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Reform issues in the former Soviet Union

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Abbreviations and symbols used

Countries

B	Belgium
DK	Denmark
D	Germany
GR	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	The Netherlands
P	Portugal
UK	United Kingdom
EUR 9	European Community excluding Greece, Spain and Portugal
EUR 10	European Community excluding Spain and Portugal
EUR 12–	European Community, 12 Member States (including West Germany)
EUR 12+	European Community, 12 Member States (including Germany)
USSR	Union of Soviet Socialist Republics

Currencies

ECU	European currency unit
BFR	Belgian franc
DKR	Danish krone
DM	Deutschmark
DR	Greek drachma
ESC	Portuguese escudo
FF	French franc
HFL	Dutch guilder
IRL	Irish pound (punt)
LFR	Luxembourg franc
LIT	Italian lira
PTA	Spanish peseta
UKL	Pound sterling
USD	US dollar
SFR	Swiss franc
YEN	Japanese yen
CAD	Canadian dollar
ÖS	Austrian schilling
R	Russian rouble

Other abbreviations

ACP	African, Caribbean and Pacific countries having signed the Lomé Convention
ECSC	European Coal and Steel Community
EDF	European Development Fund
EIB	European Investment Bank
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
ERDF	European Regional Development Fund
Euratom	European Atomic Energy Community
Eurostat	Statistical Office of the European Communities
G-7	Group of seven major industrialized democracies (Canada, France, Germany, Italy, Japan, UK, USA)
GDP (GNP)	Gross domestic (national) product
GFCF	Gross fixed capital formation
LDCs	Less-developed countries
Mio	Million
Mrd	1 000 million
NCI	New Community Instrument
OCTs	Overseas countries and territories
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PPS	Purchasing power standard
SMEs	Small and medium-sized enterprises
SOEC	Statistical Office of the European Communities
toe	Tonne of oil equivalent
:	Not available

Glossary

CMEA	Council for Mutual Economic Assistance, also known as Comecon
glasnost	transparency, openness
Gosbank	State Bank
Goskomstat	State Committee for Statistics
Izvestia	news — Soviet daily newspaper
Komsomol	youth association of the Soviet Union
kolkhoz	cooperative farm
NEP	New Economic Policy (economic policy in the Soviet Union from 1921 to 1928, which allowed private ownership of enterprises, etc.)
RSFSR	Russian Soviet Federative Socialist Republic

Contents

Reform issues in the former Soviet Union — Introduction

Joan Pearce and Jean Pisani-Ferry

Contents

1. Introduction

The papers in this volume were prepared by independent experts from Western Europe and the former Soviet Union at the request of the Directorate-General for External Relations (DG I) and the Directorate-General for Economic and Financial Affairs (DG II) in the framework of the Commission's efforts to analyse and assess the process of reform in the former Soviet Union.

This research was initiated after the Commission had completed its own study of the Soviet economy[1] and launched its first technical assistance programme. At that time (spring-summer 1991), it was clear that a major research effort into the economics of Soviet transformation was a necessary companion to the European and Western assistance programmes. As in the case of the countries of Central and Eastern Europe,[2] it was therefore decided to commission empirical research by Western experts. Fruitful professional contacts established during the preparation of the Commission study gave the opportunity, a few months later, to commission parallel studies by young Soviet economists associated with reform circles. As events developed in the autumn of 1991, it turned out that most of these people became more and more involved in the definition and internal implementation of reform policies. Most of them were nevertheless able to complete their studies, and to participate in a seminar in Brussels on 24 and 25 October 1991. Final manuscripts were received at end-1991 or at the beginning of 1992.

As editors of the volume, we hesitated to publish it when events accelerated dramatically with the break-up of the Soviet Union and the implementation of radical economic reform in Russia. As the reader will observe, some of the issues which are discussed by the authors have been settled by history. This relates especially to the discussion — whose echoes can be found in many of the papers — of the costs and benefits of decentralized as against centralized reform. Other topics already seem very distant in time, such as the discussion of Gorbachev's economic policies.

We finally decided to publish these studies, however, for three reasons. First, a large part of the underlying analysis remains valid for today's successor States of the former Soviet Union. Even issues which have for several months been about to be settled, such as the introduction of new currencies or the convertibility of the rouble, remain undecided. Second, post-Soviet reform debates have been characterized by an extreme focus on the very short term. The studies will give the reader an opportunity to take a longer view on these debates. Third, this volume is also a contribution to the history of economic policy in the former Soviet Union. Although this is not its main purpose, we thought readers would be interested in the analysis and the views it presents.

The volume is organized in four parts. Part 1 deals with macroeconomic issues. Part 2 is devoted to structural reform. Part 3 specifically addresses the inter-republic (or interstate) dimension. Part 4 is wider in scope, as it envisages the transformation process in its political economy and cultural dimensions.

2. Macroeconomics

At the end of 1991, the Soviet Union had been experiencing several years of macroeconomic deterioration. Against a background of stagnation in real income, the succession of high and rising budget deficits had led to the accumulation of involuntary savings which became conventionally identified as a 'monetary overhang'. Successive ambitious but unimplemented reform plans had helped to educate policy-makers in the issues of reform design, but were also responsible for widespread confusion regarding the aims and the pace of economic policy. Furthermore, permanent disputes between the Union authorities and emerging republic leaderships contributed to procrastination and confusion. After being appointed in the context of the conservative backlash of end-1990, the Pavlov government launched a stabilization package. However, the measures it took were both partial and poorly designed, such as the ill-conceived monetary reform of February, or the partial price liberalization of April. Furthermore, ambiguity persisted as to the aim of these policies, which could be seen either as preliminary steps towards liberalization, or as an attempt to reintroduce central control over the economy. Budgetary restriction and monetary control also proved impossible to implement in the context of permanent disputes between Union and republic governments.

