimates given in this section are not, in fact, those of a budget limitation for a number of reasons. First, equation (15) was evaluated separately for various components of the financial aid, transfers from the FFRS and additional financial aid. It means that the financial aid under consideration accounts for only a part of the difference between the factual incomes and expenditures. Second, the equations make use of not only the factual incomes and expenditures of regional budget, but also estimates of the tax potential and normative expenditure needs. Third, we used tax, rather than aggregate incomes of the regional budget. Besides that, we left out some sources of financing of the regional budget deficit, other than the financial aid.

At an initial stage of calculations, we estimated equation (15) separately for all the years with the above-mentioned lags of dependent and explanatory variables. In line with the changes that have taken place in the mechanism for financial aid distribution, it can be assumed that parameters α и β (a_1/a_3, and $-a_2/a_3$ respectively) may vary for different time intervals. Because of the changed total amount of the financial aid as prescribed by laws on federal budget for the corresponding years, we may assume that parameter γ (a_3) can change for each year as regards the aggregate gap between the incomes and expenditures of regions. In order to answer the question how the parameters of the financial aid distribution model have changed over the years and check whether we can evaluate the parameters on the basis of the panel data, we should check

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[32] See reports on execution of regional budgets at the site of the Finance Ministry of the Russian Federation, http://www.minfin.ru/.

[33] See policy and results of estimation of tax potential of Russian regions in: Batkibekov, Kadochnikov, Lugovoy, Sinelnikov, Trunin (2000) and policy and results of estimation of normative expenditure needs in: Kadochnikov, Sinelnikov, Trunin (2001).

[34] The sense of the dependence obtained will not be that an amount of a transfer depends on an amount of budget incomes and expenditures, but that an amount of expenditures will be adjusted to that of the own incomes and financial aid.

the hypothesis that the coefficients of equation (15) are equal throughout the years. Separate checks were made for transfers from the FFRS and additional financial aid for a couple of consecutive years.

The results of the tests show that in terms of stability of coefficients we can distinguish three periods – the year 1994, 1995-97 and 1998-2000 (in 2000 we have witnessed a significant change in the coefficient a_1). In accordance with the results obtained, we shall carry out subsequent estimates for these three periods, namely regression for 1994, an estimate on the basis of the panel data for 1995-97 and a similar estimate for 1998-2000 with a dummy variable used to estimate a change in the coefficient a_1 in 2000.

The goal of this section is to test the formulated hypotheses on coefficients (15) and check how the coefficients for various types of financial aid and various groups of regions differ[35].

<u>An estimated model of distribution of transfers from the FFRS.</u> The results of estimating the model of distribution of transfers from the FFRS for the three periods are given in Table 4. The estimate for 1994 demonstrated that the model incorporating the difference between the actual expenditures and incomes of the budget as an explanatory variable gives a better description of amounts of financial aid provided in 1994 than model (15), with comparison made on the basis of the adjusted value R^2, as well as Schwartz's information criterion. This indicates that in providing the financial aid the government used as a benchmark not the normative values of expenditures, but the factual state of regional economy, i.e. the values of income and expenditures. Similar estimates were also made for the other years, but the use of factual budgetary deficit instead of the variables used by the model (15) as parameters does not improve the properties of the equation based on the post-1994 data.

Table 4. Results of estimating equation (15) for transfers from the FFRS

Explanatory variable:	Transfers from the FFRS							
Estimation period:	1994	1994	1995-97	1995-97	1996-97	1998-00	1998-00	1998-00
Lags of explanatory variables	0	0	0	1	2	0	1	2
Number of observations	86	86	258	258	172	258	258	258
Explanatory variables:	Round brackets below coefficients specify *t*-statistics							
constant	**-0,377**	**-0,330**	**-0,233**	**0,036**	**0,310**	**-0,645**	**-0,474**	**-0,404**
	(-4,849)	(-4,729)	(-2,941)	(0,445)	(2,725)	(-7,883)	(-4,323)	(-3,213)
Co-financing of expenditures (a_1)	**0,262**		**0,324**	**0,368**	**0,324**	**0,195**	**0,218**	**0,240**
variable $E - \widehat{E}$	(13,299)		(19,648)	(17,977)	(10,838)	(9,397)	(8,867)	(5,525)
The same with a dummy for 2000						**0,072**	**0,203**	**0,327**
variable $\left(E - \widehat{E}\right) \cdot dummy^{2000}$						(2,406)	(4,651)	(6,488)
Co-financing of incomes (a_2)	**-0,355**		**-0,406**	**-0,385**	**-0,301**	**-0,347**	**-0,266**	**-0,332**
variable $T - \widehat{T}$	(-5,134)		(-6,352)	(-5,269)	(-2,833)	(-10,967)	(-5,816)	(-5,707)
Deficit equalization (a_3)	**0,269**		**0,455**	**0,408**	**0,343**	**0,671**	**0,537**	**0,458**
variable $\widehat{E} - \widehat{T}$	(15,257)		(23,563)	(20,141)	(12,452)	(26,462)	(17,753)	(13,992)
Factual budget deficit		**0,262**						
Variable $E - T$		(17,154)						
R^2 adjusted	*0,771*	*0,775*	*0,737*	*0,669*	*0,534*	*0,795*	*0,662*	*0,563*
α	**0,974**	**1,000**	**0,712**	**0,902**	**0,945**	**0,291**	**0,406**	**0,524**
β	**1,320**	**1,000**	**0,892**	**0,944**	**0,878**	**0,517**	**0,495**	**0,725**
γ	**0,269**	**0,262**	**0,455**	**0,408**	**0,343**	**0,671**	**0,537**	**0,458**
Difference of α^{2000} from α in 1998-99						0,107	0,378	0,714

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[35] As mentioned above, transfers from the FFRS are distributed according to the most formalized rules. In addition, regions receive additional financial aid which is equal to a total of grants-in-aid, subventions, means obtained through mutual accounts and balances of granted and returned budget loans.

On the whole, the results of econometric estimates of the financial aid distribution model for 1995-2000 demonstrate that the model in use (15) adequately describes real volumes of financial aid which was extended to the Russian regions (the real incomes and expenditure of budget, as well as their normative values for different years account for 70-80 percent of dispersion of the transfer amount from the FFRS).This indicates that the hypothesis under which the federal center distributed the financial aid among the regions during the period under study while seeking to fill in part the gap between the estimates of regional incomes and expenditures calculated as weighted values of real and normative figures is not in contradiction with the statistical data available.

Coefficients a_1, a_2 and a_3 are substantially different from zero, and their standard deviations are not so great. That is why estimates a and $\beta\square$ which have been obtained as ratios of a_1 and a_2 to $a_{3\text{я}}$, respectively can be considered to be quite significant. The results of estimating models of type (15) demonstrate that the above assumptions as regards parameters α, β and γ are correct. The basic conclusions to be drawn from the empirical analysis we have made are as follows:

1. The financial aid provided by the federal center to regions is positively dependent on the value of gap between the estimates of incomes and expenditures of the regional budgets. Besides that, we find positive dependence of the given financial aid on the real expenditures of regions and normative expenditure needs, as well as negative dependence of the aid on the real volume of tax incomes of regional budgets and an estimate of the tax potential of regions.

2. The subperiods of estimates revealed agree with stages of improvement of intergovernmental relations in the Russian Federation. Thus, in 1994 the basic factor which the federal center took into account by in allocating the financial aid was real current budget deficit of a region. In 1995-97 it stemmed from the real values for the preceding years and normative values of incomes and expenditures of the regional budgets, while in 1998 a new official policy was adopted for distribution of subsidies aimed at equalizing the minimum budget figures, which was based on indices of tax potential and budget expenditures used to determine the volume of financial aid to be allocated. This helps explain the results of estimates for 1994, as well as a decrease in the values of estimated parameters a and $\beta\square$ in 1998-2000 against 1995-97. A fall (far from being monotonic) in the estimated values of a throughout the years under review demonstrates that in determining an amount of the aid the federal center gradually passed over from estimation of financial aid volume based on the real expenditures to a use of normative (index) expenditure needs. A similar fall is also characteristic of $\beta\square$, which indicates a greater use of the normative values in estimating the financial aid.

3. On the whole, the tabled data show that whatever the variants of estimating the financial aid distribution model, an estimated parameter a is less than parameter $\beta\square$ $\square$[36]. As demonstrated in the theoretical part of the paper, this is an evidence of the fact that the federal budget is more involved in building incomes than in co-financing of regional expenditures. Such situation may be due to the fact that prior to 1999 the policy of estimating transfers from the FFRS relied on the use of real tax incomes of the past regional budgets (slightly adjusted) as a basis for calculation of transfers to be given to the regions. For estimating expenditure demands, they used the 1991 expenditure volume, which because of many adjustments and agreed-upon corrections proved to be closer to a certain mean value, under which the center was willing to finance the regional budget expenditures, i.e. the normative values of expenditure needs used in the course of calculations. Another reason for an excess of $\beta\square$ over a is that the volume of the income powers of regional governments is less than that of expenditure powers. Therefore relatively lower tax revenues fed to the regional budgets may be a more weighty ground for the federal center to increase the financial aid than high expenditures of a regional budget.

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[36] In order to evaluate the significance of differences for parameters a and $\beta\square$, we made use of the Walde's test designed to compare coefficients a_1 and a_2 taking into account a changed coefficient a_3, as well as the fact that a and $\beta\square$, are determined as ratios of coefficients a_1 and a_2 to a_3 respectively, with the latter significantly different from zero at a high level of significance (standard deviations of all coefficients are insignificant).

4.　　　　Even in the past years, which can be characterized by a more objective policy of transfer allocation to the regions, part of the financial aid remains to be unaccounted-for. In part, it is due to an individual approach taken by the center towards each region and its problems in allocating additional financial resources. An illustration is, for example, political arguments of some governors affecting the decision making by the federal government in allocation of additional financial aid[37], impact of the regional governments on initial indices used for calculation of a transfer and so on.

　　　　As mentioned above, the explanatory variables are not independent in equation (15). That is why we cannot divide the explained dispersion in equation (15) into three components according to the number of meaningful explanatory variables. It means that the statistical properties of the data used do not allow us to conclude which part of a transfer is allocated for co-financing of expenditures, incomes and deficit respectively. Nevertheless, we can estimate partial coefficients of correlation between the size of financial aid and explanatory variables (correlation between the indices after effects of the other variables have been removed). The corresponding values of partial coefficients of correlation between the size of a transfer and deviations of the expenditures and incomes from their respective normative values and normative deficit values in model (15) are around 0.5~0.6, -0.5~-0.3, 0.8~0.9 respectively and do not differ very much for different years.

　　　　Estimation of the distribution model for financial aid, other than transfers from the FFRS. In addition to the above estimates for transfers from the FFRS, we shall give estimates of model (15) for financial aid, other than the transfers. In so doing, we seek to check the supposition that the federal government allocates additional financial aid to regions according to less formalized rules and in estimating its amount the real incomes and expenditures of the budget are used to a greater degree than the normative figures, see Table 5 below.

Table 5. Results of estimating equation (15) for additional financial aid in 1994-2000.

Explanatory variables:	Additional financial aid							
Estimated periods	1994	1994	1995-97	1995-97	1996-97	1998-00	1998-00	1998-00
Lags of explanatory variables	0	0	0	1	2	0	1	2
Number of observations	86	86	258	258	172	258	258	258
Explanatory variables:	Round brackets below coefficients specify *t*-statistics							
constant	**0,214**	**0,276**	**-0,179**	**0,241**	**0,521**	**-0,504**	**-0,220**	**-0,356**
	(1,732)	(2,418)	(-2,496)	(2,800)	(5,053)	(-7,396)	(-2,360)	(-4,361)
Expenditure equalization (a_1)	**0,671**		**0,243**	**0,247**	**0,237**	**0,276**	**0,236**	**0,295**
variable $E - \widehat{E}$	(20,987)		(16,333)	(11,420)	(8,753)	(15,967)	(11,325)	(16,190)
The same with dummy in 2000						**-0,218**	**-0,136**	**-0,096**
variable $\left(E - \widehat{E}\right) \cdot dummy^{2000}$						(-8,742)	(-3,650)	(-2,924)
Income equalization (a_2)	**-0,691**		**-0,450**	**-0,372**	**-0,332**	**-0,243**	**-0,084**	**-0,217**
variable $T - \widehat{T}$	(-6,184)		(-7,799)	(-4,825)	(-3,450)	(-9,248)	(-2,161)	(-5,753)
Deficit equalization (a_3)	**0,720**		**0,329**	**0,223**	**0,168**	**0,349**	**0,211**	**0,236**
variable $\widehat{E} - \widehat{T}$	(25,761)		(18,920)	(10,447)	(6,749)	(16,543)	(8,199)	(11,093)
Real budgetary deficit		**0,702**						
variable $E - T$		(28,021)						
R^2 adjusted	*0,903*	*0,902*	*0,650*	*0,397*	*0,337*	*0,662*	*0,418*	*0,561*
α	**0,932**	**1,000**	**0,739**	**1,108**	**1,411**	**0,791**	**1,118**	**1,250**
β	**0,960**	**1,000**	**1,368**	**1,668**	**1,976**	**0,696**	**0,398**	**0,919**
γ	**0,720**	**0,702**	**0,329**	**0,223**	**0,168**	**0,349**	**0,211**	**0,236**
Difference of α^{2000} *from* α in 1998-99						-0,625	-0,645	-0,407

　　　　The 1994 results show that both for transfers from the FFRS and additional financial aid, the model where the real deficit of the regional budget is used as an explanatory variable, is bet-

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[37] See more details, for example, in: Treisman (1996) and Treisman (1999)

ter than model (15). It is noteworthy that coefficient γ for the additional financial aid (0.7) is much higher than the estimated value for a transfer from the FFRS (0.26). This points that it is the additional financial aid which was used as a basic source for coverage of deficits of the regional budgets in 1994, with the calculation of the volume of allocated aid based on the real values of deficit, rather than on the normative ones.

Our estimates of the financial aid distribution model for 1995-97 showed that value β, as is in the case of the FFRS transfer, is more than a, that is the federal center takes a more active part in building incomes of regional budgets than co-financing increased expenditures, with obtained estimates of a and β being mostly more than one. It cannot be interpreted in terms of the financial aid distribution model offered (7), but can be for a transformed model (15). The additional financial aid is given on the basis of less formalized criteria than the FFRS transfer, the volume of allocated financial aid frequently being negotiable between the regional governments and the federal center. The basic arguments of the former are normally insufficient tax incomes or too high expenditures of the regional budget. The federal center, given these arguments, provides additional financial aid, thereby filling the gap (with proportionality coefficients a_1, $-a_2$ and a_3) and unduly taking into consideration the real values of incomes and expenditures of a region. This results in an excessive volume of financial aid - greater than the one that could be proportionate to the real budget deficit.

The 1998-2000 situation is characterized by a smaller β value, which corresponds to an increased weight of the tax potential in the financial aid distribution model. Values a remain to be at the same high level. An estimate of a coefficient with a dummy variable, which characterizes the difference of a in 2000 in contrast to the previous years, shows that the year 2000 saw a decrease in a by approximately 0.4-0.6, which means that in distributing the financial aid the federal center to a lesser degree relied on the real expenditures and started to calculate the aid amount on the basis of the normative expenditures (in practice, with the use of budget expenditures index).

In general, it can be noted that the calculation of the additional financial aid, in fact, to a greater degree relied on the real incomes and expenditures of the budget as opposed to a transfer from the FFRS. In addition, the slightly less adequate characteristics of the estimated equation (R^2, significance of coefficients) indicate that a major portion of the financial aid was allocated on the basis of some other factors, which are outside the model, such as political considerations.

Estimating financial aid distribution models for various groups of regions. Given some specific features of the intergovernmental system in Russia, it is our assumption that the financial aid distribution model varies for different regions or, to be exact, for various groups of regions. For instance, the policy of the FFRS transfer distribution indicates explicitly that some means (20 per cent) are allocated for equalization of the tax potential of the lowest-income regions. Besides, a specific status is enjoyed by the northern territories which can get additional aid and, in particular, for delivery of products to the restricted transportation access areas.

In order to check the hypothesis that there are some differences in parameters of policy of fiscal aid distribution by the federal center to various groups of regions, out of all regions we have singled out a group of highly subsidized regions as many as 26 which regularly receive considerable per capita amounts of financial aid. Like with our traditional tests for coefficient stability, we have made use of dummy variables which are equal to 1 for highly subsidized regions and 0 for the remaining ones. As demonstrated by our calculations, the results for the highly subsidized regions are different from those for the remaining regions only in the recent years (1998-2000). It means that some financial aid has been allocated specifically to enhance the budget support for the highly subsidized regions precisely since 1998.

Similar estimates were made for the northern territories, with a dummy variable involved. The results of the estimates show that for the northern territories values of the model parameters differ appreciably from those for the remaining regions. In particular, the northern regions are characterized by a somewhat higher value γ as compared to the other regions, which means that

the federal government has provided them financial aid to fund part of the budget deficit of the northern regions.

In sum, the hypothesis about a common approach of the federal government to all the regions has not been substantiated by our empirical data (at least over the recent years).

Checking hypotheses on fiscal behavior of regional governments

In terms of the above model of choice between an amount of taxes and expenditures of the regional budget, given the pre-assigned policy of financial aid distribution, the fiscal stimuli are expressed in changed optimal values of amounts of tax levies and expenditures aimed at raising the welfare of the local population. Within the frameworks of the study, we are not going to make empirical estimates of utility functions of the Russian regions and shall keep the concept of fiscal stimuli confined as illustrated by the paper of Zhuravskaya (1998). The fiscal stimuli are considered to occur when in defining the rules of financial aid distribution the center creates conditions, under which the optimal correlation of incomes and expenditures changes in the regional budget.

There are different points of view as to what are positive and negative stimuli. In terms of increased well-being of a region, we find the center's efforts justified to increase not only a supply of the public goods across the region, but also consumption of private goods resulting from a reduced tax burden. Given a more restricted approach, it can be assumed that the federal government's goal in allocating financial aid to regions is to increase consumption of public goods by the population of a region. In this case the rules of financial aid distribution should promote increased expenditures as a result of a growing amount of a transfer, without reducing the taxes at the sane time. With this assumption in mind, a cut in the tax collection across the region, once the financial aid has been received, can be interpreted as a new negative fiscal stimulus.

It follows from a theoretical analysis of behavior of regional governments that the effects of a changed amount of financial aid provided to a region on an amount of collected taxes and expenditures as chosen by the regional governments can vary depending on the correlation between model parameters a and β.

The empirical estimates of the financial aid distribution model given above indicate that in 1994-2000 Russia has witnessed the situation that is characterized by an excess of parameter β over a. It follows from the theoretical analysis that at $\alpha < \beta$ the effect of an income, given an increased transfer, may lead to increased expenditures and reduced tax incomes. Given such correlation of the parameters, the replacement effect can lead to a fall in tax incomes and expenditures. As a result, as the financial aid goes up, the stimuli of reducing the tax incomes at constant a and β are rather strong. As this takes place, the sign of the changing expenditures may be either positive or negative. At the same time, a fall in a and a cut in β also result in effects of different directions as regards the optimal value of incomes and expenditures. As a result, the sign of income change may remain unspecified, but given the above considerations, it can be expected that in 1994-2000 Russia witnessed negative fiscal stimuli, i.e. the increased volume of received financial aid could lead to a decrease in the regional tax incomes.

In what follows, we shall carry out some variants of checking the hypothesis on availability of fiscal stimuli with the recipient regional governments. First we shall consider dependences of tax incomes and expenditures of regional budgets on an amount of financial aid in terms of growth, which allows us to correctly specify the model, assuming that the remaining factors affecting the incomes and expenditures remain unchanged. Another option of checking how an amount of the financial aid received impacts an amount of tax incomes and expenditures of the regional budget is to use more disaggregated models of building tax incomes and expenditures of regional budgets, some of which are to be considered below.

Estimating dependence of tax income and expenditure growth on an increase in financial aid. In order to check whether there are some fiscal stimuli, let us estimate how the growing tax incomes and expenditures of regional budgets depend on growth in the financial aid. Let us assume that the remaining factors which affect the fiscal policy and vary across the regions remain

unchanged in time. As demonstrated above, that volume of financial aid depends on real incomes and expenditures of regional budgets in a current year. It is primarily related to the additional financial aid which is allocated promptly throughout a year. The above means that the dependence between incomes, expenditures and financial aid should be assessed within a system of simultaneous equations. With this in mind, we shall assume that growth in tax incomes and expenditures of regional budgets depends not only on an increase in the financial aid, but also on its previous values, i.e. that they are somewhat persistent. The previous value of the financial aid is not part of the system to be estimated, since in proceeding from the financial aid distribution model we assume that the volume of a grant-in-aid does not depend on its previous values. In such a form, the system of equations is precisely identifiable:

$$\begin{cases} \Delta_t T_i = a_0 + a_1 \cdot \Delta_{t-1} T_i + a_2 \cdot \Delta_t Tr_i + \varepsilon_i^T \\ \Delta_t E_i = b_0 + b_1 \cdot \Delta_{t-1} E_i + b_2 \cdot \Delta_t Tr_i + \varepsilon_i^E \\ \Delta_t Tr_i = c_0 + c_1 \cdot \Delta_t T_i + c_2 \cdot \Delta_t E_i + \varepsilon_i^{Tr} \end{cases} \qquad (17)$$

In so doing, we intend to check the following hypotheses concerning the signs of coefficients:

$b_2>0$ — an increase in the volume of received financial aid leads to a growth in expenditures of a regional budget , i.e. to an increase in the level of provision of public goods;

$a_2<0$ — an increase in the volume of received financial aid is accompanied by reduction in tax incomes;

$c_1<0$ — financial aid falls as the tax incomes of a region go up;

$c_2>0$ — increased expenditures lead to a rise in the financial aid .

The use of growing figures, in addition to some other factors whose values are supposed to remain unchanged, also allows us to get rid of region-specific values of a constant ('fixed effects') which may be expected in a general case for the model at various levels. However, for system (17) we cannot use the method of least squares in dealing with growth rates, since it gives inconsistent estimates, because errors ε_i^T and ε_i^E correlate with $\Delta_{t-1} T_i$ and $\Delta_{t-1} E_i$ respectively. This problem can be solved through the use of instrumental variables $\Delta_s T_i$ and $\Delta_s E_i$ for all $s<t-1$ which are substantiated by the data available prior to 1995.

In order to take away effects of a change in the financial aid given over the recent years on a change in incomes and expenditures of the regional budget in the current year, we have also used instrumental variables $\Delta_s Tr_i$ for all $s \leq t-1$, with statistical data available. In addition to that, assuming that there can be some unaccounted factors in a model, it can be expected that errors ε_i^T, ε_i^E and ε_i^{Tr} correlate between themselves. That is why we used a three-step method of least squares to estimate system (17). Estimates were made on the basis of regional budget statistical data for Russia in 1994-2000. Calculations were made for 85 regions of the Russian Federation, i.e. for all the regions, except for Chechen Republic, Khanty-Mansiysky, Yamalo-Nenetsky, and Taimyr autonomous districts. The results of the estimates for the system of equations (17) are given in Table 6.

Table 6. Results of estimating equations (17).

Periods of estimation:	1996	1997	1998	1999	2000
Number of observations	255	255	255	255	255
		Round brackets indicate t-statistics			
Equation for income growth					
a_0	0.001	**0.690**	**-0.396**	**-0.628**	0.348
constant	(0.010)	(6.040)	(-2.830)	(-6.340)	(1.908)
A_1	0.031	0.641	**-0.675**	-0.024	0.404
Growth in taxes with a lag	(0.331)	(1.001)	(-2.968)	(-0.265)	(1.873)
A_2	-0.108	**-0.318**	**-0.110**	-0.076	-0.354
Growth in financial aid	(-1.405)	(-3.016)	(-2.072)	(-1.188)	(-1.293)

R^2 adjusted	-0.0003	0.0072	0.152	0.008	0.144
Equation for expenditure growth					
b_0 constant	0.305 (1.936)	6.942 (1.421)	**-0.814** (-3.694)	**-0.823** (-6.562)	0.226 (1.052)
b_1 Growth in expenditures with a lag	-0.071 (-1.078)	-5.724 (-1.190)	**-0.442** (-2.332)	-0.003 (-0.114)	0.119 (1.349)
b_2 Growth in financial aid	**0.585** (4.715)	-4.778 (-1.138)	**0.549** (3.065)	**0.785** (9.596)	**0.963** (2.992)
R^2 adjusted	0.197	0.144	0.564	0.570	0.104
Equation for growth in financial aid					
c_0 constant	-0.151 (-1.412)	**1.208** (2.297)	-0.510 (-1.885)	0.064 (0.605)	0.039 (0.787)
c_1 Growth in taxes	**-0.630** (-4.327)	**-2.803** (-3.876)	**-1.676** (-5.242)	**-1.384** (-10.926)	**-0.604** (10.685)
c_2 Growth in expenditures	**0.506** (6.465)	**0.572** (2.531)	**0.779** (9.595)	**1.124** (15.908)	*0.604[#]*
R^2 adjusted	0.337	0.116	0.509	0.666	0.594

[#] Estimates for 2000 were conducted with limitation $c_1+c_2=0$.

The results show that significant negative coefficients of dependence of growth in taxes on a rise in the volume o of obtained financial aid are observed for 1997 and 1998 only, their respective coefficients are –0.3 and –0.1 (results for 1998 should be considered with regard for the federal and regional budgets and in the light of the past financial crisis leading to a sharp fall in incomes which was not due to a change in the policy of providing financial aid). We have not found any significant dependence of growth in the tax incomes on a rise in the financial aid for 1999-2000.

Concurrently with that we have revealed a significant positive dependence of growth in the expenditures of regional budget on an increase in the financial aid, with the coefficient ranging from 0.5 to nearly 1 depending on a year. It means that the increase in the financial aid was to a greater degree used for increased provision of public goods in a region.

On the whole, it can be noted that we have not found any steady negative fiscal stimuli in the financial aid distribution model for the period of 1994-2000.

