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The Collapse of the Soviet Fiscal System:
What Should Be Done?

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The Collapse of the Soviet Fiscal System: What Should Be Done?¹

1 Introduction

The fiscal system is one of the main tools of economic policy in every country. The state of this system determines, to a large extent, the state of the whole economy, though other influences are also significant. The economic crisis that is taking place in the old Soviet Union was caused by several factors, of which one of the most important was the budget catastrophe of 1991.

Contrary to a market economy, the fiscal system has played a secondary role in the Soviet Union during the last sixty years. The command economy was based on the physical allocation of resources; and money flows in general, and fiscal flows in particular, merely followed behind. The state was virtually responsible for the organization of production and reallocation of goods in the economy. Money was used mainly as an accounting tool. The only sector in the economy, in which money was a limited resource was the household sector. In the rest of the economy, the financial system was similar to that of the finance department of a huge corporation, where central management is able to reallocate financial resources among corporate divisions.

The Soviet command economy maintained its development path by exploiting huge amounts of natural and human resources. But even this source of economic growth, which had seemed to be unlimited, was used up by the mid 1980s. The old system lost the ability to sustain itself, and economic decline became more and more evident. The industrial capacity was not maintained, and industrial output began to decline, while the quality of goods worsened from year to year. The necessity of change in the economic system became more apparent, with renovation of the fiscal system having top priority. But in practice this renovation was postponed until the disintegration of the USSR. The changes that did take place were only cosmetic and did not improve the system. All this added to the severity of the economic crisis in the USSR and virtually caused the bankruptcy of the state, both domestically and externally.

This paper discusses the fiscal legacy of the Soviet Union, which will be the source of many of the problems the former Soviet republics will have to face in

¹ This paper was written during the stay at the Bank of Finland as a visiting researcher. Any opinions expressed are of the author only. The author greatly acknowledges "The Cultural Initiative" Foundation, supported this job by financial and technical means.

both the near and medium term as they get on with the transformation of their economic systems.

The second section of the paper examines the primary tool of the old fiscal system – the general financial balance of the state – which played a much more important role in the Soviet economy than the budget. It was a major financial document, which transformed the physical plans of the industrial ministries and local authorities into financial flows. The third section analyses the main trends in the revenue and expenditure sides of the Soviet budget over the last 15 years, arguing that the financial crisis which took place in 1991 was inevitable. The fiscal legacy the old system is the huge (more than 60 % of GNP) accumulated internal debt of the Soviet Union, which totally lacks any legal or administrative framework and whose financing drains a substantial part of the resources of the banking sector. The fourth section summarizes the overall effect of the Soviet fiscal legacy, emphasizing, besides its fiscal aspects, also its ideological, institutional and technical aspects.

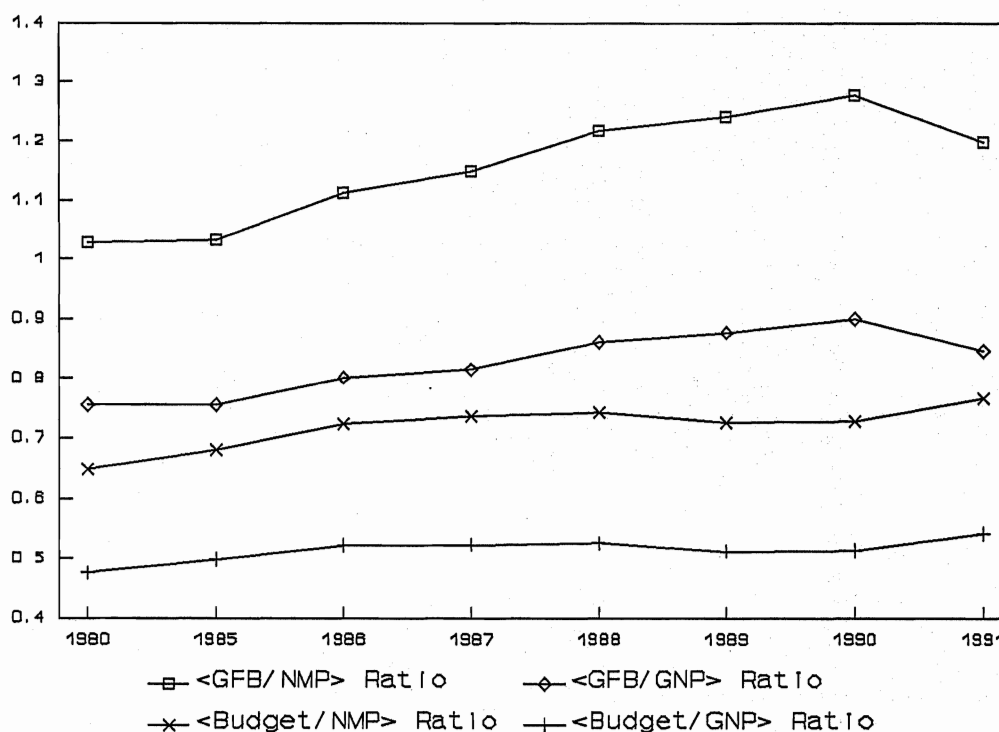
The special appendix is devoted to a brief analysis of the first stage of the Russian economic reform in the first quarter of 1992 and its influence on the fiscal system. This attempt at transformation did not bring significant changes to the nature of the fiscal system, and the problems that face the Government have increased.

There is a lot of statistical data in the paper, though it is impossible to indicate all the sources. The poor quality of the Soviet, and now republican, financial statistics is well known. A lot of data was and is secret and has never been published before. For this paper, official information, published by Soviet and Russian authorities, information distributed among the members of Parliaments (both, USSR and Russian), information from officials published in newspapers and magazines (usually after some verification), and the author's own estimates were used. A large share of the data is presented in the appendices. For the other data, please contact the author.

2 General Financial Balance of the State

The general financial balance of the state was the principal instrument of financial planning in the Soviet Union over a long period of time. It was tied in with all the physical plans for economic development and formed a basis for the budgetary process. Gosplan of the USSR (State Committee on Planning) was responsible for its formulation and fulfilment, as for the whole process of planning. **The basic idea behind this document is that the Soviet state, being the owner of virtually all property in the country, was the owner of all state enterprises and, consequently, of their financial resources also. This means that the state had a right to reallocate all financial resources in the budget and in the state sector of the economy.** The aggregated general financial balances (GFB) of the USSR for 1980 and 1985-1990, as well as its reconstruction by the author for 1991, are presented in Table 1. This instrument of overall financial planning was in force until end-1990, while enterprises were obliged to adopt their plans. Of course, the real influence of the GFB declined in the second half of the 1980s

Chart 1. **Redistribution of financial resources through general financial balance (USSR, 1980-1991)**

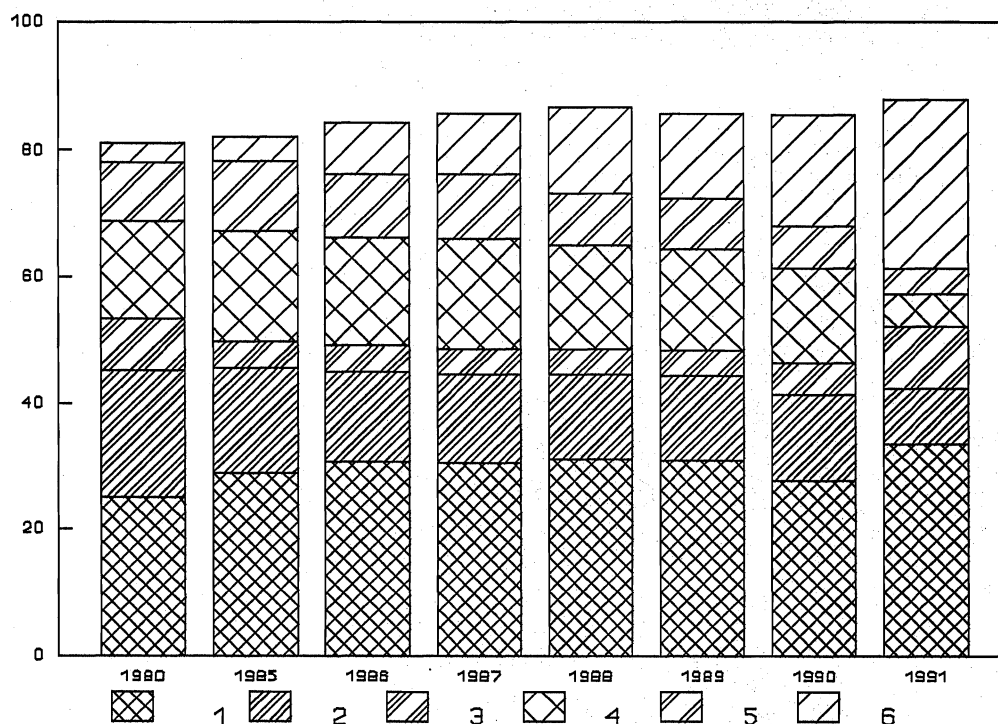


as a result of transformational attempts in the Soviet economy: enterprises received more freedom in their decisions, the basic principles of the command economy were eliminated step by step and the state's ability to enforce enterprises to implement its decisions was declining. Beginning in 1991, the GFB is no more than a tool of macroeconomic forecasting.

The revenue part of the GFB (Chart 2) included all sources of funds available to the state, including state-owned enterprise profits and depreciation, cash emissions (which was not revenue in the budget!) and tax revenues.

Each enterprise had its own detailed annual plan, adopted by its ministry, concerning physical production and allocation of financial resources. We have to keep in mind that the planning process in the command economy started simultaneously from two sides. Enterprises drafted their plans, which were revised by the industrial ministries, which received "control figures" as plan targets from the central economic agencies, mainly Gosplan. In its calculations, Gosplan used physical and financial planning, manipulating prices, subsidies, wages, investment and credit. And it was natural in the command system that this central economic body would reallocate all financial resources of the state throughout the economy.

Chart 2. **Structure of revenues in the GFB**



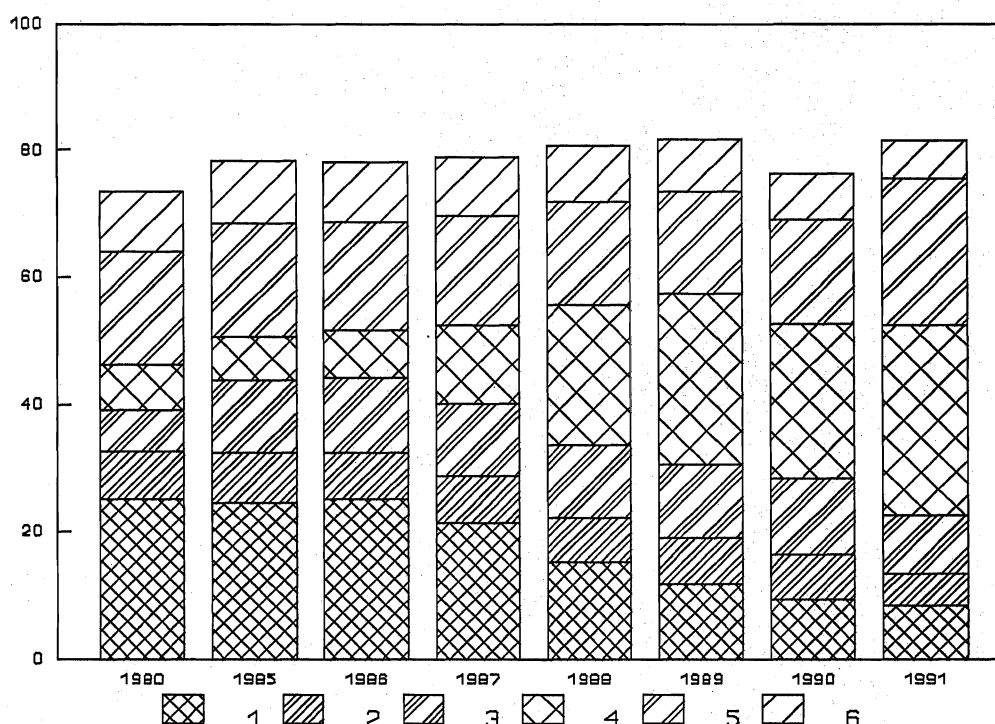
- 1 Profit of state enterprises
- 2 Turnover tax
- 3 Social insurance and personal taxation
- 4 Depreciation
- 5 Foreign activity
- 6 Cash emission and borrowing from Gosbank
- Unmarked - other

There were three principal channels for reallocating enterprise finances: the budget, the industrial ministries' funds, and the financing of centralized investment by enterprises. It is possible to correlate budgetary reallocation with inter-firm capital movements in market economies. Here, the aim of the industrial

ministries was to reallocate money within their own sectors, much like intra-firm reallocation of resources. This means that only inter-sector investment was included in the budget, while the greater share of investment, that managed by the state, was excluded.

The expenditure part of the GFB (Chart 3) included all the outlays of the state and of state-owned enterprises. The structure of this part reflects the inner organization of the planning mechanism: planning by complexes. For example, social investment was included in the "investment" item, together with industrial and military investment, and pensions to the former military were part of social spending.

Chart 3. Structure of expenditures in the GFB



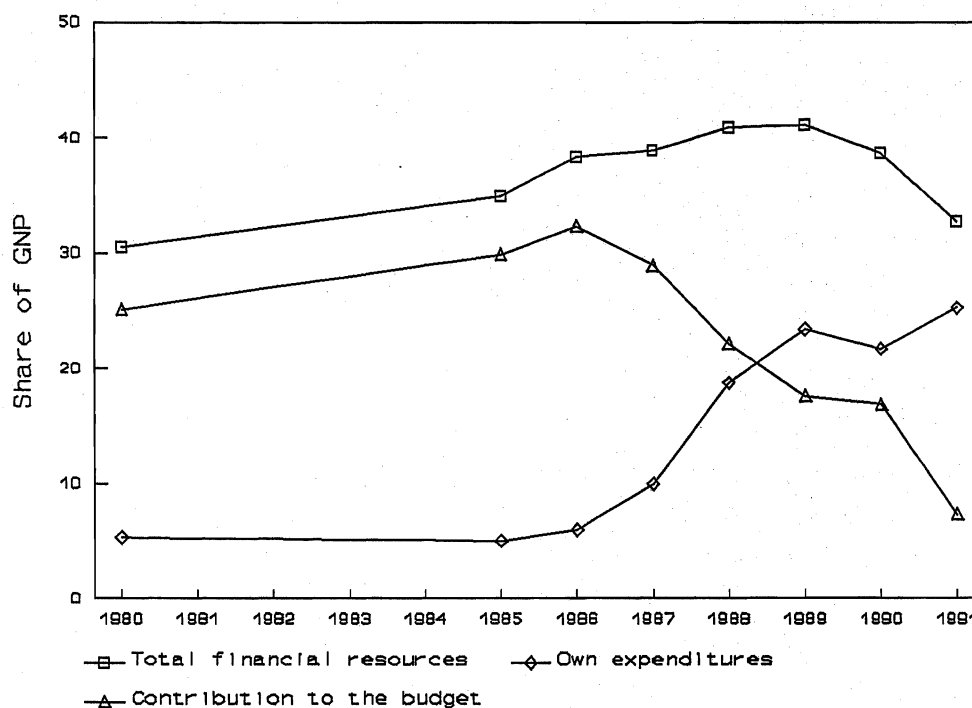
- 1 Centralized investment
- 2 Assets renovation
- 3 Differences in prices
- 4 Funds of enterprises
- 5 Social and cultural activity (excluding investment)
- 6 Defense (excluding pensions and investment)
- Unmarked - other

Current military outlays were under the control of the Ministry of Defense, whereas weapons procurement was financed via the military-industrial ministries and was not shown as military spending. But this type of overall financial plan allowed the state to manage and monitor the process of spending. In the classical

command economy, which existed until the mid 1960s, enterprises had virtually no access to their profits, and in 1965-1985 they were able to use only a small share of profits (so-called "incentive funds") under the tight control and direction of the state.