The reform errors and failures of the last Gorbachev years were clearly a major factor in the deterioration of the macroeconomic picture that the new authorities had to face in

1 Commission of the European Communities. (1990), 'Stabilization, liberalization and devolution; Assessment of the economic situation and reform process in the Soviet Union', *European Economy*, No 45, December.

2 Commission of the European Communities. (1990), 'Economic transformation in Hungary and Poland', *European Economy*, No 43, March; (1991), 'The path of reform in Central and Eastern Europe', *European Economy*, Special edition No 2.

1992. After Mr Pavlov's failed attempt at stabilizing the economy through administrative measures, a new policy course was taken, at least in Russia. But analysis of the main macroeconomic issues of the last Gorbachev years also shows that major policy dilemmas have in large measure persisted. This is apparent in the three contributions by S. Alexashenko on the budget, A. Vavilov and O. Vjugin on inflation, and A. Vernikov on the convertibility of the rouble.

Alexashenko's title is prophetic in tone. Yet his pessimism is rooted in his analysis of the structure of the budgetary system: he shows that quite apart from policy mistakes, the structural sources of the budgetary crisis were the lack of a genuine tax system and of an expenditure control system, and the absence of any effective mechanism that could foster budgetary discipline at the various government levels. Both resulted from the relaxation of the procedures associated with the command economy and the lack of alternative mechanisms that could ensure control over the budget during the transition to a market economy. It is by now conventional wisdom to emphasize the importance in the sequencing of economic reform of introducing early on a package of reform of tax and expenditure. Alexashenko's paper clearly illustrates this view, but also shows the specific contribution of the Soviet disintegration process.

Vavilov and Vjugin carefully analyse the sources and mechanisms of inflation in the former Soviet Union. After recalling how inflationary pressures had been developing in the traditional command system, and how perestroika contributed both to aggravate these pressures and to relax the control mechanisms, they provide a detailed and quantitative assessment of Mr Pavlov's macroeconomic policy, especially as regards the aggregate and distributional consequences of his price and tax measures. They point out that the administrative price reforms, whose goals were to redistribute income towards the State, to correct relative price imbalances and to confiscate excess savings, completely failed to achieve the first aim, brought only limited success in the second, and only succeeded in reducing the 'monetary overhang'. This last conclusion may seem paradoxical, since price liberalization at the beginning of January 1992 resulted in a 500% price jump. Yet it is consistent with all available estimates of the overhang. This indicates either that involuntary savings were significantly higher than estimated, or that the price jump did not result from their excess, as is generally thought.

Convertibility has for more than one year been on the agenda for the immediate future. Yet it remains an ever-distant goal. Andrei Vernikov's paper first reviews the Soviet policies and the debate on this subject. He then moves on to discussing the pros and cons of current account convertibility. His main conclusions are that current account convertibility should accompany price liberalization (because liberalization would otherwise result in price distortions), but that pegging the exchange rate could only be advisable after the main inflationary consequences of liberalization have been borne. He advocates an early introduction of current account convertibility for residents, but emphasizes a number of preconditions, among which are internal stabilization and the implementation of clear rules for inter-republic economic relations. It is evident that these conditions have not yet been met.

3. Structural reform

Structural reform in the former Soviet Union was bound to require even more pain and hardship than in other post-communist countries. Even without the inter-republic dimension, the virtually all-encompassing nature of the State, the near complete elimination of market relations and private property, especially in agriculture, the long-standing isolation from world markets, the extent of distortions in industry and the size of the military complex were clearly adverse factors that would make successful transition particularly difficult. The extent of the recession that unfolded in 1992 confirms that the costs of the transition to a market economy will be significantly higher than in Central and Eastern Europe.

Four papers investigate specific issues in structural reform. Philip Hanson assesses the various efforts to reform the economic law framework. Susanne Oxenstierna analyses the situation in the labour markets. Olga Ivanova examines how the CMEA collapse affected Soviet trade with Central and Eastern Europe. Gérard Duchêne and Claudia Senik-Leygonie provide a quantitative assessment of the relative price distortions in the Soviet economy.

In all the countries in transition to market economies, a priority in setting up the legal framework is to lay down a clear basis for the acquisition and protection of property rights. Philip Hanson examines this aspect of various pieces of actual and proposed legislation from 1989-91, from the Union, the Russian republic and the Shatalin programme approved by the Russian Parliament in September 1990. He concludes that all were intended to liberalize with regard to property rights, and were clearly aimed at establishing the legal framework for a mixed economy. Their main shortcomings were that they failed to deal adequately with the ownership of land; that they contained too many loopholes that would undermine their effectiveness; that their political underpinnings were fragile, as the conservative backlash of 1991 revealed; and that their implementation would require

the development of skills and institutions, which would take time to accomplish. None the less, he suggests that privatization can contribute to stabilization, because it promises to change the prevailing patterns of microeconomic behaviour of enterprises that help to generate inflationary pressure.