Models of dependence of tax incomes of the regional budgets on indices that characterize the tax base and on an amount of financial aid. Let us analyze some models of tax incomes and expenditures of regional budgets, which include indices of the tax base for incomes and characteristics of a budget network for expenditures of the regional budget[38]. In order to specify the model of building tax incomes of regional budgets, we have introduced an amount of the financial aid and a variable that characterizes an amount of the tax base and its structure. Let us take an index of region's GRP as the most aggregated characteristic of the tax base and for characterization of a tax base structure a share of rural population as part of the total strength of the region's population which reflects a ratio of industry and agriculture in a region. Estimates of such an equation were given for 1995-2000, with a few variants considered for each year and financial aid received both in the current year and with a 1 to 3 year lag. In general, the results of our estimates show that the model accounts for around 70-80 per cent of dispersion of regional tax incomes, and a coefficient for the GRP proves to be significant and positive in all cases (a share of deduced value across a region going to the territorial budget as taxes constitute about 10 to 20 per cent). A share of the rural population proves to be significant (with a negative sign) only during the initial years, indicating a decreased level of average tax deductions from regions with a high share of agriculture. At the same time, a coefficient for an amount of financial aid mostly proves to be insignificantly different from zero.

Dependence of expenditures of regional budget on indices characterizing the cost and volume of the public goods and an amount of financial aid. In order to adequately specify a model of dependence of regional expenditures on an amount of financial aid received, we have intro-

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[38] See in more detail: Lugovoy, Sinelnikov, Trunin (2001), Kadochnikov, Sinelnikov, Trunin (2001).

duced a set of factors resulting in differentiation of budget expenditures. First, these are climatic-geographical characteristics, such as duration of a cold season, remoteness from key transportation routes; socio-demographic situation in a region, such as age structure of population, the level of urbanization, as well as the level of prices. Second, they are a condition and degree of development of the budget network, such as availability of hospitals, schools, etc, a share of housing and communal services paid by the population, as well as the capability of financing public goods, i.e. real incomes of a region's budget. To investigate effects of the financial aid on an amount of expenditures, we should divide the region's budget incomes into two independent variables – own tax incomes and financial aid. Given the above, we can estimate dependence of expenditures of regional budgets on a share of urban population across the region; how much the population pays housing and communal services; the per capita number of nursing staff; the per capita number of schools and the minimum wage.

The econometric model we have built accounts rather well for expenditures of the regional budgets. A one-unit increase in financial aid leads to a 1-1.5 unit rise in expenditures on average. It might be due to a few reasons. First, it might result from co-financing of expenditures at the expense of increased tax incomes, i.e. during the years that expenditures increase at a greater rate than the financial aid does, the tax incomes go up too. Second, expenditures can also be financed at the expense of non-tax incomes, as well as loans.

In summing up the empirical estimate of effects of financial aid on the fiscal behavior of regional governments, we should note a certain degree of their disagreement with the theoretical considerations. As demonstrated above, the theoretical considerations that unconditional lump sum grants affect the choice of recipient governments between public and private goods, testify to the effects of a leakage of some granted resources in the form of increased consumption of private goods across that region (reduced tax rates). Likewise, our analysis of the theoretical model suggests that with observed value of parameter a somewhat less than parameter β, increased financial aid should lead to a cut in tax revenues. In most cases, the empirical analysis of effects that the federal financial aid distributed among the administrative entities of the Russian Federation produce on an amount of tax levies collected by the regional governments does not demonstrate any statistically significant dependence, with growth in a transfer amount accompanied by a respective or slightly smaller decrease in expenditures. In order to account for an absence of observable leakage of the financial aid from the Russian federal budget for consumption of private goods, we can make use of the considerations that have been advanced in interpreting a slightly different empirically observable phenomenon – a flypaper effect[39]. According to the flypaper effect, in choosing between the consumption of private or public goods, the observable response of a recipient of a lump sum grant differs from that to an increase in electors' incomes across the territories that are under the jurisdiction of the recipient in case, say, a decrease in federal taxes to be paid across the territory. It does take place, although the two situations are equivalent in terms of theoretical analysis.

The studies of effects produced by the unconditional grants on expenditures of local governments in the USA show that a $100 grant-in-aid leads to a rise in the consumption of public goods by $40-50, whereas an equivalent increase in incomes of inhabitants of a territorial division resulting from decreased federal taxes leads to only $5-10 increase in the federal expenditures[40].

To explain the situation, we offer a number of hypotheses, which have been considered at length in Part 1.2 of the paper and consist in availability of own preferences with the subnational governments which are different from those of a representative elector. However, the above-listed reasons may be insufficient to explain an extremely high increase in expenditures across the Russian regions receiving the financial aid. Such a substantial effect of the financial aid on the budget expenditures of regions, with an average annual growth rate of expenditures amounting to around 100 per cent of the received financial resources, may be due to a number of addi-

[39] Cullis and Jones (1998), pp.321-326
[40] Gramlich (1977), pp. 282-290

tional reasons. First of all, it might be well to point out that in accordance with the legislation in force, the regional governments should furnish public goods and exercise transfers to the population at a scale much larger than the own incomes of a region and the financial aid granted. Besides that, the Russian budget situation was characterized by a high volume of overdue credit indebtedness of regional budgets to suppliers of goods and services, as well as to recipients of social payments. Thus, in terms of costs, the volume of furnished public goods is more than the real expenditures for their financing, which is especially characteristic of the regions strongly relying on the federal financial aid. If so, an unconditional lump sum grant turns into a conditional one used to fund the unsatisfied social commitments and pay off the debts. It is also worth noting that the actual conditions of granting financial aid from the federal budget are somewhat different from those that have been analyzed in the model. In calculating and allocating grants to regions, the center sets forth conditions to set maximum regional tax rates, pay off tax liabilities, transfer budget implementation to the exchequer's office and so on. The restrictions of the kind prevent the grant from leaking into the private sector.

It can also be assumed that the expenditures of the regional budget used to provide public goods and the social situation in a region are currently more important for the regional governments than the advantages from taking proper measures to reduce the tax load, particularly in the background of insignificant differentiation of the tax load across the regions.

Thus, the empirical analysis does not provide grounds to claim that the system of intergovernmental financial aid in force in 1994-2000 brought about negative fiscal stimuli in the above described narrow meaning of availability of the negative interrelation between the volume of financial aid and taxes collected for the regional budget. The growth or decrease in the federal financial aid provided to regions led respectively to growth or decrease in the expenditures of the regional budgets and did not result in reduction in the level of tax revenues across regions. It is most likely that the absence of fiscal stimuli was due not to a structure of the current financial aid system, but to some other characteristics of intergovernmental relations and, in particular, to a high level of federal expenditure mandates set forth for the regional budgets, as well as a low size of tax powers of regional governments.

Conclusions from our empirical analysis and proposals for the economic policy

We have analyzed results of the empirical check of the hypotheses concerning the character of the 1994-2000 policy of distribution of the Russian financial aid and dependence of the fiscal behavior of the regional governments on the parameters of the policy used, which led us to the following conclusions:

1. During the period under review the distribution of the financial aid from the federal budget was based on filling a certain part of the gap between estimated incomes and expenditures of the regional budgets. The claim that the estimate of the above gap was based on both actual values of incomes and expenditures of the regional budgets and those of the tax potential of the territories and normative expenditure needs of the regional budgets agrees with the empirical data obtained. As the time went on, the financial aid allocated from the federal budget stemmed to a greater degree from a use of estimated values of income potential and expenditure needs as compared to the factual values of incomes and expenditures. The federal center co-financed to a lesser degree the actual expenditures and participated in offsetting the deviations of the tax expenditures of regions.

The empirical estimates strengthen our assumption that the center sticks to the Rolls' principles of justice which demand that the regions with the least income base should be favored most of all. Consequently, if this goal is actually a high priority in managing the system of intergovernmental relations, then the center should continue to increase a share of the financial aid distributed according to the formalized rules that are used to equalize the budget security of the regions which is interpreted as filling part of the gap between the incomes and expenditures of a regional budget.

It is noteworthy that in 2000 the Center established the Compensation Fund which was designed to give regions subsidies so that they could fulfill some of their social commitments, such as child support allowances, disability benefits and assistance to some other categories of citizen, which does not fit in well with the Rolls' logic of equalization, for the assistance of this type is provided depending on the number of the recipients of the corresponding benefits and allowances no matter whether the region's income base is sufficient and the expenditures are met for the other budget lines or not.

2. The estimates given above indicate that in allocating the financial aid the Center prefers to orient itself toward the factual expenditures, rather than estimates of their normative (potential) values. In interpreting such situation, it should be taken into account that up to 1999 the official policy of distributing transfers from the FFRS was based, on the one hand, on an amount of the actual tax incomes of regional budgets for the previous years and, on the other hand, on adjusted expenditures for 1991. In addition, even now low tax revenues are weightier in distributing the other types of financial aid, along with transfers, than high expenditures of a regional budget.

The theoretical analysis shows that in the Russian system of intergovernmental relations there might be negative fiscal stimuli which are used to reduce the own tax incomes when receiving the financial aid from the Center. However, the empirical analysis did not reveal any steady negative fiscal stimuli. Therefore participation of the Center in partial compensation of the deviations of actual incomes of regional budgets in time and among the regions, particularly given relatively low taxing powers of the regional governments, seems to be justified and does not need serious changes to be made.

3. The empirical estimates of the distribution model for additional financial aid, other than the FFRS transfers, showed that the means of the federal budget used to provide financial support, other than the FFRS means, are distributed on the basis of less objective criteria. Hence it follows that it is necessary to carry on a policy of reducing volumes of financial aid which is distributed without *apriori* established formalized rules. In prospect, the financial aid should go down to the size enough to put under control the consequences of emergency situations and natural disasters and other types of financial aid.

4. The results of the empirical analysis point that there are differences in criteria of financial aid distribution for various groups of regions. The results of the estimates for a group of highly subsidized regions and northern regions differ from the estimated model for an entire set of the regions. The difference is that in allocating the financial aid to the former the Center fills a larger share of the gap between the estimated incomes and expenditures and to a greater extent takes into account the factual expenditures and factual incomes as compared to their normative values than in distributing the aid elsewhere.

The situation demands that the differences in approaches available should be formalized. One option is to improve the policy of allocating transfers from the FFRS through inclusion into transfer calculation models of factors that provide for more precise differentiation of the needed expenditures of regional budgets for the northern and highly subsidized regions. Under such an approach, we should be more consistent in giving up non-formalized types of financial aid and abandon special approaches to such regions. Another option is to single out these regions as separate groups, with special policies developed of allocating financial aid to them with due regard for their specific features. Third, along with a common approach to allocating transfers to such types of regions, the Center could provide for some formalized procedures for distribution of additional financial aid because of their special objective conditions.

5. As revealed by the empirical analysis, the absence of negative fiscal stimuli, i.e. in some cases the increased financial aid is actually used to furnish public goods in full, in a way gives more freedom in developing a policy of distributing the federal financial aid among the regions. In particular, a policy of transfer distribution can be developed in such a way as to compensate within certain limits for fluctuations in incomes of regional budgets, i.e. stabilize regional incomes in time, without concurrently setting up negative fiscal stimuli which could make re-

gional governments exploit the financial aid not for funding of public good consumption and provision of social transfers to the population, but for reduction in the level of taxation across the region, i.e. subsidizing of private goods.

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Estimation of expenditure needs for regional budgets in Russia 1999-2000[2]

Introduction

The budgetary system of the Russian Federation consists of the large number of subnational jurisdictions, characterized by different economic, social, natural and climatic conditions and different levels of economic development. This requires substantial redistribution functions of the federal government. One of the main purposes of the federal government that redistributes public resources between regions is inter-regional equalization of resources to provide public goods and services under the condition of applying tax efforts at the average level. One of the most important instruments of redistribution in Russia is general unconditional transfers from the federal budget provided on a regular (within a certain period of time) basis and allocated in accordance with a single formula for all regions. Besides federal financial aid is provided to the regions as conditional specific purpose grants, matching grants, budget loans, mutual settlements and other unconditional ad hoc transfers.

The amount of equalization transfer to the region is determined by two main groups of factors. Firstly, the need for a certain volume of public goods in a particular jurisdiction and the cost of such public goods (expenditure needs of the subject of the Federation), and secondly, the tax capacity of the region.

The purpose of the current study is to elaborate an approach to determine and estimate the regional expenditure needs - the amount of expenditures that reflects the necessary level of public spending determined by social, economic, natural and climatic conditions in each subject of the Russian Federation. Respectively, the method for determining the amount of financial aid must be based not upon actual spending in separate subjects of the Federation for reported periods, but upon regional expenditure needs. Basing the transfers allocation formula on the latter is crucial in order to exclude the possibility of the regional authorities influencing the amount of federal financial aid through manipulating the amount of the regional public expenditures.

Methodology of research

The current study continues a number of works performed by the Institute for the Economy in Transition, which calculated the expenditure needs for the subjects of the Russian Federation in 1997 and 1998[1]. The previous research was based on evaluation of separate equations describing different spending items in the regional budgets. In this study we will be doing evaluations of dependencies between budget expenditures, volume of provision of public goods, and other factors using simultaneous equations estimation for expenditures and the volume of public goods provided. The specification of the system of the simultaneous equations is derived from the theoretical model provided below. Following the specification

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[2]Present article was written as a result of the research project «Analysis of taxing powers and expenditure responsibilities of the subjects of the Russian Federation» by P. Kadotchnikov, O. Lugovoi, S. Sinelnikov, I. Trunin.

[1] See. O. Lugovoi, S. Sinelnikov, I. Trunin, «Working out of budgetary standards and methods for evaluation of interregional differences in budgetary requirements of the subjects of the Russian Federation" // Improving inter-budgetary relations in Russia. Collection of articles, M., IET, 2000, Series "Scientific essays" №24R, p.p. 239-355; P. Kadotchnikov, O. Lugovoi, S. Sinelnikov, «Evaluation of standard spending requirements for the subjects of the Russian Federation by main expense accounts in 1998», mimeo, IET, 1999.

and econometric estimations of the constructed systems and equations the values of the expenditure needs will be calculated on their basis.

Models of regional budgets spending. Let us consider a problem in which regional authorities have preferences reflecting the preferences of the representative individual in the region and maximize the utility from the provision of *n* public goods. For the purpose of simplicity let us consider that the sum of expenditures that are made for public goods provision is fixed, meaning that there is a choice between the spending amount for private (the amount of taxes collected) and public goods (this choice has been done before) and a choice between which public goods to provide and in which amount. Each public good is produced with its production function which in its turn depends on the amount of funds allocated for it. Apart from the amount of expenditure on this particular good the production function depends upon other factors which determine the differentiation of the volumes of the public goods among different regions with the same volume of expenditure. Such factors include different conditions: geographic, climactic, demographic, economic (reflecting the efficiency of spending funds), and others. The values of these factors in the model are set forth exogenically. Let us also assume that the production functions meet the assumptions of the neoclassical microeconomic theory.

An important assumption of the model is that the regional authorities don't affect the amount of the federal financial aid by their spending decisions and the total revenue of the regional budget is given exogenously (fixed). This allows us to make an assumption that the decision by the regional authorities in the model is made without the gaming strategies between the region and the Center concerning the amount of the transfer and necessary expenditures that are very important for regional and federal authorities. As the result the model studies the influence of a specific set of factors upon a dependence between the values of expenditure and the amount of provided public goods, which appears along with exogenically given amount of funds made available to the regional budget.

Let us consider that a certain set of factors characterizing conditions of activities in the region includes parameters which influence both the utility of the provided public goods by the regional authorities and the costs and efficiency of its production (volumes of production at a fixed amount of total funds in the budget). For example, in the northern territories such public goods as a provision of heating contains a larger value of utility then in the southern regions and at the same time the provision of it is more costly to the regional budget. In the same token a large share of children in the region may define for the regional authorities a higher priority for educational services and higher related educational expenses.

At this stage of research we anticipate a lack of any particular features of separate groups of regions which form specific characteristics of the considered dependencies and which require a separate study of the respective groups. In other words we assume a certain stability of the models for all the regions and all of the important factors, defining the character of the considered dependencies.

This problem in a general form can be written in the following way – regional authorities select values of expenditures *{Eᵢ}*, *i=1,..,n*, and the volumes of provision of appropriate public goods *{Gᵢ}*, *i=1,..,n*, which are the solutions for the problem of utility maximization:

$$U\left(G_1,...,G_n,\vec{X},A\right)\to\max,\qquad\qquad(1)$$

where

G_i - volume of public good i provided in the region;[3]

$\vec{X}$ - a set of factors which influence the utility received from the provision of public goods (different values of these factors in different regions determine different intensity of the requirement for different public goods among the population) and the volume of production of public good (different values of this factor in different regions reflect different efficiency of the production of public good);

A - the funds allocated to finance public goods (the volume of funds is given exogenously and is fixed)[4].

With the conditions of the production functions (we assume that the demand for public goods is equal to the supply):

$$G_i = g_i\left(E_i, \vec{X}_i\right), \quad i = 1,2,...,n \tag{2}$$

where

E_i - the regional budget expenditure on the provision of ith public good;[5]

$\vec{X}_i$ - the factors influencing the amount of ith public good provided with a fixed amount of expenditure on its production;

and budget constraint:

$$\sum_{i=1}^{n} E_i \leq A. \tag{3}$$

Let us assume that the regional authorities' utility function is separable over public goods and consequently has the following appearance:

$$U\left(G_1,...,G_n, \vec{X}_1,...,\vec{X}_n, A\right) = \sum_{i=1}^{n} u_i\left(G_i, \vec{X}_i, A\right) \rightarrow \max \tag{4}$$

Besides to simplify calculations let us assume that the production function for each public goods has an isoelastic function form, that is, it can be presented in the following way (in logarithms):

$$\ln G_i = \ln g_i\left(E_i, \vec{X}_i\right) = \alpha_i \ln E_i + \beta_{i0} + \sum_{k=1}^{m_i} \beta_{ik} \ln X_{ik} \tag{5}$$

where

G_i - the amount of ith public good provided in the region;

E_i - regional budget expenditure for the provision of ith public good ;

α_i - the expenditure elasticity of the ith public good production;

β_{ik} - k^{th}-factor elasticity of the volume of ith public good which affects the volume and the efficiency of its production;

β_{i0} - the parameter of good i production function (constant coefficient).

First order conditions (necessary and sufficient under standard assumptions on the production functions and the utility function) for this problem and after the exclusion of the Lagrange multiplier-variables produce the following expression for the optimum spending on i public good:

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[2] Since the assumed regional authorities' utility function – is the utility function of a representative consumer of respective public goods, so the amount of goods provided – is the amount of goods estimated per single consumer.

[3] Per capita. With some limitations it may be considered that A – are the regional budget revenue per capita.

[4] Per capita.

$$E_i^* = A \cdot \frac{\alpha_i \cdot \varepsilon_i \cdot u_i\left(G_i^*, \vec{X}_i, A\right)}{\sum\limits_{j=1}^{n} \alpha_j \cdot \varepsilon_j \cdot u_j\left(G_j^*, \vec{X}_j, A\right)} \tag{6}$$

where

E_i^* — optimum expenditure for the provision of public good i;

A — budget total revenue (the fixed amount of funds allocated for financing of all public goods);

α_i — the expenditure elasticity of the ith public good production;

ε_i — the ith public good elasticity of the utility function (in a general case it depends on G_i, A and $\vec{X}_i$: $\varepsilon_i = \varepsilon_i(G_i, \vec{X}_i, A)$;

G_i — the amount of ith public good provided;

$\vec{X}_i$ — the factors from the set of factors $\vec{X}$, that influence the volume and the efficiency of the ith public good provided.

The expression (6) together with the production functions (2) enable us to construct a system of *2n* equations with *2n* unknown variables *{E_i, G_i}, i=1,..,n*, the solution of which gives optimum spending values and the volumes of provided public good. It is difficult to resolve this system even if we assume a specific form for the utility and production functions. But in order to simplify solution of this system let us make a number of additional assumptions.

The denominator of the equation (6) is common to all types of expenditures and includes the dependence of optimal expenditure on i^{th} public good (E_i) from the volume of other goods provided (G_j, $j \neq i$), the factors which are part of production functions for other goods ($\vec{X}_j$, $j \neq i$), as well as the elasticities of utility function and the production functions. For example, the increase of the expenditure elasticity α_i of the production function of ith public good leads to the increase of the share of expenditure on this public good in the total volume of revenues through the reduction of other shares. For the ith public good this increase would be almost proportional α_i, but for the other goods this influence is less and is expressed through the increase of ith item under the total sum in denominator position. If we believe that this intersectional influence is small in value and suppose that the total sum in the denominator of equation (6) is constant, then this assumption would help us to greatly simplify the system of equations and enable us to resolve equations in pairs for all public goods, meaning being able to write the solutions of the problem in the form of *n* system made up of two equations :

$$\begin{cases} E_i^* = e_i\left(G_i, \vec{X}_i, A\right) \\ G_i = g_i\left(E_i^*, \vec{X}_i\right) \end{cases}, \ i = 1,..,n \tag{7}$$

This system can be resolved in case one definitely knows the appearance of the utility function and the production function. But the choice of the utility function form greatly affects the solution of the systems. That is why in order to determine the type of dependence for the first equation of the system (7), let us evaluate it econometrically by assuming that this equation has a form of a multiplicative dependence (the utility function is isoelastic by the amount of provided public good). Respectively, the system for estimation would have the following form in logarithms:

$$\begin{cases} \ln E_i = a_{i0} + a_{i1} \ln G_i + a_{i2} \ln A + \sum_{k=1}^{m_i} a_{ik+2} \ln X_{ik} \\ \ln G_i = b_{i0} + b_{i1} \ln E_i + \sum_{k=1}^{m_i} b_{ik+1} \ln X_{ik} \end{cases}, \quad i=1,..,n \qquad (8)$$

If it is assumed that the optimal values of expenditure and the volume of ith public good provided in each of the Russian regions are determined from the system (8), meaning that the regional authorities select the distribution of the budget expenditure per accounts solving the problem (4)-(5), then the system can be estimated using the cross-sectional data from the regions.

In the expression (6) there are the public good elasticities of the utility function, which makes it possible to assume that these elasticities diminish with the growth of the amount of revenue. It means that the budget revenue elasticity of optimal expenditures a_{i2} is less 1, and the faster is the reduction of the public good elasticity of utility function with the growth of total revenue, the lower is the revenue elasticity of expenditure per this account, i.e. the value of a_{i2}.

The econometrically estimated systems in logarithms corresponding systems (8), per each account of expenditure are the following (i – the public good and appropriate expenditure index, j – the region index, k – the specific factor index):

$$\begin{cases} e_j^{(i)} = a_0^{(i)} + a_1^{(i)} g_j^{(i)} + a_2^{(i)} a_j + \sum_{k=1}^{m_i} a_{k+2}^{(i)} x_{kj}^{(i)} + \varepsilon_j^{E(i)} \\ g_j^{(i)} = b_0^{(i)} + b_1^{(i)} e_j^{(i)} + \sum_{k=1}^{m_i} b_{k+1}^{(i)} x_{kj}^{(i)} + \varepsilon_j^{G(i)} \end{cases}, \quad i=1,..,n; j=1,..,J; \quad (9)$$

where

$e_j^{(i)}$ - logarithm of expenditure for i^{th} public good production in the region j (per capita);

$g_j^{(i)}$ - logarithm of the amount of i public good per capita in region j;

a_j - logarithm of the total budget revenue per capita;

$x_{kj}^{(i)}$ - logarithm of kth-factor influencing the provision of i-public good;

$a_l^{(i)}, b_l^{(i)}$ – evaluated model coefficients;

$\varepsilon_j^{E(i)}, \varepsilon_j^{G(i)}$ – errors in the appropriate equations.

For some expenditure items we haven't developed systems (9) to estimate and specified and estimated only the first equation of the system (the expenditure equation). Such estimation may allow evaluation of the theoretical values of the expenditures supposing that the volumes of public goods provided (or proxy variables) are given exogenously. Here it should be taken into account that the amounts of public goods are poorly detected and poorly evaluated variables, that is why the estimation of a theoretical budget spending shall be determined by a selection of variables, characterizing the volumes of provision of respective public goods and the quality of these variables. At the same time when evaluating model (9) as a system of simultaneous equations (this system can be resolved in case the system is identifiable), it enables us to estimate respective theoretical values for all the endogenous variables including the theoretical value of the volume of the public goods.

The estimation of one equation carries within itself a technical disadvantage - in case if a dependence between expenditure and the amount of public good has the form of a system (9), then the estimation of one equation in such a case would lead to a biased estimates of the

coefficients[6]. So wherever possible we will estimate model (9) as a system of simultaneous equations.

As mentioned above an important problem in this modeling exercise is the selection of the variable, which could describe the amount of the public good provided. For health care or educational services there can be taken some indicators of the amount of public goods or the description of the results of the provision of these goods (level of education or a level of sickness) or the characteristics of the process of the provision of such goods (the availability of health care or educational institutions to the population, the number of students studying or the number of those undergoing treatment).

However, a selection of a variable which describes the availability if municipal utilities and residential services (MURS) or the government administration services is more complicated. As far as the MURS expenditure is concerned, which reflects the amount of the provision of public good, one could take for example proportion of government coverage of the residential services (heated, lighted, supplied with water, sewage and garbage disposal service). It is even more difficult to select a characteristic for the expenditure on the government administration because neither the number of beurocrats, nor the amount of time they spend in the office reflect the provided amount of this public good – the government management service per se. In the cases, where a variable which quite truthfully reflects the amount of public good provided was not possible to identify, we conducted evaluations for one equation[7].

Model (1)-(3), the system (8), and considerations mentioned above show that the spending in each estimation must have a positive dependence upon regional budget revenue (the amount of funds allocated for the provision of public good). We shall consider the dependence of the regional budget expenditure per capita from the real budget revenues adding interregional price index as a separate explaining variable[8]. The more probable comparable interregional price differentiation can be received on the basis of the data on the minimum living wage amount in the regions[9].

Before the evaluation of one equation or wherever it is possible, the systems (9) it is necessary to select factors which influence the expenditures and the amounts of the public goods provided. A certain set of assumptions and variables which are listed below is related to the dependence of budget expenditure upon diverse factors defining the differentiation in specific regions. Among such factors are climactic and geographic peculiarities of the regions, social and demographic characteristics of the regional population, parameters of the government institutions network of the regions, which produce public good.