The 1980s became a critical time for the old system: the stock of resources was declining, while the functioning of the economic system was worsening. Our analysis of the GFB indicates that the financial crisis became more evident during this time in view of Gosplan's concept of state finances. While state expenditures were growing continually, the flow of revenues slowed until it failed badly to meet the needs of the state. In 1980-1985, total GFB expenditures were approximately equal to net material product (NMP) produced in the economy or about 75 % of GNP. At the end of the 1980s, total expenditures which the state tried to control were greater than NMP by 25 %-30 % and amounted to about 88 % of GNP. This means that the degree of centralization of the Soviet economy was increasing right up until the last years of the command system.

Chart 4. **Use of enterprises' financial resources**



It became impossible for the state to finance its expenditures without increasingly resorting to the resources of the banking system. The share of this item in the total revenue of the GFB increased from 3 % in 1980 to 17 % in 1990 and 27 % in 1991. At the same time, the growth of turnover tax yields came to a halt, and its share in total revenue was declining. (This was partly due to political decisions and to the structure of this tax, as explained below). The same process was taking place regarding foreign revenues, which declined with the decline in raw materials exports and worsening of Soviet terms of trade, due to the fall in world oil prices.

Beginning in 1987, the share of financial resources² remaining at the disposal of enterprises began to increase rapidly (Chart 4). In 1980-1986, about 70 % of enterprises' resources went into the budget or ministry funds. In 1988 this share dropped to 42 %, in 1989-1990 30 % and in 1991 only 12 %. The reason for this change was the partial transformation of the economic system through the introduction of the self-financing principle in enterprise operations. Enterprises received more financial resources and, at the same time, became responsible for their own spending. The counter side of this development was the decline in budgetary revenues. This would have caused a decline in state outlays if there had been a hard budget constraint. But in the case of the USSR, the state had direct access to the resources of the banking system, being the owner of all banks. As a result, the growth of expenditures was financed by domestic credits. Expenditures declined to some extent, but mainly through a reduction in the amount (and share) of centralized investment. This item dropped from SUR 150 billion in 1985- 1987 (annual average) to SUR 90 billion in 1989-1990, and its share in the GFB declined from 25 % in 1980-1987 to 10 % in 1989-1990³.

An unexpected tendency was discovered in the analysis of social expenditures in the USSR (excluding investment but including consumer price subsidies). Though their nominal volume was growing continuously, their share in total GFB expenditures remained virtually constant. The share of subsidies increased by 1 percentage point in 1985-1990; its fluctuations during this period probably depended on the weather. The share of current social expenditures (excl. subsidies) even dropped by 1.5 percentage point in 1988-1990 compared with 1980-1985.

To sum up, the worsening of financial difficulties was a permanent feature of the 1980s. The GFB reflected all the actual problems of the Soviet economy and was a mirror of its nature. But the problems in connection with the Soviet fiscal system became even more severe.

² According to Gosplan methodology, the financial resources of enterprises include profits and depreciation.

³ This process to a certain extent caused the economic crisis in the republics of the old USSR. While the general volume of investment grew in the USSR until 1990, the efficiency of investment fell substantially: the volume of unfinished construction increased, while the output of new industrial units decreased. This is explained by the fact that due to the soft budget constraint, state-owned enterprises began to invest only in their own production lines or social welfare, believing that it would be easier to find money in the future for financing construction (as had been the case in the past). But the growing financial troubles forced the state to reduce investment spending from the budget, and at the same time enterprises' profits were often insufficient to finish the construction projects that had been started. From the other side, enterprises had no choice and were obliged to invest in their own assets because of the absence (even now) of an institutional framework for capital movement.

3 The Soviet Fiscal System

The Soviet budget was usually planned on the basis of expenditures, with the revenue side playing a secondary role. The state in the command economy was able to reallocate virtually all of the country's financial resources. The volume of total budget revenue was dependent on the volume of total budget expenditure, as the state was able to provide any needed resources for the budget. This is why the analysis of the Soviet fiscal legacy begins with the expenditure side.

3.1 Expenditures

The overall structure of expenditures of the consolidated Soviet budget⁴ is presented in Table 2 and Chart 5.

The essential feature of the socialist state is its position as the prime economic agent, carrying responsibility for the economic development of the entire country. Because of this, the most visible distinction between the Soviet budget and the budget of a market economy is the astronomical share of **expenditures on the item "National economy" (ENE)**. Until 1990 its share was about 40 % of total budget expenditures⁵. This item included all budget outlays, going to enterprises, including current expenditures, investment, all types of subsidies (to prices for industrial goods, as well as to prices for consumer goods). For a long time this item was the biggest outlay item in the budget, and this fact reflected the involvement of the state in the economy.

But even these figures do not show the whole burden of expenditures connected with the maintenance of the Soviet economic mechanism. Previously, it was mentioned that Gosplan reallocated all financial resources of enterprises, which amounted to 40 %-45 % of NMP produced. Such substantial involvement of the state in the financing of the economy was natural. Being the owner of all property, the state was obliged to carry responsibility for the functioning of the economy and for the maintenance of the nation's working capital.

A marked decline in the share of this item in total budget expenditures took place during the last fifteen or more years. The share of ENE (excluding military outlays and subsidies to consumer goods) in total expenditure was about 34 % in 1976-1980; by 1985 it had decreased by another 6 percentage points. This share (28 %) remained constant during 1985-1987, due to the political objective of accelerated development of basic industries adopted at that time. The decrease

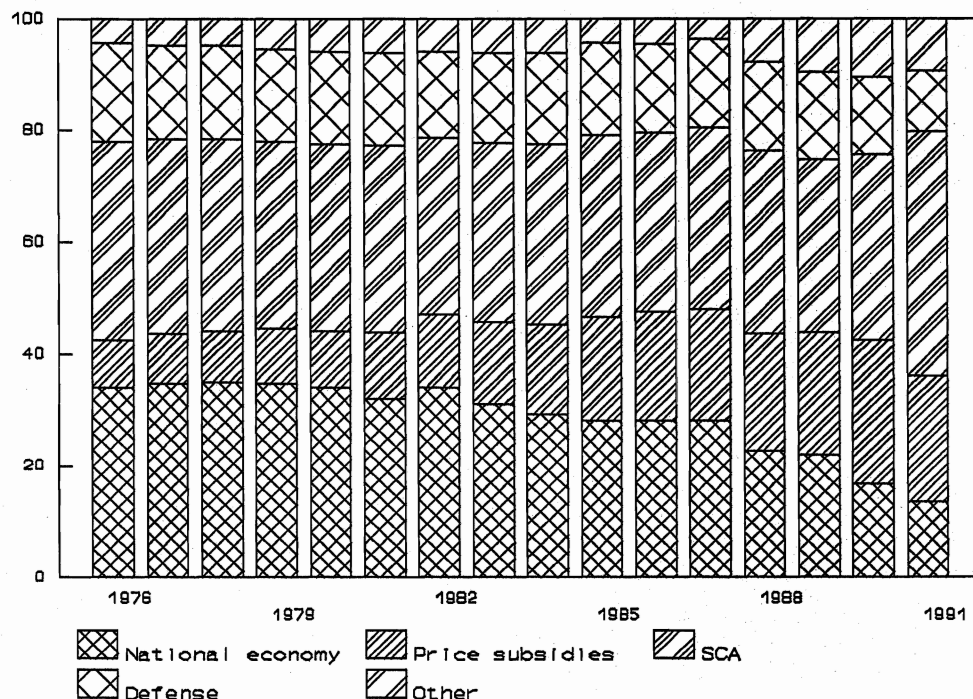
⁴ Beginning in 1985 (there is no data on previous years), the real volume of budget expenditures was greater than reported officially by the Ministry of Finance. From this time, it became impossible to reimburse the banks completely from the budget for the subsidies which they initially paid to producers. At the end of each year, the current amount of state indebtedness was converted into state debt without any stipulation of precise obligations on the part of the state. The total amount of this indebtedness increased from SUR 5 billion in 1985 to SUR 132 billion in 1991. Later, we include these hidden outlays in the **overall budget expenditures**.

⁵ For a long time, a substantial part of military outlays, generally all those except current spending, was included in this item. Here, we speak of expenditures purged of military spending. The estimates of military expenditures are given below.

resumed in 1988 (22 %), and accelerated in 1991 (13.4 %). Compared to GNP, the volume of ENE was relatively stable (14 %-16 % of GNP) in 1976-1987; then it declined drastically to 11.2 % in 1989 and 6.8 % in 1991. One could say that budgetary financing was going solely to the fuel and energy sector of the economy, as well as to agriculture. Even the infrastructure sector received virtually no state financing (and still doesn't) and was obliged to finance itself, mainly through under-investment.

On the one hand, the decline in volume and share of ENE was a positive sign that meant the progress in reducing the state's role in the economy. But on the other hand, this process was not accompanied by changes in property rights:

Chart 5. **Structure of expenditures in the Soviet budget**

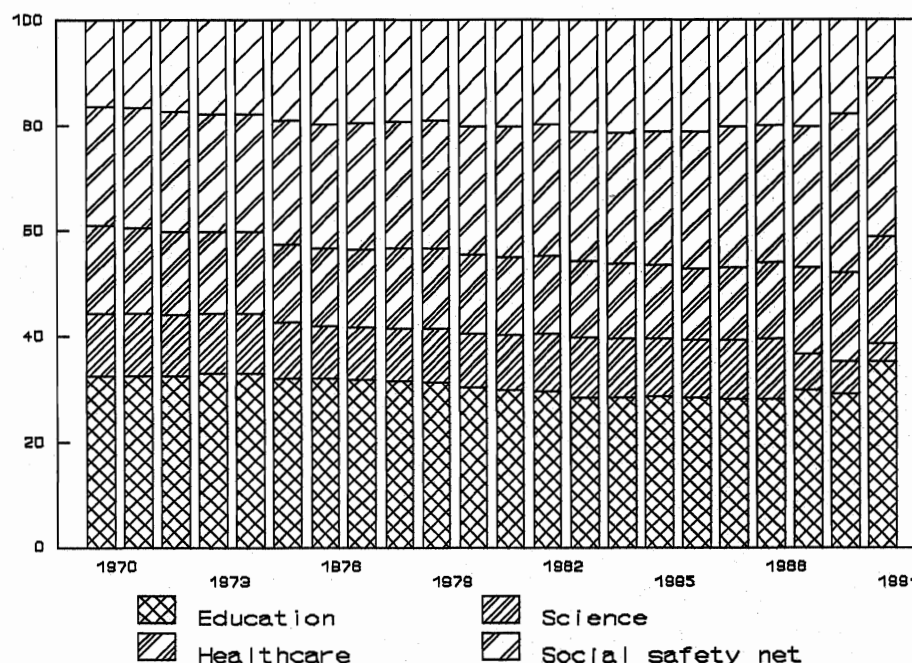


enterprises remained state-owned, labor collectives had received access to current decision making but were interested mainly in growth of personal incomes, not in the self-financing of enterprises. Now, we may state that the attempts to improve the old Soviet economic system in the second half of 1980s resulted in a spontaneous increase in consumption and decline in investment. Furthermore, this process slowed the renovation of industrial capacity, led to a significant fall in industrial production in 1991 and will be one of the main obstacles to the future economic recovery of the former Soviet republics.

This paper does not present an analysis of the subsidization of losses. First of all, the amount of such subsidies in the budget was several times smaller than the amount of subsidization through ministry funds. And on the other hand, these subsidies were a small part of the overall mechanism of financial and price planning. Generally, they were not connected with the results of enterprise

activity; losses were often planned by state bodies. Agricultural price subsidies and certain other consumer goods subsidies were much more important to the Soviet economy. An overview of such subsidies is presented below, because, in our opinion, they were part of social expenditures.

Chart 6. **Structure of Soviet social expenditures**



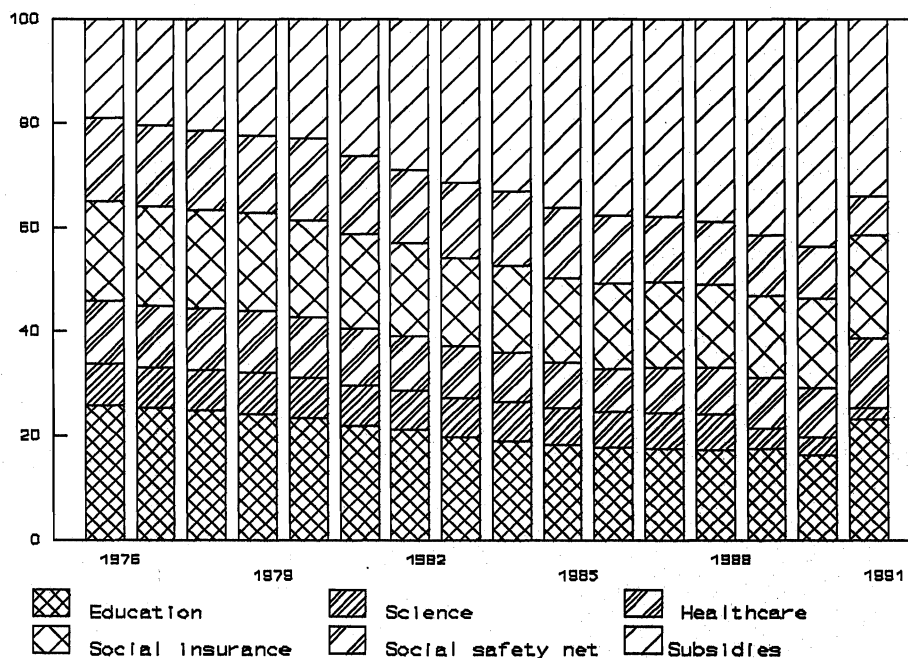
In analyzing expenditures on "social and cultural activity" (SCA) (Charts 6, 7), it is necessary to keep in mind that the command economy assumed an informal social contract between the population and the state. According to this contract, the state undertook all the functions related to managing and developing the economy and therewith it guaranteed that a certain set of social needs would be met and that most social services would be provided free of charge on an equal basis. The members of the society, for their part, "promised" to discharge their production duties in good faith and not to demand too much from the state as regards remuneration⁶ and quality of social services, being passive with respect to the management of the economy.

SCA expenditures grew continuously in the USSR over the years. But while the economic growth was continuing in the USSR, the state was able to fulfil its social obligations at acceptable prices: the ratio of SCA expenditures to GNP did not actually exceed 20 % until 1980. Then the economic growth came to an end and the fulfilment of the social contract obligations resulted in a rapid increase in the relative volume of social expenditures: their ratio to GNP increased from 20.7 % in 1980 to 25.4 % in 1985, 30.2 % in 1990 and 33.9 % in 1991.

⁶ There was a waiting line of professions for their increases in wages and salaries. From time to time, specific decisions were made as to which wages and salaries would rise: usually, the coal miners were first and teachers last in the queue. The periodic increases in remuneration for labor were a part of the social contract.

Chart 7.