By 1990, the wage reform of 1986 and the Law on State enterprises of 1987 had already brought observable changes in the Soviet labour market: employment in the State sector was declining, while legal private employment was expanding; unemployment was increasing; and nominal wages were rising steeply. Susanne Oxenstierna challenges the view that the reforms dampened labour demand in the State sector. She suggests instead that the fall in State-sector employment was due at least as much to supply factors and points out that labour force participation rates were declining among the active population, albeit with sharp differences among republics. Enterprises, faced with the requirement to raise wages and the freedom to set prices, in the absence of competition preferred to raise prices rather than to shed labour or improve profitability. Unemployment did rise, however, and Oxenstierna estimates that in 1990 the true rate was between 3 and 6%. She sees the much higher rates that will appear as transition gets under way raising particular concerns: mismatches between the unemployed and the new job opportunities, coupled with uncertainty about the new opportunities and hence about what retraining is appropriate; the budgetary cost of supporting the unemployed; and the need to improve on the very limited provision of employment offices.

On 1 January 1991, all trade among CMEA members switched to world prices and hard-currency settlement. Available estimates indicate that the US dollar value of intra-CMEA trade flows contracted sharply in 1991 in comparison with 1990. However, several factors — recession and disorganization in the Soviet Union, relative price changes, shortage of hard currency — may account for this collapse. Olga Ivanova's paper analyses changes in the Soviet Union's trade policy *vis-à-vis* the Central and East European countries. It does not provide a clear-cut decomposition of the factors behind the collapse, but it shows how domestic recessions, policy errors which created obstacles or disincentives to trade within the CMEA, and a shortage of hard currency all contributed to it.

The goal of Gérard Duchêne and Claudia Senik-Leygonie is to assess the consequences for the former Soviet Union of a switch to world prices. R. McKinnon has conjectured that the peculiar relative price structure of the Soviet economy could result in the existence of value-subtracting industries when value-added is measured at world prices. There is, however, no standard way of measuring *ex ante* an industry's value-added at world prices. Duchêne and Senik-Leygonie use Soviet foreign trade prices as proxies for the world price of tradables and compute similar prices for non-tradables under the assumption that the mark-up rate for non-tradables is equal to that for tradables. They confirm that value-added can be negative when measured at world prices, and that profit in many industries would be too low to finance further investment. They also indicate that, using the same prices, private consumption represented a meagre 40% of total GDP. These figures indicate how deep the structural transformation needs to be in the former Soviet Union.

4. The inter-republic dimension

The struggle between the Centre and breakaway republics began in 1990 to interfere strongly with the process of economic reform and led at the end of 1991 to the break-up of the Soviet Union. This interaction between two major dimensions of the Soviet transformation process became apparent when the elaboration of the economic reform plan prepared by Professor Shatalin at the request of President Gorbachev revealed how difficult it was to design a reform policy in an unstable and rapidly evolving context. During the 1990-91 period, Soviet and Western economists intensively discussed the implications of this interference and assessed alternative options. Chief among the issues under discussion was the monetary regime, as some scholars emphasized the potential benefits from a quick move to separate currencies while others underlined the possible disruptions it could imply for trade and payments.

A qualitative change occurred at the end of 1991 with the dissolution of the Soviet Union and the choice by President Yeltsin of a 'Russia first' option. However, many of the economic issues which had been discussed in the years before have not yet been settled. The rouble remains the currency of most republics, trade rules are far from clear, and Moscow's economic policies still determine to a large extent those of the other States. As demonstrated by the difficulties of controlling monetary emission and by the rising cost of disintegration, these issues remain key for any reform policy in Russia and the other States of the former Soviet Union.

Three contributions in this volume specifically address the interstate dimension. Vladimir Maschits (who completed his contribution shortly before being appointed Minister for Inter-republic Economic Relations in the Russian Government) gives an overview and an assessment of the relations

between the Union and the republics until end-1991. Jacques Sapir draws on the regional features of the Soviet economy and the history of Soviet federalism to discuss the costs and benefits of disintegration, and Peter Bofinger assesses alternative monetary frameworks for organizing interstate monetary relations.

Vladimir Maschits considers that the last chance of preserving some form of unity in the Soviet Union was lost when the Union authorities refused to endorse the compromise reached in the negotiations on the Shatalin plan. After this chance was wasted, the trend towards disintegration became irresistible. Maschits has no illusions as regards the possibility of finding stable arrangements between the former republics. He expresses deep pessimism as regards the risks associated with the rise of nationalism.

Jacques Sapir addresses the inter-republic issue from a different angle. He emphasizes that decentralization has been on the rise since the death of Stalin, but does not take for granted the decomposition of the former Soviet Union into republic units: he rather emphasizes a transversal opposition between a relatively prosperous manufacturing belt in the north-west and less-developed south-eastern regions. He also stresses that the degree of interdependence between the former Soviet republics is actually higher than indicated by recorded trade flows, because of the low degree of substitutability between suppliers. Conscious both of the risks of introducing republic currencies and of the unstable character of a single-currency regime, he advocates that the West be involved in the management of inter-republic monetary relations.

Peter Bofinger examines the two main options for the future of monetary relations among the former republics: a monetary union and the introduction of republic currencies. The yardstick he chooses for assessing these monetary arrangements is their ability to achieve the right balance between discipline and flexibility in the financing of budget deficits and in the provision of credits to loss-making enterprises. An excessively rigid system (such as, for example, a currency board) could lead to a massive contraction of output; a system without disciplinary devices (as a pure republic currency system might be) would lead to hyperinflation. Bofinger concludes that on these grounds, the arguments in favour of a common currency are strong, but that such an arrangement could only be efficient if international institutions became involved in its management. However, he does not consider this outcome to be realistic. (In fact, however, in the course of 1992 the IMF became involved in the drafting of rules and settlement of disputes regarding the management of the rouble zone.) Therefore, he advocates the creation of a payments union in order to avoid trade being disrupted by the introduction of non-convertible republic currencies.