We assume that the greater severity of a climate and the geographic remoteness result in a more expensive provision of public goods. This or that character of the organization of the government institutions network which in short term perspective appears to be quite rigid,

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[5] Econometric estimations of coefficients will be biased because of an correlation between the explaining variable – the volume of public good and the error in the equation.

[6] It often happens that one of the indicators from the set of $\vec{X}_i$ has to be taken as a proxy for G_i. Formally it means that estimation of the two equations as a system makes no sense, and one should consider the first equation only (expenditure equation).

[7] With the use of the multiplicative form of the studied dependence from a formal standpoint – the inclusion into the right part of the equation of an interregional price index is similar to developing a model directly for the real budget spending.

[8] Under the resulting conditions, when it is not appropriate to believe that the existing interregional differentiation of prices shall be determined exclusively by objective reasons (the cost of production or importation of products), and shall also depend upon artificially created interregional barriers, it is necessary to additionally model an interregional price index for the regions, and only then use the constructed index into the equations. Such type of an estimation is quite complicated and needs additional research, that was not done for this particular project.

produces a substantial influence over the amount of the budget expenditure required for the production of a certain quantity of public goods. This process is also greatly influenced by the economy of scale. With smaller size of the respective government institutions large fixed costs to maintain the government institutions network are relatively quite significant. In a number of cases such a situation is impartially conditioned by a low density of the population particularly in remote rural districts. In other cases it may be explained by an insufficiency of the government efforts in the area of the government network restructuring.

After the evaluation of the model (9) coefficients theoretical values of the regional budget expenditure the volume of public good provided can be calculated. These theoretical values (in case of a correct model specification) per each specific region reflect the expenditures which would be made by regional authorities with actual values of the exogenous variables in the model (regional budget revenues, specific factors, affecting the utility from public goods and the efficiency of their production) in case the regional authorities were making decisions on the basis of average over the RF preferences in the area of the budget planning. So if we are to assume that all of the regions are homogeneous with respect to the factor (they produce similar types of revenues per capita and have equal natural, climactic, economic, social and demographic characteristics), than the theoretical values of expenditure on the production of public good and its amount should have been equal for all the regions and the deviation of the actual values from their theoretical values would have been the result of a random error.

The theoretical values are brought about by the existing preferences among the regional authorities (reflecting the preferences of the population in the regions); and the given values of exogenous parameters (including regional budget), which are part of the model, and which characterize specific regional conditions. Such kind of averaging of the preferences of the regional authorities described in the model enables us to identify respective theoretical values to a certain extent as values that are conditioned objectively.

Expenditure needs

Models describing the regional budget expenditures are used to calculate the expenditure needs. These values as was already mentioned above can be applied in the method of distribution of the financial aid from the Federal fund for the financial support of the regions. We consider expenditure needs as a amount of spending per a respective account of the regional budget, which ensures a certain fixed amount of the respective public good for an individual in this region taking into account specific conditions of this region.

Obviously the theoretical values of expenditures received from the model (9), can not be directly used or applied as expenditure needs. When organizing inter-budgetary relations and defining the amount of financial aid to the regions the Federal center can not act on the basis of the amount of theoretical values of the volume of public good provided and the respective spending despite the fact that these values in a certain sense are objective. The problem is that the list of exogenous factors, which lead to the differentiation of the regional requirements in certain services which define the volume of theoretical values of the budget spending and the volume of public good provided include such factors which the Federal center should not take into account when appropriating financial aid to the regions. The Federal center during the distribution of financial aid should not try and achieve a high theoretical value if it is the result of the high regional budget revenue or the result of the significant peculiarities or inefficiency of the structure of the budget dependent institutions network. With this result all the explaining variables used in the model can be divided into three groups:

- the first group of variables are the variables that are influence the expenditure but should not influence the amount of expenditure need on this item These are such

variables as, for example, the regional budget revenue, the level of individual income of the regional population, etc;

- the second group are the variable which reflect the volume and the structure of the public goods provided in the regions. They include characteristics of the government agencies network in the region, for example, the availability of hospital beds and health care personnel, schools and the school teachers. Among them are such parameters which characterize the Federal center priorities in reforming the public sector – recipients of the government financing, in particular, variables, that characterize the budget network as a number of clinics, the number of schools, the share of the municipal utilities and residential services coverage. Expenditure needs must not depend upon actual values of many such variables in order to avoid stimulating conservation of inefficient budgetary institutions network.
- the third group of variables are the indicators describing objective differences between the regions' (geographic and climactic conditions, demographic structure) influencing both actual expenditures and expenditure needs.

In order to calculate the expenditure needs the variables from the first two groups must be fixed at a certain level10. And when considering different time horizons of the budget planning the variables which are included into the second group can change their positioning with respect to the Federal budget policy priorities. As it was mentioned above the expenditure needs must not depend upon the regional budget revenue. A higher level of revenue in the region determines greater expenditure and the respective expenditure need for this region must not take into account such an effect. In the similar way in case a higher expenditure is defined by inefficient budget structure network, which is subject to reform, then the expenditure need must not depend upon the differences in the value of the respective variable. As the result the expenditure need will differ from the respective theoretical value, derived from the model in a way, that in the respective expenditure equation (describing the dependence of the each type of the regional budget expenditure from the selected factors) the values of the variables that should not influence the expenditure needs are fixed at a level that is the same for all the Russian regions (for example, the average or the minimal among all the regions).

In the current study we shall calculate two types of expenditure needs - these are the average and minimal expenditure needs which differ from each other by the level at which the values of the variables are fixed, which influence the amount of standards that are to be eliminated. The minimal expenditure needs reflect a certain minimum sum of expenses sufficient to ensure a certain (average for the group of regions with the lowest budget funding) volume of public goods provided for each individual residing in this region. The selection of this curtain volume of public good is quite voluntary. In the current study for the purpose of calculating the minimal expenditure needs we used the average value among the lower tertile of the regions. The reason for using such a value during the calculation of expenditure needs is that the needs calculated in such a way shall point a certain amount of the budget expenditure sufficient for the provision of an average minimum tertile of the level of public good. The average expenditure needs are calculated by fixing the level of the regional budget revenues in the equation at the average level for Russia, which shall correspond to the availability of public good with the budget revenues being at an average level as well.

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[9] In case the calculation of expenditure needs is done on the basis of a system of equations, then this system can be directly resolved in relation to expenditure and volume of the public good. After that the expenditure would depend only upon the variables of the second and third groups.

So the general scheme for calculating the expenditure needs consists of two stages:

1. Selection of factors influencing the provision of each type of public good. Estimation of the first equation of the system (9). Then wherever possible to use indicators reflecting the volume of the good provided, evaluation of the system of simultaneous equations (9).

2. Division of included factors into groups mentioned above and fixing of values of some factors at the level characterizing the intended level of certain budget indicators of the subjects of the Federation between themselves for the purpose of calculating expenditure needs.

Based on the above described method we calculated the expenditure needs for following budget items for the subjects of the Federation in 1999 and 2000:

- municipal utility and residential services;
- health care;
- education;
- arts and culture;
- social policy;
- transportation (without road construction);
- law enforcement;
- government administration.

The present study made it possible to achieve two main results, which should be considered and analyzed consecutively. Firstly, these are the results of modeling of the dependence of the most important regional budget expenditure items on the volumes of provision of respective public goods, as well as other factors. For some budget expenditures (education, health care, culture and arts) the systems of equations were constructed, in which the expenditures depend upon the volume of public good provided (and other factors) and also vice versa, the volume of public goods provided depends upon the volume of expenditures.

Table 1. Variables explaining the differentiation of the expenditures over regions (in bold are shown the variables that should be fixed or calculated in the system using another equation in expenditure needs calculation).

Expenditure item	Variables
1. Municipal utility and residential services (MURS)*	**1. Real budget revenue*** 2. Share of municipal housing 3. Number of enterprises and organizations* 4. Share of urban population 5. Minimum living wage 6. Number of cities* 7. Number of rural administrations*
2. Transportation * (without road construction)	**1. Real budget revenue *** 2. Share of urban population 3. Bus passenger turnover 4. Minimum living wage
3. Arts and culture *	**1. Real budget revenue *** **2. Availability of books and magazines in public libraries*** 3. Minimum living wage 4. Share of population over working age
4. Government administration*	**1. Real budget revenue *** **2. Population** **3. Real average wage** 4. Share of urban population 5. Minimum living wage

Expenditure item	Variables
5. Education*	**1. Real budget revenue *** **2. Availability of schools *** **3. Real average wage** 4. Minimum living wage 5. Share of urban population
6. Health care*	**1. Real budget revenue *** **2. Availability of medical personnel *** **3. Real average wage** 4. Minimum living wage 5. Number of (new) diseases *
7. Social policy*	**1. Real budget revenue *** **2. Real average wage** 3. Minimum living wage 4. Size of average town in the region 5. Share of children subsidized
8. Law enforcement	**1. Real budget revenue *** **2. Real average wage** 3. Minimum living wage 4. Share of population below working age 5. Share of rural population

* per capita

Secondly, an important result received in the this study is contained in the construction of the expenditure needs for the subjects of the Russian Federation. The elasticities of the expenditures over explaining variables in the models for the year of 1999 are given in table 2. The results for the year 2000 are listed in the table 3.

Table 2. Results of estimation of equations (for health care, education, arts and culture – estimation of the first equation of the system), elasticities over explaining variables, 1999.

Explaining variables elasticities of expenditure (1999)	Spending on MURS	Spending on health care	Spending on education	Spending on arts and culture	Spending on law enforcement	Spending on transportation	Spending on government management	Spending on social policy
Budget revenue per capita	0,723	0,644	0,662	0,793	0,736	1,062	0,352	1,047
Minimum living wage	0,856	0,741	1,048	0,991	0,591	-	1,025	0,376
Share of urban population	2,013	-	-	-	-	5,458	-0,579	-
Average wage	-	0,220	-	-	-	-	0,547	-
Share of municipal housing	0,148	-	-	-	-	-	-	-
Number of enterprises and organizations per capita	0,259	-	-	-	-	-	-	-
Availability of medium level medical personnel	-	0,163	-	-	-	-	-	-
Availability of schools	-	-	0,155	-	-	-	-	-
Availability of books and magazines in public libraries	-	-	-	0,224	-	-	-	-
Passenger traffic by public transportation buses	-	-	-	-	-	0,201	-	-
Population number in a region	-	-	-	-	-	-	-0,162	-
Average town size in a region	-	-	-	-	-	-	-	0,087

Table 3. Results of estimation of equations (for health care, education, arts and culture – estimation of the first equation of the system), elasticities over explaining variables, 2000.

Explaining variables elasticities of expenditure (2000)	Spending on MURS	Spending on health care	Spending on education	Spending on arts and culture	Spending on law enforcement	Spending on transportation	Spending on government management	Spending on social policy
Budget revenue per capita	0,763	0,790	0,573	0,891	0,666	0,873	0,489	0,806
Minimum living wage	-	-	0,447	-	-	-	0,501	-
Share of urban population	-	-	-	-	-	1,007	-	-
Average wage	-	-0,087	1,005	-0,142	0,847	-	1,210	0,238
Share of municipal housing	0,286	-	-	-	-	-	-	-
Number of enterprises and organizations per capita	0,285	-	-	-	-	-	-	-
Number of cities per capita	0,124	-	-	-	-	-	-	-

Number of rural administrations per capita	-0,127	-	-	-	-	-	-	-
Availability of medium level medical personnel	-	0,607	-	-	-	-	-	-
Number of pupils per capita	-	-	1,012	-	-	-	-	-
Availability of books and magazines in public libraries	-	-	-	0,252	-	-	-	-
Number of people under working age	-	-	-	-	0,369	-	-	-
Bus passenger turnover	-	-	-	-	-	0,568	-	-
Population	-	-	-	-	-	-	-0,215	-
Number of children subsidized	-	-	-	-	-	-	-	0,609

The evaluation of the model describing the spending on municipal utilities and residential services (MURS) demonstrated that the greatest value of the elasticity of expenditure on this account – is the elasticity over the share of the urban population which characterizes substantial differences in the value of expenditures on this item in urban and rural areas. The budget revenue elasticity of this expenditure is approximately 0,7.

Within the system of equations describing expenditure on health care availability of medical personnel to the population is used as another endogenous variable which serves as the indicator of the level of health care services provided, which in the system depends also upon the level of sickness of the population. The budget revenue elasticity of health care expenditure is close to the appropriate elasticity for MURS expenditure is about 0,6-0,8 for 1999-2000. Almost similar value was also received for budget revenue elasticity of education expenditure. Endogenous variable in the respective system of simultaneous equations is the availability of schools to the population (children), which characterizes the level of educational services provided in the region, which also depends upon the share of urban population in the region apart from the spending on education per se.

As far as the expenditure on arts and culture is concerned, the second endogenous variable in the constructed system of equation is the availability of books and magazines in public libraries to the population (as a proxy of cultural activity in the region). The budget revenue elasticity of expenditure on culture and arts is higher than the elasticity for education or health care and constitutes approximately 0,8-0,9.

It was not possible to develop a system of equations for the expenditure on law enforcement, which could include the dependence of expenditure upon the number of registered criminal offences and vice versa, the level of crime upon the expenditure on law enforcement (it turned out that only the expenditure influences the level of crime). The budget revenue elasticity of law enforcement expenditure constitutes approximately 0,7, which is close to education and health care, but lower than for the expenditure on arts and culture. In the model describing transportation expenditure and consisting of one equation, the budget revenue elasticity of expenditure is about 1, which demonstrates a small level of inertia of transportation expenditure compared with other accounts, when the budget revenues change. As in the case for the MURS expenditure, the transportation expenditure is greatly affected by the share of urban population, which demonstrates a strong dependence of the expenditures on the existing network, as well as on the greater spending on transportation for the urban population.

The budget revenue elasticity of government administration expenditure is approximately 0,35 in 1999 and 0,5 in 2000 respectively, which is the lowest indicator among the considered expenditure items. Besides, government administration expenditure negatively depends upon the share of urban population in the region, which characterizes the efficiency of spending in this account in the cities and major regions (per capita).

The estimations demonstrated that the shares of groups of the population receiving the social aid (including subsidies for children) significantly influence the spending on social policies only in 2000. The budget revenue elasticity of the social policy expenditure constitutes approximately 0,8-1, which is consistent with the hypothesis that the expenditure

on this account being determined by the availability of resources for the financing of this spending rather than by an individual specific aid to the needy.

The comparative analysis of the achieved results for expenditures lets us to state that the expenditures on the accounts such as health care, education and law enforcement – represent the financing of the existing budget institutions network. The financing of government administration expenditure at the government level is somewhat of a greater priority (bigger inertia and to a lesser extent the dependence upon budget revenues that results in a lower value of elasticity). Financing of transportation expenditure, expenditure on culture and arts, and the social policy are of lower priority (with a higher level elasticity).

Another important result of the study is the construction of the expenditure needs in the above considered expenditure items for the regional budgets. The developed system of expenditure needs can be used in the methodology of a financial aid distribution. An important application of expenditure needs – is the comparison between the structure of actual expenditures with a structure of the expenditure needs, which would make it possible to evaluate the relative importance of financing for some expenditure items compared to the distribution of the calculated expenditure needs. So if the regional revenue exceeds the average for all regions or the average for lower tertile of the Russian regions, then the changing of the structure of expenditures with the increase of the share of one or a few items points to the fact, that specifically this expenditure item is of a greater priority.

R. Entov, A. Zolotareva, O. Lugovoi

Non-payments in the Russian economy and in the regions[1]

Introduction

While transiting to the market economic relations, many East European countries and those of the former USSR encountered the problem of non-payments between enterprises and large-scale growth of mutual indebtedness. In Russia the problem of non-payments has for a long time been one of the most acute and unresolved issues. And, although for several past years, in face of stabilizing state finances and well-established economic growth the acuteness of the problem has markedly reduced, it is still too early to speak of its final resolvement. Moreover, there have remained many questions concerning the mechanisms of its development and the ways to its settlement. The search for the causes of the changing dynamics of indebtedness and the fact that rather high levels of non-payments still remain requires in-depth studies on the process of non-payment formation, theoretical as well as empirical.

Among the reasons for the occurrence and spread of non-payments, crediting deficit often is pointed out which is linked to tightening of monetary policy and liquidity contraction (see, for example, Calvo и Coricelli, 1994; Gavrilenkov, 1996; Deliagin, 1997; Usizima, 1998), shortage of circulating assets and low monetization of the GDP (see, for example, Shmelev 1997; S. Usizima 1998), inefficiency of enterprises (see, for example, Rostowski, 1993; Volkonskii, Kantorovich, 1995, Klepach, 1997; Entov, Radygin, Mau et al., 1998; Alekseev, 1998; Ivanova and Wyplosz, 1999, Pinto, Drebentsov, Morozov, 2000), non-execution of the state budget (see, for example, Entov, Radygin, Mau et al., 1998; Usizima 1998; Alekseev, 1998, Pinto, Drebentsov, Morozov, 2000), tax evasion, direct larceny and corruption (Karpov, 1997); the importance of the institute of bankruptcy for the problem of non-payments is noted (see, for example, Rostowski[2], 1993).

The great variety and even some contradiction in the approaches to explaining and understanding the problem of non-payments have pointed out to the fact that non-payments represent a many-faceted problem sustained by both macro- and microeconomic factors and requiring a wider definition and investigation. This paper makes an attempt at taking a look at the

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[1] Present article was written as a result of the research project «Non-payments in the Russian Economy and in Regions» by R. Entov, A. Zolotareva, O. Lugovoi, L. Lederman

[2] In this paper the author asserts the point of view that non-payments would have disappeared spontaneously had the state pursued a more strict policy in reforming enterprises.

main characteristics of non-payments in an economy in transition. The main purpose of the paper is to analyze various aspects of the emergence and accumulation of non-payments and to reveal the principal factors that could explain the emergence and distribution of non-payments and non-monetary forms of payments between enterprises in the Russian economy.

In the paper a system of theoretical models is suggested whose purpose is to unite and structure the main hypotheses explaining the reasons for the insolvency of enterprises. Within the framework of each model the onset of non-payments in connection with the characteristic peculiarities of the development of an economy in transition is followed-up. A classification of the principal factors involved in the development of non-payments and the schemes of the interactions between these factors is suggested. The second part of the paper dwells on the legal aspects of the problem of non-payments in the Russian economy. In the third and concluding part the results of an empirical analysis are presented - the results of modeling the dynamics and the regional differences in stale debts, the statistical testing of some theoretical hypotheses discussed in the first part of the paper. The results of the estimation and investigation of set-off operations at the regional level are presented.

THE SYSTEM OF THEORETICAL MODELS

When generalizing the accumulated experience of investigating this problem and systematizing the main hypotheses as to the sources of indebtedness, three types of microeconomic models can be delineated[3] describing the causes of the emergence of net non-payments (the difference between obligations and claims). Each of these three microeconomic models characterizes a certain group of the causes of a primary onset of net indebtedness.

In the first microeconomic model - "intentional nonfulfilment of obligations" - the motives of intentional prolongation of state debts are considered. This opportunistic behavior can spread especially widely under the conditions of inefficiently functioning market institutions and a weak system of enforcing the execution of contract obligations.

In the next two models a situation is considered when the accumulation of stale debts is at least partly enforced. The second model - "short-term cash gaps" - presupposes that the financial difficulties experienced by a company are shortlived, and after a production cycle is over all the obligations can be settled without selling the company's own assets. In other words, the company

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[3] The issue of debt classification is discussed, in particular, in the works by Rostowski (1993), Alfandari, Schaffer (1996). Rostowski, when studying non-payments occurring between enterprises, subdivides them into "healthy" and "pathologic" (excessive). Alfandari and Schaffer subdivide non-payments into "late payments" and "bad payments". The system of theoretical models presented in the paper generalizes, supplements and in a certain sense specifies and concretizes debt characteristics, their sources and causes.

could have tackle the problem by obtaining a short-term loan. Such a situation is especially typical of enterprises with a long production cycle (the time of spending does not coincide with the time of receiving the proceeds) which during the process of production experience an urgent need of borrowed funds which makes them dependent upon the situation of financial markets. However one of the most important prerequisites within the second model is that the cause of the insolvency of the firms in question is not linked to their efficiency.

The most deep sources of non-payments are considered within the third microeconomic model - "subsidies to inefficient enterprises". Here non-payments result from ineffective production, ineffective budgetary policy and other factors reducing the effective demand for the products of domestic enterprises and promoting increasing losses at enterprises. The role of these factors must be especially great under the conditions of the economy in transition in face of structural changes in demand and supply, cutbacks in those old branches and sectors that turned out non-competitive, sequestering planned expenditures in the state budget.

The growth of non-payments in such situations can serve as a certain amortization factor curbing the decrease in production and inflation growth in the "dying" sectors, but this, in its turn, might hinder the transformation of production in other sectors of the economy.

The processes describing each of the three microeconomic models are closely interrelated. It is obvious, for example, that the inefficiency of enterprises described in the third model seriously worsens the conditions of the calculations considered in the second model. The existence of non-payments caused by current cash gaps or inefficient companies in a certain sense legalizes non-payments and thus contributes to the growth of non-payments in the first model. Any kinds of non-payments aggravate the problems of selecting those companies that experience temporary financial difficulties and those that are incapable of settling their debts with all their creditors under the new economic conditions which induces decreased bank crediting and promotes the spread of non-payments in the second model.

Table 1. Microeconomc models of the emergence of non-payments, the characteristics and causes of stale debts

Model	Features, characteristics	Causes
Model 1 *"Intentional nonexecution of obligations" (opportunistic behavior).*	1. Non-payments - the means of achieving the hidden goals of economic agents. 2. Companies are capable of loss-free activity. 3. The possible demonstrable losses are a result of: a) inefficient management (inconsistency of the interests of the owners and the	1. Inefficient economic and legal institutions (contractual and labour law). Lack of tough state policy as regards defaulters. 2. Insufficient monitoring of the activity of contracting parties and management. 3. Inefficient property rights.

		managers); б) concealment of the true financial situation for mercenary purposes. 4. Non-payments can represent both "delayed payments" and "irrecoverable debts".	
C o n d i t i o n a l l y e n f o r c e d C a u s e s	**Model 2"Short-term cash gaps"**	1. It is characterized by the deficit of circulating assets at the producers' disposal. Debts due to all creditors (except for capital investment loans) can be physically redeemed when a production cycle is over 2. Non-payments represent "delayed payments", as different from "irrecoverable debts". 3. Temporary loss-making activity of an enterprise is possible, but there can be no loss coverage at the expense of creditors (subsidizing loss-making producers by external sources of financing).	1. Unavailability of traditional methods of covering cash gaps at enterprises. 2. High level of credit rationing. 3. Tight monetary policy.
	Model 3"Subsidies to inefficient enterprises"	1. It is characterized by loss-making production, with shifting the financial results onto creditors. 2. Non-payments repsesent "irrecoverable debts", as different from "delayed payments". 3. A need for resources for a term longer than one production cycle. The debtor is physically unable to satisfy the demands of all creditors even after the production cycle is over.	1. Non-market economy. An enterprise incapable of producing competitive goods continues to function. 2. Insufficient financing of government orders and government expenditures. 3. Losses do not result in reducing production volumes to a full extent because they are "shifted onto" creditors. 4. A change in the economic conditions that influences the production activity.

In accordance with the analysis presented here the possible ways and methods of reducing the scope of non-payments in the economy in transition are differentiated. The action of the

factors presented in the first model can be limited by way of establishing and consolidating the system of enforcement, contractual laws and implementing efficient bankruptcy procedures. This trend in the economic policy should be based upon the program of judiciary reform as outlined by the Government and constitute its important part.

Within the second model non-payments are associated with certain "technical" stopgaps and do not represent a systemic problem. Consequently, such problems will lose their importance along with further development of the financial markets and the reorganization and development of the banking system.

In a market economy, it seems, there always do exist some comparatively inefficient enterprises; therefore the problems of eliminating non-payments should not be linked to total disappearance of loss-making enterprises. However the state, by means of a structural economic policy, can reduce the adverse effect of non-payments produced by inefficient sectors of the economy's development as a whole.

THE LEGAL ASPECTS OF THE PROBLEM OF NON-PAYMENTS IN THE RUSSIAN ECONOMY

Though the present study involves primarily an economic analysis of the problem of non-payments, we believe it extremely important to point out those necessary changes in the federal legislation that define the legal conditions of the interaction between the economic agents, payment discipline and contract enforcement. Since the issues of property rights and civic legal relations fall within the federal jurisdiction, the existing federal legislation is equally applied to all the RF's subjects, any changes therein influence the legal situation which allows (and sometimes even promotes) the emergence of non-payments and is common for all regions.

In order to prevent accumulation of credit indebtedness in the subnational budgets it is necessary to solve the problem of "uncovered mandates", i.e. expenditures imposed on the subnational budgets by the federal legislation. This would involve auditing all the existing normative acts that envisage expenditures of the budgets at all levels, with greatest possible accuracy calculating the volume of budgetary financing necessary for their implementation, to make distinctions between the spending obligations at different levels of the budgetary system, to abolish the normative acts not backed by financing sources. At the next stage the methods of accounting for credit indebtedness on the budgetary obligations of public and legal character (that is, obligations envisaged by laws involving transfers for the benefit of the population) and the rules for redeeming the state debt of this type.

In order to increase the state's responsibilities as to its civic-law obligations and to prevent discrimination of some budget's creditors in favor of others it seems necessary to expand the notion of internal debt by including therein the indebtedness relating to all the civic-law obligations. For this purpose in those chapters of the BC where the stages of drawing and approving budgets are defined an obligatory inclusion in the budgets of the years to come of the following items should be envisaged:

– allocations to redeem the credit indebtedness on civic-law contracts previously signed and executed by the budget's (including labor contracts),

– allocations for executing all court verdicts enforcing payments from the funds of a budget in question that were recognized as having legal force and not executed as of the time of drawing the draft budget

– allocations for executing all civic contracts with the term over one year that were made in the preceding years.

Considering that it is impossible to fulfil at once the obligations concerning all the credit indebtedness accumulated in the budgets, it should be envisaged when implementing this norm that it be effective only as regards the future periods, and the inclusion in the budgets of allocations to cover the credit indebtedness accumulated in a budget until now is to be done at the discretion of the legislative bodies. For the same reason, the notion of protected budget items should be reestablished in the Code, and it should be envisaged that the allocations on executing those civic-law contracts that have become effective are not to be sequestered.