Structure of Soviet social expenditures (incl. subsidies)



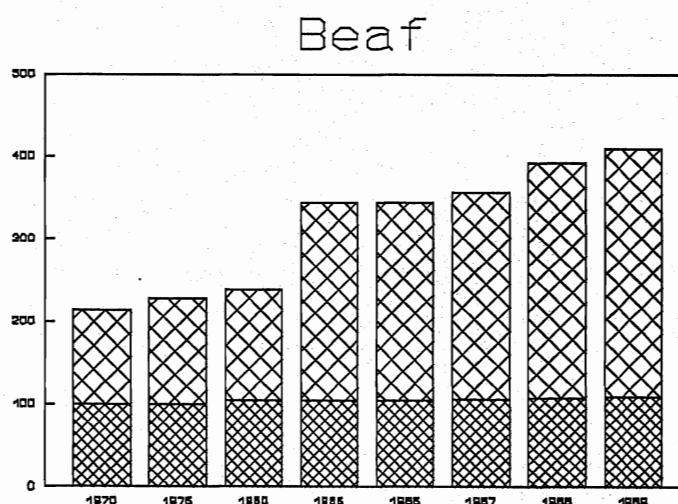
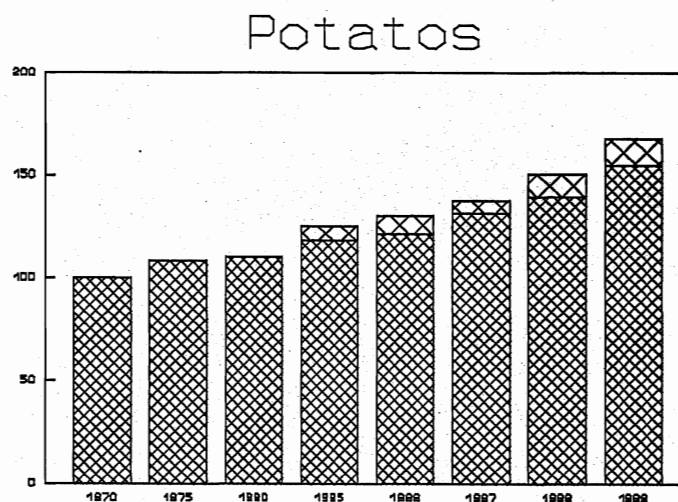
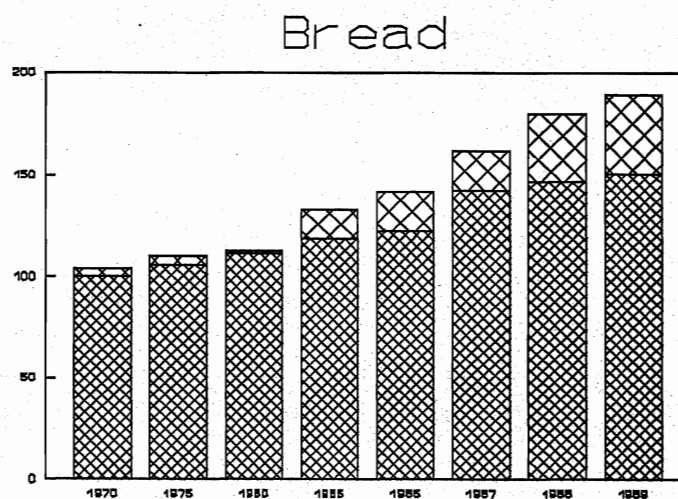
The growth of SCA expenditures was not uniformly distributed. The greatest growth was in price subsidies. In absolute terms, they increased six-fold during 1976-1990, and their share in total SCA expenditures (including hidden budget outlays on subsidies) increased from 19 % to 44 % during the same period and then declined to one third in 1991. The ratio of consumer subsidies to GNP increased from 4 %-5 % in 1976-1980 to 13 % in 1990; then it slightly declined in 1991 (11.4 %)⁷. This was the price paid for the social illusion of low and stable consumer prices.

This subsidization was organized in such a way that the transfers were going, not to low-income consumers, but to producers instead. This resulted in the distribution of subsidies among the population according to the level of consumption of subsidized goods. As a result, the greater part of these subsidies went to high-income groups, and the poor received the least. At the same time, this price support mechanism caused the continuous growth of subsidies and failed to influence the behaviour of producers. In fact, all their costs were paid *ex post* by the state, and thus they were not interested in cutting costs. (Chart 8 illustrates the change in retail prices and in the real costs of production for several subsidized goods.) Retail and wholesale prices were set by the state without much coordination. This is why increases in retail prices subsidized by the state never resulted in supply increases in the socialist countries: an increase in retail prices meant a decline in subsidies, not an increase in procurement prices.

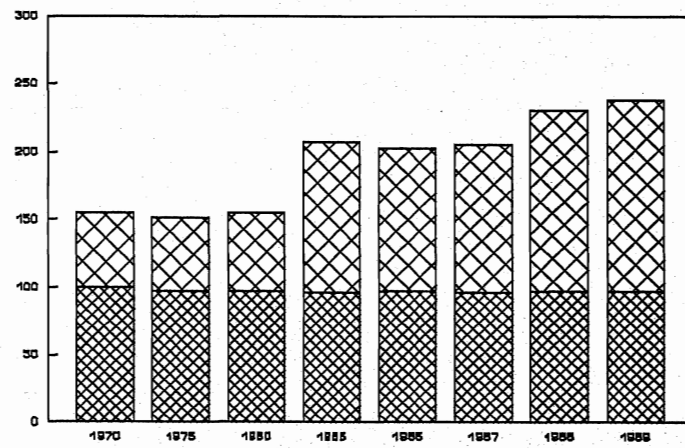
⁷ The target of the price reform in 1991 was to reduce the burden of subsidies at least two-fold, to 6% of GNP, but this attempt failed.

Chart 8.

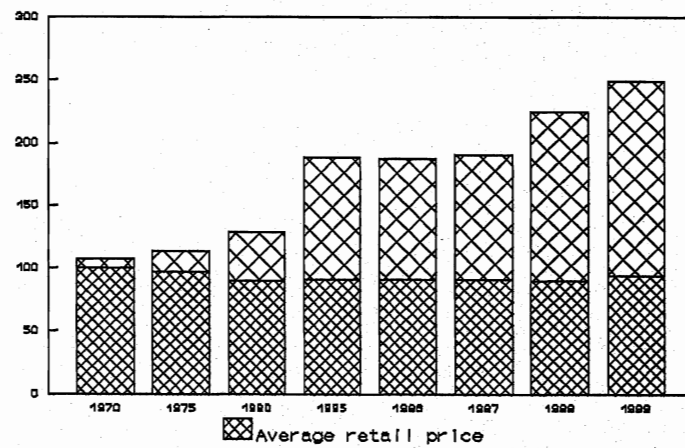
**Retail prices and real costs of production in the USSR
(retail price of 1970 = 100)**



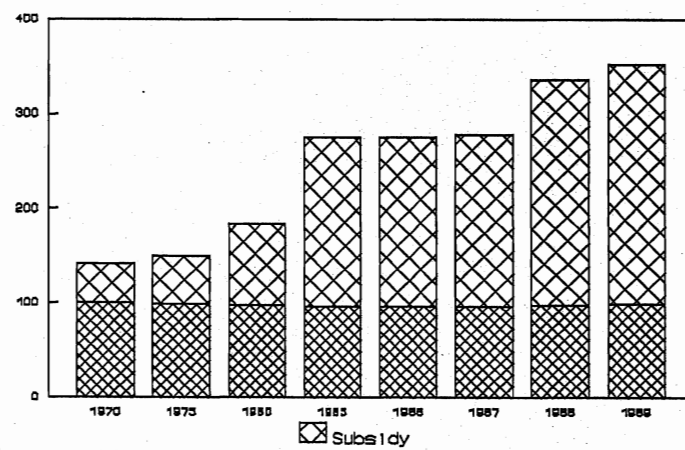
Pork



Milk

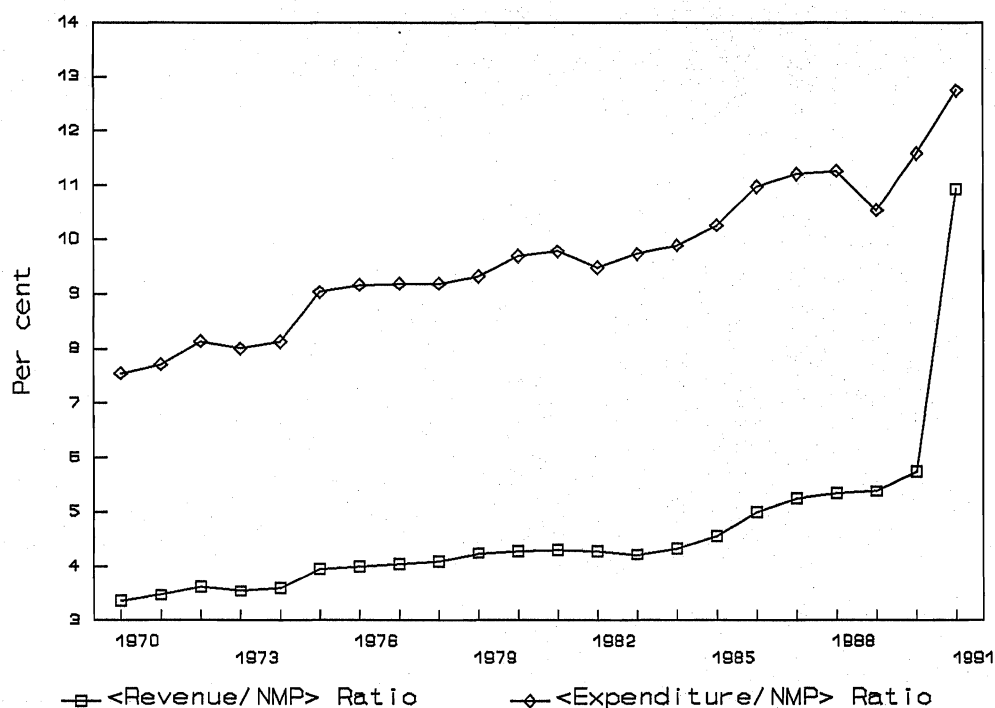


Butter



If price subsidies are excluded, it becomes apparent that social expenditures in the Soviet budget declined relatively from 36 % of total expenditures in 1976 to 31 % in 1982. Later on, their share remained stable, at about one third of total expenditures, until 1990. The ratio of social welfare expenditures to GNP remained from 15 % to 16 % in 1970-1985, then increased slightly to 17 % in 1990. Social transfers of all types⁸ grew faster than other SCA expenditures, being less than half self-financed through social insurance contributions and otherwise subsidized through the budget (Chart 9). At the same time, the budget share of expenditures on public services declined. This was the reason for the substantial decline in the quality of public services in recent decade.

Chart 9. **Social insurance revenue and expenditure
(as per cent of NMP)**



Significant changes took place in 1991. Firstly, under the pressure of public opinion, the all-union and republican Parliaments adopted in 1990 a lot of decisions concerning the increase in social welfare outlays, including the new Pension law based on a substantial increase in the amount of social transfers. Secondly, the decline in GNP was much more substantial than had been anticipated by the Government at end-1990 (17 % vs. 2 %-4 %). Thirdly, the realized

⁸ Until 1990 pensions and social insurance were included in the budgetary system. Beginning in 1991, Pension and Social Insurance Funds (in the republics) became independent and presumably self-financed. In this analysis these funds are included in the budgetary system for 1991.

price reform (under the Ryzkov-Pavlov scenario) did not eliminate the burden of subsidies as planned, but the SCA expenditures increased by the amount of compensation paid to employees in social welfare (this compensation, paid from the budget in the first month then was included in wages, salaries, pensions, stipends, etc., but in the case of the USSR this increase in salaries became an additional burden on the budget). All this resulted in a substantial increase in the ratio of SCA expenditures (excluding subsidies) to GNP, from 17 % in 1990 to 22.5 % in 1991. Currently this sector of the economy is relatively impoverished.

The volume of **Soviet military expenditures (SME)** is the biggest mystery in Soviet statistics. It seems that no one knows its magnitude precisely. Competition with the USA for world military supremacy was surely very costly to the Soviet society. Maintenance of military power parity during the post-war period demanded spending by the Soviet economy at least on a par with U.S. spending.

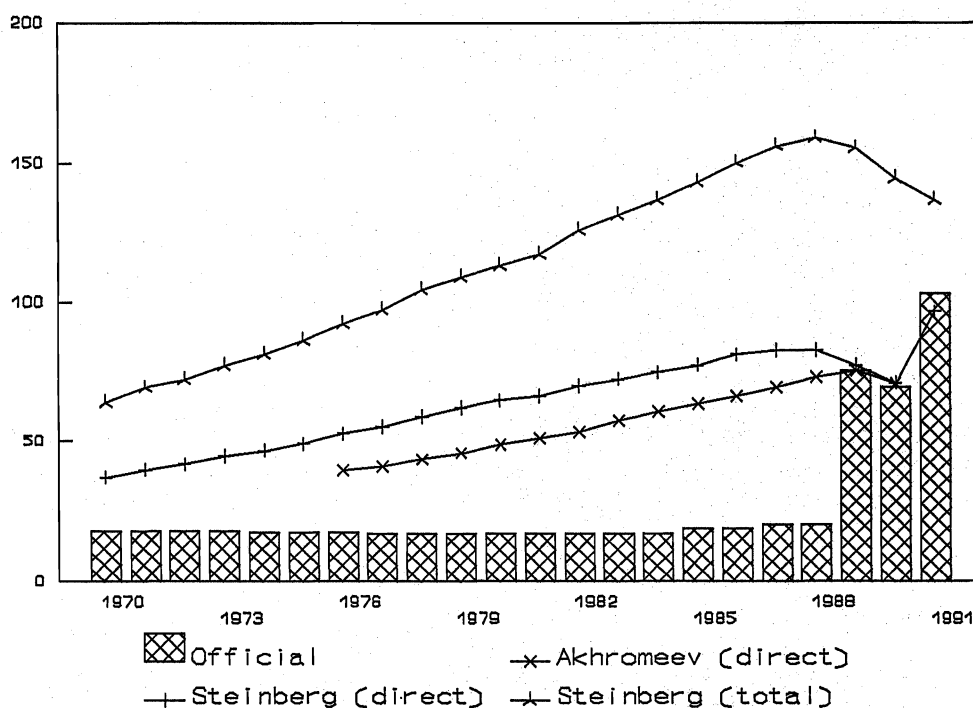
Debates regarding the evaluation of the real military burden on the USSR seem to be eternal, and this is not a subject for this paper. In our opinion, all attempts to measure the real volume of SME that are based on a comparison with military expenditures in the USA and which look for hidden SME in the budget are conditional to a great extent. SME were mainly hidden not in other outlays (we argue from recent data) but in the distorted price system. Prices used by enterprises in the military industry were substantially lower (relatively) than in the civilian sector. Until 1990 these enterprises did not make any contribution from their profits to the budget, but only 10 %-15 % of profits was centralized in ministry funds. The transition to the tax system in 1991 made it necessary for military enterprises to pay taxes and led to an adequate upward adjustment of prices. We cannot even measure the "price" of such factors as the use of higher quality equipment or free access to all resources in the economy. Of course, all this meant (and means) a huge burden on the Soviet economy, but it can hardly be considered a burden on the budget.

For this paper, we used the data on direct budgetary SME in 1976-1990 presented by S.Akhromeev (1991). As is seen in Chart 10, their growth until 1989 was continuous; D.Steinberg (1992) draws the same conclusion, though his estimates are higher. It is interesting to note that the average rate of growth of direct budgetary SME is approximately equal to the rate of growth of total budget expenditures. This is why the share of direct SME in the consolidated budget was relatively stable (15.5 %-17 %) in 1976-1989. In 1990 their share declined to 13.8 % and in 1991 to 10.7 % of total budget expenditures.