5. Political economy and economic culture

Economists tend to reduce the process of economic transformation to familiar economic categories. Hence, the usual focus on stabilization and liberalization. Yet the transformation of the former republics into democratic societies and market economies is bound to be a much more complex and chaotic process, in which different dimensions of change interact. Two papers in this volume broaden the scope of the analysis and discuss the interactions of economic transformation with political and social change. Gérard Roland draws on recent developments in the political economy literature to examine the path of reform in the Soviet Union since the beginning of perestroika. Yaroslav Kuzminov stresses that economic reform will also require a complete change of economic culture, assesses the implications of this transformation and discusses the role that Western assistance could play in this process.

The recent revival of research in political economy provides analytical tools for analysing the interactions between the economic and political dimensions of change in the post-communist countries. Gérard Roland concludes from his brief survey of this strand of research that gradualism is a sustainable strategy for irreversible reform if the sequencing of policies leads to the creation of constituencies in favour of reform and if at any point in time the cost of returning to the old system exceeds that of implementing further reform measures for the majority of the population. This is broadly the strategy that was followed under perestroika, but Gérard Roland considers that Mr Gorbachev failed at a critical juncture to use the momentum created by the first steps in democratization and liberalization. Roland also discusses assistance policies to the former Soviet republics. He doubts that stable relations will emerge spontaneously and advocates that international assistance be conditional on the conclusion of inter-republic agreements.

Yaroslav Kuzminov takes up a point from Philip Hanson's paper: establishing the legislative and regulatory framework of a market economy is essential, but to make it effective there must be proper implementation. Kuzminov sees the ability to participate in a market economy and to observe its rules as requiring a deep cultural change, involving the acquisition of not only new knowledge and skills, but also new values. Since it would be impossible to reach everyone individually, actions to change economic culture should focus in the first place on researchers and teachers, in the expectation that they will influence politicians, managers, officials and ultimately the rest of the population. Kuzminov points out, however, that changing what he calls mass consciousness may be difficult, particularly because people in the former Soviet Union have become suspicious of anything

that smacks of ideology and will judge the market economy by how their personal well-being is affected.

We would like to express our gratitude to all the people who contributed in one way or another to this volume. Jorge Braga de Macedo, who was then Director for National Economies in DG II, was a driving force behind the whole effort, which benefited from the support of Jean-Louis Cadieux, Deputy Director-General for External Relations, Giovanni Ravasio, Director-General for Economic and Financial Affairs, and Michael Emerson, head of the Commission's delegation in Moscow. We would also like to thank for their contribution the discussants in the October 1991 workshop: Anton Brender, Daniel Cohen, Daniel Gros, Alexander Italianer, Fleming Larsen, Ivan Materov, D. Mario Nuti, Richard Portes, André Sapir, Jürgen Voss and Rutger Wissels.

Part 1

Macroeconomics

The budgetary system in the USSR: impossibility of transformation

Sergey Alexashenko

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Introduction

In 1991 the Soviet Union experienced severe financial upheavals: suppressed and open inflation were mounting, and hyperinflation became a real possibility. The high level of the budget deficit[1] which in recent years had not fallen below 10% of GNP, and probably rose by some 5 percentage points in 1991, the loss of control by the State over the evolution of the monetary situation as well as the non-existence of any instruments to monitor it, all brought the country to the edge of financial catastrophe. This statement is no exaggeration, in view of the size of the country, the acuteness of the political contradictions tearing it apart, and the absence of any practice of resolving financial problems in a civilized way during the last 60 years.

Nowadays, many people believe that the breakdown of the fiscal system in the USSR was caused by the *perestroika* process, and its inconsistent and slow movement towards a market economy. They also believe that the old system enabled us to cope with all the problems that have been encountered.

On the contrary, the majority of the financial problems that the Soviet Union faced in 1991 resulted from the functioning of the old system. This is what I shall try to show in the first part of the paper, in which I will analyse the problems of the old budgetary system, the distribution of expenditure among different levels of government, and the function of the budget deficit.

The period 1990-91 was one of the most critical in Soviet history: dramatic changes took place in the economy, politics, State organization and ideology. Of course they influenced the development of the economic situation and the decision-making process. Unfortunately for economic reform, most of those changes had a negative effect on the budgetary system, and made the success of macroeconomic stabilization even more problematic. In the second part I will analyse the development of this process and the transformation of the old Soviet budgetary system.

The third part is devoted to a quantitative analysis of the changes that took place in 1991. Taking into account political decisions, and the aggravation of the economic crisis, I shall try to estimate recent imbalances in the Soviet budgetary system.

In the fourth part I shall try to analyse the possible transformation of the Soviet budgetary system in the near future, taking into consideration different viewpoints on this question existing in the USSR.

1. The inheritance of the past

Nowadays, many people believe that the breakdown of the fiscal system in the USSR was caused by the *perestroika* process and its inconsistent and slow movement towards a market economy; they hold that the old system enabled us to cope with all the problems encountered.

I, for one, do not find this point of view sufficiently justified. The majority of the financial problems that the Soviet Union faced in 1991 resulted from the functioning of the old system, from manifestations of its fundamental features that had been suppressed for a long period of time. The point is that within the command economy the fiscal system, as well as money in general, did not play any active role. It was more like the financial service of some gigantic corporation, the objective of which is to augment the system of inner material flows, accounted in a special system of inner prices, and to effect mutual settlements of accounts so as to bring about the required reallocation of funds.

The Soviet fiscal system coped with this task rather successfully as long as it was possible to continue expanding production by drawing more and more new resources (natural, human, etc.) into production. When all these were exhausted, some internal trends of its evolution manifested themselves. This became evident from the mid-1980s.