Besides, it is necessary to take legislative measures to prevent any future growth in the budgets of credit indebtedness regarding civic-law obligations. Among these, the principal ones should be as follows:

- limiting the state's responsibility on the monetary obligations of budgetary institutions that exceed the budgetary estimates; reducing the number of institutions whose obligations are subject to subsidizing responsibilities on the part of the state;

- entering in the civic legislation special rules as to declaring null and void those transactions that were made by the state authorities and budgetary institutions with violations of the requirements envisaged in the legislation (primarily in the BC) including the transactions that fall outside the legal capacity of the said state authorities and budgetary institutions;

- imposing personal responsibility on the managers of budgetary institutions for the results of their activity including those involving accumulation of credit indebtedness by handling those transactions that fall outside the legal capacity of the institutions in question.

In order to solve the problem of mutual non-payments in the relations between enterprises it is necessary to improve the legislation defining the mechanisms of enforcing obligations, in particular:

- to simplify the procedure of making a claim to the subject of a mortgage;

- in order to reduce on the market the number of those subjects whose obligations are in fact not secured the tax control over those enterprises that do not submit tax reports and cannot be found at their legal address should be toughened, and the procedure of compulsory checking the authenticity of the passport data of their founders and managers introduced; the requirements as to the registered capital of economic unions should be made more strict;

- to expand the capacities of the judicial system in order to accelerate court proceedings;

- to increase the efficiency of bankruptcy procedures, among other ways, by narrowing the judiciaries' legal capacities to make rulings without taking into account the creditors' opinions.

THE RESULTS OF AN EMPIRICAL ANALYSIS[4]

The empirical survey undertaken in the present study is based upon the theoretical analysis cited above. By means of multiple regression methods an attempt has been made to test some hypotheses described in the theoretical models. The purpose of this empirical analysis was to diagnose the microeconomic causes of non-payments in the Russian economy - to reveal the prevailing types of the models describing the formation of non-payments within the framework of the system described above.

It should be noted that an empirical analysis of the problem of non-payments was done by many authors, where to a certain degree the problems of revealing the different kinds of factors influencing the formation of non-payments were raised. Into this category fall the works by Calvo and Coricelli (1995), Alfandari and Schaffer (1996), Gavrilenkov (1996), Ivanova, Wyplosz (1999), Mokhtari, Keiner, Kantorovich (2000) and others. The authors of the first two works deal with the problem of classifying the indebtedness between enterprises and speak of the low materiality of the factors of corporate efficiency in accumulating stale debts. In a number of works the authors reveal an association between the accumulated indebtedness level and the monetary stock or inflation. These results support the leading role of the hypothesis about the prevalence of monetary factors in the accumulation of non-payments.

It is noteworthy that an important peculiarity of the method applied in the above-mentioned works is that the authors analyze the accumulated stale debt level. However under the conditions of a high-level and rapidly changing inflation the accumulated level strongly depends on the

dynamics of prices because in addition to the emergence of new non-payments an even greater depreciation of the previously accumulated indebtedness occurs. If this factor is disregarded it may result in distorted estimates, especially as regards classification. Therefore in the present paper, just as in our previous studies, in modeling the nominal increments of non-payments attributed to the volume of production or comparable prices were applied. Thus, in contrast to the works by other authors, we are studying the process of the formation of new non-payments which is different from the dynamics of total accumulated debt whose real value to a large degree depends on the current inflation level.

The diagnostic process is based upon revealing the statistically significant factors responsible for the formation of non-payments and compared to a corresponding model. The factors that produce unintentional non-fulfillment of obligations (model 1) are mostly unobservable, and the factors of this kind cannot be easily tested empirically. Their action can be limited by developing and strengthening the enforcement system, the contractual rights and implementing efficient bankruptcy procedures. This trend of the economic policy should be based on the program of the judicial system reform outlined by the Government and constitute its meaningful part. An important aspect of reducing the scope of unintentional non-payments would be, of course, a general decline in the practice of non-fulfilling obligations caused, among other things, by the factors described in the other two models.

The distinction between the non-payments conditioned by the second and the third microeconomic models is based on the premise of the existence of an association between non-payments and efficiency. If insolvency is not caused by acompany's inefficiency then the financial difficulties are probably of a temporary character and the debts will be finally redeemed which corresponds to the second theoretical model. The presence of the non-payments described in this particular model can be also seen by the materiality as regards the formation of non-payments of such factors as the availability of bank credits and the interest rate, with the respective sign.

As for the existence of a connection between non-payments and losses, it is an evidence of insolvency coupled with inefficiency, and therefore debt settlement will be the most problematic if the financial situation of the debtor is not improved or bankruptcy is not declared. This situation corresponds to the system described in the third theoretical model. The presence of irrecoverable debts can be also seen by the significance of other factors directly or indirectly influencing the efficiency of enterprises orwhole branches. Among these factors, the structure of inside prices and the real exchange rate should be placed. Non-execution of the planned budget

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[4] The authors should like to express their deep gratitude to V.P.Nosko for consultations on the issues of economic analysis.

should also be regarded as an element of inefficiency but the inefficiency of the budgetary policy which we shall also classify as belonging to the third model.

For the purpose of statistical testing of the hypotheses, dynamic and static models were constructed which as a result unite into a single large regional dynamic model (panel regression) that includes all the available groups of factors[5]. Among these, the following can be enumerated:

- − the growth rate of the nominal interest rate on credits granted;
- − the real interest rate on the credits granted;
- − the excess of actual expenditures in the federal budget over plan;
- − the dynamics of stale debit indebtedness (region-wise);
- − the dynamics of the price structures of producers and consumers (region-wise);
- − total financial results of loss-making enterprises (region-wise);
- − total financial results of profit-making enterprises (region-wise);
- − the volume of credits granted to the economy (region-wise).

Besides, logical variables for the periods of political and economic instability were incorporated into the model which in part can characterize the causes of the emergence of the non-payments belonging to the first theoretical model.

The explained variable in the model is represented by the share of manufactured and unpaid for product in the regions. The region-by-region application of quarterly statistical data made it possible to expand the sample to 2000 observations which increases the reliability of the obtained results.

The results of our empirical study have allowed us to speak of the most deeply rooted causes of non-payments in the Russian economy that are conditioned by the inefficiency of the real sector of the economy and are associated with the structural changes going on in the economy and inefficient budgetary policy. During the years 1994-1997 the most significant factors promoting non-payments were the losses of industrial enterprises which is the evidence of the presence of a channel for subsidizing inefficient enterprises through the system of non-payments (model 3). During the next period (1998-2000) the significance and intensity of this dependence was considerably reduced, just as the non-payment growth itself did.

Our calculations have shown that the role of interest rate credit is statistically significant but does not contribute much to our understanding of the variance of non-payments region-by-region and over time. These results as well as the previously drawn conclusions do not allow us to accept the hypothesis of a purely monetary aspect of the non-payment crisis in the Russian

Federation. The analysis however has not provided any answer to the question as to what served was the initial shock that provoked the growth of non-payments. As we know, the beginning of the transition period was characterized by liquidity contraction which could have been the primary cause of the growth of non-payments which then grew into a more deep crisis with financing loss-making enterprises. But with the beginning of the transition period most profound structural changes in the economy have also occurred[6] whose significance was revealed as a result of our empirical study.

Along with the abovesaid factors, the growth of non-payments may be due to a jumping reduction of the demand for the products of domestic companies. And the conditions of the competition between these products and imported ones strongly depend on the real exchange rate of the rouble. Our calculations have shown that with rapid depreciation of the rouble the process of the non-payment growth becomes slower which in its turn can be explained by a growing demand for the domestic products and the growth of current cash flows involved in the turnover of payments between domestic companies.

During short-term periods the ratios between the movement of retail prices on commodities and the disbursing prices of the producers were undergoing considerable changes. The changes of these ratios, as it was shown by our calculations, were producing considerable effect on non-payments. More rapid rates of the growth of the disbursing prices set by the producers could also mean the preferential accumulation of the instruments of payments in the payment channels between enterprises as well as increased product profitability. The influence of this index (as well as that of the real exchange rate) on profitability is not necessarily reflected in the accounting indices of profits (losses) due to a discrepancy between economic and accounting results of the economic activity, concealment of the true financial situation and changes in the production volumes. Therefore the use of these indices together with the accounting results of the financial activity does not represent a controversy (the indices are not collinear).

There is no doubt that one of the important sources of the growth of non-payments were the non-payments on the part of the state (although in many instances they do not take the form of stale debts). It is true that the calculations have demonstrated a positive correlation between non-execution of the planned state expenditures and non-payments. Moreover, the statistical significance of this factor is second only to that of losses.

It is difficult to diagnose the presence of intentional non-payments described by the first model due to their specificity. However their presence most probably is preconditioned due to the

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[5] For more details see Zolotariova, Lederman, Lugovoi, Entov (2001) p. 109-123.
[6] See Bessonov (2000, 2001)

intensification of the problems associated with asymmetrical information in a situation of spreading enforced non-payments.

At the same time, the factors that have been marked out can explain, in all probability, only a certain part of the growth of non-payments (about 30% of the variance[7] of this index) which can be largely explained by the high degree of "noise pollution" of the statistical data applied here. This was contributed for by the incompatibility over time of the data published by the Goskomstat and requiring correction and additional estimation, low reliability of accounting data, regional peculiarities that were not taken into consideration and the unobservability of many factors which were replaced by their proxy analogues.

The obtained results are compatible with our previous studies (see Entov et al., 1998, Lugovoy, 1998, Lugovoy, Semionov, 2000). Despite all the differences in the models' specification, the data and the periods under study, the same factors have turned out to be statistically significant. Moreover, the obtained results are markedly different from the results of the empirical tests conducted by other authors cited above. Our results differ in that the most significant factors in the model have turned out to be the characteristics of inefficiency (losses) and non-execution of the state budet as well as the characteristics of the structural changes in the economy (the structure of the inside prices and the real exchange rate of the rouble) which points to a deeper level of the problem. In this sense non-payments can be regarded as a symptom of an underlying crisis in the real sector of the economy which places the problem outside the limits of the financial sphere – that of the financial markets and monetary circulation.

Estimation and analysis of the set-off operations at the regional level

The process of stale debt growth had a number of negative consequences. One of them was non-monetary implementation of budget revenues and expenditures. This phenomenon should be regarded as negative at least because such implementation of a budget has a preset structure of budget expenditures and therefore their effectiveness becomes lower. Another negative aspect is that the precedent of such operations promotes further accumulation of the indebtedness to the budget by economic agents, in expectation of setoffs. Or, in other words, the moral hazard problem occurs when a successful enterprise fully capable of making timely payments to the budget in fact delays these payments. The behavior of enterprises in a situation when they are expecting possible setoffs, as it was already mentioned earlier, was studied in the works by Perotti (1998), Nikitin (2000). In this connection there arises a question as to which extent such

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[7] It should be noted that the explanatory properties of regressions in Calvo and Coricelli (1995) also do not exceed the 34% variance. These authors worked with balances of Romanian enterprises and as the explained variavle utilize accumulated non-payments in relation to sales.

operations can be regarded as imposed on the budget if non-payments are largely conditioned by the problems occurring in the real sector.

For this purpose an estimation and an empirical analysis of setoffs at the regional level were carried out in the present study. The statistical data on this type of operations are not easily available, therefore we have developed a method for estimating setoff operations based on discrepancies in tax collection for the territorial and the federal budgets. The higher collection level of the federal taxes paid to the regional budgets and non-execution of the *established attachments* can be explained, among other reasons, by the widely spread local practices of setoffs[8]. The estimation was done for two taxes - the VAT and the profits tax.

Thus the estimate obtained in this study, with certain reservations can be regarded as the value characterizing the share of setoffs at the regional level. However the obtained index can be interpreted as not the share of setoffs but only as the estimate of the surplus of the share of the "setoff execution" of a regional budget over the corresponding index of the federal budget. The resulting index can also acquire negative values if in the region in question the level of tax collection to the federal budget is higher.

Our calculations have demonstrated that the level of setoffs is higher in the regions where there is a higher general level of non-payments, that the volumes of setoff operations depend of the functioning of the banking sector and the efficiency of the enterprises located in the region. The growth of bank crediting in the regions is associated with a negative dependence on the share of setoff operations. On the contrary, the regions where the share of loss-making enterprises is greater are more inclined to resort to setoffs. The obtained results to a larger extent support the idea of the enforced nature of setoffs. However certain dependencies were revealed that demonstrated an association between setoffs and the level of market concentration in the regions which might be regarded also as an evidence of the intentional character of setoff operations expressed in the opposition (or conspiracy) of enterprises against the regional authorities. In other words, the regions with high concentration of industry are more inclined toward setoffs at the regional level.

The growth of setoffs at the regional level can be interpreted also as the growth of regional protectionism of enterprises. The regional authorities are trying to reduce tax payments for the enterprises at the expense of the federal taxes transferred to the federal budget. But there can be another reason for resorting to setoffs - an impossibility to collect taxes in the form of cash. However the range of data applied in this study has not allowed us to carry out a more precise

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[8] According to the governor of Krasnoyarsk Krai V.M.Zubov, the share of set-offs in Krasnoyarsk Krai as regards the VAT and the profits tax in the year 1997 was 84% and 81% , respectively (V.M.Zubov "Ot neplatezhei k rasvitiu" ("From non-payments to development"), 1999).

investigation of the question as to which of these interpretations could be regarded as more true to life.

The complexity and versatility of the problem of non-payments means that it should be studied further, but all that has been said so far is also enough for us to note that it cannot be solved without restructuring loss-making and inefficient production entities, making the system of state financing more healthy, improving the market institutions, the enforcement system and the bankruptcy procedure.

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Assessment of Tax Potentials of Constituent Entities of the Russian Federation[1]

Introduction[2]

One of the most topical tasks related to reformation of inter-budgetary relations in the Russian Federation consists at present in enhancement of efficiency of the system of federal financial support to budgets of constituent entities of the Russian Federation. The principal line in the effort to improve that system consists in introduction of such principles as would permit objective assessment of the need for financial aid and also of the stimulating effect such financial support would have. For achievement of the above objectives, it is important that calculation of the amounts of financial aid to the regions should be done taking into account such indices as the potential amount of tax revenues and normative spending responsibilities since use of actual (reporting) indices would result in regional authorities becoming motivated to lower the tax rates unjustifiably and overstate the regional budgetary spending. [3]

Taking into account the above, it is to be noted that the methods of assessment of the potential amounts of tax revenues of constituent entities of the Russian Federation (gross tax resources) currently used by the Ministry of Finance in calculation of the amounts of financial aid do not meet a number of requirements adopted in respect of calculations of this kind.[4] Firstly, the currently-used form of the tax potential's dependence on the principal factors does not seem to be justified. (The regions' tax potentials are currently forecasted as tax deductions at a fixed rate from the region's gross product.) Secondly, the complex system of various adjustments and indexes of the obtained tax potential value has brought about an unjustified complication of the assessment method and made it insufficiently transparent and verifiable.

On the other hand, it is to be noted that with administrative-territorial entities in Russia being numerous and their differentiation in respect of natural, climatic, social and economic conditions (and hence of their tax potentials) being great indeed, assessment of specific regions' tax potentials cannot be done with the use of any comparatively simple methods.

For that reason, the purpose of the present study consists in description of comparative analysis of various methods of assessment of tax potentials of subnational administrative-territorial entities in a state with a multilevel budgetary and tax system, calculation of tax potentials of constituent entities of the Russian Federation with the use of econometric modeling methods, comparison of the outputs of such calculations produced with the use of different methods and also development of proposals in respect of improvement of the currently adopted mechanisms of assessment of regions' tax potentials and spending responsibilities.

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[3] For more detailed information on influence of the principles used in distribution of financial aid on the recipient authorities' fiscal and budgetary decisions see Kadochnikov P., Sinelnikov S., Trunin I. And Shkrebelf Y. *Assessment of the Effect of Federal Financial Aid on Fiscal Behavior by the Authorities of Constituent Entities of the Russian Federation.* Moscow, CEPRA, 2001.

[4] For more detailed information on history the present state of the system of distribution of federal financial aid among regions, see. Trunin I. *History of Development of the Budgetary System and Interbudgetary Relations in Russia.// Volume I. Interbudgetary Relations.* Moscow, 2001.

Issues Related to Assessment of Tax Potentials of Subnational Administrative-Territorial Entities

Any state with a multilevel budgetary system is faced with the task of assuring all its subnational administrative-territorial entities equal opportunities in respect of availability of public services. One of the methods used in achievement of that task consists in redistribution of part of the resources received by the federal/national budget from the territories of subnational administrative-territorial entities in the form of tax revenues (which redistribution is done in the form of financial aid to lower-level budgets). For such financial aid to be of an objective nature and stimulate recipient authorities' efforts in mobilization of budgetary revenues, the base for determination of the amount of such aid to subnational entities should be calculated on the basis of indices of the fiscal, that is, tax, potential.

It is to be noted that interpretation of the notion of 'tax potential' depends on the methods used in each specific case in assessment of such potential. At the same time, in formulating the notion of tax potential of an administrative-territorial entity's budget, one should bear in mind that within the framework of the problem tackled by us tax potential indices are used for the purpose of inter-budgetary equalization, that is, leveling of the capacities of authorities of all the administrative-territorial entities (regions) in rendering of public services in the territories under their jurisdiction. For that reason, the output of estimation of the tax potential of each region should reflect the ability of regional taxpayers to finance rendering of public services in the region in conditions of application of uniform taxation rules (in respect of tax rates and tax privileges) in all the regions. If the inter-budgetary equalization system is to be efficient, it needs to be devised in such a way as to assure a situation where the region would be entitled to federal aid whenever its capacity to render such services drops below the minimum set by the federal government with the amount of such aid depending not only on the amount of the region's tax potential, but also on the regional authorities' spending responsibilities.

In papers on fiscal federalism, two principal approaches to calculation of the tax potential are usually highlighted: one of these consists in assessment of the regional tax potential with the use of the representative tax system method, while the other one, in use of macroeconomic indices for assessment of regional authorities' capacity to mobilize tax revenues into their own budgets.

In different countries with multilevel budgetary systems, different methods are used. Even within one and the same method, there may be variations in respect of its actual implementation; each variation has merits and faults of its own; the choice of variation tells on the outputs of assessment of tax potential. So, both the choice of the method itself and of the way of its actual realization should be in accordance with the requirements set to the tax potential. Now let us discuss each of the methods currently in use in greater detail

The representative tax system method (RTS method) consists in forecasting/assessment of the potential tax revenues of the region's budget through application of standard (or national average) tax rates to the respective tax bases.[5] When that method is used, the data on the volume of the region's tax base is produced by state tax authorities. The output of an assessment done with the use of the above method shows the volume of tax revenues the region would probably receive if the typical (representative) tax system were applied in it. The tax potential may be assessed separately for each type of tax revenues, proceeding from the

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[5] It is to be noted that in dealing with tax potential the notion of 'tax rate' should be regarded not only in the legislative sense, but also in the economic sense (as the ratio between tax revenues and the tax base. With such an interpretation of the tax rate, regional authorities are able to change the tax rates, even in cases where that is not permitted by the effective legislation. (They do it through granting of tax benefits, tax deferrals, permissions to build up tax and duty liabilities, an so on.)

respective tax base and the average tax rate. Use of the representative tax system method thus produces an estimate of the regional authorities' ability to ensure contribution to the budget of such amounts of tax duties as are payable on the tax base declared by tax-payers in their tax declarations or disclosed by tax authorities.

The other method of calculation of a region's tax potential is based on **indirect assessment of potential tax liabilities** of the taxpayers in the region in conditions of application by the regional authorities of a national average taxation effort. Such calculation is based on assessment of the tax base as a derivative of one or more macroeconomic indices used for characterization of the ultimate income in the region. In other words, assessment of the tax potential with the use of that method relies on the presumption that, irregardless of the tax base used, in the final count all the tax payments are made out of taxpayers' incomes and the region's tax base in a broad sense (that is, the tax base for the totality of regional taxes or for taxes channeled into the regional budgets) is the aggregate regional income, whether the income is taxed at the point where it is drawn (profit tax and income tax) or at the point where it is used (sale tax and excise duties). [6] So, the macroeconomic indices-based method of assessment of tax potential, unlike the RTS method, deals with assessment of regional authorities' ability to mobilize tax revenues, proceeding from taxpayers' capacity for payment of certain amounts of taxes calculated on the basis of the average proportion of tax deductions in the ultimate income in the territories of subnational administrative-territorial entities.

The RTS method of assessment of regional tax potential can be subdivided into several separate methods differing from each other in the approaches to assessment of the region's tax base. There may be a statutory approach or a broader approach. The former is based on the assumption that such data as is required for calculation of the tax base in respect of all the taxes collected in the territory of the region or channeled to the region's budget can be obtained from the tax authorities. Where the latter method is used in assessment of the tax potential, indirect assessments of the tax base are made, since in some cases it is impossible to carry out direct assessment of the tax base.[7] The experience of such multilevel budgetary system countries as use the RTS method in assessment of tax potential shows that as a result of amendment of that method mostly indirect methods of assessment of the tax base for the purpose of assessment of territories' tax potential come to be used.[8]

It is to be noted that where indirect assessments are used, the representative tax system method is, in fact, close to the macroeconomic indices method of assessment of tax potential, though, there is still one major difference between the two: where the macroeconomic indices method is used, the modeling of the potential tax revenues is done without taking into account of the specifics of bases and rates of individual types of taxes, while the RTS method proceeds from the need of making as accurate assessment as possible of each of the principal budget-forming sources taking into account the specifics of the rates of different taxes and the related collection procedures.

On the other hand, the distinction between the above two methods is somewhat notional: while RTS assessment of tax potential proceeds from calculation of the tax base with gradual aggregation of indices used for characterization of the tax base with shift to indirect assessment of the potential tax liabilities, macroeconomic indices assessment is based on use of a single index for characterization of all the taxes levied in the region with gradual

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[6] See *Barro (1984)*, p.8.

[7] The task of assessment of potential revenues from taxes on use of natural resources is an example of how difficult it may be to carry out direct calculation of the tax base. It can be assumed that seen as the taxable base in respect of such taxes should be the economic rent gained from use of natural resources, and that that rent should hence be assessed as the tax base. Neither legislation, nor tax authorities' reports contain any data on the economic rent, however, so indirect assessment of such rent has to be done. A similar situation is also to be observed in respect of the property tax.

[8] See *The Representative Tax System (1999).*

disaggregation of the characteristic used (taking into account the specifics of collection of specific taxes) in cases where the assessment outputs obtained with the use of the aggregated index prove to be unsatisfactory.

Now let us discuss some of the existing requirements in respect of assessment of regions' tax potentials and also the advantages and faults of each of the above-listed methods from the point of view of various criteria of efficiency of their use.

Efficiency and effectiveness of any tax potential gauging concept mostly depends on the extent of independence of the assessment outputs on the fiscal choice of the regional authorities and the economic agents (absence of the feedback effect). The feedback effect is observed in cases where the tax base indices or any other factors used in assessment of the tax potential depend on the choice made by the regional authorities or by economic agents.[9] Preclusion of the feedback effect is an important task faced by anyone developing a methodology for tax potential assessment. Depending on the tax potential assessment method used, the feedback effect may be caused, in particular, by change in the shares the private and the public sectors of the economies.

For instance, growth of the public sector's share (as a result of an increase in the tax rates) may result in reduction of the private sector's tax base. So, assessment of a region's tax potential with the use of the RTS method is to a certain extent prone to influence by subnational authorities' choice, which includes preferences in respect of the relative shares of the private and the public sectors of the regional economy. Use in tax potential assessment of macroeconomic indices, including data on the actual sizes of the private and the public sectors of the regional economy permits a considerable reduction of the final assessments' dependence on regional authorities' decisions related to alteration of the relative shares of the private and the public sector of the region's economy. (Such indices include, in particular, the gross regional product.)

Tax potential assessment with the use of the RTS method is also influenced by the regional authorities' fiscal choice, that is, introduction of various types of taxes (within the limits of regional jurisdiction) and also change in the structure of the aggregate tax base (that is, proportion of the sizes of the tax bases of various taxes in respect of which assessment of the potential revenues has been made), alteration of the structure of consumption in the private sector, change in the general level of business activity, capitalization of the taxes in assets prices and change in spatial distribution of economic activities.[10] Where assessment is done with the use of the RTS method, the tax base depends on the tax rates, and so the outputs of calculations done using the RTS method (whose principal component is assessment of tax bases) cannot but be influenced by fiscal policies pursued by the regional authorities.

On the other hand, all the above mechanisms are there, though to a lesser extent, also when tax potential assessment is done with the use of the macroeconomic indices method.[11] The smaller influence of those factors in such cases can be explained by two reasons. Firstly, the approach in question does not presuppose analysis of the actual tax policy pursued by the regional authorities since it mostly focuses on the basic sources of tax revenues (and, consequently, of tax potential). Secondly, use of a broader base for calculation of microeconomic data reduces the influence of the feedback effect on the ultimate assessment outputs. However, it is to be noted that when tax potential assessment is done with the use of the RTS method, aggregation of the outputs of calculations for individual types of taxes takes place, which may result in reduction of the extent of influence of distortions (which took place

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[9] See *Barro (1986),* p.79.

[10] For more detailed information, see *Assessment of Tax Potential and Spending Responsibilities…,* 2001

[11] *Barro (1986)* notes that in assessment of tax potential using the macroeconomic indices method, only feedback effect related to distortions in interterritorial distribution of economic activity is observed. in the final count

in the process of calculation) on the final output, since 'opposedly directed' errors are thus eliminated.

Another important criterion of efficiency of tax potential assessment consists in sufficiency of the available data on incomes of the region's economic agents (which incomes in the final count constitute the base of all types of taxes). From that point of view, the macroeconomic indices assessment method has the advantage of assuring fuller coverage of the regional economic agents' incomes than RTS assessment since modeling of a representative tax system based on analysis of the legislatively set tax base cannot take into account all the sources of regional income.[12] In that case, the most illustrative index in respect of the gained regional income is gross regional product (GRP). But even in assessment with the use of the macroeconomic indices method, every component of the regional income may not be taken into account. For instance, income gained by residents of the analyzed region outside that region causes certain distortions in tax potential assessment.