The share of direct SME in GNP has been 7 %-8 % during the last fifteen years, and it declined to 5.4 % in 1991. The anticipated (by the Government) decline in direct SME was 10 % in 1991: from SUR 70.7 billion in 1990 to SUR 63.5 billion in 1991. The impact of the price reform, as well as of some other events, was strong: the nominal amount of direct SME was forecasted to be SUR 96.5 billion in the budget, while its share in GNP was expected to be 6.7 %. In fact, the inflation rate was much higher than predicted, and it resulted in an increase in direct SME of SUR 6.2 billion, mainly for current expenditures. Prices for weapons and other military equipment, as well as for military construction, were fixed by the state, and did not change during the year. As a result, the ratio of direct SME to GNP fell more significantly, but this decline does not reflect adequately the decline in SME.

Chart 10.

Soviet military expenditures (SUR billion)



Total expenditure in the Soviet budget increased continually during the last fifteen years, and in the second half of the 1980s its rate of growth was very impressive compared to the zero growth of NMP. (Partly, this resulted from the necessity of including in the budget some outlays previously treated as off-budget GFB outlays). As a result, the <Budgetary expenditures/NMP> ratio was increasing. Whereas in 1960-1965 it was about 50 %, in 1975 it reached 59 %, in 1980 65 %, and beginning in 1985 it was over 70 % every year (about 52 % of GNP) (Chart 1). Taking into account the current indebtedness in the repayment of price subsidies, this ratio has to be adjusted upward by 4-5 percentage points.

The growth of budgetary expenditures accelerated even more in 1990-1991, when the control over expenditures moved to the newly elected all-union and republican Parliaments. Under the pressure of regional and sectorial interests, a lot of the decisions on new budgetary expenditures were made without taking into account the true state of the economy. There was no force to resist this pressure, and it was the price paid for the absence of democratic traditions and the low professional level of members of the parliaments. When all the republican budgets for 1991 had been adopted, the combined planned amount of expenditures exceeded 100 % of planned NMP (80 % of GNP). It was evident that such ill-founded decisions would lead to a severe financial crisis, to growth of the budget deficit and to an increase in inflation because of the monetary financing of the deficit. This is one of the main paradoxes of the command economy: in order to fulfil its social contract obligation during the economic decline the state was obliged to increase the financial redistribution of GNP through the budget. Thus,

the significant decline in ENE in 1990-1991 did not lead to a decline in the ratio of total budget expenditures to GNP, because this decline was "compensated" by the decline in GNP.

The old system of budgetary planning only helped to avoid the complete collapse of the financial system. Traditionally, all items in the budget were planned in nominal figures without any inflation forecast. This means that the volume of expenditures could not be adjusted to the rise in prices. The rate of inflation in the USSR significantly exceeded the planned rate in 1991 (128 % vs. 60 %), and as a result, the total volume of budgetary expenditures was "only" 54.1 % of GNP.

3.2 Revenues

The overall structure of the revenues in the consolidated Soviet budget is presented in Table 3 and Chart 11. According to Soviet statistics⁹, total budget revenue grew continuously over the last decades. But as we see above, this figure meant virtually nothing because the role of the revenue side was secondary in the budget of the command economy. Some specialists have argued that beginning in the mid-1960s total real budget revenue was lower than current expenditures, i.e. the budget was in deficit. Until now, there has been no official data to prove or disprove this hypothesis¹⁰. The available statistical data for 1985-1991 provides evidence that in this period there was virtually no growth in budget revenues, while expenditures were increasing, and the share of monetary financing of expenditures became more and more significant in the USSR.

Official data shows that in 1985-1988 total budget revenue was virtually constant, and their ratio to GNP fell to 43 % in 1988-1990, then to 35 % in 1991 (as share of "total revenue" excl. borrowing) (Chart 12). As a result, the share of monetary financing was about 20 % of total expenditures. There were three primary reasons for this. First, the decline in oil prices in the world market took place in the second half of the 1980s. The Soviet terms of trade worsened and Soviet income from foreign trade declined. Second, the contributions of state-owned enterprises to the budget declined. This was partly compensated by the decline in expenditures, as enterprises became responsible for certain items. Third, as a result of the political anti-alcohol campaign, the yield from the turnover tax decreased substantially at that time. According to our estimates, the accumulated decline in budget revenues in 1986-1988 due to this campaign no less than SUR

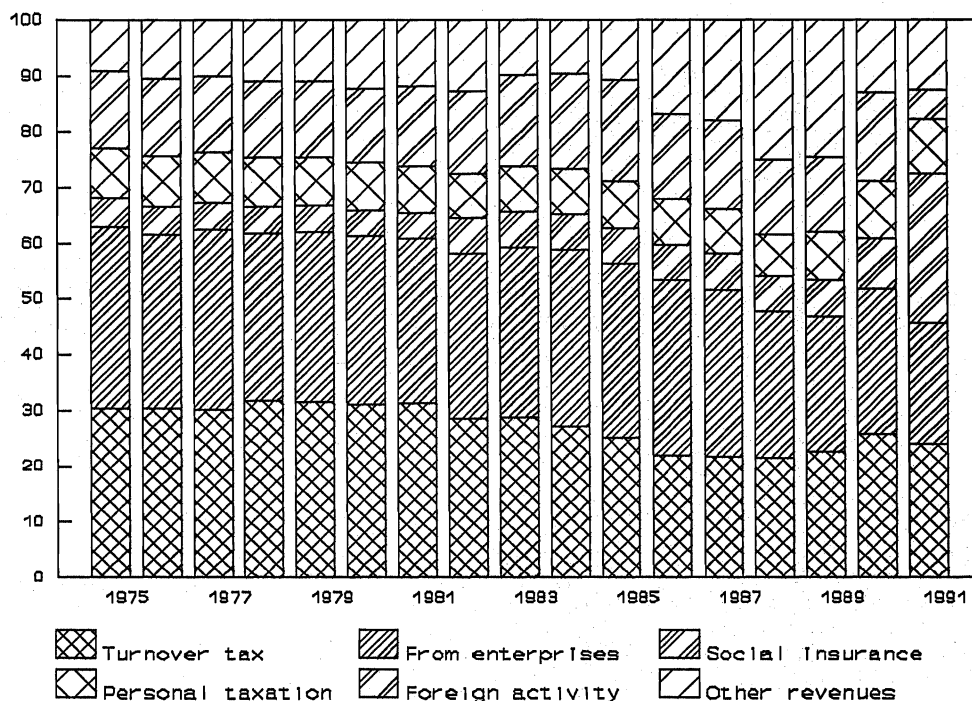
⁹ According to Soviet methodology, not only sales of state bonds were included in revenue but also borrowing from Gosbank and, what is even more surprising, external borrowing measured in rubles. In our opinion, it was (and it is) "more honestly" to have a special hard-currency budget for the state.

¹⁰ On the one hand, there are the official figures for the accumulated internal debt beginning in the year end 1974 (Table -) which do not include (according to Soviet methodology) sales of state bonds to private individuals. Hence, this should be the volume of accumulated borrowing from the banking system. On the other hand, in autumn 1991 it became known that the Ministry of Finance of the USSR disposed of secret accounts in Gosbank, where SUR 52 billion had accumulated. According to officials' explanations, budgetary surpluses were accumulated there over a long period.

40 billion, i.e. one third of the increase in the internal state debt during the same period.

Chart 11.

Structure of revenues of the Soviet budget



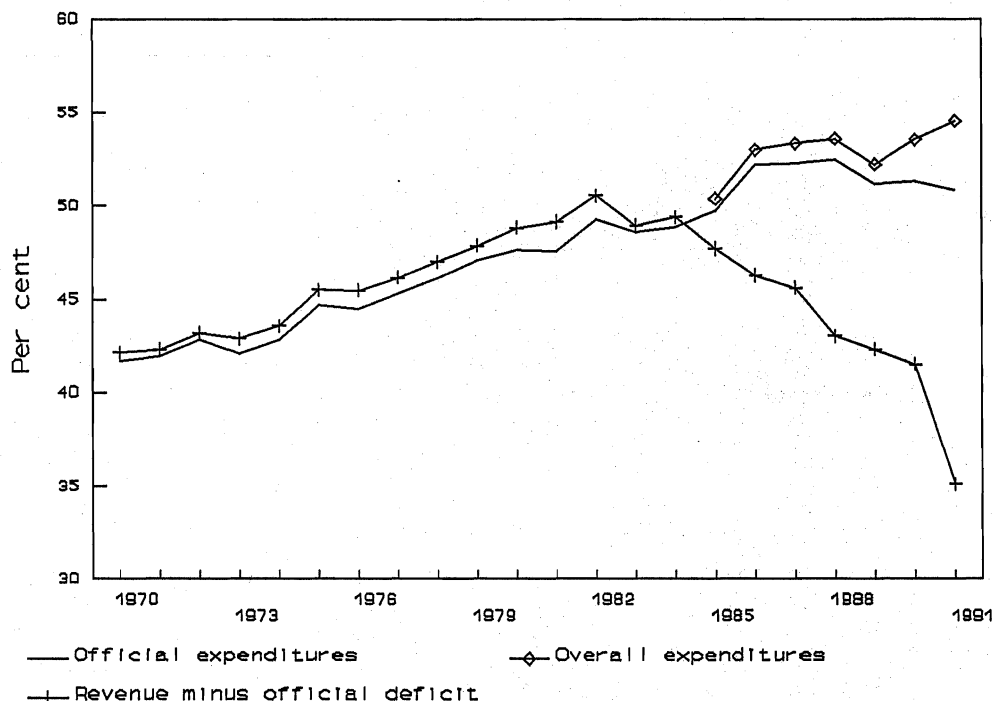
A slight increase in the volume of revenues took place in 1989-1990. This was caused by an improvement in the terms of trade (increasing foreign trade revenues by SUR 13 billion over the two years) and by the increase in alcohol sales (increasing annual revenues by about SUR 10 billion). The increase in the social insurance contribution rate in 1990 added some (SUR 7.5 billion) to the budget. But all this was not sufficient to balance the Soviet budget. Deficits became a chronic plague of the budgetary system.

Traditionally, there were two dominant revenue items in the Soviet budget (state-owned enterprises' contributions and the turnover tax), which exceeded 60 % of total budget revenues. Beginning in the mid-1970s, an additional substantial source of revenue appeared - the revenue from foreign activity.

There was no **taxation system** for state-owned **enterprises** in the USSR until 1991. The state had a right to accumulate to the budget any part of the enterprises' financial resources (profit plus depreciation). The share left for the enterprise was determined in absolute figures and depended on its needs, as determined by the industrial ministry. This share was subject to bargaining between the enterprise and the ministry and could be changed during the year. As a part of the economic reform of the mid-1960s, a 6 % payment for fixed capital was introduced in order to create certain incentives for enterprises. But this idea failed because the state appropriated enterprises payment savings into the budget as well.

Chart 12.

Revenue and expenditure of the Soviet budget as share of GNP



In this situation, it was easier to both enterprises and ministries not to use this type of payment. As a result, in 1986 only 12 % of enterprises made fixed capital payments, though it was formally obligatory. The introduction of a payment for personnel in the second half of 1980s produced the same results.

The first changes in this system of profit reallocation took place in 1984-1985 as a part of the "large-scale experiment". The amount of profit left to an enterprise was dependent on the results of its operations. The list of result indicators corresponded with the general thrust of the experiment inside the command economy - to support the initiative of enterprises to make micro-level improvements. The indicators were: decreases in production costs, increases in labor productivity, increases in the share of production designated extra-quality, economies in the use of material resources, etc. Though these steps were not part of a comprehensive reform, their initial results were positive. Enterprises became interested to a certain extent in their own financial results.

The next step in the transformation of the old system was the introduction in 1988 of norms for the distribution of profits. Enterprises received from their ministries fixed (for a period of one year) but individualized norms for fixed capital payments and for personnel payments, as well as for share of profit to be contributed to the budget and to their ministries' funds. These norms were based on the adopted financial plans of enterprises, but the positive aspect of this step was that these norms were fixed, and ministries did not have the right to revise them. At the same time, enterprises were allowed to use the rest of their profits as desired.

At the end of 1980s, difficult debates took place in the USSR on the transition to a taxation system. The Government's argument for a "one-tax system" for enterprises had prevailed. According to the law on taxation of enterprises, prepared by the Government and adopted by the Parliament in the beginning of summer 1990, the tax on enterprise profits virtually became a single tax on enterprises¹¹. At the same time, its revenue generating potential was reduced significantly. Whereas the first Governmental draft presumed a 60 % rate, and the final draft 55 %, the all-union Parliament adopted (after five minutes of discussion) a 45 % rate. The political struggle between central and Russian authorities began in autumn 1990, and was manifested in a further reduction of the tax rate in Russia, to 37 %. After the price reform in the beginning of 1991, the tax rate was cut to 35 % in April 1991 by decision of the central authorities and to 32 % in Russia. The effective average rate of the profits tax in 1991 was about 26 %. As a result, though significant growth took place in the nominal profits of enterprises (2.15-fold as compared to 1990), the nominal yield from this tax increased only by 13 % in 1991.

There is a lot of literature on the **turnover tax** in the USSR, but it is necessary to point out once again that it was not a tax at all. It was one of the constituent parts of the economy's general mechanism of complete financial reallocation. It allowed the maintenance of relatively low prices for raw materials and industrial goods and higher prices for certain consumer goods. The basic method for determining this tax was the establishment (by the state) of the specific gaps (in absolute terms) between wholesale and retail prices for individual goods and producers. Evidently, these taxes were determined in the context of annual financial planning for enterprises and were changed from time to time. Table 4 presents the real average rates for this tax (relative to retail prices) for certain goods. The conclusion we draw from this data is as follows: the continuous rise in retail prices and the maintenance of a fixed absolute turnover tax led to a decline in its share of retail prices. Consequently, the yield from this tax grew more slowly than total turnover¹².

State officials did not forecast open inflation for 1991 and the new tax rates were set on the old basis. In fact, the open inflation measured by consumer prices was about 40 % in 1991 (excl. the centralized increase in prices by another 40 %). This was the reason for the small increase in the nominal yield from this tax (15 %) in 1991, despite the 70 % increase in nominal turnover. As about 50 % of wholesale and retail prices were liberalized in 1991, the fixed gap in prices fell in percentage terms when retail prices rose by more than the Government had foreseen, or was eliminated when the retail price was fixed while costs were

¹¹ We argued during this discussion and would still argue that the elimination of the payment for fixed capital was a mistake in the context of the transformation of the economic system. In its origin, this payment is similar to the dividend the state receives as shareholder. The preservation of this tax would further the privatization process.

¹² This conclusion is true if we analyze the gradual increase in retail prices. Of course, the increases from time to time in prices of e.g. alcohol products (by dozens of a percent) were aimed at increasing the share of the turnover tax in the retail price and increasing the yield from this tax.

increasing¹³. All the proposals concerning the reform of the turnover tax made in the Parliamentary hearings on taxation laws which called for the introduction of percentage rates and an increase in the tax base were rejected by the officials. The attempt to improve the situation in the beginning 1991 by implementing a sales tax (at a unified rate of 5 %) was not adequately prepared technically and politically, and has failed as a result. The total yield from this tax during 1991 was only 20 % of the planned amount. Beginning in 1992 the turnover tax and the sales tax were replaced in most of the republics by the **value added tax (VAT)**.