1.1. The old system: income side

Ever since 1931, when budgetary reform in the Soviet Union was implemented, there had been no real taxation system. The main sources of budget revenue were contributions from enterprise profits, turnover tax, and revenue from international economic activity.

Financial contributions of enterprises to the budget in the USSR were for decades based on administrative principles, under which the ministries responsible for particular industries drew up individual financial plans for enterprises, taking into account to a limited extent their need for investment resources and for funds for social expenditure. The rest of their profits were transferred to the budget and/or to the centralized funds of the sectoral ministries. Since the ministry decided how the enterprises' profits were distributed, the enterprises could ask the ministry for additional resources if

[1] Here and elsewhere I analyse the consolidated deficit of the Soviet budgetary system including extra-budgetary funds, unless indicated otherwise.

their situation changed. To put it more accurately, until recently enterprises paid no attention to money at all, because the most important thing for them was to receive material resources, quotas and other types of 'ration cards'.

This system has been in operation for almost 60 years, successfully performing its functions — from the viewpoint of the command economy. In 1987-88 the first step towards a tax system was taken: fixed 'economic rates' were introduced. The absolute amounts of payments set in financial plans were replaced by fixed percentage rates. These rates were, however, set for each enterprise individually and ranged from 0 to 94% of profits.

In addition, enterprises paid social security contributions (rates differed from one ministry to another, and ranged from 10 to 18% of wage and salary expenditure) which covered no more than 65% of expenditure for these purposes (these sums were included in production costs and, with prices fixed by the State, had no tax leverage on the profits of enterprises). There was also a tax on the wage fund and a tax on transport facilities calculated per unit of engine power.

A turnover tax also existed in the USSR. But although it sounded very much like its Western counterparts, in fact it was very different (Raiklin, 1988). All books and manuals define it as follows: 'Turnover tax is a form of centralization and redistribution of part of net income'. What this means is that by creating a centralized system of prices, with reduced prices for raw materials and excessive prices for consumer goods, the State withdrew sizeable sums from circulation. Moreover, this tax included excise duties on certain types of goods (cars, tobacco, alcohol, etc.). The system of fixed prices made it possible to set the rates of the turnover tax as absolute sums per quantity of goods.

Revenue from international economic activity derived from the inconvertibility of the rouble, the State's monopoly on international economic activity, and the substantial differences between domestic and world prices. As a result, the budget received huge incomes from the export of raw materials — whose domestic prices were relatively low — and from the import of consumer goods — whose domestic prices were relatively high.[1]

The overall structure of budgetary incomes is shown in Table 1.

1.2. The old system: expenditure side

Budgetary expenditure was also linked to the command economy (Table 2). The State, being the owner of almost all property and having organized the economy as a single factory, was obliged to carry a heavy burden to support the functioning and development of this mechanism — more than one-third of total expenditure in the consolidated budget was directed towards investment, subsidies to loss-making enterprises, and price subsidies.

[1] Also included in this income were foreign credits received by the government; their share is impossible to distinguish.

Table 1

Income structure of the consolidated budget of the USSR, 1985-91

(%)

	1985	1986	1987	1988	1989	1990	1991
Total expenditure	100,0	100,0	100,0	100,0	100,0	100,0	100,0
National economy	56,3	56,3	54,5	44,2	41,5	38,1	22,9
Subsidies to prices	17,9	18,1	17,9	20,7	20,8	22,1	12,7
Defence	4,9	4,6	4,7	12,5	15,6	13,9	10,6
State management and security	2,3	2,2	2,1	2,1	2,1	2,3	2,2
Science	3,5	3,5	2,9	3,7	2,1	2,2	1,8
Social and cultural activities	29,0	28,7	29,7	29,2	28,9	31,8	30,2
Security and insurance	15,1	15,2	15,3	15,2	14,6	14,8	17,1
Foreign economic activity	0,6	1,2	2,8	3,4	5,9	5,4	2,8

Sources: 1985-88: *A study of the Soviet economy*, 1991.
1989-90: Gosudarstvennyi budget SSSR, Moscow, 1990.
1990-91: *Ekonomika i Zhizn'*, 1991, No 25, and own calculations.

Table 2

Expenditure structure of the consolidated budget of the USSR, 1985-91

(%)

	1985	1986	1987	1988	1989	1990	1991
Total income	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Turnover tax	26,2	24,6	25,0	26,7	27,8	27,1	20,0
Taxes (contributions) on enterprises	32,1	34,9	33,7	31,6	28,8	26,2	14,4
Personal taxes	8,1	8,4	8,6	9,5	10,4	10,8	6,9
Income from international activity	19,1	17,3	18,3	16,5	16,8	15,2	9,9
Social security contributions	6,8	7,1	7,4	8,0	8,3	10,0	21,0

Sources: 1985-88: *A study of the Soviet economy*, 1991.
1989-90: Gosudarstvennyi budget SSSR, Moscow, 1990.
1990-91: *Ekonomika i Zhizn'*, 1991, No 25, and own calculations.

Another mechanism that had to be supported was the Soviet military machine, which consumed a substantial part of national product and of budgetary resources.

There is no doubt that the build-up of Soviet military power during that period contributed to the worsening of the economic situation and to the financial destabilization, but in the absence of authentic statistics, it is rather difficult to assess the impact of this factor. The official data quoted by S. Akhromeev (Table 3) indicate that from 1976 to 1989, Soviet military expenditure increased by 90%. Whatever the true level of military expenditure,[1] it could not but bring pressure to bear upon the economy. In spite of the military cutback in 1990-91, which reduced expenditure by 10 to 14%, military expenditure still constituted a heavy burden on the economy.