Other problems related to tax potential assessment include export of the tax burden in the meaning traditionally found in research papers, that is, direct or indirect taxation of nonresidents. It is to be noted that none of the methods used in tax potential assessment assures full taking into account of export of the tax burden. Yet, the RTS method ensures fuller taking into account of such an export since under that method data from taxation reports is used in assessment of the tax base, which permits identification of the exported tax burden in the total tax amount.

One of the principal tasks of any methodology used in assessment of the tax potential and distribution of financial aid consists in non-creation of motivation for regional authorities to pursue any particular strategies in respect of tax rates and budgetary spending. In research papers on tax potential assessment, three types of such motivation are discussed: stimuli related to use of tax rates, stimuli related to influence on the tax bases and stimuli related to adoption of a moral hazard behavioral strategy.[13] The volume of financial aid to a region rendered within an efficient system of interbudgetary equalization should not depend on change by that region of its own tax rates. On the other hand, an efficient system of interbudgetary transfers should take into account increments in regions' tax bases (and respond by reducing the volume of financial aid), which may create motivation for the regions not to seek to develop their own tax bases.

It is to be noted that despite the need for eradication of the above faults presently inherent in the adopted methodologies, the methodology itself should remain relatively simple, comprehensible and easy to use. Along with economic efficiency, requirements in respect of transparency and openness of the interbudgetary equalization procedure and in respect of simplicity and understandability remain one of the most important conditions of successful functioning of a system of interbudgetary relations.

Canada's experience in use of the RTS method shows that as a result of numerous amendments of that method of assessment of tax potentials of Canadian subnational entities it has come to be a complex sequence of calculations rather difficult to assess from the point of view of accuracy in respect of interregional differentiation of the tax potential.[14] A similar situation is taking shape in Russia where the effort to amend the tax potential assessment method has resulted in that method becoming very complex. It is also to be noted that efficiency of use of such a method in conditions of an unsatisfactory statistical base is dubious to say the least.

In the present paper, assessments of tax potentials of Russia's subnational entities have been made using both the methods, the outputs of checks are discussed below. It is to be noted

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[12] See *Courchene 1984a).*

[13] For more detail see *Courchene (1984b) Bird and Slack (1990), Smart (1998).*

[14] See *The Representative Tax System (1999).*

that use of the conventional RTS method for assessment of Russian regions' tax potentials is impossible due to insufficiency of statistical data in respect of the regions' tax base and also inaccuracy of the available data. Application of the conventional macroeconomic indices method to the entire volume of tax payments to budgets of constituent entities of the Russian Federation is also insufficiently efficient due to considerable differentiation of the structure of tax revenues between regions, complexity of the Russian taxation system and imperfection of statistical reporting in Russia.

Assessment of Regions' Tax Potential on the Basis of Gross Regional Product Data

Gross value added produced in a region is an income-related index particularly fully characterizing the level of economic activity in the region in an aggregated form. There are several different methods of assessment of tax potential with the use of that index, the simplest of which is the average tax load per product method.

Product of the average effective tax rate (τ) [defined as relation between all the regions' aggregate tax liabilities and those regions' aggregate product] by a region's actual gross product constitutes assessment of that region's tax potential:

$$TA_i^* = \tau \cdot GRP_i \tag{1}$$

where

TA_i^* is assessment of tax liabilities of i region (tax revenues plus growth of the debt).

GRP_i is i region's gross regional product.

For the purpose of this study, the term *tax liabilities* means sum of the region's actual tax revenues and growth of the accumulated debt to the budget (arrears and deferred payments). That index is used for measuring of the amount of taxes payable by the region's companies (tax liabilities). Assessment of tax potential for taxes payable, unlike that of taxes actually collected does not give one an opportunity to take into account differences in various regions' tax-collecting effort, that is, to level the differences in the tax rates.

In accordance with that method, with a consolidated budget $\tau = 0.241$. In other words, the national average effective rate of taxation per unit of value added amounts to 24.1%.

It is to be noted that use of this kind of assessment is based on a number of assumptions. Firstly, there is the assumption that the tax burden per unit of value added is the same for all the industries. Secondly, treatment of different regions is different under such an assessment since it is scale-sensitive. In other words, a region with a larger economy will have greater weight under such an assessment. That method also has an advantage, however, which consists in the fact that there is a zero aggregate absolute error of the forecast (that is the assessed amounts by the region amount to the actual tax revenues). That may be convenient for the purpose of budget planning, but it is to be noted that the quality of tax potential assessment by the region (standard error) will not be the same for all regions. Assessments in respect of regions with larger economies are more accurate than those in respect of regions with smaller economies. Where assessment of regions' tax potential is done for the purpose of budget equalization, the above factor makes this method unacceptable.

The above faults can be remedied if regression methods are applied to the assessment methods. Full elimination of the scale effect can be achieved by means of application of the weighted least squares method (WLSM) with the related weights. In addition to that, experience in studies of dependence of tax liabilities on the gross regional product shows that the tax load grows with the growth of per capita GRP. The richer the region, the more it pays per unit of value added produced. In a linear regression dependence that is manifested in existence of a statistically significant negative constant interpreted as a certain hypothetical

nontaxable level of the per capita regional income. The output of an assessment done with the use of the WLSM can be represented in the following way:

$$TA_i^* = \left(-688.448 + 0.245 \cdot Y_i\right) \cdot N_i,\qquad (2)$$

where

TA_i^* is assessment of the i region's tax potential (tax revenues plus growth of the debt to the budgetary system of the Russian Federation).

Y_i is the i region's gross per capita regional product;

The results of comparison of different tax potential assessment methods with the use of the GRP show that assessments with the use of the weighted LSM better suits the equalization purpose since they level regions' contributions and permit reduction to the minimum of dispersion of relative errors in respect of individual regions.

Assessment of Tax Potentials of Subnational Entities of the Russian Federation with the Use of the Representative Tax System Method

Opportunities for use of the RTS method in the Russian Federation are but limited due to lack of sufficient statistical information on tax bases. Tax rates (and tax benefits) are different with different types of goods and types of activities. Such tax rates as have been set by federal legislation and do not depend on regions' taxation effort need to be taken into account in assessment of the tax potential. As has been noted earlier, regions' taxation efforts differ (within the limits of regional authorities' powers) in the rates and the extent of actual collection of the taxes payable rather than differences in the regional structures of economic activities.

In the present section, assessment is made of tax potentials related to individual types of the more important taxes (such as aggregately accounted for over 90 percent of all the tax revenues of the 1999 consolidated budget). Those are VAT, the profit tax, income tax (individuals), an assortment of excise duties and fees for use of natural resources, property tax (corporations), tax on maintenance of housing and social infrastructure[15], and the sales tax. Other taxes collected for budgets at different levels are modeled separately as a homogeneous aggregate. Also, assessment of the tax potential is carried out for the road fund (which has a nonbudgetary status).

Some specifics of the of the methodology used need to be discussed here. As has already been noted, assessments of this kind are done with the use of regression analysis methods on the basis of data on actual values of tax bases (in cases where such data is provided by the National Statistical Board of the Russian Federation or the Ministry of Taxes and Duties of the Russian Federation) or data on characteristics of such tax bases (macroeconomic indices supposedly related to the actual base or defining its value). As a rule, information available from the National Statistical Board of the Russian Federation is insufficiently disaggregated and hence cannot be used as a tax base. Since there can be more than one base characteristic for each tax and selection of the most suitable option proceeding from economic considerations alone is not always easy, we have used different options of specification of models, choosing between them on the basis of the best explanation properties. The task consisted in selection of such an index as would offer the fullest explanation of the actual tax liabilities and most fully meet the requirements in respect of characteristics of assessment of the tax base (see above).

As compared to sheer averaging of the effective tax base (relation of tax liabilities to the base's characteristic) the regression method has an advantage in that it permits assessment of

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[15] Repealed as from January 1, 2001

accuracy of characterization by that index of the specific tax's base. It is to be noted that the regression method also permits taking into account of subjective differences in tax collection defined as differences in regional authorities' taxation efforts) for the purpose of upgrading of the assessments' quality. At the transition from assessment of models to assessment of the regional tax potential those differences can be fixed at a specific level. That methodology was used in particular in assessment of regional spending responsibilities.

Figure 3 shows the structure of tax revenues of budgets (consolidated, federal and regional) in 1999. Over half of all [calculated] revenues in 1999 (53 percent) were formed out of revenues from two taxes, the value added tax and the profit tax. The personal income tax accounted for 12 percent, excise duties and fees for use of natural resources, for 11 percent and 5 percent, respectively, while the other taxes and duties aggregately yielded the remaining 19 percent. VAT, the profit tax and excises accounted for 88 percent of the federal budget's revenues. At the same time, the above principal federal taxes accounted for a mere 57 percent of regional budgets' revenues in the same year, while other taxes yielded 31 percent. Fully channeled to subnational budgets were revenues from some spirits excises (except the vodka excise and other distilled liquor excises, part of which was channeled to the Federal budget), property taxes (around 10 percent of territorial budgets' tax revenues), sale tax (around 4 percent), and local taxes and duties (around 10 percent), of which the most important one was the tax on maintenance of housing and social and cultural facilities (around 9 percent).
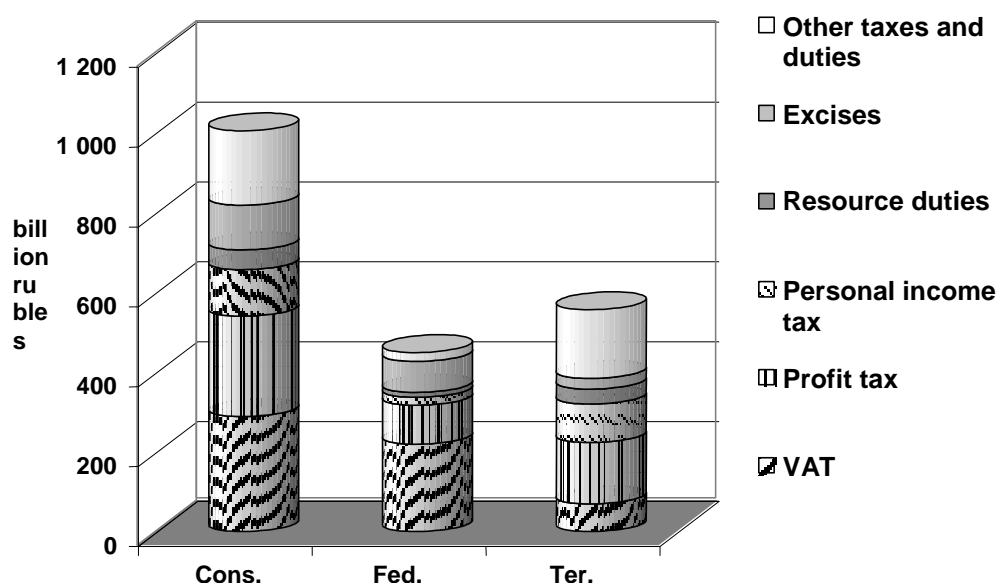

Figure 1. Structure of taxes charged at the three levels of the Russian Federation's budgetary system, 1999.

Nearly 91 percent of all tax revenues of the budgetary system of the Russian Federation, 96 percent of tax revenues of the federal budget and 89 percent of tax revenues of budgets of territorial entities of the Russian Federation are aggregately formed by revenues of the modeled taxes (1999). Other taxes are modeled as an aggregate.

Under the Tax Code of the Russian Federation, defined as objects of the **VAT taxation** are sales in the territory of the Russian Federation of goods, including those meant for industrial and technical purposes, performance of jobs and rendering of services. To different groups of products, tax rates of 10 percent or 20 percent are applied, while to most food products and children's goods, a privileged rate is applied. Export goods and services, excluding oil and gas deliveries to CIS states are taxed at a zero rate[16]. In addition to that, a number of tax privileges[17] have been granted in respect of various groups of goods (jobs and services) and various groups of taxpayers

For assessment of the tax base of the value-added tax, a number of indices have been modeled, including the value of a retail sales volume[18], value of services rendered to individuals[19] and volume of the gross regional product (GRP). Such indices as volume of export and proportion of rural population in the region's total population have also been used as characteristics of the relevant tax base in order to ensure taking into account of the volume of goods and services taxable at a zero tax rate, as well as the group of goods taxed at a privileged rate. The model in which such indices as GRP and the proportion of rural population in the total population of the territorial entity of the Russian Federation were taken into account for assessment of the tax base has proved to be the best one, both in terms of explanation ability and in terms of economic interpretation. As agricultural regions produce products taxable at lower rates, taking into account the share of rural population permits one to take into account objective difference in structures of various regions' tax bases. Assessment of regions' tax liabilities (as of 1999) based on the GRP index and the index used for characterization of the share of rural population in the region's total population can be represented as follows:

$$\boxed{VAT_i^* = \left[1127 + 0.033 \cdot Y_i - 21 \cdot SN_i\right] \cdot N_i},$$ (3)

where

VAT_i^* is assessment of the VAT potential; and

SN_i is the share of rural population in the total population of i region.

By way of assessment of the related tax base, tax potential of the corporate profit tax has been modeled on the basis of the index of companies' aggregate profit (supplied by the National Statistical Board). However, it is to be noted that the explanation ability of that model has turned out to be rather low due to the large volume and uneven distribution of privileges granted in respect of the profit tax, both on the federal and the regional level. That assessment can be represented as follows:

$$\boxed{TP_i^* = \left(113.201 + 0.260 \cdot PR_i\right) \cdot N_i},$$ (4)

where

TP_i^* is assessment of the profit tax potential of i region;

PR_i is the profit of companies in i region (per capita of that region's populace).

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[16] In levying of VAT, a switchover to the country of destination principle has been underway since July 1, 2001.
[17] See the Law of the Russian Federation on Value-Added Tax of December 6, 1991 (the relevant edition which was in force in 1999). At present, VAT taxation is regulated by provisions of Section 21 of the Tax Code of the Russian Federation which became effective in January 1, 2001.
[18] According to the definition adopted by the National Statistical Board, seen as retail trade volume is the value of such consumer goods meant for personal or household use as are sold to individuals for cash..
[19] According to methods used by the National Statistical Board, the volume of paid services rendered to individuals reflects the volume of consumption by people of different kinds of services. It includes volumes of services rendered to individuals by officially registered companies, as well as an expert assessment of the covert and unofficial business activities on the services market.

It is to be noted that with use of the aggregate profit index the obtained assessment has equalized both differences in taxation effort by regional authorities and privileges provided for by the Federal law (which privileges are considered objective since their introduction does not depend on decision of regional authorities).

In assessment of the **personal income tax** base for the purpose of assessment of the regional tax potential, we have used such indices as the volume of households' income and the aggregate value of the wages funds of territorial entities of the Russian Federation. The latter index is used because the value of the former index is not satisfactory for assessment of the tax potential since the methods of calculation of the index in question include expert assessments of the unaccounted cash income. In addition to that, the value of that index also covers such non-taxable incomes as the bank deposit income, insurance benefits and the like. On the other hand, the index of the value of the wages fund does not take into account the whole spectrum of households' taxable incomes. For that reason, those two indices have been used in combination, which has permitted us to obtain a more accurate assessment:

$$IT_i^* = \left(-203.584 + 0.109 \cdot W_i + 0.012 \cdot (MR_i - W_i)\right) \cdot N_i, \tag{5}$$

where

IT_i^* is assessment of the personal income tax potential; and

N_i is the number of residents in i region.

It is to be noted that percentage of explained dispersion of personal income tax revenues is higher than such percentage with other modeled taxes. (It amounts to over 95 percent.).

Property tax revenues (paid by businesses and individuals, or charged on inherited property) go to regional budgets and account for 10 percent of all revenues of regional budgets (aggregately). It is to be noted that nearly all revenues (98 percent) of that budgetary position have been yielded by corporate property taxes. Payers of the corporate property tax are any legal entities, their branches and subsidiaries, while objects of such taxation are fixed assets, goodwill and expenses on the payer's balance. The applicable tax rate is set by regional authorities (within the limit of 2 percent provided for by the Federal legislation[19])
Used as characteristics of the tax base of the corporate property tax were fixed assets, however, as fixed assets alone are insufficient for complete characterization of the tax base (some other assets on the balance of a business are taxable as well), the index of the value of the region's gross income was used as well (it seems quite natural that the index of the income gained in the region should characterize the assets in question to a certain extent). The macrofactor used here can also characterize tax bases of other property taxes levied on businesses (the corporate property tax, the inherited property tax and the securities operations tax). However, such taxes account for less than 2 percent of the total amount of that particular group of taxes. According to the assessment outputs, that model accounts for more than 80 percent of dispersion of the property tax across regions, while assessment of the tax potential can be represented as follows:

$$PT_i^* = \left(-62 + 8.6 \cdot 10^{-04} \cdot OF_i + 0.011 \cdot Y_i\right) \cdot N_i, \tag{6}$$

where

PT_i^* is assessment of the property taxes potential; and

OF_i is cost of the fixed assets of companies domiciled in i region (per capita of that region's populace).

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[19] See Federal Law of the Russian Federation №36-ФЗ of February 22, 1999

Regression assessment of **sales tax** revenues is rather complicated due to the fact that taxation efforts by regions in respect of that tax vary greatly from one region to another. Sales tax revenues fully go to regional and local budgets, while the procedure applied in respect of collection of that tax is regulated by regional legislations. It is to be noted that at the time of assessment (in 1999) the sales tax was not applied at all in some regions, while in others it was introduced during the period under review. Use of regression assessment being complicated for the above reasons, the assessment has been made on the basis of the average effective rate:

$$\tau = \frac{\sum_i ST_i}{\sum_i RT_i} = 0.012 , \qquad (7)$$

where

ST_i is the aggregate sales tax in i region (per capita of that region's populace);

RT_i is retail trade turnover of i region (per capita of that region's populace),

τ is the average (effective) sales tax rate applied to retail trade turnover.

So, assessment of the sales tax potential (ST_i^*) can be represented as follows:

$$ST_i^* = 0.012 \cdot RT_i \cdot N_i \qquad (8)$$

Excises account for a large portion of revenues at all budgetary levels. For instance, in 1999, they accounted for 11 percent of all revenues of the consolidated budget of the Russian Federation, 21 percent of the Federal budget's revenues and five percent of territorial budgets' revenues. (See figure 18).
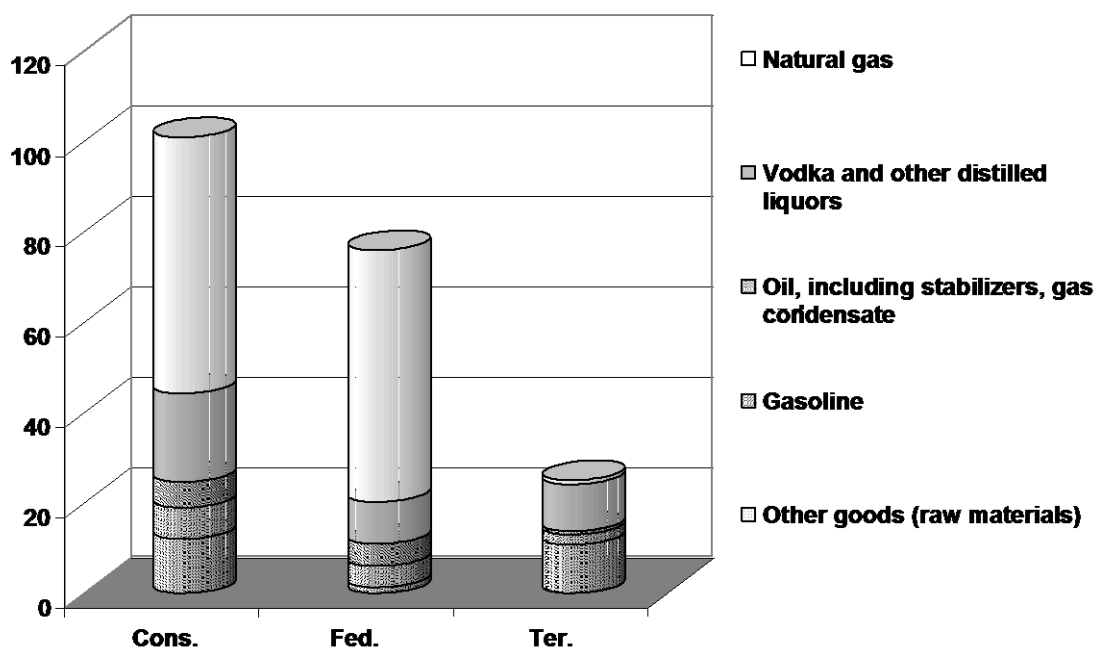

Figure 2. Structure of excise revenues of budgets at different levels

Excises on natural gas account for the larger portion of all excises (100 percent of such excises are paid to the Federal budget, except such payments in the Republic of Bashkiria and the Republic of Tatarstan which have concluded specialized tax agreements with the Federal Government). Excises on vodka and other distilled liquors rate second accounting in

combination with the excises on gas, oil and gasoline for almost 100 percent of all excise revenues of the Federal budget.

Excises on vodka and other distilled liquors (48 percent, see figure 19) account for a larger portion of the revenues of territorial budgets (aggregate by regions). Next in importance are excises on beer, tobacco and gasoline which aggregately account for over 30 percent of all excise revenues. Other excises (brandy, champagne, wine, oil and the like) account for nearly 20 percent of all excises paid to territorial budgets, that is, nearly one percent of all tax revenues of territorial budgets (aggregate). Thus, the excises on natural gas and vodka and other distilled liquors are the most important sources of excise-related revenues for budgets. Under the legislation effective in 1999, excises on alcoholic beverages were levied from producers of alcoholic beverages[20], the object of taxation being the output (on which excise duties were charged at specific rates).

Assessment of the tax potential of excises on alcoholic beverages was based on the output of such products:

$$A_i^{alc*} = \left(13.6 + 0.17 \cdot Q_i^{alc} + 0.14 \cdot Q_i^{vsh}\right) \cdot N_i, \tag{9}$$

where

A_i^{alc*} is assessment of the tax potential of excises on alcoholic beverages;

Q_i^{alc} is output of vodka and other distilled liquors in i region (per capita of that region's populace);

Q_i^{vsh} is output of wine, including champagne in i region (per capita of that region's populace).

Assessment of potential revenues from certain taxes (such as excises on oil and gas) in the budget system cannot be made with use of regression methods due to a mismatch between regions producing oil and gas and those paying the related taxes. It is to be noted that the taxes in question fully go to the Federal budget (except those levied in the Republic of Tatarstan and the Republic of Bashkortostan which have concluded special agreements to that effect with the Federal Government). Also, they in no way affect regions' potential ability to generate their own income. For the above reasons, modeling of those taxes has been of little importance for the purpose of equalization of budget.

Payments for use of natural resources (with excise payments not taken into account) account for 7 percent of revenues of territorial budgets and nearly 3 percent of those of the federal budget (1999). Payments for use of mineral deposits (5 percent of the revenues of territorial budgets) and land tax (1.7 percent of all the revenues of territorial budgets) account for a greater portion of all natural resources payments. Those taxes are levied on companies which either use natural resources in their economic activity, or engage in development of extracted natural resources.

The tax potential of payments for use of natural resources has been modeled on the basis of extracting industries' output and indices in respect of the actual output of raw materials in regions:

$$\boxed{\begin{aligned} RP_i^* = 38.871 &+ 0.024 \cdot Q_{i,1} + 0.019 \cdot Q_{i,2} + 0.026 \cdot Q_{i,3} + \\ &+ 0.005 \cdot Q_{i,4} + 9.690 \cdot Q_{i,5} + 0.041 \cdot Q_{i,6} \end{aligned}}, \tag{10}$$

where

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[20] At present, with enactment of the second section of the Tax Code of the Russian Federation liability to pay excises is divided in equal portions between producers of alcoholic beverages and wholesale traders selling such products from an excise warehouse. It is to be noted that excise revenues are divided between federal and regional budgets at every stage of payment of excises.

RP_i^* is assessment of the tax potential in respect of payments for use of natural resources in i region; and

$Q_{i,j}$ is the volume of production of j industry in i region (per capita of that region's populace), ($j=1$, fuel industry [volume by cost]), $j=2$, wood industry [volume by cost], $j=3$, nonferrous industry [volume by cost]), $j=4$, iron–and-steel production [volume by cost]), $j=5$, volume of natural gas production [natural volume], $j=6$, output of oil and gas condensate).

Local taxes and duties (9.4 percent of the revenues of regions' consolidated budgets) are an important source of territories' revenues. These include among other resort duties, specialized duties for maintenance of the police force, the advertisement tax, the housing and social infrastructure maintenance tax, license duties levied on trading companies and other. **The housing maintenance tax** is the principal one among local taxes; it accounts for 8.6 percent of regions' revenues (consolidated budgets).

The object of such taxation is the volume of sale of products (jobs and services), such as the proceeds from sale (gross sales income) determined on the basis of the disbursing prices (VAT, tax on combustible and lubricant materials and excises are not included). Used as characteristics of the tax base of the housing maintenance tax have been the index of the volume of production of goods and services published by the National Statistical Board and that of the gross value-added produced in the region. According to assessment outputs, the former model ($R_{adj}^2 = 0.74$ as against 0.69 in the model with the GRP) had a better explanation ability and that factor determined the choice of the model:

$$TJ_i^* = \left(5.43 \cdot 10^{-2} \cdot Q_i + 4.11 \cdot 10^{-3} \cdot UN_i \right) \cdot N_i, \qquad (11)$$

where

TJ_i^* is assessment of the tax potential of the housing maintenance tax;

Q_i is the volume of industrial output in i region (per capita of that region's populace); and

UN_i is the volume of services rendered to individuals in i region (per capita of that region's populace);

Taxes for which assessment has been carried out account for a larger portion of budget revenues, however, it is to be noted that the entire spectrum of revenues from taxes and tax payments collected in regions was not taken into account. Those include, among other, the single tax on aggregate income, some unaccounted excises, state duties, licensing and registration charges, non-tax revenues (those account for nearly 3 percent of the tax revenues and tax payments of the consolidated budget system of the Russian Federation) and other. It is obvious that a reliable base for such a heterogeneous group cannot be easily defined. It seems that the index of business activity in the region can be most appropriate for that purpose. At least, that index accounts for nearly 77 percent of dispersion of the above group of taxes.

$$OT_i^* = 0.015 \cdot Y_i \cdot N_i, \qquad (12)$$

where

OT_i^* is assessment of the tax potential for "other taxes" whose tax potential has not been assessed separately (i region).