Revenue from foreign activity was the third important source of state revenues in 1976-1990, representing 13 %-19 % of total budget revenue. The basic source of this revenue was the state's monopoly on foreign business activity (trade, most importantly). Due to the distorted domestic price system and the artificial exchange rate (US\$ 1= SUR 0.6), a gap between domestic and world prices appeared. Prices of exports (raw materials and weapons) fell relative to prices of imports (consumer goods). Beginning in the mid-1980s, a new source of budget revenue appeared in addition to the revenue from trade - external credits. These inflowed into the USSR in heavy volume during the second half of 1980s, and they were recorded as budget revenue. Their share in the total revenue from activity was 10 %, in 1986 13 %, and in 1991 more than 35 %¹⁴.

The Government of the USSR tried to increase the revenue from trade by introducing import and export taxes in 1991. But as the state-owned specialized firms had received allowances from this taxation (and their share in the total volume of trade was about 87 %), these taxes were virtually not collected at all. The collapse of Comecon trade and the sharp decline in oil exports (by 50 %) resulted in a decline in the volume of Soviet trade of 45 % in 1991, and the budget revenue from foreign activity declined even more.

Personal taxation had never played an important role in the Soviet economy. The state could directly determine the levels of incomes, as all groups in the population received wages and salaries from the state sector. (When combined with the colkhozes, the state's share of income was about 95 % in the USSR.) The personal income tax existed in form but without content¹⁵. Virtually all incomes were taxed at a uniform marginal rate (13 %), the effective tax rate never exceeding 10 % of personal income during the last two decades. The share of the yield from personal taxation (there were some small taxes, mainly collected on the local level, in addition to the personal income tax) in total budget revenue was also small (under 9 %). In 1989 and 1990 the yield from the personal income tax increased faster than other revenues, and its share was 10.5 % and 12 % respectively. This resulted from the rapid growth of personal incomes during that period and from stable tax rates.

¹³ A real paradox had taken place at the end of 1991. The unit production costs of vodka rose above the retail price fixed by the state. As a result, not only did the gap between prices and turnover tax disappear, but it was necessary to pay subsidies to producers of vodka.

¹⁴ Even if we take into account the 45% decline in foreign trade in 1991, the share of external credits is still very large. There is no practical reason to record these amounts as budget revenue because virtually all new long- and medium-term credits were used for servicing the external debt.

¹⁵ The personal income tax was actually introduced in the USSR in the beginning of the 1930s, replacing several other taxes that existed at that time.

On July 1, 1990 a new law on personal taxation was enacted in the USSR, which envisaged an increase in the marginal tax rate for high income groups from 13 % to 60 %. But in fact there was no significant increase in the yield from this tax because, on the one hand, there were few such people and, on the other hand, several republics, including Russia, decided to reduce the marginal rate to 30 %. As a part of the price reform in 1991, the deductible level of personal incomes was increased and tax rates for low-income groups were reduced. As a result, the yield from personal taxation grew slower than the total income of the population in 1991 (33 % vs. 90 %), and its share in total budget revenue fell back to 10 %.

Significant changes took place in the **social insurance** system in 1991. Previously, the system generated total revenues amounting to 40 %-45 % of its total expenditures, the rest being financed from the budget. Beginning in 1991, the Pension Fund and the Social Insurance Fund were separated from the budget. Due to the increase in the rate of the social insurance contribution from 14 % (on average in 1990) to 38 % ¹⁶, they should now be self-financed. Evidently, this caused the increase in the share of this item in total budget revenue, to 27 %, making this the largest source of budget revenue in 1991. The implementation of the new pension law was gradual, and a revenue surplus in the social insurance system was anticipated for 1991-1992. This is why in 1991 about 29 % of the total revenue was allocated to other uses through the all-union and republican economic stabilization funds. But a forecast error ¹⁷ and additional increases in pensions and other transfers in several republics resulted in a deficit for the consolidated system of social insurance.

The absence of serious problems with **tax collection** was a strong feature of the command economy. Virtually all enterprises as well as the entire banking system belonged to the state, and payments to the budget were made according to the schedule. Furthermore, the total number of enterprises was relatively small (45 thousand in industry and construction and about 50 thousand in agriculture), and the financial control network was able to monitor the calculation of contributions and payments. Moreover, industrial ministries also helped control the reallocation of enterprise profits. The bulk of the population received its income from the state. The "pay as you earn" system worked perfectly.

Problems regarding tax collection began to grow rapidly with the appearance of a great number of non-state enterprises, beginning in 1988. The new enterprises were small, as were their profits and turnover, but the control task was roughly equal to that of big enterprises. The tax collection staff was not sufficient, and their skills were not up to the task. Tax evasion became very profitable, and "holes" in the laws meant little or no punishment if caught. The propensity to evade taxation grew in 1991 due to the introduction of the sales tax, which was

¹⁶ The employer pays 37% and the employee 1% of wages and salaries. This increase in the rates was connected with the price reform and the general increase in pension benefits and transfers, which formed the basis of the Soviet Government's economic strategy.

¹⁷ It was partly caused by the disintegration of the social insurance system in 1991, when some republican funds (Russia, Ukraine, Baltic counties, Georgia, Armenia and Moldova) declared their independence. Each republic needed its own social insurance rate because of the different demographic characteristics of the population. But the rate was established for the whole USSR, as it was envisaged as a mean of redistributing revenues. According to official (central government) estimates, this rate would be sufficient for the unified social insurance system.

not prepared for technically. Moreover the tax war between the central and republican authorities, which took place that year, made it possible even for state-owned enterprises to evade taxation. According to some estimates, total tax evasion in 1991 amounted to 20 %-25 % of collected taxes.

3.3 Internal debt

This part of the Soviet fiscal system, which is shrouded in secrecy, faces a lot of unresolved problems. For a long period of time, there was no information available on the size or growth of the debt. The first official data became available only in 1990 - the volume of state debt accumulated up to the end of 1989 was reported to be SUR 399 billion. Nowadays, it is possible to monitor its dynamics as from 1975 (Chart 13), though there are still no methodological notes on its calculation or what it includes or how is it connected with the current budget deficit. According to Goskomstat's data, the internal debt of the USSR totalled SUR 990 billion on January 1, 1992 (52.5 % of GNP). According to our estimates it exceeded SUR 1150 billion (61 % of GNP). (Both estimates exclude the internal debts of individual republics.)

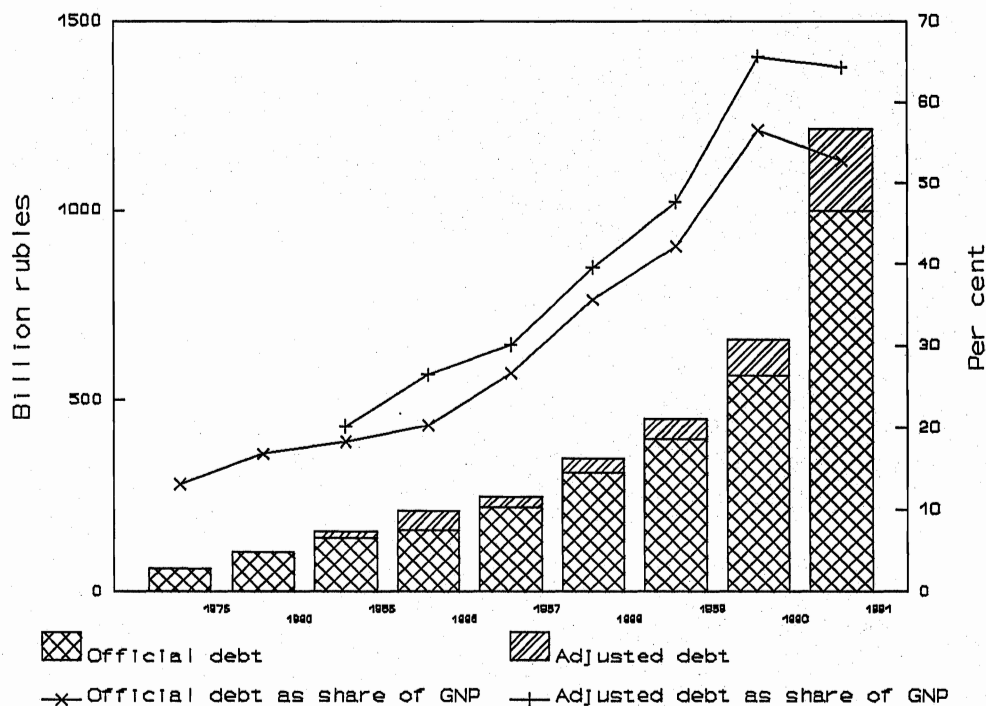
The internal debt of the USSR includes the following items:

- 1) Institutionalized state borrowing from the population and enterprises through the issuance of state bonds. Up to now, all post-war forced state borrowing for reconstruction of the national economy has been repaid by the state; in the mid-1970s it amounted to about SUR 23 billion. Up to January 1, 1992, the Soviet population held state lottery bonds, issued in 1982, amounting to SUR 27.3 billion, treasury bonds (1990) worth SUR 1.1 billion and target bonds (1990) worth SUR 4.3 billion (in issuing prices). The total was SUR 32.7 billion. In addition, in 1990 the Soviet Ministry of Finance issued bonds for enterprises amounted to SUR 49.1 billion, of which only SUR 500 million worth was bought by enterprises; the rest was bought by Gosbank of the USSR.
- 2) Beginning in the mid-1980s, the Soviet state discontinued the burdensome maintenance of fixed low prices for food and some other goods from the budget. The system of subsidizing was organized as follows: Gosbank (later - Agroprombank) paid subsidies to producers automatically as they sold their products and then charged the state. Beginning in 1985, the budgetary system became unable (to the end of each year, as stated above) to repay these credits. As a result, non-repaid credits began automatically to be transformed into the state debt. In total of this type of state debt amounted to SUR 132 billion at the end of 1991.
- 3) The most conventional state debt results from the writing off of enterprises' indebtedness to the banking sector. Formerly being the owner of enterprises and banks, the state was (more or less) legally able to convert the debt of enterprises into state debt. According to S.Lushin (1992), the central Government has written off debts totalling SUR 83.9 billion. Moreover, in 1990-1991 several republics decided to follow suit. Russia's share was dominant (SUR 125 billion); the

combined share of the other republics was much more moderate (SUR 10-15 billion).

4) To the end of 1990, the state had borrowed (virtually by force, as an owner of the banking system) from SUR 18 billion to SUR 23 billion (according to different sources) from the reserve fund of Gosstrakh (insurance company).

Chart 13. **Internal debt of the Soviet Union**



5) The Government also borrowed directly from Gosbank in order to finance budget expenditures. The sources of these credits were private savings in Sberbank and cash in circulation, as reflected in the liabilities of Gosbank's balance-sheet. The total amount of "credits granted to Ministries of Finance of the USSR and the republics", was SUR 462.06 billion¹⁸ (January 1, 1991), whereas the amount of corresponding resources was SUR 504.9 billion (Narodnoye Khozyaystvo, (1991)). The total official amount of the state debt at that time was SUR 628 billion. This means that the share of this source in debt financing was 73.6 % at end-1990, and it grew to more than 90 % (according to Goskomstat) by the end of 1991. On the other hand, financing of the state debt drew more and more resources from the banking sector, which meant a shortage of credit for the economy.

¹⁸ This figure indicates the source of debt financing. If one is speaking about its creation, it is necessary to reduce this amount by the volume of enterprises' indebtedness written off (SUR 83.9 billion).

6) The implementation of price reform (at the beginning of 1991) meant an increase in the average level of consumer prices of 60 %; hence the central government decided to increase the volume of private savings by 40 % as a compensatory measure. The total increase in savings (SUR 160.8 billion) was "financed" by the increase in the state debt. (In spring 1992, several republics decided to compensate private savings by another 100 %¹⁹.)

7) The disintegration of the USSR, which took place throughout 1991, caused the disintegration of the fiscal and monetary systems. As a result, several republics implemented inflationary policies by running budget deficits financed by borrowing from their central banks. According to our estimates, the total amount of republican deficits in 1991 was at least SUR 110 billion.

The problem of the large state debt and the current deficits is aggravated by their lack of institutionalization. The share of the debt financed by bond issue is very small, and borrowing from Gosbank, as usual, was done without precise maturities and service obligations. Now, with the disintegration of the USSR, this debt should be shared by the republics. But until now, all attempts to begin the negotiation process have failed. Moreover, some republics (e.g. Estonia) have publically refused to take responsibility for any debts of the USSR. Russia has unilaterally determined its share (SUR 435 billion) and plans to begin servicing it in the second quarter of 1992. Some republics (e.g. Ukraine, Uzbekistan) demand, as a condition for sharing the debt, the sharing of Gosbank's resources, Soviet property abroad and the gold stock of the USSR.

The most likely outcome is that the sharing of the total Soviet internal debt will never be realized and that the bulk of the debt will be written off as a result of some monetary clearing procedure (e.g. monetary reform). The republics will more likely take responsibility for the private savings in Sberbank (SUR 656.7 billion at end-1991) and, naturally, for the corresponding share of the internal debt, although as a result of the disintegration of the Soviet monetary system and the introduction of republican currencies, it might be the case that only part of this share of the debt will be converted into new currencies. The institutionalized part of the Soviet debt (bonds sold to private people) is also likely to be repaid by the republics. In total, no more than 55 % of the entire Soviet debt will be assumed by republics; the rest will likely be written off.

But even the burden of this portion of the state debt will be substantial to the republican economies (SUR 900 billion including republican debts). The servicing of this debt will demand enormous effort by the republics. Even a 20 % annual interest rate means approximately 10 % of GNP produced in 1991, and the rate of inflation is evidently higher in the former Soviet republics, and GNP is declining.

The situation may be aggravated by the development of commercial banks: the establishment of a system of mutual insurance and mutual responsibility for private savings and growing branch networks may attract a large share of private deposits, as the interest rate is much higher in the new commercial banks than in the (virtually) state-owned Sberbank. Today the share of private savings that is

¹⁹ These decisions were made, e.g., by Ukraine (amount of savings in its territory SUR 146 billion on January 1, 1992), Belarus (SUR 28.5 billion), Uzbekistan (SUR 18 billion).

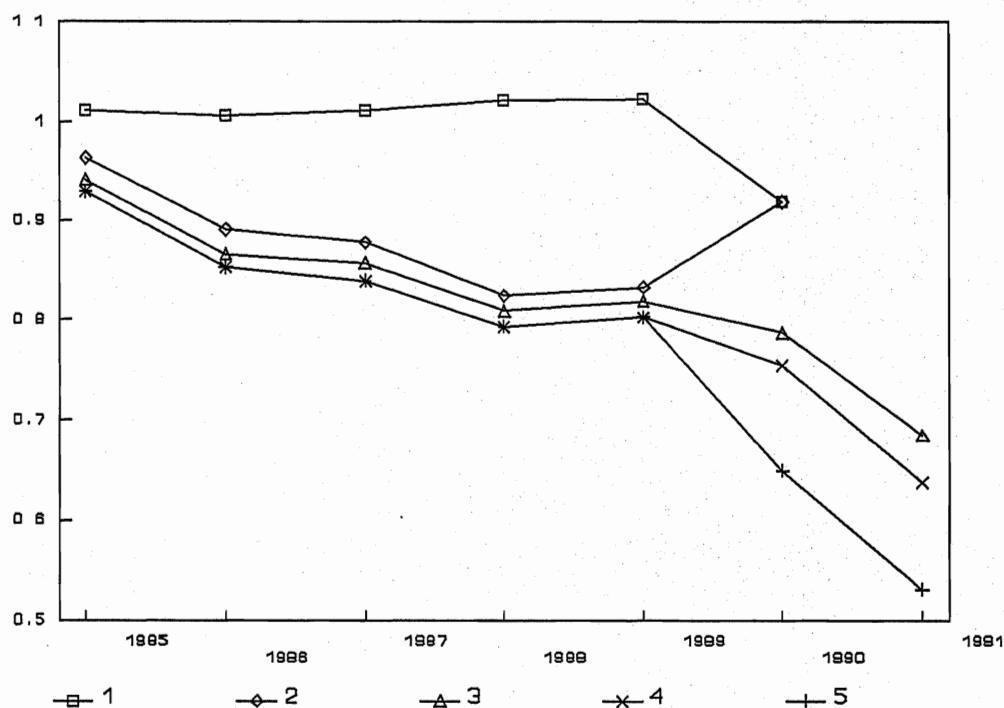
held in commercial banks is under 3 %, though the interest rate is on average twice as high as in Sberbank. Sberbank cannot introduce higher interest rates on deposits because it has had to lend all its resources to the state. (Now Sberbank is allowed to grant credits for commercial purposes, but this concerns only new deposits.) Substantial outflows of private deposits from Sberbank may cause additional difficulties to the republics because it would be necessary for them to borrow directly from central banks in order to finance their old debts. The likelihood of a transition to state borrowing from the market remains very unclear for the near future. It is reasonable to anticipate that some republics will re-establish the emission as a source of budget financing, perhaps not only in cash form. (In the USSR the cash emission was the source of the increase in credit resources of Gosbank and was not used for budget financing.) In any case, the problem of accumulated state debt needs to be resolved in the future, and this may substantially influence the financial situation in the republics.