The third most important category of budgetary expenditure was social programmes. The command economy entails an informal, peculiar social contract between the State and society: the State undertakes all the functions related to managing and developing the economy and guarantees that a certain set of individual needs will be met, hence the bulk of social services is distributed free of charge and equally; members of society, for their part, promise to discharge their production duties in relative good faith and do not demand too much from the State as regards either the level of their remuneration or the quality of social services.

The observance of such an agreement requires many efforts on the part of the State as regards the organization of the redistribution system: the amounts to be redistributed have to grow much faster than in market economies.

Table 3

Soviet military expenditure, 1976-90

(R billion)

Year	Budgetary data	Revised estimates	Revised estimates as a share of:		
			NMP	GNP	budgetary expenditure
1976	17,2	39,8	10,4	7,8	17,5
1977	17,2	41,2	10,3	7,7	17,0
1978	17,2	43,7	10,4	7,7	16,8
1979	17,2	45,9	10,6	7,8	16,6
1980	17,2	48,9	10,8	7,9	16,6
1981	17,1	51,1	10,7	7,8	16,5
1982	17,1	53,4	10,5	7,8	15,5
1983	17,1	57,6	10,7	7,9	16,3
1984	17,1	60,9	10,9	8,0	16,4
1985	19,1	63,5	11,2	8,2	16,4
1986	19,1	66,3	11,5	8,3	15,9
1987	20,2	69,4	11,9	8,4	16,1
1988	57,3	72,8	11,8	8,3	15,8
1989	76,9	76,9	11,5	8,1	15,3
1990	70,7	70,7	10,6	7,4	14,5

Sources: Megapolis — Express No 8, 1991; *A study of the Soviet economy*, 1991.

[1] The traditional ways of concealing the full expenditure on defence in the USSR were either to hide the individual articles of the military budget (the expenditure on military space appeared in the science section, military pensions were paid for outside the framework of the Ministry of Defence budget, military construction was not always indicated), or to use the price system.

1.3. *Perestroika*: What has happened?

In the history of the USSR, the share of the net material product (NMP)[1] reallocated through the budget system never fell below 50%, i.e. approximately 37 to 38% of GNP (Graph 1).

The high level of this indicator during the pre-war and war years (up to 75%) is understandable. After declining from 1950 to 1958 as a consequence of post-war restructuring, it remained approximately at the same level (52 to 55% of NMP) until 1974. The rates of growth of budget expenditure and of NMP during that period were almost equal.

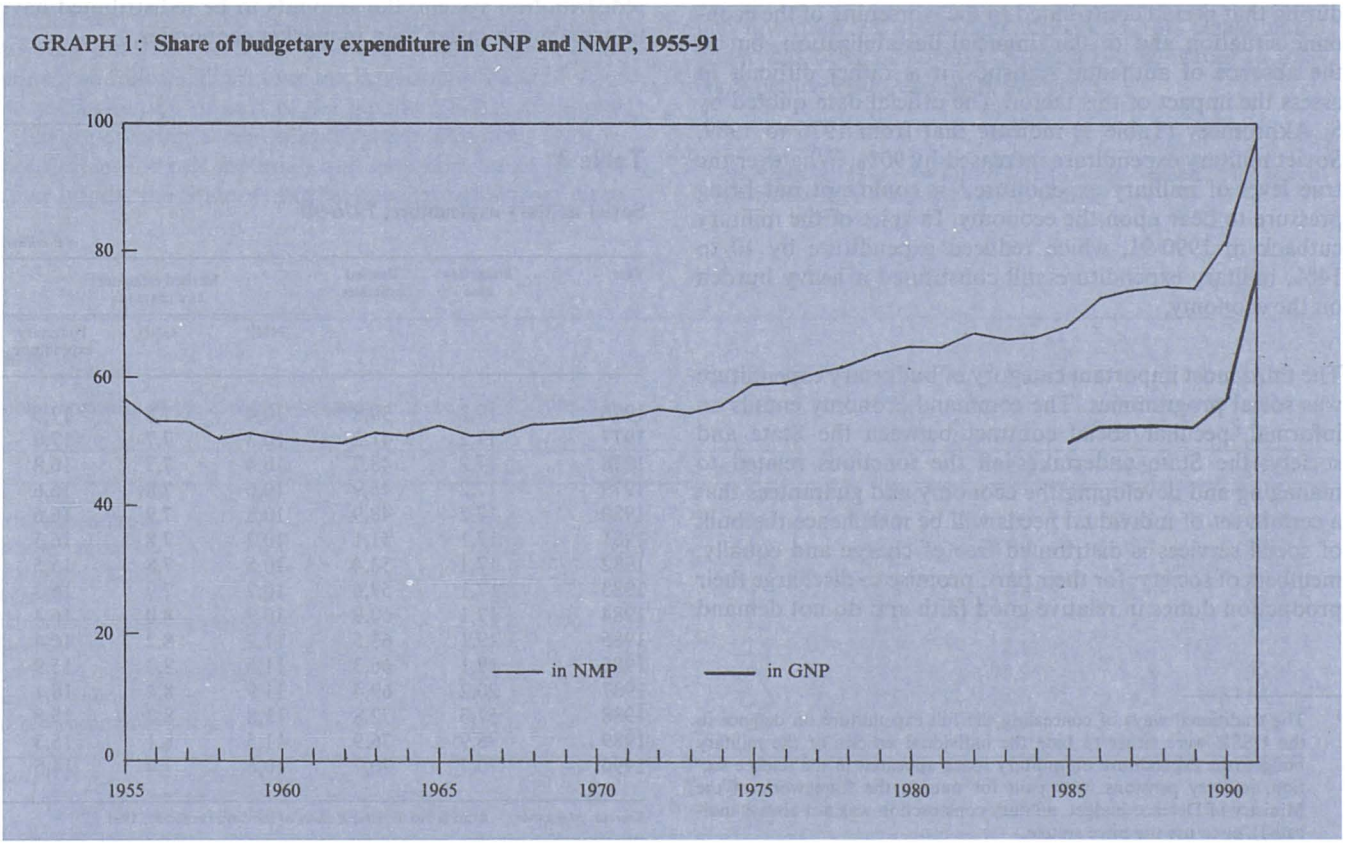
From 1975, Soviet economic growth began to slow down, and the growth of budget expenditure continuously exceeded the growth of NMP. To fulfil the social contract, the State was forced to look for new sources of revenue, in the first place by increasing exports of raw materials; the increase in world oil prices — the basis of Soviet exports — certainly played in its favour.[2] All this resulted, between 1974 and 1982, in an increase in the share of the budget expenditure in NMP from 55 to 67-68%. At that time the Soviet people had the impression that their living standards were being significantly upgraded, and later the situation of the early 1980s was used to demonstrate the losses inflicted by *perestroika*.