Large amounts of financial resources have been accumulated in specialized non-budgetary funds whose resources are comparable to those of regional and federal budgets. The most important of these is the road fund whose revenues are equal to 9 percent of the federal

budget' revenues and 17.5 percent of territorial budgets' revenues (1999). Starting from the year of 2000, the federal road fund has been consolidated in the budget.

The largest source of road funds' revenues is the **highway users' tax**. The object of such taxation is sales proceeds and difference between the buying and the selling prices of goods which change hands in the process of procurement, sale, supply and other commercial activities.

As in case of the housing maintenance tax, assessment has been made with the use of the two models. Used as characteristics of the bases of the first model were the volume of industrial output and the volume of services rendered to individuals, while as characteristics of the second one, the gross value added. It is to be noted that both the models show a high explanation ability accounting for 88 percent of dispersion.

Summing up the obtained outputs **the aggregate assessment of the tax potential** of territories can be represented as the total of assessments of the potential by the individual type of taxes and group of taxes described above:

$$TA_i^{**} = VAT_i^* + TP_i^* + IT_i^* + PT_i^* + ST_i^* + A_i^{alc*} + RP_i^* + TJ_i^* + A_i^{gas} + A_i^{oil} + OT_i^*, \qquad (13)$$

where

TA_i^{**} is assessment of the tax potential of i-region (tax revenues plus increment of debt to the budgetary system of the Russian Federation) on the basis of the representative tax system method;

A_i^{gaz} and A_i^{oil} are, respectively, actual revenues from excises on oil (including gas condensate) and natural gas (not modeled, see the above);

As it can be seen from calculations, the quality of explanation of actual tax liabilities (collected taxes and increment in arrears) is rather high (it accounts for over 90 percent of dispersion). At the same time, the specific of that method consists in equalizing structures of bases across regions, that is, the assumption that a single tax rate has been applied irregardless of the type of economic activity in the region. On the one hand, it permits to reduce dependency of assessment of the tax potential on fiscal choice by regional authorities and economic agents (the feedback effect). On the other hand, it does not take into account objective differences in regions' ability to gain income. Such differences include among other differences between various branches of the economy (the level of tax burden in those branches can be objectively different) and differences in structures of tax bases (production of excise goods, essentials and the like) which can affect the actual tax potential due to the specifics of the Russian tax system.

The broader representative tax system method implies provision of a separate assessment of the regional tax potential by the type of tax through indirect assessment of the related tax base.

The Table 1 contains the outputs of comparison of assessments obtained with use of the above two methods.

Table 1. Comparison of outputs of the GRP-based assessment and the assessment done with use of the broader representative tax system method, 1999.

	Model 2	Model 13
Aggregate assessment error for Russia as a whole,	-8.2%	-13.3%
Standard deviation of relative errors, %	27.8%	22.5%

The outputs of comparison show that the aggregate model has a smaller deviation of the aggregate assessment for Russia as a whole, while the relative standard error of that model turned out to be higher. Such results can be explained by the fact that in assessment with the use of the broader representative tax system method some taxes were not modeled (excises on oil and gas), while actual values of tax liabilities were included in the tax potential. However, with their exclusion the value of the standard error does not change much (22.6 percent as against 22.5 percent).

The fact that the assessment obtained with the use of the broader representative tax system method is closer to the actual values is extraordinary, especially if the model's relatively small explanation ability in respect of specific types of taxes is taken into account. This can probably be explained by opposite signs of errors, which reduces the value of the aggregate error at aggregation.

However, the criterion used in selection of the model of tax potential assessment is related not only to the ability of such a model to describe actual tax revenues, but also its usability in actual equalization of revenues of different regional budgets. As was noted above, the tax potential calculated for the purpose of inter-budgetary equalization is such revenues as the region would have received if average tax rates (efforts) were applied to the actual tax bases. However, objective differences in tax burdens (established by the Federal law) should be taken into account in assessing of the tax potential, while the subjective ones (differences in tax rates and privileges which are set by regional authorities) should be eliminated (averaged). It is clear, that drawing of any strict distinction between objective and subjective factors which affect the actual collection of taxes is only feasible with the use of highly disaggregated data with all the factors taken into account. However, such an approach may not produce the desirable results because of some drawbacks. Firstly, it is a highly sensitive approach to data and accumulation of errors of different assessments. Secondly, the disaggregated approach does not take into account interrelation between tax bases (See above).

Making of a single assessment based on use of both the above methods can be the only compromise in such a situation:

$$TA_i^{/} = \lambda \cdot TA_i^{*} + (1 - \lambda) \cdot TA_i^{**} \qquad (14)$$

where

TA_i^{*} is assessment of the tax potential (of i region), made on the basis of the aggregate method (Model 1.7);

TA_i^{**} is assessment of the tax potential made on the basis of the broader representative tax system method (Model 1.45);

$TA_i^{/}$ is weighted assessment on the basis of the both methods;

$0 \leq \lambda \leq 1$ is the weighted coefficient.

Such an approach permits taking into account, on the one hand, all the existing objective differences between tax bases (the broader representative tax system method), while on the other hand, general tax burden on the product (interchangeability of bases).

Coefficient λ which determines which method has a greater weight can be set by an expert method or be calculated. Minimization of the aggregate standard (relative) error can be proposed as one of the principles of such calculation. Composition of assessments obtained with the use of those two methods permits taking into account strengths and weaknesses of the both approaches and reduce the relative error of the final assessment.

It is to be noted that the outputs of calculations of tax potential in conformity with the proposed method of assessment can be used by the Ministry of Finance in distribution of transfers from the Fund of Financial Support of the Regions. The principal task in

introduction of the proposed method of calculation of the tax potential consists, firstly, in drawing up of clear-cut and comprehensible methods of calculations and, secondly, in taking into account the specifics of the transition period both in calculation of the tax potential of regions with the use of the existing methods and proposed ones. The former problem can be explained by complexity of mathematical mechanism used in regression assessment and the need to adapt those methods for use by the Ministry of Finance and regional authorities, while the latter, by inevitable deviations of calculations used in the existing methods from those of the proposed ones. It is clear that mechanisms of diminishing of such deviations should be provided for at the initial stage.

Summing up the results of this research, it is to be noted that future research in this area can be based on aggregation of outputs of calculations done under those two methods in a single aggregate assessment. At the same time, expansion of the range of available statistical indices after so-called 'tax passports' of territorial entities of the Russian Federation are introduced can significantly improve assessment of tax potential with the use of the broader representative tax system method.

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The financial relations between the federal center and Northern regions and their consequences for the "organized" migration from the North[1]

Along with the fundamental changes of the Russian national economy, the problems of the development and functioning of the socioeconomic complexes in the northern territories have become more acute. This has put into focus the studies on the general and specific features of the structural changes in the regional economy and the mechanism of the interaction between the federal and the territorial levels of public administration.

The problem of regulating the socioeconomic development of the Russian North represents one of the most acute components of reforming the Russian economy. This problem is of an indisputably complicated character and encompasses multiple legal, social, economic, financial, national, historic, ecological and other aspects. In this connection there has emerged the task of singling out several principal problems (primarily those of financial and economic character) which have to be solved immediately within the framework of improving (creating anew) the economic and legal model of the state regulation of the development of Russia's northern territories.

Besides, the choice of the problems that are most important at the present moment cannot be arbitrary: the logic of such a choice must be conditioned by

(1)   the goals of developing the socioeconomic potential of the Russian North,

(2)   achieving maximum budget efficiency when implementing the policy as regards the North in the RF,

(3)   lowering the level of social tension in the northern territories.

Considering the specific peculiarities of the economic functioning of Russia's northern regions and in accordance with the goals and the logic as described above, the focus of the present paper has been placed upon investigating the financial relations between the federal center and the northern regions (including the problems of northern supply).

It should be taken into consideration that the specificity of the financial relations between the federal center and the northern regions is to a large extent based upon:

- the existing approach toward regionalization (typology) of the North, including that on the legislative level;

- the substance of the Russian legislation on state support of the northern regions including the key issue of social guarantees and compensations for the population of the northern territories, as well as the northern supply.

The problem of "organized" migration also should be considered within the context of the financial relations between the federal center and the northern regions. The reason for this is that relieving the social tension in the northern regions through organized migration can be possible to a large degree within the framework of the policy of rationalizing the relationships between the budgets of different levels, as well as rationalizing various kinds of privileges and compensations. The usefulness of such an approach has been confirmed in particular by the IET's experience of investigating the migration problems for the Government of the RF and the World Bank[2].

Accordingly, the studies were focused on the following problems:

- the problem of the typology of the northern regions, including the legal aspects involved (the prerequisites for analysis);

- a brief overview of the socioeconomic development of the northern regions by the year 2000 (the prerequisites for analysis);

- an analysis of the northern privileges and compensations in the context of the financial consequences of the elimination of their compulsory character;

- the draft laws necessary to modify the economic policy as regards the northern privileges and compensations (recommendations);

- an analysis of the peculiarities of the financial relations between the federal center and the northern regions;

- the problems of supplying the northern regions with commodities ("Northern supply"), an analysis of the financial problems associated with the "northern supply";

- a special analysis of the legislative base of the "northern supply;

- an analysis of possible consequences and the calculation of the budgetary effect of the population's migrations from the northern regions;

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[2] See "Kompleksnyi analiz sotsial'no-ekonomicheskikh i finansovykh aspektov migratsii naseleniia iz severnykh territorii" ("A complex analysis of the socio-economic and financial aspects of the population's migration from the northern territories"). – M.: IET, 1998; "Otsenka ekonomicheskoi effektivnosti pilotnogo proekta sodeistviia pereseleniu netrudosposobnogo i bezrabotnogo naseleniia iz raionov Krainego Severa i prorabotka finansovykh aspektov planov mestnogo razvitiia v pilotnykh regionakh" ("Estimation of the economic efficacy of the pilot project of promoting migration of incapacitated and unemployed population from the regions of the Far North and the development of the financial aspects of the plans for local development in the pilot regions". – M.: IET, 1999. The authors utilize, in particular, some conceptual approaches and principles (models) of calculation contained in these works. At the same time – due to a different subject of analysis and the necessity to renew the statistical base – these studies can be applied here only as introductory material for reference and information in a revised or supplemented form.

- an overview of the fiscal relationship between the federal and the territorial governments in Canada.

The study was conducted within the framework of the CERPA project (Russian-Canadian Consortium on applied studies on economics) funded by the Canadian International Development Agency (CIDA)[3].

The principal results obtained during the study are as follows.

While the specific status of the regions of the Far North can be explained by their geographical peculiarities, at the present time it is almost impossible to define those objective criteria by which certain Russia's regions were classified as those belonging to the North because the initial normative documents in questions were approved without an adequate research of the issues involved. In particular this can be said about the process of making the list of the regions needing state support concerning their specific conditions of supply. According to Goskomsever's data, 29 out of the 153 regions included in the official list have reliable all-year-round connections with Russia's mainline network and with all settlements on their territories and therefore cannot be regarded as regions with a limited term of commodities supply. The lack of methodological principles of regionalization and typology of Russia's North is in fact a factor that prevents the formation of a common legislative base for definition and the general rules of applying the system of legislative and normative acts where the implementation of the social guarantees put down in the Constitution is stipulated.

The normative and legal base of the state support for the socioeconomic development of the northern regions has not been representing so far a system of interrelated and intersupplementing laws. Presently it consists of three federal laws, separate articles within the federal laws on general Russian issues regulating the problems of the North, several decrees of the President of the Russian Federation and the decrees of the Government of the Russian Federation.

The federal laws insufficiently reflect the changes that have taken place within the country's sphere of economy and the potentials of the federal budget and the budgets of the Russian Federation's subjects. The decrees of the President of the Russian Federation and the decrees of the Government of the Russian Federation deal mostly with some individual issues of the socioeconomic developments of the North. The normative acts concerning some particular spheres of state support are often changed, almost every year the mechanism of the state support of product supply to the North also changes. In this connection it is necessary to make an inventory and to analyze the practice of implementing the legislation of the Russian Federation, to work with the purpose to eliminate its shortcomings and to revise it in order to create the normative and legal base.

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[3] A detailed report on the study in question is published in "Finansovye vzaimootnosheniia mezhdu federal'nym tsentrom i severnymi regionami i ikh posledstviia dlia "organizovannoi" migratsii s Severa" ("Financial relations

The regions of Russia's North can be arbitrarily divided into those that are actively developing and those in the state of a slump. It is obvious that the forms, methods and priorities of the state support would be different for each of the types. The selectivity of the state support means a switchover from a generalized classification of certain territories as the regions of the Far North toward differentiation according to precise criteria. The initial base for reforming the system of wages, social guarantees and compensations in the northern regions and the procedures of their financing should become the new regionalization of the northern territories according to their natural and climatic conditions. This will make it possible to create a flexible system of targeted allocation of the state support to the northern regions and to establish a limited range of guarantees and compensations for citizens employed in the regions with uncomfortable living conditions.

The improved efficiency of the state support would depend on a pro-active attitude of the federal center as regards the issues of the population's distribution and migration, the development of the tour-of-duty method of work organization, the provision of commodities supply, etc. An increase of this interaction has a tremendous importance for the future of the Russian Federation and her northern regions.

An analysis of the allocation of the financial support from the federal budget to the northern regions has led to the following conclusions:

1. The Federation's subjects which for the purpose of the present study we classified as belonging to the North generally receive from the federal budget all the kinds of financial support envisaged by the legislation though the degree of the dependence of the regions in question on the federal funds varies considerably.

2. The volume of non-targeted financial support received by the northern regions per capita exceeds both the average level for Russia as a whole and the similar index as calculated for the non-northern subjects of the Federation. At the same time the structure of the non-targeted funds received by the northern regions is considerably different from the Russian average index.

3. Since only limited statistical data are available from the financial bodies it is not possible to correctly estimate the volume of the targeted financial support allocated to the Russian regions. At the same time it can be stated that all northern regions receive on a regular basis the kind of targeted financial support assigned only to this particular group of the Federation's subjects and allocated every year to the regional authorities, as well as prolongating the sums of the loans to support the northern supply that were granted in the years 1994-95, plus the interest on these loans. Despite the fact that as time passes the volume of these sums is being reduced, partly due to their redemption and partly due to inflation, as the results of the year 1999 showed, these financial resources constituted the main bulk of the targeted financial support received by the regions.

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between the federal center and the northern regions and their consequences for the "organized" migration from the

4. The total funds received by the Federation's northern subjects from the federal budget by far exceed similar indices of the other regions. And the higher level of dependency of the northern regions on the federal financial support can be explained mostly by the fact that they receive certain specific kinds of financial support in the form of prolongation of their indebtedness on the budgetary loans: as far as the northern regions are concerned, on the whole the share of the regional budgetary expenditures funded from the federal finances without taking into account the said loans only slightly exceeds the average Russian index. Also, the existence of considerable region-by-region differentiation among the northern regions should be noted - this group is represented both by those Federation's subjects that receive maximum volumes of financial support as compared to the whole of Russia, and also by the regions with a high level of budgetary security.

5. One of the principal features that distinguish the northern regions from the other Federation's subjects from the point of view of their receiving the federal financial support, is the structure of this support: the share of the financial resources distributed in accordance with the formalized procedures that are common for all the regions is 3 times lower in the northern regions than in the other Federation's subjects.

6. It should also be noted that on the basis of the present analysis it impossible to develop any recommendations as to changing the system of granting the federal financial support, except that it is necessary to adequately reflect in the expenditures and revenues of the budgets of different levels the procedures of granting loans to the regional authorities. The development of any further recommendations will require a more in-depth analysis of the adequacy of the size of the financial resources transferred to the northern regions to the needs of those regions as to covering their spending obligations.

Having considered the non-targeted financial support transferred from the federal budget to the budgets of the northern regions we can conclude that in absolute values the northern regions receive larger sums of financial support than do the other regions, but that at the same time the share of the financial support in the budgets of the recipient regions is only slightly higher than the average Russian indices, which means that this larger financial support is on the whole conditioned by the greater spending needs of the regions. On the other hand, the dependence of the northern regions on the federal targeted financial support in generally lower than that on the average in Russia because the regions in question incorporate the Federation's subjects with high tax revenues.

We believe that the existing system of distributing the federal resources for the purposes of financing **the northern supply** today has a maximum level of efficiency. However in order to improve the efficiency of the northern supply system itself, in our opinion, it is necessary to carry out a number of institutional transformations in the budgetary sector. The purpose of these

North"). – M.: IET, 2001.

transformations would be to eliminate the following shortcomings inherent in the system of financing the northern supply at the regional level.

1. Lack of effective control on the part of the federal financial bodies over implementing the procedures of distributing the financial resources among product suppliers and transport agencies on the basis of a tender. Although some of the resources to cover the northern supply are allocated from the federal budget, the distribution of these resources among suppliers and transport agencies is carried out at the regional level on the basis of a tender. At the same time, presently the federal authorities have no efficient leverages that could ensure that justified decisions are made as to placing the orders for product supply with particular enterprises.

2. Lack of control over the correctness of the prices and tariffs set by the suppliers of communal services. Although the enterprises providing housing and public utilities remain the recipients of the funds of the territorial budgets that subsidize the difference between the tariffs on housing and public utilities and the actual cost of these services, at the present time most regions have no possibilities for creating a transparent system of setting the tariffs on housing and public utilities. This gives rise to situations when additional costs of prior delivery of fuel and oil products covered by the state support for the northern supply are included in the cost of housing and public utilities at the stage of tariff-setting. Thus the additional costs of prior delivery of fuel and oil products for the needs of housing and public utilities are covered twice: once by the budget at the stage of paying for the northern supply, and then for the second time by the consumers of housing and public utilities – at the stage of paying for these services.

It is obvious that despite the considerable rationalization of the system of allocating the federal resources for the support of the northern supply the abovesaid shortcomings result in substantial losses as far as the efficacy of utilizing the state resources is concerned. Therefore, in our opinion, in the nearest future it will be necessary to take some radical measures both in the sphere of reforming the northern supply system and in housing and public utilities. As it was already stated earlier in the text, the formal reason for the northern supply is the need for additional funding during the period of seasonal supply of fuel, oil products and other commodities. However from the economic point of view this need serves as an additional factor contributing to the rising cost of housing and public utilities, i.e. increasing spending obligations in the budgets of the Federation's subjects incorporating in their territories regions with limited transport accessibility which therefore need prior delivery of cargoes.

 For this reason, if the responsibility to organize the prior cargo delivery is delegated to the housing and public utilities enterprises or their amalgamations, the northern supply costs can be included in the tariffs on housing and public utilities. When necessary the tariff levels can be

subsidized from the territorial budget in the form of categorized or targeted subsidies. This means that the federal support of the northern supply should be included in the total support allocated to the budgets of the Federation's subjects and distributed in the form of transfers from the FFAR according to the rules common to all the regions taking into account their objective budgetary spending needs. In this connection the rule of seasonal allocation of the financing to cover the northern supply can be eliminated because the attraction of additional funding during the term of transport accessibility also can be included in the tariffs on housing and public utilities and subsidized in the traditional manner.

A favourable consequence of including the funding allocated to support the northern supply into the total volume of the transfers from the FFAR, in our opinion, would be the non-targeted character of the support of the northern supply. With general control over targeted utilization of the budgetary funds at all levels of state authority and transparency of the process of tariff-setting by the enterprises belonging to natural monopolies, this must result in increased efficacy of utilizing the allocated funds and reduced misuses in the process of their spending: in those cases when the regional authorities planned the costs associated with prior product delivery in amounts smaller than the sum allocated for this purpose from the federal budget the targeted character of the allocated resources (i.e. the possibility to spend these funds only on pre-defined targets) resulted in reduced efficacy of utilizing federal funds.

However on the other hand it seems obvious that it would be impossible to carry out the proposed transformations in shortest terms because of their radical and all-encompassing character. For this reason, in order to eliminate the abovesaid shortcomings of the existing system of the northern supply in the shortest possible time, the following measures would be necessary.

1. A system of control on the part of the federal governing bodies over the correctness of the tender procedures. Formally, the distribution of the finances to support the northern supply falls within the powers of the Federation's subject's authorities, but the regional subdivisions of the federal controlling and auditory bodies must exercise a more strict control over the observation of all tender procedures and equal approach toward all the participants in the tenders for the supply of commodities within the framework of the northern supply.

2. An effective component in the control over the observation of the tender procedures can be the approval of the results of the tender for the distribution of the orders for product supply at the federal level. In our opinion, due to the limited number of the suppliers of oil products and fuel, the federal authorities will be able to exercise an effective control over the prices and the terms of the contracts for product supply. Besides, a procedure should be adopted when a Federation's subject would be denied the financing to support the northern supply in cases when the tender's results are

subject for protestation.

3. As a temporary measure, until large-scale reforms in the sphere of financing the housing and public utilities can be undertaken, is might be possible to create a system of tariff-based regulation of the activity of public utilities where the cost of the fuel purchased at the expense of the state support of he northern supply will be excluded from the cost of the public utilities covered by the consumers. Thus double payment for the prior delivery from the state budget and by the consumers can be avoided.

The analysis of privileges and guarantees carried out in the study has led to the conclusion that it would be feasible to eliminate the compulsory character of the **guarantees and privileges** established by the Law "On the State Guarantees and Compensations for the Persons Working and Dwelling in the Regions of the Far North and Localities With the Similar Status" for the private sector of the economy. Nevertheless if an employer, after the compulsory character of the privileges as stipulated in the law is eliminated, still decides to continue the payments in question - the costs involved (as it is done now) are to be included in the labour costs, i.e. to be exempt from the profits tax. Similarly, the existing interpretation of some of the northern privileges should be preserved – that of classifying them as the enterprises' expenses that are not to be included in their cost of production and are to be covered by their profit left at their disposal after paying the taxes.

In this connection two approaches to imposing the income tax and social payments (the payments to the state non-budgetary funds) on the northern privileges are possible:

1) To preserve the existing regime of imposing the income tax and social payments on the northern guarantees and compensations.

In this case the elimination of the compulsory character of the northern privileges and compensations will result in transforming into wages those kinds of privileges that at present are not exempt from the income tax and social payments and preserving those privileges that are fully or partially exempt from such taxation. The negative feature of this solution would be that there still remains a possibility to evade social taxation, as far as the privileges and compansations envisaged by the law are concerned, in favour of the employees.

2) To equalize the social guarantees and compensations granted by the northern employers to their employees in the monetary form and in kind, in accordance with the Law "On the Social Guarantees…", with wages (with a few exceptions). This will entail the necessity to impose the income and social taxes on those payments.

A practical consequence of the proposed solution, first of all, will be simplification of the northern employees' wage system by means of transforming most of the presently existing privileges into wages.

This approach has several advantages. Firstly, it seems to be a logical solution: if for the purposes of taxing the incomes of organizations these payments are categorized as labour costs, they must have a similar status as far as the incomes of natural persons are concerned. Secondly, this will eliminate the possibilities for tax evasion through transforming wages into these social privileges.

A negative consequence of the proposed solution would be a somewhat greater tax burden imposed of the payroll fund which might result in a decrease in real wages in the North. Considering that such a solution might be met by a negative response on the part of society its feasibility represents a political issue.

To legalize the proposed solutions, drafts of the normative acts on both of the abovesaid variants of resolving the issue of imposing the income and social taxes on the northern privileges have been prepared (see Appendices 3.1 and 3.2).

The study has also included an analysis of the financial consequences of reforming the system of the northern privileges, guarantees and compensations for enterprises and employees that could occur as a result of some of the abovesaid variants. The calculations are made for the cases when an enterprise does or does not compensate its employees' reduced incomes due to the elimination of the compulsory character of the privileges. Besides, there is a separate analysis of the privileges granted to the employees of the enterprises located in the northern regions and to the migrants who arrived to a northern region in order to get employed. The rates of the profits, the income and the social taxes (the latter represented by the payments to the non-budgetary funds) are considered in two variants: the existing legislation (the years 1998-99) and the draft version of the Tax Code (the chapters of the TC approved by the State Duma and the draft version of the chapter on the incomes of enterprises).

The calculations cited by the authors have demonstrated that the variants of **migration** differ from one another. The first variant that involves only the changes of personal payments does not offer any considerable economy of resources. The reason for this is that the main costs of one person's upkeep in the North are represented by the budgetary spending on housing and public utilities, education and health care and not on personal payments. The considerable costs of moving cannot be compensated for only by removing the regional coefficient (up to 1, and for pensioners with a lengthy record of employment in a northern region – up to 1,5), therefore this variant offers no recoupment for the great majority of regions.

With the growing consolidation of the infrastructure in the northern regions, the annual economy value grows correspondingly (the period of recoupment becomes shorter). But as the scope of migration grows there appears the need to increase accordingly the expenses per capita in the recipient regions. This has a smaller impact on the southern regions with a well-developed and

optimized infrastructure but substantially reduces the savings resulting from the migration into the northern regions or regions where public services entail high costs.

The approach described above incorporates a great number of the variants of the calculations (those for the four variants of migration for several social categories from 18 northern regions into 89 subjects of the RF on two types of costs – constant subsidy and traveling expenses) – all these calculations have been carried out. Besides, each of the calculations includes the size of the annual savings resulting from the migration of one person as well as the calculation of the costs, present worth, net present worth and the period of recoupment for the migration program involved in this variant. The main text and the appendices contain only the principal resulting values out of all obtained, in order to present the effectiveness of the migration programs in a most complete manner.