4 What is the Soviet fiscal legacy?

Looking at the state of the fiscal system after the disintegration of the USSR, it seems reasonable to discuss four aspects of the legacy of the command economy in the fiscal sphere: fiscal balance and institutional, ideological and technical problems.

Fiscal balance has virtually disappeared in recent years (Chart 14). The revenue side of the budget eroded as a result of economic crisis and mistakes in economic policy. The ongoing economic crisis has put big enterprises in a very poor financial position, which will cause a further decline in budget revenues. The necessity of structural adjustment of the economy, conversion of the military industry and the financing new social programs will put pressure on the expenditure side of the budget. The overall deficit of the budgetary system is estimated by officials to be 22 % of GNP in 1991, but a small adjustment in line with

Chart 14. **Adjustment of the Soviet budget
(Revenue/expenditure ratios)**



- 1 Official revenue/ Official expenditure
- 2 (Official revenue minus official deficit)/ Official expenditure
- 3 Adjusted revenue/ Official expenditure
- 4 Adjusted revenue/ (Official expenditure plus indebtedness in procurement prices)
- 5 Adjusted revenue/ (Adjusted expenditure plus total increase in indebtedness to banking sector)

international methodology boosts it to some 34 % of GNP. Though it, of course, can be explained by political developments and by the collapse of the tax collection system, this deficit is a manifestation of the inability of the budgetary system to carry such a burden - the redistribution of more than 50 % of GNP.

This kind of burden would be heavy for any state, but it is much more significant to a nation that is undergoing a general economic crisis and radical transformation of its economy. Chart 15 provides our estimates for the notional budget deficit for the ex-Soviet republics for 1991. This is data based on the redistribution of expenditures of the all-union budget among the republics anticipated by the Ministry of Finance of the USSR for 1991, and the regional redistribution of revenues of the all-union budget (Liubimtsev (1992)).

Institutional problems that were present in the Soviet fiscal system will determine to a large extent what difficulties will face the republics, as they develop their economies. The problems are as follows:

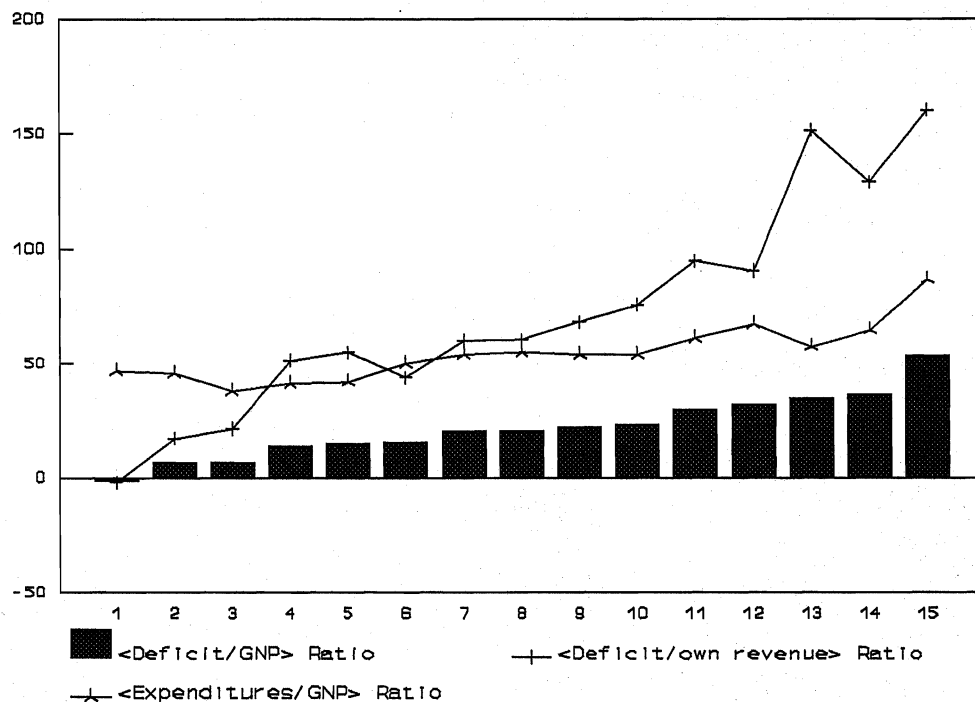
- 1) the need to complete the tax reform, i.e the implementation of a system of taxes and the establishment of a well functioning tax collection arrangement, including as a special problem, the taxation of small business;
- 2) the need to establish a new system of budget planning and realization, adjusted to high inflation;
- 3) financing the budget deficit and the accumulated state debt, including the problem of sharing the Soviet internal debt among the republics;
- 4) implementation of the principles of fiscal federalism in the republican fiscal systems (first of all, in the big republics), entailing the sharing of revenues, expenditures and responsibilities by the different levels of authority and the establishment of the transfer system;
- 5) personalization of the social insurance system and the social safety net;
- 6) partial private financing of public services;
- 7) the transformation of the system of depreciation rates. Nowadays it includes more than 1500 positions with depreciation rates varied from 0.5 % to 50 % per year.

The list of problems could be continued, but it is evident that the scale of problems is great and that it will take a lot of time to resolve them.

Widespread public and political discussions concerning the structure and functioning of the fiscal system took place in the USSR in 1989-1991. But they had a negative effect overall because strong **ideological stereotypes**, which do not strengthen the fiscal system, appeared in the public discussions.

Chart 15.

Notional republican budgets for 1991.



1 Lithuania	2 Armenia	3 Estonia
4 Georgia	5 Azerbaidjan	6 Latvia
7 Russia	8 Ukraine	9 Kazakhstan
10 Moldova	11 Belarus	12 Kirgizia
13 Turkmenia	14 Uzbekistan	15 Tadjikistan

First, the idea that lower tax rates are the only or primary basis for a nation's economic prosperity became widespread. Supporters of this idea cite the experience with tax reform in the Western countries in the 1980s. They take the reductions in tax rates as the single centrepiece of such reform and ignore the differences in economic systems, the state of the economy and in the structure of revenues and expenditures in the fiscal system.

Second, the idea of simplicity of the tax system is dominant in politicians' thinking. They believe that the tax system has to be based on one or two taxes that provide the needed revenue. Third, the so-called "one-channel" tax system was implemented in practice in 1991 during the heated political confrontation between the central and republican authorities. According to this idea, all taxes would go into the local republican budget. The republics would then make agreed contributions to the central budget. The theoretical disadvantages of this approach are very substantial, but no argument could prevent its implementation in the face of pressures exerted by republican politicians (mainly, Russian). The realization of this idea in 1991 showed how impractical it was. The republics were unable to

agree upon the total volume of common (central) expenditures, upon the distribution of corresponding contributions to the central budget, upon their responsibility for the fulfilment of agreements etc. This mechanism became one of the prime factors in the financial collapse of the USSR in 1991. Now, after the disintegration of the USSR, this idea is actively supported by regional leaders inside Russia and has begun to be implemented again.

Technical problems in the fiscal system also present serious future obstacles to the economy. Soviet financial statistics have always been a secret, being characterized by poor quality methodology, slow collection and generalization of the data and the hiding of much information. There is literally no single person who would be able to answer all statistical questions. The absence of the custom of monitoring financial documentation and of paying taxes, the great popularity of tax avoidance and the inability of tax inspection to verify a substantial part of enterprises' balance sheets will require a lot of time to overcome.

The disintegration of the USSR created additional problems. As mentioned above, the old fiscal system was highly centralized, and now the new independent states have to dismantle this system into fifteen independent systems. (We have to take into account the fact that in most republics the level of skills of ministry staffs is very low.) At the same time, as long as the monetary system is still integrated, there is a need to at least coordinate the fiscal policies of the republics. The significant degree of inter-republican economic and technological interdependence requires substantial coordination of fiscal systems, and with multinational populations in all the republics, the possibility of the mass re-migration into native republics in the near future makes the achievement of a number of agreements very urgent (firstly, concerning social insurance).

Evidently, none of these problems help advance economic transformation in the republics, but each of them has to be resolved in the foreseeable future.

5 Conclusion

The transformation of the command economy on the territory of the Soviet Union will evidently be a long, difficult process. The complexity of simultaneous transition from a command economy to a market economy and from a totalitarian society to a democratic society is aggravated by the disintegration of the country. Nevertheless, there is no other alternative. The job has to be done.

The end-result of the development of the old system was extremely unsatisfactory as a starting point for transformation. The economic decline may be compared only with the historic disaster of the depression of the 1930s and is slightly less than that experienced in Germany and Japan at the end of the war. During the last five years, all attempts to improve the command system have resulted in the step-by-step destructure of its basic mechanisms, but the new economic system was not created. The overall financial result of the 70-year history of the socialist model in the USSR is both the domestic and external bankruptcy of the state. In fact, the former Soviet republics are now in a state of multilateral crisis and deep economic recession, which are aggravated by the absence of a common vision for the transformation process.

The long history of the command economy created a very specific type of fiscal system, which was inherited by the republics. Over a long period the state, being responsible for economic development, was able to manage the use of virtually all financial resources in the economy. The fiscal system was only a part of the overall mechanism of centralization and reallocation of resources, playing mainly an additive role. There were virtually no changes in the fiscal system of the USSR, and now this system is completely unsuitable to current needs.

Up to the mid-1980s, the Soviet state controlled the redistribution of 75 % of GNP through the general financial balance, which, in fact, was the most important financial tool in the old system. The attempts to accompany the perestroika in the ideology with improvements in economic system in the second half of the 1980s failed. The result of these non-comprehensive measures was the continuous growth of budget expenditures accompanied by a decline in revenues, as a result of the erosion of the tax system. The budget deficit became a chronic disease of the Soviet economy.

The overall legacy of the old-type fiscal system is multilateral, combining the disequilibrium with a number of technical, ideological and institutional aspects. The number of the Soviet budget's mysteries became slightly smaller. The most critical problem is the necessity for the ex-Soviet republics to join their efforts in the resolution of the common inheritance of problems, at least in the monetary sphere: the common monetary system makes it virtually impossible to realize reform separately in the absence of the will to cooperate among all the republics.

The final conclusion is as follows. The fundamental basis of the transformation in the former Soviet republics is the macroeconomic stabilization that has as its components tough monetary policy and the maintenance of fiscal balance. Any attempts to achieve this goal without taking into account the internal organisation and the state of the inherited fiscal system can not be successful. A huge transformational task in this area has to be carried out in the future, and only its achievement would allow us to anticipate general success for the transformation.

Appendix

The Russian reform and the fiscal system

The Russian economic transformation attracted a lot of interest around the world, and hence it would seem appropriate to analyze (however, briefly) what has happened in this country in the recent past and how Russian reformers are struggling with the legacy of the old system. (There is no precise information on the changes taking place in the other republics, though, of course, it will be necessary to take them into account because of the integrated monetary system.) We shall not attempt to completely describe Russian economic developments of recent months but only to give an overview of the fiscal processes.

According to the original reform plan of Mr. Gaidar, the aim of the Government was to virtually eliminate the budget deficit in the first quarter of 1992, i.e. to reduce it to 1 % of GNP in comparison with the official 22 % level for 1991. In the middle of the quarter, the Government admitted failure in its Memo on Economic Policy submitted to the IMF. But in the later half of the quarter the overall result of the fiscal policy was apparently commendable: the federal budget deficit was reduced to 4.8 % of GNP (Vavilov 1992). What is behind this result and should it really be considered as commendable ?

Before the start of comprehensive reform an effective legislative job was done: the Russian Parliament adopted a number of laws concerning the tax system in December 1991. Several new taxes were established, their yields being distributed among different levels of power. The value-added tax (VAT), at a unified rate (28 %)²⁰, and a system of excise taxes replaced the turnover tax and the sales tax. The economy would clearly have benefited from an earlier adoption of these laws, but better late than never. There also were some ill-advised decisions made, for example, to introduce a tax on the net earnings of enterprises (profits and wages and salaries plus social insurance contributions). This tax is very similar to the VAT, and so it meant virtual double taxation). But overall, the new legislation had a significant positive impact.

The beginning of the economic reform in Russia coincided with the disintegration of the USSR, which (in our opinion) necessitated the effective cooperation of all the republics, at least in the initial stage of their independent lives. On the contrary, the Russian Government proclaimed as its guideline the slogan of "complete economic independence", having destroyed the negotiation process on the Economic Community Treaty in December 1991. The non-viability of this line became evident in January (for the Government; for the majority of specialists, it was clear from the very beginning).

The mutual interdependence of the republican economies is great, but much more important is their common monetary system. Having stated its readiness to make reforms, Russia did not have and still does not have a clear vision of the transformation of the monetary system. Until now, all republics of the ex-USSR have used the Soviet ruble as legal tender. There is a central bank in each repub-

²⁰ Though in mid-February the Russian Parliament reduced the VAT rate to 15% on a small list of goods (drugs, medical equipment, children's formula).

lic, each of which is able to produce money. The probability of success in macroeconomic stabilization with such a multiplicity of emission centres approaches to zero.

The elimination of the budget deficit in the first quarter of 1992 was announced as a prime goal of the Government, which was ready to pay any social and political price for this result. The guideline for fiscal policy in the first quarter was to spend (money) as is earned, with strict limits on all extra outlays. The main hopes for the revenue side of the budget were connected with the VAT, the yields from which are growing as rapidly as prices.

The decision to implement the VAT caused a lot of discussion in Russia. This idea was actively supported by officials from the Ministry of Finance and the Ministry of the Economy (former Gosplan) in 1990-1991, though not even minor preparatory work was done. It seems that the implementation of this tax was one of the mistakes made by the Russian Government. This tax requires the resolution of many technical and political problems, a good system of tax collection and financial control. Nothing like this exists in Russia, and the great dimensions of the country will cause a lot of additional problems. (The anticipation of similar problems was one of the main reasons for the rejection of VAT in the USA.) Nevertheless, this tax was made the centerpiece of budget revenue: its share of total revenue in the consolidated budget was 54 %, and in the federal budget 69.4 %.