In 1985 came the next stage in the increase in the share of budget expenditure. It was caused by the initial policy undertaken by the new leadership: the so-called acceleration *(uskorenie)* of the development of machine-building cost the budget about R 20 to 25 billion of additional expenditure from 1985 to 1987. It did not produce any real effect, and the implementation of the previously planned social programmes began against the background of practically zero economic growth (Graph 2).

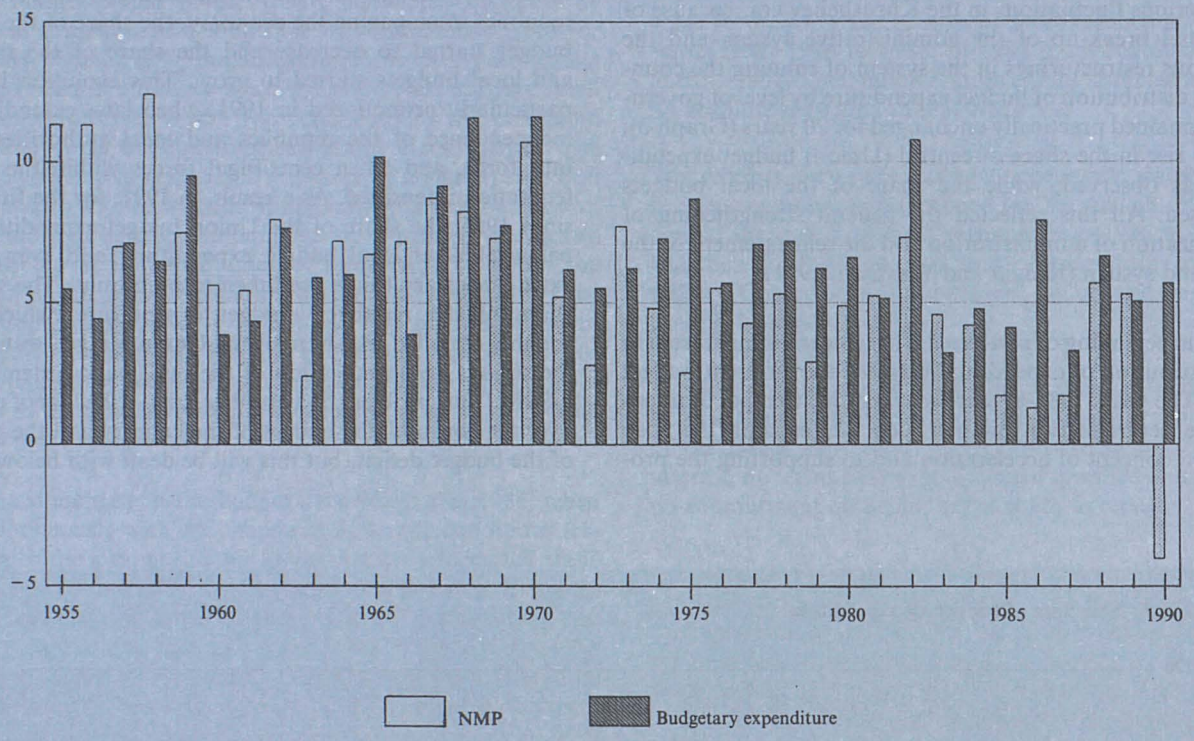
[1] Net material product was the most important macro-indicator in the USSR until 1987, when GNP began to be calculated.

[2] Soviet oil export revenues from 1974-82 were USD 180 billion higher than in the previous nine years.

GRAPH 1: **Share of budgetary expenditure in GNP and NMP, 1955-91**



GRAPH 2: **Comparative growth of nominal NMP and budgetary expenditure, 1955-90**



At that time, the Soviet leadership discussed whether the five-year plan should be fulfilled and the beginning of the radical reforms in the economy postponed, or whether the implementation of the five-year plan should be abandoned for the sake of economic reform. The first point of view won, and at the second Congress of the People's Deputies of the USSR in December 1989, the government presented a programme that stipulated the reinstatement of administrative management within enterprises and the stabilization of the economy on that basis. However, the recession in the economy became obvious in the summer of 1989, and all the attempts to make the old system work for any longer proved futile. The plan was not fulfilled, and the reform was not begun. At the same time, all the planned expenditures were made.

One component of social policy is to keep retail prices for foodstuffs at a low level, through ever-growing subsidies to collective and State farms. By 1990 the share of subsidies on prices of agricultural products (irrespective of an increase in the arrears to the Agroprombank of the USSR) in total budget expenditure reached 25%.