Different variants of the economic development of the northern regions may envisage different variants of migration-promoting programs; thus, if the goal is to expand and develop a quality infrastructure in the northern regions, then the aid should be provided only for pensioners if they wish to move away, at the same time making efforts at creating jobs and offering employment to the unemployed in the northern regions. And if the goal is to maintain only a few large centers while carrying out the work in most northern territories by the tour-of-duty method, then it is necessary to create the stimuli for an outflow of the permanent population by reforming the existing system of privileges. Besides, the considerable number of migrants that would appear in this case would require additional calculations to be made (to solve the transportation problem on the basis of the capacity of the recipient regions and their costs of settling the migrants) which could be done on the basis of the obtained results. At the same time, when considering this variant, it should be noted once again that the migration must be only voluntary which means not only providing an alternative to migration itself (the choice of a recipient region etc.) but also a possibility to stay and work in a northern region.

K. Battle and Sh. Torjman

"Post-welfare-state" Canada: examination of the neediness and organization of social assistance[1]

Introduction

Both the supporters and the opponents of globalization are admitting nowadays that national states are eager to cope with the powerful economic forces limiting their power and ignoring national political boundaries. The state is forced to clarify its role and to change the mode of functioning of its institutions.

Citizens are increasingly interested to know what they would get in return for the taxes they pay. This question is especially acute in such countries as Canada where the growth of taxes coincides with a decrease in social expenditures, as the state is trying to eliminate budget deficit and to reduce the tax burden.

There is no doubt that all developed industrial countries are confronting similar "challenges" preconditioned by deep economic, social and political changes. But the belief that globalization inevitably causes a convergence of social policy as well as a convergence of the economy is profoundly erroneous. The choice of instruments and targets of social policy is deeply influenced by the differences in history, culture and political systems.

The system of social assistance existing in Canada has great similarities with those in Anglo-American countries (first of all, with the USA and Great Britain). At the same time, the existing system of social programs is unique by the specific combination of its set goals and instruments. These programs reflect such typically Canadian characteristics as a decentralized system of governance, the presence of two official languages - English and French, and the long standing traditions of a free market economy with certain elements of rather limited interference on the part of the state. The said social programs are aimed at introducing civilized elements into capitalism and not at replacing it.

Major concepts of the Canadian social policy

The provision of a socially acceptable income level

Every nation does its best to provide all its citizens with incomes sufficient for satisfying their basic and specific needs. One of the first problems deal with the necessity to identify those circumstances which require financial assistance to cope with. In most countries, there exists a certain system aimed at supporting the incomes of senior citizens and pensioners, mainly designed for the citizens over 65 years of age. In the USA, the pension age envisaged by the system of social assistance is 67. In Canada, reduced pensions in the system of social assistance can be assigned already at 60 years of age, but the programs of income support cover the persons who have reached the age of 65.

As a rule, the question of whether senior citizens need income support is no longer under discussion. It is generally accepted that those who can work no longer have a right for certain assistance. At the same time, arguments are going on as regards the best forms of rendering such an assistance. In Canada, these debates become more and more intense by the year, and the expenditures on pension programs are growing ever faster in response to the general process of ageing of the population.

The necessity of social assistance is generally acknowledged for the disabled as well. It can hardly be argued that people with a congenital or acquired disability making it impossible to earn a necessary labor income need material assistance. But even in this case, there are certain unsolved problems. First of all, it is difficult to establish the threshold beyond which a person losses an ability to work and to obtain an earned income if the capacity for work is lost only partly. Second, it is necessary to specify how financial assistance is to be rendered. Is it reasonable to introduce a guaranteed income? Is it necessary to use some insurance schemes envisaging that an insured person has to make certain contributions? Is it reasonable to combine the insurance schemes and certain state guarantees so as to ensure a sufficient level of income?

Also to be solved is the problem of what challenges are to be met when granting the disability pensions. Are they a certain type of compensation for disability or accidents? Is it necessary to take into account the existing or future incapacity for work when the decision on granting such pensions? In Canada, all these questions have already received positive answers. The system of disability pensions consists of a set of specific and uncoordinated programs financed and realized separately.

Another standard element of the existing system of social security is income support of the unemployed. In many countries, the programs of income support of jobless persons have been recently modified in the direction of cutting the expenses, reducing the level of dependence on the assistance programs and helping the jobless to return to the labour market. In this case, the most common questions are limited to the following: what is the possible size of the coefficient of income replacement, how long could be the payment period, what rules should be applied to the chronically unemployed persons, what length of service is sufficient for granting unemployment benefits, and what should be the procedure of their financing?

And finally, all industrially developed countries must at last decide to what extent they should help certain categories of households not only in the interests of the corresponding families but also in the interests of a given nation in general. These payments are exacted not as assistance in a predictable situation (retirement) or compensation for an unpredictable risk (disability). They are interpreted rather as investments in the citizens of the country. It is especially for this reason that in the majority of developed countries payments are exacted to families with children. It means investing in the next generation, the well-being of which represents a considerable factor of economic prosperity and social health of any nation. Nevertheless, even in this case, there are arguments on the method of granting the corresponding allowances. The allowances can be granted to all families with children or can be specifically addressed to certain low-income groups of the population. The size of the allowances can depend on the number of children and their age as well as on the family income; such allowances can be considered just as a supplementary income apart from the earned income of adult family members.

Such discussions are very intense in Canada which is trying to solve these problems in the process of development and expansion of the system of children's

allowances. As in the case of disability pensions, the solution will depend on the political aims a certain nation is going to achieve. If the aim is to grant compensation to the families burdened with additional expenses which are caused by the upbringing of children, the allowances must be paid to all families with children irrespective of their incomes. And on the contrary, if the main aim is to eradicate infantile poverty, these allowances are to be strictly addressed, that is assistance must be rendered to such households whose incomes are below a certain limit .

And finally, in the majority of industrially developed countries, there exist certain programs for the provision of assistance "in the final instance". Such allowances are paid to those families which do not receive any other forms of assistance while having insufficient incomes and no resources to satisfy their basic needs. In Canada, such a program is called welfare. The implementation of this program is supervised by the thirteen sub-national governments (provincial and territorial), and the procedures differ from one region to another. Welfare is likely to be the most contradictory of all programs of income support, and the degree of public backing for this program is very low. In fact, the participation of a person in this program means his or her total failure because the program leaves this person in poverty, for the size of the allowance is always below the poverty line.

Implementation of income-support programs
A. The criteria of participation in the programs

When the aims of a policy of social assistance are already defined, it becomes less difficult to find relevant methods of payment as regards the corresponding allowances. "Less" difficult because no procedures of payment of social allowances are ever simple and straightforward. It is always necessary to take into account a number of factors. First, can the payment of allowances create any negative stimuli as far as employment is concerned? One of the largest Canadian programs - that of insurance against unemployment - has been criticized for many years. It is believed that this program aimed at income support and regional levelling-out is poorly organized. The program is also criticized for undermining labour ethics and work-related self-esteem and smothering any initiative on a local level. It is thought that the program is not conductive to the development of self-employment and small business. It is also argued that this program only aggravates the problems of unemployment in the regions heavily dependent on it - for example, this effect manifests itself in the Atlantic region with its weak economic base mainly focused on fishing.

Similar accusations are also addressed to the programs of financial assistance to the disabled. If certain people are incapable of working because of illness, they are usually ranked in the category of "the poor deserving assistance". At the same time, there emerges a question concerning the degree of this aid and the optimum procedure of payment as regards the corresponding allowances. But when the disabled have the capacity to do certain work, the decisions on granting pensions become much more complicated. The main problem is to keep a balance between income support and provision of employment. If the disabled are sure of getting the allowance again in the case of inability to proceed with work, it is unlikely that they would ever try to find a paid work.

Even more difficulties are encountered in the process of realization of public-welfare programs. The recipients of such aid are usually considered as the poor "not

deserving assistance" because they have had to turn to this program for help in order to satisfy their basic needs. In people's eyes, reception of welfare usually meant that the recipients because of their own weaknesses cannot find work or keep the job. This is why everything is done to return the recipients of welfare back to work and to deprive them of allowances. The state believes that its role is limited to freeing the recipients of their dependence on welfare. To taxpayers are eager to prevent the recipients not deserving assistance from getting any money from this scheme.

This negative attitude and the existing stereotypes complicate the development of a coherent and humane policy of income support. At the same time, the importance of methods combining the acceptability to the taxpayer and the stability of conditions for the recipients of allowances is emphasized once again.

B. The development of income-support programs

Social insurance
Social insurance provides income protection by consolidating in a single fund all insurance contributions intended for the payment of allowances in the case of materialization of such risks as unemployment, retirement or accidents at the place of work. The allowances are paid only in the case of materialization of a risk envisaged in the insurance cover.

Canada has three ongoing insurance programs: insurance of employment (formerly known as insurance against unemployment); the Canadian pension plan (and its double, a program implemented only in the province of Quebec); and the program of compensation of workers. The Federal Government manages the program of insurance of employment and the pension plan, while the provincial governments exercise administrative management of the programs of compensation of workers.

All contributions to employment insurance are completely deducted from wages and salaries of the insured. The employers in their turn also make contributions (a fixed share of the pay-roll fund). Self-employed persons are not entitled to this form of insurance.

As far as the pension plan is concerned, the employees make contributions in proportion to their wages and salaries (up to his or her average wage rate). A similar contribution is to be made by the employer as well. The self-employed make double contributions (for themselves and for the employers).

The program of compensation of workers is implemented somewhat differently. Contributions to the funds of social insurance are made by the employers alone. These programs are the instrument of legal protection of the employers in the case of accidents at the place of work when the employee affected refers a damage claim to the employer. Insurance benefits are paid when the contributions to the corresponding funds have been made during the required minimum period of time. Apart from this, other restrictions can also be introduced as regards some specific insurance programs.

The programs of income support directly financed from the budget

In Canada, three types of allowances are directly financed from the these programs including both the universal and the addressed ones - the allowances are paid on examining the income or the neediness of the applicants.

The universal programs

In the framework of universal programs of income support, allowances are granted to all households answering certain criteria irrespective of the level of their average per capita income. Qualification for the allowances does not depend on non-participation in any other programs of social assistance.

Thus, for example, in the framework of the income-support program for the elderly called "Old Age Security", the allowances had been granted to all citizens over 60. It had been sufficient to reach a certain age and to have Canadian citizenship to get entitled to the allowance. In 1989, some of the requirements were altered so that the allowances to well-off citizens could be reduced or even completely cancelled.

Canada also had a universal (all-embracing) system of family grants. All families with children were entitled to an allowance irrespective of their income level. Such universal programs are extremely costly because they cover a huge number of recipients. At the same time, the size of allowances granted to individual recipients can differ even in the framework of universal programs.

In Canada, the allowances granted in accordance with the "Old Age Security" program are levied with income tax. Income taxation is also envisaged in the program of family grants. The size of allowances paid in accordance with these programs was standard for the elderly and for the families with children. Nevertheless, after the deduction of income tax, the amounts paid were re-distributed in favour of the poor - families with low incomes received their allowances in full, while the more prosperous - on paying their income tax - could in some cases receive just one half of their original allowance. The two other programs - Insurance from Unemployment and the Pension Plan (Canada / Quebec) - are also universal by the character of their application. The elements of addressing are guaranteed in their case by the fact that the allowances paid in accordance with these programs are levied with income tax.

The programs envisaging examination of incomes

All the programs of income support existing in Canada - the program of concessional taxation for families with children, the guaranteed supplementary allowance for married couples, and the repayable tax credit for purchasing goods and services envisage - examination of incomes. This examination limits the number of recipients; it is also used to define the amount of the allowance to be granted.

The households with incomes not exceeding the authorized threshold value, are entitled to get the allowance in full. When the threshold is over-shot, the amount of the allowance reduces as the incomes increases. When the maximum value (the so-called cut-off point) is exceeded, the payment is suspended.

The programs envisaging examination of neediness

Examination of neediness further reduces the number of those entitled to the allowances. The examination is used to determine the right to receive a certain type of allowances, and sometimes - to calculate the size of these allowances.

The neediness test is aimed at determining the fact of neediness and its acuteness. First of all, it solves the problem of whether a given household is entitled to receive the allowance in correspondence with the liquid assets and property it possesses. The liquid assets include cash and securities (the amount of these assets

must be below the threshold value). Then the property of this household (the house, cars, tools, equipment) is evaluated. These assets also must not exceed the admissible level. If the liquid assets do not exceed it, the next step will be to define the aggregate income of a given household. The potential sources of income include the wage (salary), income from self-employment, interest on deposits, dividends, rent income and income from property. The aggregate income is correlated then with the needs of the household - both general and specific. The general needs corresponded to a certain basic set comprising food stuffs, housing and communal services. Family composition is also taken into account - the size of allowances varies in accordance with that of the family, the number of children and their age. Special needs result from health condition or disability; the remedies include spectacles, wheel-chairs, medications and prosthetic appliances.

B. The assessment of the structure of the programs

Among the advantages of social insurance, one could mention the fact that its purpose is to materialize an efficient, effective and balanced program of income replacement for the employed. Theoretically, these programs must guarantee justice and reciprocalness. The workers who have made the required contributions, receive an insurance compensation when an insured event envisaged in the insurance contract takes place. The collective character of insurance makes it possible to use the economies proceeding from the scope of operations and to achieve a higher effectiveness in comparison with private, commercial schemes of insurance.

In Canada, certain changes have taken place recently so as to restrict the right to receive insurance indemnities for unemployment, disability allowances within the framework of the Canadian pension plan, and compensations of workers. These changes have caused a lot of criticism. They are negative not only from the viewpoint of potential recipients who would either receive reduced allowances or nothing at all. These changes also sever the link between the insurance compensations and the granted benefits. As a result, doubt is cast on the social contract itself, the mainstay of social insurance.

In particular, public confidence in the schemes of social insurance was undermined by the fact that in Canada only one third of the insured workers who have become unemployed are receiving allowances according to this program. Thus, there emerges a general feeling that workers do not receive payments corresponding to the contributions made by them.

The programs envisaging examination of incomes have their own unique advantages. It is believed that they are based on objective criteria, simple in the administrative respect, and never stigmatize the recipients with the implication of poverty. The right to receive the allowance is easy to determine in accordance with the form of income tax. The decisions are not taken on the basis of a lengthy examination of various circumstances existing in a certain household. Contacts between the recipients of allowances and the officials of the system of social protection are reduced to a minimum or become unnecessary. As soon as the right to receive the allowance is determined, payment is effected automatically - all the operations in the computer system will proceed in a prescribed mode. The allowances are paid on a regular basis in accordance with the rules uniform throughout the country.

The major failing of the programs envisaging examination of incomes is the fact that they ignore special needs or circumstances which require additional expenses.

Households with a high income level do not receive any allowances like tax rebates for families with children even in the case of additional expenses caused by poor health or the necessity to pay for education of the children. In accordance with the programs envisaging examination of incomes, the allowances are recalculated only after the income level has changed (after l8 months).

It is exactly this shortcoming of the programs envisaging examination of incomes that represents the major advantage of the allowances paid on the basis of examination of neediness. In this case, consideration is given not only to the income level but also to the special circumstances which create additional money requirements.

But the principle shortcoming of these programs is that they intrude into private life of the recipients. Determination of one's right to benefits requires some very detailed information. The decisions remain the prerogative of officials from the system of social protection who subjectively assess the acuteness and urgency of specific family needs. A situation can emerge when a household in one province can receive an allowance, while under exactly the same conditions but in another region this allowance would never be granted to it.

The reform of the system of income support in Canada

The scope and rate of changes occurring in Canadian social programs do not completely correspond with the traditionally modest Canadian national character. The system of social insurance has undergone an all-embracing transformation which had started in the 1970s, gained momentum in the 1980s, accelerated in the 1990s and is continuing in the first decade of the new century.

There has been a shift towards targeting based on examination of incomes, away from the traditional universal methods and the methods of examination of neediness. These changes are taking place in a wider context of changes in other social programs, services in the sphere of social security, employment and medical care.

The emerging "post-welfare-state" model is based on the fact that the state cannot shoulder the whole load of social programs. The model is focused on the assistance to non-state actors such as the employers, trade unions, social groups and communities permitting them to play a more active role in the implementation of social programs. The Canadian version of this new model is only being developed. Within this model,

➢ a wide and progressive system of examination of incomes replaces the universal programs in the sphere of income support;
➢ special attention is given to the unintended effects of destimulation of economic activity of the recipients of allowances;
➢ consideration is given to the interrelationships between social programs and the taxation system;
➢ balancing of the "active" and "passive" social programs as well as of the proactive and preventive approaches is intensified;
➢ harmonization of the federal and provincial social programs is taking place, the degree of duplication and overlapping of the programs is being reduced;

> ➤ financial stability of social programs is being secured;
> ➤ the multipolarity of the system of social services is acknowledged, the joint efforts of the government sector, the private sector and char liable organizations are optimized;
> ➤ special emphasis is placed on the realization of the economic function of the existing social policy especially in the sphere of training and education aimed at ensuring competitiveness of the labour force, and at creating a social infrastructure (universally available medical care and education) supporting economic growth and attracting a competent labour force;
> ➤ the necessity to measure the results of the implementation of social programs and to furnish the general public and the corresponding nongovernmental organizations with the reports on these social programs is accentuated.

The emerging system is not free from contradictions, and the socially oriented NGOs in general do not approve the new approach entailing the examination of incomes and the tendency to force out the old universal procedures of furnishing social assistance.

The universal model of social policy

The Canadian system of social security was formed in general in the second half of the 20th century. At the same time, in many respects the obtained system was based on the works of specialists on the social reform of the l920s-l940s. It is in these works that the justification of a universal model of social assistance was formulated for the first time. Even today, the position of many groups as regards the problems of social reform, especially the position of the "leftists" are formed under influence of this model.

The universal model of social security has emerged as a counterbalance to the liberal model of social policy dominant till the Great Depression of the 1930s. The liberal model proceeded from the paramount importance of the free market; the state was invested with a rather limited role in the distribution of incomes, goods and services.

The welfare state corresponding with the universal model, on the contrary, was to play a key role in eradicating inequality in the distribution of incomes and wealth generated by market activities. But the market as such is not capable to eliminate the risks of unemployment, disability caused by illness or ageing, and invalidity. The traditional institutions such as family, Church and charitable organizations cannot provide a necessary support to the needy families and individuals. The risks inevitable in modern society cannot be shouldered by individuals, their families and private institutions alone. The sphere of responsibility of the government includes the protection of citizens from the loss of income or the insufficiency of the income level, and the provision of a free access to the basic services relating to education and medical care.

The state performs these functions by carrying out social programs of income support and social servicing as well as programs of employment and medical care. The economic policy and the educational system also play an important preventive role by reducing unemployment, promoting economic growth and investing in human capital. Social programs are the first line of defense from the exposure to economic risks and not the last ditch to resist in.

In the universal model, social benefits are considered as the rights granted to citizens in accordance with the objective criteria of neediness. These benefits are not the privileges distributed by the administrators of the system of social security after an all-embracing examination of the applicants' situation. This model envisages implementation of a much wider circle of social programs than the liberal approach; such models are oriented to different targets and large groups of the population - not to the poorest only.

The prevention and reduction of poverty remain the fundamental aims of the universal social policy. Social programs are also oriented to the relatively well-off members of society experiencing a temporary decline of their income level. They also compensate for certain additional expenses borne by families upbringing children and by disabled pensioners. The existing social services and employment agencies help the citizens to cope with economic changes and with certain changes in the structure of their households. Social programs provide access to the basic services of medical care to all citizens.

In correspondence with its name, the universal model envisages the availability of social programs to all citizens irrespective of their income levels. The right to receive an allowance must not depend on non-reception of other allowances. By granting allowances to everybody, universal social programs generate general public support of the system of social security including the programs oriented to the poor and to those Canadians whose income level is modest.

At the same time, universal programs do not envisage similar allowances to be paid to all recipients. In Canada, all universal allowances (old-age pensions, family allowances, insurance benefits) are included in the amount of a taxable income. Thus, the amount of allowances to be paid decreases as the recipients' income level goes up.

Universal programs can apply the qualification criteria other than income, for example, age - when granting pensions, or the presence of infantile dependents - when granting children's allowances. Universal programs are financed either from the net tax revenues or from the tax on the pay-roll fund paid by the employers or employees.

Despite the fact that universal programs naturally hold a key position in the universal system, much attention is being given to the programs taking in account the level of financial requirements on the part of the recipients. These non-universal programs sometimes called "address" are oriented to people with a certain income level, as a rule with low or average incomes. At the same time, some programs (deductions from a taxable income (which are equal to the amount of contributions to the professional pension plans or individual plans of pension savings) exclude the poor from the ranks of recipients, while more affluent taxpayers are gaining the first prize.

It is possible to single out the two different types of "address" social programs: first, the programs of social assistance envisaging a detailed and "intrusive" test of the recipients' resources covering their incomes, assets and requirements, and second, the programs relying on examination of incomes (e. g. tax rebates for families with children) envisaging a simple income test based on annual income statements.

The framework agreement on the social union

For some time, the distribution of authority between the Federal Government and the governments of the provinces has been determined not only by the Canadian constitution. It was heavily influenced by the new circumstances stipulated in a framework agreement on the social union signed in February 1999.

During the last three years, Canada has been witnessing lively discussions on the new framework conditions of federalism referred to as "the social union". In February 1999, the Federal Government and the governments of the provinces (except Quebec) signed an agreement on the social union.

The agreement formulates the basic rules concerning the future cooperation between the Federal Government and the governments of the provinces. The agreement is aimed at ensuring collaboration between the authorities of both levels in solving the major social problems which do not come within jurisdiction of just one level of government. This agreement envisages a higher degree of responsibility for spendings from the state funds.

The major specific feature of the social union is the necessity of joint work in all envisaged spheres to be performed hand-in-hand by the Federal Government and the provincial authorities. Ottawa is no longer capable of unilaterally determining the rules to be observed by the provinces if they want to receive the means from the federal budget. According to the conditions of the social union, all the rules pertaining to the allocation of means, implementation of programs and accounting must be jointly determined by the Federal and regional governments.

At the same time, the concept of "equality" of the authorities does not mean that in certain cases some prerogatives can fall under exclusive competence of the Federal or regional governments. For example, the Federal Government can commit itself to implementing the programs of income support, because it is capable of providing equal conditions of social assistance in all regions of Canada. On the contrary, the provinces have wider opportunities to implement the programs of medical care and social servicing. They can better understand and tackle the specific situations and requirements existing in the regions.

The negotiations on the social union proceeded from such a concept of partnership between the federal and provincial levels of governance when both levels of authority are playing an important role. In the framework of this partnership, different variants of actions can be put into effect if the new problems emerge. The policy pursued on the regional level can have some specific features. Nonstandard decisions become not only inevitable but also desirable because different levels of authority act in conformity with their fiscal and political priorities. The agreement on the social union envisages the accountability of the authorities of all levels. All levels of governance are accountable to the population and different groups of interests, for example, to families with children or the disabled.

In brief, the social union is designed to carry out effective cooperation in the three following spheres: reforming of the existing social programs; renovation of the federation by introducing certain new forms of interbudgetary relations and ensuring the accountability of all levels of governance to the population.

The roots of reforms: international programs

International experience and research in the sphere of intercountry comparisons have exerted considerable influence on the organization of income-support programs in Canada. In particular, the works of the Organization for

Economic Cooperation and Development (OECD) have become an impulse for more active investments in active programs. These programs are aimed at restricting the dependence on income-support programs and at helping to restore the links with the labour market and to seek paid work.

In the mid-l980s, the OECD identified the disbalance in the choice of forms of struggle against unemployment and the strong bias in favour of the so-called passive measures on the labour market as one of the serious problems. Later on, the expenses on active measures on the labour market in the OECD member-countries were regularly monitored. The Job Study published by the OECD contains a list of recommendations regarding the intensification of active measures on the labour market (the list includes more than 60 recommendations).

The problems of the development of active programs was thoroughly examined in the mid-1990s in the framework of a survey of Canadian programs of social security. This approach has influenced the results of the survey - as reflected in the reorientation from insurance against unemployment to insurance of empolyment and in the simultaneous shift towards a wider proliferation of active measures on the labour market.

The implementation of the concept of active measures on the labour market has led to reorganization of the systems of social security on the provincial level. Every territorial unit has envisaged measures to carry out transition from "dependence" to "self-reliance". The active programs received various names; "The Program of Promotion of Employment" (Newfoundland), "The Works for Ontario", "The Strategy of Training for Saskatchewan", "The Support of Independence" (Alberta), "The Priority Employment" (Manitoba) and "The Choice of Effectiveness" (the North-Eastern Territories). Despite the difference in names, the aims of these programs are identical: to help the recipients of social security benefits to find paid work and to enter the labour market.

The OECD also carried out research devoted to "passive" measures in support of incomes. The three volumes of research in the field of social exclusion and social assistance, issued by the OECD, make it possible to thoroughly compare the systems of social security in the ten member-countries of the OECD including Canada.

The research ends with a conclusion that all countries are facing a serious common problem: many households receive insufficient remuneration for their work. The loss of allowances and tax rebates turn out to be on par with the incomes. In the framework of programs of social assistance, some benefits are furnished in kind, which makes the "exit" from these programs even more difficult. When returning to work, many of former recipients will have to go to certain work-related expenses on clothes, transport and child-care. Apart from this, the amount of a person's salary or wage decreases by the amount of contributions to the pension plan of Canada, contributions to employment insurance and income-tax payments.

Bearing in mind all factors including the income tax, tax on the wages fund, expenses regarding the return to work and the loss of benefits in kind, many of the recipients of aid will only lose if they find work. In fact, the OECD countries are facing one and the same political problem of how to balance the function of "social security" with that of "stimulation of employment".

One of the possible ways to overcome the contradictions between active and passive measurements of social security is to approach the problem from another angle. The point is not how to redistribute the money by reducing expenditures on the programs encouraging parasitism. In fact, it. is necessary 'to find the means which

would permit low-income households to enter the labour market and to take roots there. We believe that this problem can be solved by a number of measures in the two fields not related directly to social security, that is, the family policy and promotion of emmaployment.

Family policy includes income support and services. One of the methods of assistance to low-income families can consist in furnishing them with a considerable amount of money. Even in the initial stage of development of the Canadian system of social security, its authors were aware of the important role of children's allowances filling the gap between wages and salaries on the one hand and family income on the other in the case of families with low or medium income.

Families with working parents are in need of a considerable volume of social and medical servicing easing the conflict between work and home and making it possible to cope with those problems which cannot be solved by additional expenses alone. Looking after children, formation of their character in early childhood, supplementary services of medical care are becoming the key elements in the list of supplementary measures of assistance furnished to families with children.