The failure of the ill-prepared VAT was evident: though the additional increase in prices increased the yield from this tax, the overall amount of collected VAT revenue reached only 64 % of the planned yield or 41 % of the possible yield. In fact, the VAT generated to the budget only 6.5 % of GNP at the first quarter of 1992 (8.3 % including exices) that is lower than the turnover tax provided in 1980s (12 %-13 % of GNP) and even in 1991 (8.4 % of GNP). (Nevertheless, the Government insisted on the idea that VAT should be the main source of revenue: in the draft budget for the second quarter, its share in consolidated budget revenue remains the same (53.1 %), and in the federal budget 68.2 %). The propensity to avoid taxation has grown as a result of loose tax inspection.

In all, the decline in overall budget expenditure including extra-budgetary funds, (compared to GNP) was extremely great: from 54 % in 1991 to 37 %-38 % in the first quarter of 1992. Table 5 presents the change in structure of revenues and expenditures between the consolidated budget of the USSR in 1990-1991 and the consolidated budget of Russia for the first and the second quarters of 1992. One could say that the system of tax collection virtually collapsed in Russia in the first quarter of 1992. Though its internal organization made it possible to avoid the Oliveira-Tanzi effect (due to three tax payments per month for state-owned enterprises), the relative reduction (compared to GNP) of all revenue items of the budget was significant. The hurried change in the taxation system at end-1991 and the destructive effects of political struggle with the central authorities in 1991 resulted in the inability of the fiscal system to produce the needed revenues. As a result, all expenditure items were also reduced, social welfare outlays being the most significant.

There is no data on the overall volume of subsidies paid in the first quarter of 1992, but the draft budget for the second quarter anticipates their share as

5.3 % of GNP (subsidies to prices and increase in tariffs for coal miners), and if including investment in agriculture and the coal industry²¹ 7 % of GNP. We may assume that the ratio of subsidies to GNP was not smaller in the first quarter, because subsidies for several goods were eliminated during March-April 1992. The subsidization effect for the consumers was even greater: if investment outlays are included into prices, this would require to increase their cost approximately of 50 %, due to the social insurance contribution, the profit tax and the VAT.

There is one more hidden form of subsidization in Russia - the centralized import. All enterprises are obliged to sell 40 % of their export earnings in hard currency at an artificial exchange rate (SUR 55 per US dollar, whereas the average market value of the US dollar was about SUR 150 in the first quarter of 1991, and about SUR 130 in the second quarter). The state buys hard currency in order to service external debt and finance critical imports for the domestic economy. The centralized imported goods were sold to enterprises at prices recalculated from the world market price with an exchange rate of SUR 5.4 per US dollar (this rate was revised up to SUR 20 per US dollar in the end-May 1992). Total exports from Russia amounted US\$ 6.5 billion for the first quarter of 1992, and possible flow of resources to the state for centralized import (evaluated at 50 % retention of enterprise earnings) could be about US\$ 1.3 billion. The subsidization of centralized import at SUR 49.6 per US dollar ("buy" price minus "sell" price) resulted in an overall subsidy of another 4.4 % of GNP²². From this one could say that the burden of subsidies in the Russian economy was not eliminated as the Government had anticipated. Furthermore, if investment and centralized imports are included, the ratio of subsidies to GNP declined only by one percentage point compared to 1991. And this is one of the greatest failures of the Russian Government.

The plan for Russian economic reform was based on price liberalization together with a five-fold increase in energy prices, which remain under state control, beginning January 2, 1992. In this situation, the basic foundation for budgetary planning was the forecast of the overall increase in prices. The official forecast projected a jump in prices of 150 % in January and more moderate inflation in February (15 %-20 %) and March (5 %) on a month-to-month basis. This forecast was based on the precondition of extremely tight monetary policy: the freeze of the money supply would not allow prices to increase. In fact, inflation was much higher during the first quarter of 1992: measured by consumer prices, prices rose 250 %, 38 %, 31 % and 20 % respectively in first four months of the year, while wholesale prices increased 398 %, 70 %, 28 % and 26 %, respectively. The nature of the Soviet economy and the behavior of enterprises

²¹ In our opinion this investment has to be included into the volume of subsidies, as it is acquired by industry at fixed prices for its production (coal), or fixed procurement prices, that presents another form of subsidization of these goods. 90% of this investment will go to agriculture.

²² If the real difference in price of hard currency is taken into account (SUR 145 and SUR 125/110 per US dollar in the first and the second quarter of 1992), the burden of subsidies would rise two-three-fold.

Moreover, the current account balance was negative for Russia in the first quarter of 1992 by US\$ 2.25 billion, financed completely by foreign credits. This amount was also spent for centralized import and presumably was shown as budget revenue (according to the old methodology). If one consider this centralized import as a part of total subsidization, the share of subsidies in GNP could rise by an additional 7.9% of GNP (SUR 49.6 per US dollar).

resulted in a great increase in mutual indebtedness. Having been responsible only for physical production for so many years, enterprises were not inclined to worry about payments from consumers. This had been handled virtually automatically. During the first months of 1992, Russian enterprises continued to behave as before, paying no attention to the ability of their consumers to pay. In this situation, all enterprises included the increased price for energy in their costs, and their prices increased at the same rate in the first month. (After the previous three-fold increase in energy prices in January 1991, the overall increase in wholesale prices was only 128 % for the whole year, of which 56 % was the result of administrative price increases.) The overall shortage of consumer goods being so severe, coinciding with a decline in production and a significant increase in personal income in the last two months of 1991, the population socially accepted the new prices. But as a result, private consumption fell by 56 % in January 1992 in comparison with December 1991 (measured in physical volume), but on the other hand, the shortage ended and consumer goods appeared on the shelves. But the mistake in the inflation forecast had serious effects on the fiscal policy.

First, the growth of enterprise profits and personal incomes was greater than expected, as were the corresponding nominal budget revenues (including VAT). Moreover, a rapid increase in prices usually redistributes incomes from wages to profits in the short run, creating paper profit for enterprises. On the other hand, due to the system of profit accounting²³, the compensative growth of wages led to the increasing double taxation of a substantial share of personal incomes and to further growth in budget revenues. Second, due to the fact that the Russian fiscal system cannot be adjusted automatically to high inflation, budget expenditures are limited by the nominal figures adopted by the Parliament (the final version of the budget for the first quarter of 1992 was adopted on April 4, in a way very similar to the old system). Third, until now there have not been market-determined prices for enterprises' fixed assets, book-value being the only available measure of value. The ten- to twelve-fold increase in prices led to a significant undervaluation of enterprise depreciation, which was increased only twice, beginning in 1992. Besides the decline in enterprises' ability to invest, this also resulted in a relative increase in profits and budget revenue.

The worst result of underestimating inflation was the drastic reduction in social expenditures in Russia. Government policy presumed (at the end of 1991) that the budget would compensate 90 % of the increase in costs in the social sphere and the growth rate for personal incomes would be 60 % of the inflation rate. Overall social expenditures increased by 135 %, expenditures on education 180 %, on culture 140 %, on healthcare 125 % and on the social safety net only 70 %. Due to the higher-than-expected level of inflation (and prices of social goods may have risen even more because they had been previously fixed), this increase in budget expenditures was not sufficient. The relative level of income of employees in this sector began to fall drastically (Table 6). The shortage of drugs in hospitals was caused not by the physical shortage of drugs but by the insufficient financing of hospitals. Strikes among teachers and medical workers became widespread. According to our estimates, the total underfinancing of social welfare

²³ Enterprises are allowed to include in the cost of production only four-times the minimal salary per worker. The rest of labor remuneration has to be paid from after-tax profit. The minimal salary in January-May 1992 was equal to SUR 342 per month, while the average monthly salary was SUR 1300 in January, SUR 1994 in February, SUR 2705 in March and SUR 3500 in April.

in the first quarter was about 40 % (considering the Government's assumption as 100 %). It must be partially compensated by the outlays in April 1992, but governmental budget proposals for the second quarter of 1992 indicate that the substantial underfinancing of the social welfare will continue. Of course, this is one way of reducing the budget deficit, but its social cost seems to be excessive.

The positive result of fiscal policy in the first quarter is the centralization of the budget deficit, which makes it possible to monitor and control the financing of the deficit. But the deficit is still being financed by borrowing from the central bank.

The over-centralization of the budget has not been resolved. The share of the federal budget was 72 % of the total expenditures of the consolidated budget in the first quarter of 1992, and it will increase (up to 74 %) in the second quarter.

The overall effect of the Russian Government's fiscal policy seems not to have been very favourable. Though the budget deficit was significantly reduced, this has been achieved through the drastic underfinancing of social welfare. Even the moderate compensation for this measure (increased social financing) planned for the second quarter may cause an increase in the budget deficit (up to 8.9 % of GNP on the federal level according to Government forecast). None of the problems mentioned above as part of the legacy of the command economy have been resolved yet. The entire job of reconstructing the fiscal system still lies ahead.

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Table 1. General Financial Balance of the USSR (SUR billion)

	1980	1985	1986	1987	1988	1989	1990	1991
Total Revenue	457.2	569.5	592.7	614.9	663.7	734.8	770.0	1300.0
1. Profit of state enterprises	116.9	169.7	196.3	204.2	234.3	254.5	249.3	537.0
2. Turnover tax	94.1	97.7	91.5	94.4	101.0	111.1	121.9	139.3
3. Social insurance contributions	14.2	25.4	26.5	28.1	30.1	33.1	44.8	158.6
4. Depreciation	71.9	102.1	110.0	117.0	124.2	133.0	137.3	81.5
5. Geological fees	2.0	3.7	3.9	4.0	4.1	4.2	4.1	15.0
6. Revenue from foreign activity	43.4	65.0	64.4	69.2	62.6	67.2	59.6	64.4
7. Emission	3.3	4.1	3.9	5.9	11.8	18.4	26.6	127.3
8. Taxation of non-state enterprises	1.7	2.5	2.6	2.8	2.8	4.2	4.1	6.0
9. Personal taxation	24.5	30.0	31.2	32.5	35.9	41.7	43.5	42.2
10. State bonds	0.7	0.9	1.5	1.9	2.0	2.1	7.5	0.5
11. Other revenue	84.5	68.4	60.9	54.9	55.0	65.3	71.3	128.2
Total Expenditure	467.3	587.5	640.6	672.0	753.8	826.5	900.0	1600.0
1. Centralised investment	117.8	145.3	161.7	144.1	114.0	96.9	83.6	132.9
2. Geological expenditures	3.3	4.1	4.1	4.1	4.2	4.7	3.7	15.0
3. Equipment for budgetary organisations	1.5	1.9	2.1	2.2	3.0	3.9	4.7	5.4
4. Assets renovation	34.8	45.6	46.5	49.4	53.5	60.0	63.0	81.5
5. Differences in prices	29.9	66.4	74.3	75.7	86.3	95.5	109.8	145.7
6. Expenditures for foreign activity	0.4	0.8	19.9	26.7	28.5	27.4	26.8	26.7
7. Funds of enterprises	33.0	39.4	48.1	82.4	164.5	221.2	217.4	479.0
8. Socio-cultural (without 1,3,4)	83.5	105.5	109.7	115.9	123.7	132.9	147.8	369.5
9. Payments for state bonds	0.9	1.3	0.8	1.3	0.1	1.1	1.6	1.8
10. Defense (without pensions and construction)	14.0	14.8	14.9	15.6	15.7	68.6	64.5	93.7
11. State management	5.8	8.2	8.5	8.8	10.4	11.0	11.8	19.4
12. Revenues surplus	8.1	4.1	2.5	4.6	9.5	11.1	0.0	0.0
13. Reserve funds	0.0	0.0	0.0	0.0	0.0	0.0	4.1	6.2
14. Operational and other expenditures	134.3	150.1	147.5	141.2	140.4	92.2	161.2	223.2
Gosbank financing	10.1	18.0	47.9	57.1	90.1	91.7	130.0	300.0
Memorandum items								
Net Material Product	454.1	568.7	576.0	585.6	619.1	666.0	704.3	1335.0
Gross National Product	619.0	777.0	799.0	825.0	875.0	943.0	1000.0	1892.4

Source: Gosplan, own estimates.

Table 2.1. Budget Expenditures in the USSR (consolidated budget, SUR million)

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total Expenditures	154599.9	214520.7	226737.0	242790.2	260218.0	276370.4	294630.6	309793.7	343149.7	354265.0	371183.8	386469.3	417089.6	430930.2	459525.6	482633.1	513200.0	953500.0
1. National economy – official	74554.3	110696.8	118488.8	129781.8	141253.6	151354.0	161030.5	169769.7	197288.5	201831.8	211715.8	219451.9	239067.5	245866.5	242824.2	201500.0	197500.0	274400.0
National economy – adjusted (*)			96118.8	105811.8	114783.6	122684.0	129254.5	135723.7	160942.5	161285.8	167869.8	175014.9	191830.5	196710.5	190268.2	201500.0	195900.0	274400.0
1.1 Subsidies to retail prices	.....	.....	19000.0	21600.0	24200.0	26800.0	29400.0	36800.0	44200.0	51600.0	59000.0	66400.0	74300.0	75700.0	86300.0	95500.0	109800.0	145700.0
2. Social and cultural activities	55941.4	77043.9	80741.5	84271.6	89053.3	92822.1	98826.8	103635.1	108555.8	113804.4	119658.2	125573.0	133743.9	139963.5	151251.4	149314.3	170000.0	425600.0
2.1 Education	18226.0	24755.5	25759.3	26800.5	28025.9	28927.5	29906.9	30809.8	32145.0	32432.6	33980.6	35977.6	38050.5	39224.3	42668.7	44407.5	49400.0	146500.0
2.2 Science – official	6543.4	8032.1	8031.8	8315.5	8902.0	9417.4	10081.0	10862.1	11720.3	12712.3	13232.9	13624.8	14426.7	15590.1	16938.9	10056.4	10500.0	14000.0
Science – adjusted (*)	3736.3	4586.3	4586.2	4748.2	5083.0	5377.3	5756.3	6202.3	6692.3	7258.7	7556.0	7779.8	8237.6	8901.9	9672.1			
2.3 Healthcare	9207.5	11383.1	11758.6	12317.1	13283.4	13826.7	14650.9	15112.8	15913.4	16331.8	17026.6	17484.8	17880.4	19315.3	21703.9	24414.9	28280.0	83300.0
2.4 Physical culture	76.7	86.8	94.3	146.8	208.7	308.3	170.1	130.4	121.6	123.1	122.5	125.8	127.3	147.7	168.9	198.1	220.0	500.0
2.5 Social insurance	12737.8	18166.1	19212.8	20177.1	21410.3	22640.9	24008.8	25660.1	27280.8	28029.6	29623.7	31861.2	35037.8	37272.1	39503.6	40235.0	51500.0	126000.0
2.6 Social safety	9150.0	14620.3	15884.7	16514.6	17223.0	17701.3	20009.1	21059.9	21374.7	24175.0	25671.9	26498.8	28221.2	28414.0	30267.4	30002.4	30100.0	46500.0
3. Defense – official	17854.0	17430.0	17430.0	17230.0	17230.0	17230.0	17124.0	17054.0	17054.0	17054.0	17054.0	19063.0	19063.0	20244.0	20244.0	75230.1	69100.0	103000.0
Defense – Akhromeev			39800.0	41200.0	43700.0	45900.0	48900.0	51100.0	53400.0	57600.0	60900.0	63500.0	66300.0	69400.0	72800.0	75230.1	70700.0	103000.0
4. State management	1661.4	2010.3	2054.0	2151.3	2282.7	2361.3	2544.1	2638.2	2788.0	2856.6	2861.0	2982.2	2985.9	2923.8	3037.4	3384.4	5100.0	23400.0
5. Other	4588.8	7339.7	8022.7	9355.5	10398.4	12603.0	15105.2	16696.7	17463.4	18718.2	19894.8	19399.2	22229.3	21932.4	42168.6	53204.3	71500.0	135900.0
5.1 Foreign activity	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15100.0	18000.0	24600.0	26004.2	28374.1	28500.0	19400.0
6. Indebtness in repayment of subsidies		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5000.0	6300.0	9200.0	9275.0	9925.0	22200.0	70100.0
7. Overall Expenditures												391469.3	423389.6	440130.2	468800.6	492558.1	535400.0	1023600.0
Memorandum items																		
Net material product (bln.Rbl.)	289.9	363.0	383.0	399.4	420.6	432.9	454.1	477.9	512.9	536.4	559.0	568.7	576.0	585.8	619.1	666.0	704.3	1353.0
GNP (bln. Rbl.)	370.5	479.7	509.4	535.5	564.1	586.7	619.0	651.0	696.0	729.0	760.0	777.0	799.0	825.0	875.0	943.0	1000.0	1892.4

(*) – ENE and "Science" were adjusted by the difference between "Defense – official" and "Defense – Akhromeev".

Source: "Gosudarstvennyy byudzheth", "Narodnoye Khozyaystvo", Goskomstat, Ministry of Finance, own estimates (for 1991).

Table 2.2. Budget Expenditures in the USSR (per cent of GNP)

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total Expenditures	41.7	44.7	44.5	45.3	46.1	47.1	47.6	47.6	49.3	48.6	48.8	49.7	52.2	52.2	52.5	51.2	51.3	50.8
Overall Expenditures												50.4	53.0	53.3	53.6	52.2	53.5	54.1
1. National economy	20.1	23.1	23.3	24.2	25.0	25.8	26.0	26.1	28.3	27.7	27.9	28.2	29.9	29.8	27.8	21.4	19.8	14.5
1. 1 ENE – adjusted	20.1	23.1	18.9	19.8	20.3	20.9	20.9	20.8	23.1	22.1	22.1	22.5	24.0	23.8	21.7	21.4	19.6	14.5
1. 2 Subsidies to retail prices	...	...	3.7	4.0	4.3	4.6	4.7	5.7	6.4	7.1	7.8	8.5	9.3	9.2	9.9	10.1	11.0	7.7
1. 3 ENE – adjusted & excl. subsidies	...	...	15.1	15.7	16.1	16.3	16.1	15.2	16.8	15.0	14.3	14.0	14.7	14.7	11.9	11.2	8.6	6.8
2. Social and cultural activities	15.1	16.1	15.9	15.7	15.8	15.8	16.0	15.9	15.6	15.6	15.7	16.2	16.7	17.0	17.3	15.8	17.0	22.0
2. 1 Education	4.9	5.2	5.1	5.0	5.0	4.9	4.8	4.7	4.6	4.4	4.5	4.6	4.8	4.8	4.9	4.7	4.9	7.7
2. 2 Science	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.1	1.1	0.7
2. 3 Healthcare	2.5	2.4	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.3	2.2	2.3	2.5	2.6	2.8	4.4
2. 4 Physical culture	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. 5 Social insurance	3.4	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.9	3.8	3.9	4.1	4.4	4.5	4.5	4.3	5.2	6.7
2. 6 Social safety	2.5	3.0	3.1	3.1	3.1	3.0	3.2	3.2	3.1	3.3	3.4	3.4	3.5	3.4	3.5	3.2	3.0	2.5
3. Overall subsidies	...	...	3.7	4.0	4.3	4.6	4.7	5.7	6.4	7.1	7.8	9.2	10.1	10.3	10.9	11.2	13.2	11.4
3. 1 Hidden subsidies												0.6	0.8	1.1	1.1	1.1	2.2	3.7
4. SCA inc. subsidies	...	...	19.6	19.8	20.1	20.4	20.7	21.6	21.9	22.7	23.5	25.4	26.8	27.3	28.2	27.0	30.2	33.4
5. Defense – official	4.8	3.6	3.4	3.2	3.1	2.9	2.8	2.6	2.5	2.3	2.2	2.5	2.4	2.5	2.3	8.0	6.9	5.4
5. 1 Defense – Ahromeev			7.8	7.7	7.7	7.8	7.9	7.8	7.7	7.9	8.0	8.2	8.3	8.4	8.3	8.0	7.1	5.4
6. State management	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5	1.2
7. Other	1.2	1.5	1.6	1.7	1.8	2.1	2.4	2.6	2.5	2.6	2.6	2.5	2.8	2.7	4.8	5.6	7.2	7.2
7. 1 Foreign activity	...	...	...	...	...	...	...	...	...	...	...	1.9	2.3	3.0	3.0	3.0	2.9	1.0

Table 3.1. Budget Revenues in the USSR (consolidated budget, SUR million)

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Total Revenues	156702.7	218768.9	232234.2	247819.3	265812.3	281531.4	302700.0	320635.2	353032.5	357919.1	376695.4	390602.5	419547.5	435504.3	469023.4	493680.7	471800.0	664900.0
2. Turnover tax	49379.8	66606.9	70697.7	74562.7	84083.6	88296.3	94108.7	100396.3	100601.5	102902.8	102722.2	97716.4	91547.1	94445.2	100994.1	111063.7	121200.0	159300.0 *
3. Contributions of state enterprises	54156.8	69712.8	70577.8	78402.5	78591.4	84238.2	89819.1	92432.1	102357.7	106642.4	115626.4	119587.4	129801.9	127396.6	119635.5	115510.7	116500.0	144500.0 **
4. Taxation of non-state enterprises	1234.4	1464.9	1501.6	1599.3	1572.5	1566.1	1717.5	1864.4	1878.1	2174.9	2611.9	2522.2	2640.5	2854.1	2825.3	4188.3	6400.0	
5. Social insurance	8203.4	11064.2	11969.8	12162.1	12859.5	13688.4	13957.0	15012.1	22349.1	23069.2	24527.8	25381.5	26512.7	28061.1	30076.9	33092.4	43200.0	178000.0
6. Total personal taxation	13373.8	19118.9	20389.5	21549.3	22877.4	23974.4	25322.5	26073.4	27234.0	28267.4	29163.2	30652.6	31939.6	33280.7	32586.3	39087.6	48400.0	64400.0
6.1 Personal income tax	11606.7	16993.5	18218.5	19321.7	20596.7	21654.1	22954.9	23911.9	25012.6	25972.9	27105.0	28315.6	29484.5	30900.8	33834.4	37464.6	42300.0	....
7. Sales of state bonds	470.2	561.5	580.2	620.0	644.9	722.3	600.4	732.9	1342.6	1280.5	1310.2	1690.1	2218.6	2167.6	2283.2	2601.0	56600.0	....
8. Foreign activity	...	30150.0	32160.0	34170.0	36180.0	38190.0	40200.0	46380.0	52560.0	58740.0	64920.0	71100.0	64400.0	69300.0	62630.6	67171.4	75200.0	35000.0
9. Other incomes	29884.3	20089.7	24357.6	24753.4	29003.0	30855.7	36974.8	37744.0	44709.5	34841.9	35813.7	41952.3	70487.1	77999.0	117991.5	120965.6	4300.0	83700.0
9.1 Official deficit, included in revenues	...	...	...	...	...	...	...	...	...	...	...	18300.0	47900.0	57100.0	90100.0	91700.0	(41400.0) ***	
10. Fiscal balance ****	1632.6	3686.7	4917.0	4409.1	4949.4	4438.7	7469.0	10108.6	8540.2	2373.6	4201.4	-20856.9	-53960.7	-63893.5	-92160.4	-93178.4	-120200.0	-358700.0
Memorandum items:																		
11. Net material product (SUR billion)	289.9	363.0	383.0	399.4	420.6	432.9	454.1	477.9	512.9	536.4	559.0	568.7	576.0	585.8	619.1	666.0	704.3	1353.0
11.1 Gross national product (SUR billion)	370.5	479.7	509.4	535.5	564.1	586.7	619.0	651.0	696.0	729.0	760.0	777.0	798.5	825.0	875.4	943.0	1000.0	1892.4

... - No data available

* - Including sales tax.

** - Profit tax.

*** - Firstly, official deficit was not included in budget revenues.

**** - Total revenue, excluding official deficit and sales of bonds, minus overall expenditures.

Source: "Gosudarstvennyy byudzhel", "Narodnoye Khozyaystvo", Goskomstat, Ministry of Finance, own estimates (for 1991).

Table 3.2. Budget Revenues in the USSR (per cent of GNP)

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Total Revenues	42.3	45.6	45.6	46.3	47.1	48.0	48.9	49.3	50.7	49.1	49.6	50.3	52.5	52.8	53.6	52.4	47.2	35.1
2. Turnover tax	13.3	13.9	13.9	13.9	14.9	15.0	15.2	15.4	14.5	14.1	13.5	12.6	11.5	11.4	11.5	11.8	12.1	8.4
3. Contributions of state enterprises	14.6	14.5	13.9	14.6	13.9	14.4	14.5	14.2	14.7	14.6	15.2	15.4	16.3	15.4	13.7	12.2	11.7	7.6
4. Taxation of non-state enterprises	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.0
5. Social insurance	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.5	4.3	9.4
6. Total personal taxation	3.6	4.0	4.0	4.0	4.1	4.1	4.1	4.0	3.9	3.9	3.8	3.9	4.0	4.0	3.7	4.1	4.8	3.4
6.1 Personal income tax	3.1	3.5	3.6	3.6	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.7	3.7	3.9	4.0	4.2	0.0
7. Sales of state bonds	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	5.7	0.0
8. Foreign activity		6.3	6.3	6.4	6.4	6.5	6.5	7.1	7.6	8.1	8.5	9.2	8.1	8.4	7.2	7.1	7.5	1.8
9. Other incomes	8.1	4.2	4.8	4.6	5.1	5.3	6.0	5.8	6.4	4.8	4.7	5.4	8.8	9.5	13.5	12.8	0.4	4.4
9.1 Official deficit, included in revenues												2.4	6.0	6.9	10.3	9.7	(4.1)	
10. Fiscal balance	0.4	0.8	1.0	0.8	0.9	0.8	1.2	1.6	1.2	0.3	0.6	-2.7	-6.7	-7.7	-10.6	-9.9	-12.0	-19.0

Table 4. Turnover Tax Rates (as per cent of average retail price)

	1970	1975	1980	1985	1986	1987	1988	1989	1990
Vodka	87.9	87.9	89.4	94.8	95.1	95.0	94.9	94.9	95.0
Silk	65.9	64.6	62.3	59.2	58.9	56.3	55.8	49.4	49.2
Cars	51.2	60.3	65.6	66.1	64.8	63.9	63.7	63.6	63.3
Wines	51.5	50.8	52.5	58.7	57.9	57.3	58.0	56.8	60.4
Cotton	53.0	40.1	38.9	25.3	25.4	25.2	25.1	23.2	23.1
Cognac	70.9	71.0	67.4	70.0	76.1	76.5	75.9	76.8	76.0
Tricotage	44.4	43.6	41.0	34.5	33.9	32.5	28.6	27.6	26.8
Juwelry	52.0	56.6	80.5	74.8	79.0	79.6	79.2	71.1	34.9
Shoes (cuir)	30.5	35.5	32.3	29.2	26.6	22.1	23.0	23.9	21.8
Wool	34.4	32.7	33.2	23.1	23.6	25.0	25.5	21.3	21.7
Sweets	18.8	17.7	16.7	16.7	19.7	18.9	19.0	18.7	18.8
Socks	44.4	43.6	41.0	34.5	33.9	32.5	40.0	41.0	38.7
Tobacco	45.0	36.0	30.4	34.4	34.8	32.8	32.9	32.5	32.2
Beer	40.5	41.9	43.7	40.1	39.5	40.2	40.5	41.0	41.4
Shampagne	64.9	65.0	63.0	68.2	69.1	69.3	69.8	70.6	70.4
Refrigerators	32.0	47.4	39.4	42.0	41.9	41.8	41.8	39.6	39.3
Vegetable oil	41.9	41.9	34.2	33.6	32.9	31.8	31.7	31.7	31.6
Watches	62.4	63.5	56.5	50.6	48.5	49.9	49.1	48.9	48.8
TV sets	33.9	32.3	11.2	14.2	13.9	12.9	13.4	8.6	9.0
Magnetophones	14.0	18.0	18.3	22.9	21.4	20.8	20.4	17.2	17.0
Margarin	23.8	22.9	13.5	12.3	11.0	10.8	10.0	10.3	10.0
Radio	12.0	24.6	21.8	20.2	20.7	19.1	18.5	13.4	12.5
Washing machin.	31.1	30.5	26.0	19.2	19.0	17.7	17.3	16.8	14.5
Bicycles	21.6	25.1	26.3	22.8	22.7	23.6	23.0	20.2	19.9
Sewing machines	20.0	30.8	36.2	33.4	34.0	33.3	34.1	31.9	32.4

Table 5. Comparison of the structure of the Russian budget.
(in per cent of GNP)

		USSR		RUSSIA			
		1990	1991	I-92 (plan)		I-92 fact	II-92
				25.1.92	4.4.92	fact	plan
1.	Budget Revenue	37.2	25.7	33.0	25.3	24.0	26.2
2.	VAT (turnover tax)	12.1	8.4	16.6	9.9	6.5	13.9
3.	Excises			2.3	1.2	1.7	1.3
4.	Profit tax	11.7	7.6	7.9	4.5	6.5	6.8
5.	Personal taxation	4.8	3.4	2.3	1.3	1.7	1.8
6.	Foreign activity	7.5	1.8	1.1	0.0	0.0	0.5
7.	Other	1.1	4.5	3.0	3.6	7.7	1.9
8.	Extra-budgetary funds						
8.1	Social insurance contribution	4.3	9.4	8.9	....	....	9.2
8.2	Other extra-budgetary funds					....	2.7
9.	Total Revenue	41.5	35.1	42.0	....	....	38.1
10.	Budget Expenditure	49.2	43.4	34.1	26.4	28.7	34.1
11.	National economy	19.6	12.9	10.5	9.1	6.2	11.2
11.1	subsidies	13.2	11.4	3.2	2.5	....	5.2
	Centralized import *			....	....	(4.4/12.3)	
11.2	investment			3.9	2.5	3.6	3.6
11.2.1	to coal and agriculture			....	....	1.7	1.8
12.	SCA	11.8	15.8	10.9	6.2	7.4	9.4
13.	Defense	6.9	5.4	5.9	3.4	3.8	5.5
14.	State management & security	1.2	1.7	2.3	1.8	2.2	2.0
15.	Other	9.7	5.2	4.5	5.9	9.1 **	6.0
16.	Extra-budgetary funds						
16.1	Pension & SI Funds	5.2	6.7	10.2	....	....	6.4
16.2	Other extra-budgetary funds		4.0	....	....	....	2.7
17.	Total Expenditure	54.4	54.1	44.3	....	....	43.2
<i>Memorandum item</i>							
GDP (in nominal prices)		1000.0	1892.4	820.0	1500.0	1500.0	2300.0

* Not included into budget; excluding and including foreign credits.

** Partly non-distributed ENE and SCA outlays are included.

Source: Goskomstat, Ministry of Finance, own estimates.

Table 6. Comparison of Salaries in Different Sectors of the Russian Economy

	1991— Feb	1992—Jan	1992— Feb	1992— Mar
Average	100.0	100.0	100.0	100.0
Industry	107.3	122.5	128.7	128.1
Healthcare	88.2	62.0	62.6	53.1
Education	83.9	74.6	64.5	55.4
Culture	82.4	61.6	50.2	51.0

Source: Argumenty i fakty N14, 1992; Goskomstat

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