Another problem relates to the fact that future workers often cannot enter the labour market because of the additional expenses pertaining to the return to work. These expenses include the transport costs of interviews, the cost of working clothes, the cost of a license in the case of professional drivers or operators of complex equipment, the cost of professional training, the license payments, the cost of tools and instruments, and the cost of safety equipment. Financial assistance is required throughout the period of transition when the unemployed restore their positions on the labour market.

In brief, the main problems of any policy of reforms in the sphere of social security must be solved outside the framework of social security. The Canadian approach to these problems is considered in the next section.

The reform of social security and children's allowances

In the course of transition from the universal approach to the principles developed in the "post-welfare-state" stage, the reform has affected nearly all major social programs. Some of the changes were minor though a sequence of minor corrections can in time lead to a more or less substantial structural reform. Other changes were abrupt and more radical.

Among the most important changes one could cite the radical revision of the system of social assistance and children's allowances. As previously indicated, during a number of years, the tasks of organizing social assistance has encountered the emergence of new problems. This program has been increasingly criticized both by the government and the general public dissatisfied by the fact that social security was very costly for the budget.

The system of children's allowances needed to be reformed for another reason. It was a patchwork of individual programs each pursuing its own objectives.

The reform to be discussed by us has resulted in changing the configuration of the system of social security and children's allowances. The major share of the monetary means received by Canadians in the framework of transfers relating to the system of social assistance is paid nowadays after examination of incomes. Examination of incomes has become, in fact, the basic   principle of the program of income support (tax rebates for families with children). In the framework of these

programs, financial assistance is being rendered to approximately eight Canadian households out of ten.

Social assistance

In Canada, social assistance is a program of "assistance in the final instance" the provincial governments are responsible of. Within the framework of this program, assistance is rendered to the families and familyless individuals without sufficient means to meet their requirements who have exhausted their right to receive assistance for all other reasons. This form of assistance is mainly oriented to the jobless and families with no sufficient means to answer their requirements.

Each province has its own rules determining the procedure of granting the allowances (the criteria of neediness and the size of the allowance). There can be three reasons for the allowance to be granted: the rules existing in a given province, the volume of liquid assets, and the examination of neediness.

The rules existing in a given province determine the type of families which can be entitled to assistance. For example, in most provinces, the allowances are not paid to strikers, and there exist special rules applicable to students and persons dependent on their parents.

The second criterion is known as "the rules of exclusion based on examination of liquid assets", These rules determine the maximum level of liquid assets a household can have if it applies for social assistance. Each province can introduce its own restrictions. There are also some restrictions concerning property - ownership of a house, furniture, car, equipment etc.

The examination of neediness is the key factor for all provinces. In the course of this examination, all basic requirements on the part of family members - food, clothes, housing, communal services - are taken into account. Special requirements of a given family as regards medications, health food and appliances for the disabled are also taken into consideration. During examination of neediness, it is determined what amount of resources has already been obtained by a given family. The resources include all types of earnings, benefits, individual savings, assistance coming from friends and relatives, social insurance benefits, pensions and income from other sources.

A household is entitled to assistance (provided that every rule is observed) if the resources it has are not sufficient for meeting its requirements. The size of the allowance is determined by each province on an individual basis. It can depend on the size of a family, the number of children, the family status of the head of the family, his or her chances to find work, and other factors (e. g. disability).

The restrictions imposed on earnings are another crucial condition regulating the procedure of granting of social assistance. A maximum amount of earnings is determined as regards any recipient of assistance, and when this amount is exceeded the amount of the allowance decreases.

The technique of granting of social assistance differs throughout the country. In some provinces, for example, in Quebec, the maximum authorized amount of earnings is fixed, and the payments relating to the programs of social assistance are reduced by one dollar per each dollar earned in excess of the authorized level. In other provinces (for example, Yukon), the payments are reduced by a certain percentage of the earnings. Until the maximum value is reached, the recipients of allowances can receive a fixed percentage of their earnings, but when this value is

reached, the amount of the allowance decreases. Most of the provinces combine these two approaches.

Despite the differences in the procedure of granting of social assistance, the size of the said allowances in all provinces is well below the common poverty threshold.

For example, the size of allowances paid to single parents with one child varies as follows: 70% of the poverty threshold in Newfoundland, 60% in Prince Edward Island, 63% in Nova Scotia, 62% in New Brunswick, 57% in Quebec, 60% in Ontario, 50% in Manitoba, 59% in Saskatchewan, 50% in Alberta and 60% in British Columbia.

The allowances paid to able-bodied familyless citizens are even smaller. In 1999, they varied between 9 per cent of the poverty threshold in Saskatchewan and the maximum 41% per cent in Ontario. The allowances paid to familyless disabled persons varied between 42 % of the poverty threshold in Alberta and up to 70% in Ontario. Finally, families composed of two parents and a child received the allowances which varied between 45% of the poverty threshold in Quebec and 62% in Prince Edward Island.

These allowances are insufficient not only in absolute terns, they are also insufficient by being unindexed in relation to any increase in the cost of living. The allowances are increased irregularly and erratically. Though the cost of living has grown in the course of time, in the majority of jurisdictions the size of the allowances has been frozen or even reduced.

Apart from the fact that the size of the allowances is insufficient, most of the provinces have introduced certain rules making it more difficult to receive the right for social assistance or to get this right confirmed during re-registration. This tightening; of the rules is called to reduce the general budget costs.

The province of Quebec has introduced a rule on parents' responsibility. All persons of l8 years of age and older (not married and childless) who have not announced their independence from the parents, are considered dependants. Their parents are obliged to financially support them.

In accordance with the norms existing in the province of Ontario, the able-bodied persons quitting for no sufficient reason are not entitled to social assistance during the three ensuing months. In some provinces, single parents with children are considered able-bodied which means that the pays-lent term as regards social assistance is sharply limited, because the said persons are obliged to participate in the active measures and find work.

Some of the provinces, and first of all Ontario, have completely reorganized their systems of social assistance. In 1997, this province replaced the two former programs with the program "Works for Ontario" open for participation of the able-bodied persons receiving social assistance, and the program "Support of disabled persons of Ontario" in which persons with chronic diseases can participate. The program "Works for Ontario" turned out to be rather contradictory - for the first time, payment on the provincial level was preconditioned by participation in public works or other kinds of activities.

In other territories, the reforms did not have such a radical character. At the same time, during the last few years, there has been introduced an orientation towards active measures corresponding to the general policy pursued by the OBCD.

These programs differ from one another but have a common structure. They are oriented at providing the recipients of social assistance with such skills and

resources that are necessary for them in order to quickly return to the labour market. Assistance is furnished in the form of help in finding employment, preparation of résumés, improvement of literacy, formation of professional skills, retraining' and professional orientation.

Apart from the active measures focused on the improvement of skills, the provinces are introducing various programs of assistance to socially vulnerable groups (supplementary payments, disability pensions, and child benefits).

Child benefits

In Canada, considerable restructuring of federal and regional programs of assistance to families with children is taking place. The federal level and the provinces jointly materialize the initiative referred to as "the Rational Children's Allowance". This program is typical of the reforms proceeding in the period of transition from the universal approach toward social assistance - to some new principles.

Historically, children's allowances have been aimed in Canada at solving the two following problems; first, to combat poverty, and second, to ensure "horizontal justice". In accordance with the first objective, the allowances are filling the gap between the earnings of low- and average-income families and their requirements. The elimination of this gap is necessary because the market economy does not envisage any modification of the wage (salary) level in accordance with the number of dependants. The term "horizontal justice" means that children's allowances are becoming for society one of the instruments of financial "accounting" of the fact that families with children irrespective of the level of their incomes have to shoulder additional expenses not existing in the case of childless families.

From insurance against unemployment to insurance of employment

Insurance of employnent was previously known in Canada as "insurance against unemployment". This social program was one of the first in Canada. Created in the 1940s, it was based on the universal model. Initially, insurance against unemployment was aimed at financial assistance to persons temporarily out of job.

Initially, insurance was to cover only the workers whose professional activity implied a serious risk of unemployment, first of all, those employed in industry and commerce. This program embraced only one half (42%) of the economically active population. The majority of workers remained uncovered by the insurance programs; among them were persons employed in forestry and agriculture, education, medical care and public service.

The extension of the program

In the ensuing thirty years, the Federal Government has expanded the program of insurance against unemployment far beyond the framework of the original program of short-term insurance against the risk of job-loss on the part of a small section of the economically active population. By the year 1971, nearly all employees had been insured. Job specifications - the number of working weeks required in order to get qualified for an insurance benefit - were eased, while the size of benefits increased.

The system of benefits was also extended to those workers who lose work because of illness, childbirth or retirement. Some supplementary regional benefits

were also introduced. These benefits represented supplementary payments to persons without work living in the regions with an unemployment rate exceeding the national one. A sliding scale was used - the number of weeks during which it was possible to receive a supplementary benefit depended on the acuteness of the situation in a given region. Some of the means were reserved to finance re-training of the unemployed and to fund the projects of job creation.

The employers and employees financed the programs by their insurance contributions. The employers contributed a fixed percentage of the pay-roll fund, while the employees - a fixed percentage of their wages (salaries) (up to a certain maximum level). The Federal Government funded the supplementary regional programs, benefits for fishermen and promotion-of-employment programs.

The curtailment of the programs

The law on unemployment adopted in the year l971 had increased the scope of the program, but its realization was considerably impeded by numerous problems caused by the growth of inflation, budget deficit and rising unemployment taking place throughout the 1970s. As a result, the expenditures on the program of insurance against unemployment significantly increased making it one of the most costly, and did so at the most awkward time - in the period of recession. The reduction of these expenditures became inevitable.

During the ensuing 25 years, different changes have taken place resulting in the progressive shrinkage of the program of insurance against unemployment - it was becoming increasingly difficult to secure assistance, the size of benefits was declining along with the duration of their payment term.

The turning point was the year 1995, when the Federal Government announced its decision to change the system of insurance against unemployment. In June 1996, it was officially stated that the old system would be replaced with a new one - that of insurance of employment. This change reflected a fundamental shift in the "philosophy" of the programs -from "passive" dependence to "active" employment. The aim of the reform was to exclude the unemployed from the ranks of those participating in the program, to disqualify, as soon as possible, the existing recipients, and to increase the amount of the economically active population through re-training and the improvement of professional skills.

In accordance with the scheme of insurance of employment, the two types of benefits were introduced: for those seeking work and for the employed. The adopted law formulated new job specifications, changed the size of benefits and reduced the payment term. It was believed that all those changes would enhance the incentive to seek work.

The job specifications referred not to working weeks but hours. These changes were aimed at making the system more flexible; they were intended to invest partially employed persons with the right to receive benefits.

At the same time, there occurred a tightening of qualifyng criteria and a significant increase in the number of working hours necessary for the applicants to get entitled to benefits. For workers, the obligatory number of working hours varied now between 420 and 700 in relation to the unemployment rate in a given region (the equivalent of 12-20 working weeks). According to the previous law, the entitlement to a benefit had required 180 to 300 working hours.

In order to secure the sickness benefits, maternity allowances and child benefits, 700 working hours (from January 2000 on - 600) were required. The persons starting to work for the first time and those who had been jobless for several years, were obliged to "take roots" on the labour market, and only then were entitled to insurance of employment. The time limit for them was set at 910 working hours, and on observing this rule they could become participants in the program.

The benefits amounted to 55% of an average wage (salary) from which insurance premiums had been paid. The maximum amount of a wage (salary) from which insurance premiums were charged was reduced from 42 380 dollars to 39 000 dollars. The upper limit of the allowances was reduced to 413 dollars per week.

Some other rules tightening the procedures of granting benefits within the system of insurance of employment were also introduced. For example, it was stipulated that after twenty weeks of benefit payment, the substitution rate was to decline from 55 to 50%. This restriction was aimed at reducing the number of recipients of insurance benefits from the ranks of seasonal workers who repeatedly applied for benefits instead of seeking permanent jobs.

The system of insurance of employment preserved the rules of examination of incomes used in the system of insurance against unemployment. The recipients of benefits with a relatively high income level were obliged to compensate for 30% in excess of 39 000 dollars (for those who had been receiving benefits for more than 20 weeks) and in excess of 47 750 dollars when the recipients had been receiving benefits for no longer than 20 weeks.

Additional family benefits were introduced for the families with an annual income not exceeding 25 921 dollars who had the right to the federal child benefit. These allowances depended on the number of children in a given family. Such families were entitled to receive up to 30% of an income from which insurance premiums had been paid.

According to the new law, the maximum payment term as regards insurance benefits was reduced from 50 to 45 weeks. The economies were used to finance other programs of employment promotion, these measures included bonuses, assistance in establishing a personal business, credits for re-training, and job creation. A special 300-million-dollars fund was intended to finance these active measures throughout the ensuing period of three years.

As a result of these changes, the proportion of unemployed persons receiving insurance benefits was sharply reduced - from 74% in 1989 to 36% in 1997.

In September 2000, in response to the concern caused by the abrupt reduction in the number of unemployed persons covered by the new program, Ottawa made some amendments to the Law on insurance of employment. In particular, they envisaged a certain easing of the previously introduced measures considering the length of the payment term and the maximum size of the benefits.

The lessons of Canada

Integration of benefits

The Russian Federation has introduced numerous benefits differing only in orientation, regional scope and the methods of granting. Just an insignificant percentage of benefits is granted on condition of examination of neediness, and most of the benefits are granted on the categorial principle alone.

The Canadian system of social assistance is rather complex because the federal, provincial and local governments grant social allowances both in the form of allocations from the budget and in the form of tax rebates. At the sane time, this program is incomparably simpler than the Russian one. First, in Canada, the Federal Government is implementing just eight major social programs (the old-age pension, the bonus to the old-age pension, the allowance to married couples receiving pensions, the Canadian pension plan, insurance of employment, the program of tax rebates for families with children, the veterans' benefits, and social assistance rendered to native Canadians) and a number of programs concerning tax rebates.

Realization of programs of social assistance takes place on the level of the governments of provinces, territories and (in certain cases) municipalities. The provinces and territories bear responsibility for the programs of compensation of workers, and furnish supplementary tax rebates (augmenting the federal ones) mainly in the form of returnable tax credits.

Some Canadian programs envisage "packages" of benefits furnished within the framework of a joint program of assistance. In accordance with the Canadian pension plan, financing is not limited to old-age pensions alone, but is also extended to the benefits for widowed husbands and wives who have outlived their breadwinners, as well as to the disability and burial benefits. The unemployment benefits, parental benefits and disablement benefits are rendered in the framework of the program of insurance of employment. In the programs of compensation of workers and veterans' benefits, furnishing of allowances is combined with rendering of some supplementary types of medical services.

Apart from this, Canada has carried out integration of some benefits in order to overcome the contradictions existing in the internal organization of the benefits, to reduce administrative and management costs and the doubling of administrative functions. The most telling example is the sphere of social assistance to families with children where this integration has been conducted in the two following forms:

First, the three federal programs differing in organization and objectives (the family benefits, the returnable credit for families with children and the non-returnable credit for families with children) were combined into a single allowance furnished on condition of examination of incomes. The right to this benefit is determined on the basis of calculation of a family income; the size of an allowance is also established in relation with a corresponding income level. The maximum allowances are paid to poor families, and the size of the allowance declines as the recipients' income level goes up.

Second, the federal and provincial benefits were integrated in the framework of a national children's allowance so as to increase the federal share and to respectively decrease the share financed by the provincial governments, while financing was extended to cover the new types of allowances and bonuses furnished on condition of examination of incomes. These allowances are furnished through the federal tax system on behalf of the provinces and territories. Thus, the integration of the federal and provincial programs of income support aimed at families with children involves both the organization of the programs, and the procedures of granting the allowances and payments to the population.

At the same time, it is easier to theoretically justify the integration of allowances than to carry it out in practice. The Federal Government has recently attempted to integrate the three types of allowances for old-aged persons into a single address-program of social assistance (the allowance for senior citizens) similar in its

organization and orientation to the Canadian system of children's allowances. This idea was energetically criticized by both the left- and right-wingers, and the government was forced to abandon its plans. The pension policy in Canada as well as in the USA and in the majority of other countries is an area politically very sensitive, and the conduct of it always implies the necessity to cope with strong resistance on the part of well-organized opponents.

The introduction of the national allowance furnished to families with children has also provoked criticism from various social groups lamenting the fact that certain low-income families, clients of the system of social assistance, were entitled to receive the allowances within their former limits, while the employed poor families could receive a substantial gain in real terms. The major reforms of social programs always put forward the problem of losers and winners.

Such a consolidation is never easy in political respect despite the fact that it can   seem absolutely logical as regards the implementation of a certain program, and desirable as regards the administrative and management costs. People can feel that they are losing something even if the former allowances are continued to be paid to them, though in a different form. They must be informed on the reasons for which the form of these allowances has been changed. In the course of any consolidation it is necessary to guarantee that the position of low-income persons will at least not deteriorate in comparison with the pre-reform period. Any decrease in allowances can be afforded only in those cases when it affects the high-income strata of the population alone.

A lot remains to be done in Canada in order to systemize the system of benefits. Some benefits are furnished in the form of tax rebates to the disabled and their families (these benefits are rather hard to assess from the standpoint of their socio-economic effectiveness). In other cases, an allowance is granted on certain conditions (for example, the right to receive certain benefits is furnished only to the recipients of other pecuniary benefits of the same category. Some progress has been achieved recently in the improvement of these programs (the size of allowances was increased, some new allowances were introduced in the form of returnable credits granted to low-income persons, and the category of persons entitled to receive allowances was expanded). As a result, the number of programs has increased, but their structure has remained intricate.

The right to allowances

In Russia, there exists a wide-spread practice of combining the method of examination of neediness with the categorial approach (when the allowances are furnished to all persons of a certain category irrespective of their income level and neediness). Such a combination of procedures is also used in Canada, but there it is developing towards a wider application of the method of examination of incomes. Examination of neediness seems undesirable for several reasons: social assistance - a program still surviving in Canada and envisaging examination of neediness - is based on a system of strict rules and limitations, is discretionary in many respects, not easily administered and very intrusive as regards private life of the recipients and their families, being at the same time rather stigmatic. On the contrary, examination of incomes is much simpler (the right to an allowance and the size of the latter are determined in relation to the income level and in accordance with stable and

understandable rules). This system is neutral as regards any intrusion in private life, very simple in administering, and participation in it does not imply any stigmatizing.

At the same time, examination of incomes envisages the existence of a well-functioning administrative mechanism. The ideal way to accomplish these ends would be to use the tax system (as in Canada) because in such a case it becomes possible both to collect and exact payments in the framework of a single apparatus. Maybe this variant is not relevant in Russia - first of all because of the territorial disconnection of the system of social assistance and the insufficient development of the tax services' data bases.

Probably the payment of allowances can be organized by means of special centers where one could fill in the registration forms necessary for participation in the program. This approach would imply considerable expenses due to the inevitability of creation of a special system; apart form this, there emerge certain problems concerning public relations and the necessity to achieve a sufficient level of involvement on the part of persons entitled to allowances. Many potential participants in the program do not register themselves because they are ignorant of the existence of the program or simply do not want to get entangled in the red tape. The advantage of the allowances furnished in Canada in the form of tax rebates consists in the fact that all potential recipients at any rate declare their incomes in full. For them, the right to participate in the program is determined automatically on the basis of the data on their income level.

Examination of incomes by means of the system of income taxation of physical persons as it is done in Canada, envisages a one-hundred-per cent declaration of incomes. Russia still does not have such a program. One of the shortcomings of examination of incomes on the basis of a tax system consists in the fact that there can be a significant time gap between the period of acquisition of income and the moment of payment of the allowances. This problem of efficiency becomes more serious when people are encountering a serious drop in income. For example, the transition from the average-income group into the low-income one makes it possible to receive the maximal allowance, but the system can respond to any changes in the financial position of the recipients only with a certain delay.

The system based on examination of neediness, on the contrary, is highly responsive and efficient because it suggests regular examination of incomes and other factors of the economic position of a given family. At the same time, there emerge an effect of intrusion in private life and an effect of the "stigma". How serious would be the problem of efficiency of the programs, would depend on the method of organization of the program, the character of distribution of income and the regularity of its acquisition. If the majority of low-income persons receive their incomes irregularly, the problem of efficiency is not too grave. In any case, all these people have the right to the maximal allowances.

Since some people in Russia prefer not to declare their income to the authorities, they remain outside of the system of income taxation or any other mechanism of examination of incomes. People can receive their wages (salaries) inofficially, and therefore assessment of their actual financial situation is complicated.

For this reason, it could become feasible for Russia to preserve the existing approach involving examination of neediness which envisages complete assessment of the assets possessed by a household and other factors of neediness. We know from Canada's experience that this method of organization of social programs is the most costly and ineffective. Social assistance is the most unpopular and universally

despised channel of aid. Assessment of assets also presents difficulties. Even when there is a dwelling, it can turn out that the family which resides in it does not have enough money to buy food and clothes as well as to pay for public utilities. The shortcoming of examination of neediness consists in the fact that it is impossible to quickly react to abrupt changes in the position of a household and to help it in payment of extraordinary expenses relating to ill health, onset of disability or some other difficult family situation.

The simplest way to furnish allowances is to resort to the categorial approach. At the same time, the universal programs are not effective enough, inconsiderate of economic requirements and are less applicable to solving the problems of combating poverty than the address programs. In the early 1990s, Canada decided to discontinue the two largest categorial programs: the program of allowances to senior citizens and that of family subsidies.

It is likely that in Russia, examination of incomes will result in equal payments to most of the citizens because the income-distribution curve will be disbalanced in favour of low-income households. Thus the program will in fact be organized on the categorial principle even in the case of examination of incomes being used. At the same time, when examination of incomes proceeds openly, the size of allowances can be made dependent on the income level of a given family, while the amount of payments can be coordinated with the degree of neediness.

The types of allowances

The expenditures on realization of any income-support program will be very high especially when the program will envisage examination of incomes. In the financial year 1998-99, the Canadian government spent 60.3 billion dollars on financing income-support programs, or 49.5% of the net volume of financing of federal programs and 6.7% of the GDP. The largest article of expenditure was financing of the allowances to senior citizens (pensions) − 22.8 billion dollars. The amount of financing of this article is steadily on the rise because of ageing of the population.

At one and the same volume of overall financing, the address programs (implying either examination of neediness or examination of incomes) make it possible to guarantee the payment of larger allowances to a narrow circle of recipients, as a rule, the poorest. As mentioned above, Canada is moving in the direction of address social assistance envisaging examination of incomes - away from the categorial allowances or the allowances granted on condition of examination of neediness. At the same time, the main argument in favour of transition from the categorial schemes to the address approach involving examination of incomes was not the reduction of expenditures. Examination of incomes as envisaged by the scheme of social assistance to senior citizens affects only a small proportion of the richest recipients. The reform of the national program of tax credits to families with children has made it possible to substantially increase the size of allowances to the poorest, and even to increase it to a certain extent in the case of average-income persons.

Some provincial governments pay bonuses to (low-income) families with children, and experiments on the introduction of allowances to single parents are taking place in the provinces of British Columbia and New Brunswick. On both levels (the federal and provincial), a number of extensive programs of assistance to families with children is under way; the recipients are the totality of unemployed families and a

vast majority of the employed ones. At the same time, neither the Federal Government nor its provincial counterparts furnish allowances to low-income employed childless families (employed) and to employed individuals for the two major reasons: concern with the possible expenditures, and the inexpedience of any intervention on the labour market. Even if the Russian Government will decide to pay bonuses to the employed poor, it would be necessary to take into account these very circumstances. It is essential to upgrade the system of payments of children's allowances from the very beginning, and only then to introduce allowances to all of the employed poor (taking into account the high concentration of low-paid persons which exists in Russia, this measure will be extremely costly). Bonuses are feasible only on condition that some effective wage system does exist, because they are aimed exclusively at supplementing the incomes of a small percentage of low-paid workers.

In Canada, the federal and provincial governments establish the minimal wage (the federal level corresponds to that established by the local government in each of the provinces). The minimal wage is not index-tied to prices and average wages and does not react to their growth. This system of income support can function provided that an effective wage system does exist, and the very fact of its presence cannot guarantee a level of wages sufficient to meet the minimal requirements on the part of each of the employed (it is especially true in respect of workers with dependants).

The interaction between the federal and provincial authorities

One of the major lessons of Canada's reform of the system of public assistance is the achievement of close interaction between the authorities of different levels. In the past, the absence of such coordination repeatedly resulted in the emergence of various problems (as it happens today), also produced by the unwillingness of top-level officials to coordinate their actions when implementing structural reforms. The only serious attempt at introducing an allowance in the form of bonuses undertaken in the mid-1970's was a failure exactly because of the inability of the authorities of different levels to agree among themselves. The existing national system of children's allowances is a rare example of what can be done to organize an effective interaction between federal and regional bodies.

The reform of the programs and the restructuring of allowances can be successful only on condition that the role of each level of authority is adequately taken into account. When there is no integration of the programs, it is at least possible to secure coordination of actions being undertaken by different levels of authority (for example, they can jointly use some data bases). Canada's positive experience in the field of reforming children's allowances is based on close cooperation and joint work of politicians and rank-and-file officials. The national program of children's allowances was designed and materialized by a working group comprising a number of experts of the federal and provincial governments. Such groups were created in order to organize the reforms of social servicing and the programs of social assistance to the disabled. The federal and regional programs are entwined as regards the distribution of both responsibility and the rights to carry out expenditures.

The Canadian system of social protection has been doing its best to cope with the problem of imbalance between the mandates and the volume of financing. To accomplish this, news instruments have been used.

In the 1970s, the Federal Government permitted the regional governments to keep a relatively large proportion of tax revenues in order to expand their financial

base. The central government effected social transfers and equalization payments aimed at financing some expenditures on regional social programs, and at levelling-off the conditions of funding as regards such programs in the rich and poor provinces. The Federal Government has expanded its participation in the key program of assistance to families with children. Due to the widening of the scope of federal financing, the provinces have got an opportunity to redirect some of the means to social assistance in the framework of other programs, as well as to social servicing of families with children. Russia can use the experience accumulated in this sphere by the Canadian Federal Government, and thus to attain its own aims.