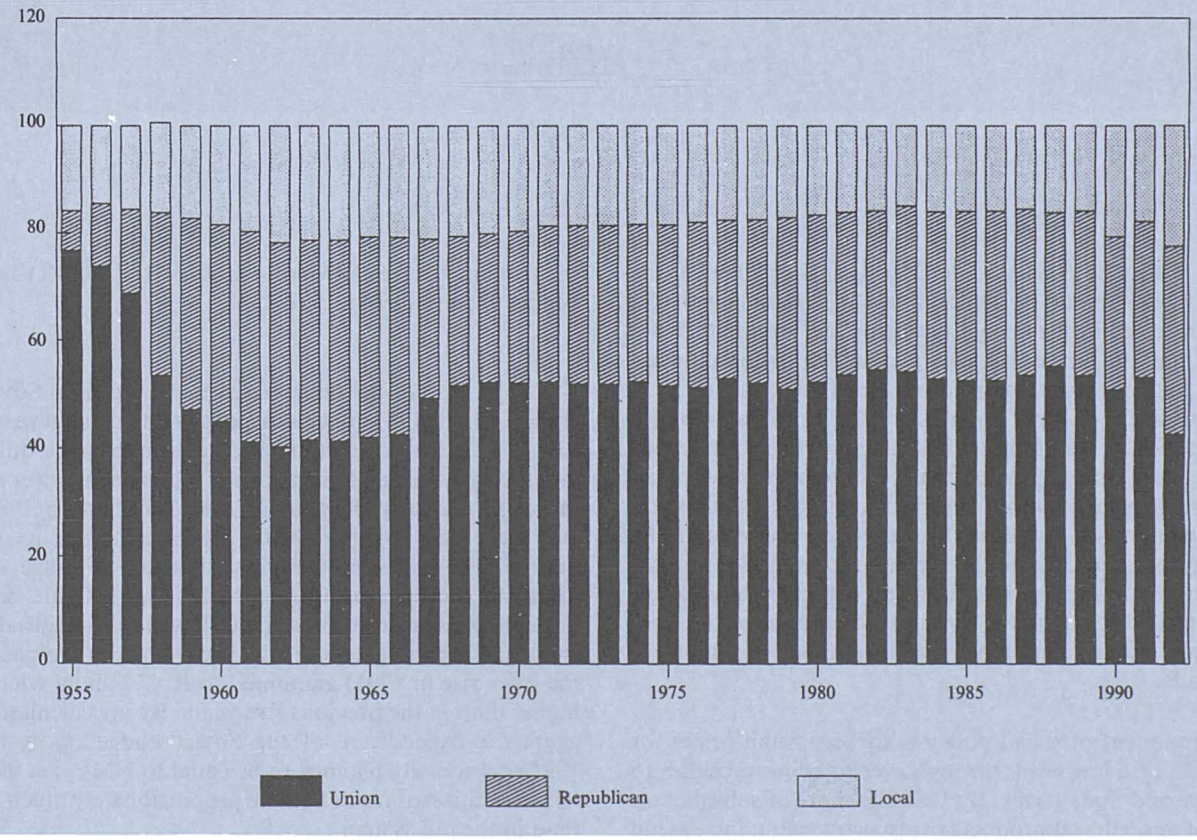
The beginning of the democratization process in Soviet society in 1989 led to a much sharper growth in budget expenditure, while the recession in the economy became quite obvious. Newly elected law-makers at all levels of power rushed to adopt one new programme after another. In 1989 this was done only by the Union Parliament, but its efforts proved to be sufficient to increase the share of budget expenditure to more than 80% of NMP. In 1990 the republic parliaments and local councils followed suit. Legislated increases in expenditure on social programmes (irrespective of the price rise in 1991) amounted to R 47 billion, which was higher than in the previous five years. By my calculation the aggregate expenditure of the Soviet budgetary system in 1991 was actually planned to be equal to NMP, i.e. the level of reallocation of funds became proportionately much higher than in the old system.

1.4. Quasi-fiscal federalism

After serious fluctuations in the Khrushchev era, because of the initial break-up of the administrative system and the numerous restructurings in the system of running the country, the distribution of budget expenditure by level of government remained practically unchanged for 20 years (Graph 3). A slow rise in the share of central (Union) budget expenditure was observed, while the share of the local budgets decreased. All this reflected the general strengthening of centralization of administration and the reinstatement of the command system (Knight and Waxman, 1991).

With the beginning of *perestroika,* sharp variations started in the distribution of expenditure between the different budget levels. The years 1986-87 were marked by attempts to intensify the centralization, with a view to realizing the then declared concept of acceleration and to supporting the promotion of machine-building. A year later, it became obvious that these plans had failed. In 1988, with the advent of the democratic changes and the strengthening of the role of the republics in managing the economy, the share of the Union budget started to decrease and the share of the republic and local budgets started to grow. This evolution became particularly pronounced in 1991, when laws extending the independence of the republics and local authorities came into force, and when centrifugal forces within the Soviet federation intensified. As a result, in 1991, for the first time since 1965, the share of the Union budget expenditure fell below 50% of total budget expenditure, and even less if extra-budgetary funds are taken into account. The soaring share of the republics' budget expenditure, which now roughly equalled the share of the Union budget, testified to the serious decentralization of the budgetary system in the USSR. (This problem had another side — the loss of control over the consolidated budget of the country and the growth of the budget deficit, but this will be dealt with below).

GRAPH 3: **Structure of budgetary expenditure**



1.5. The budget deficit

The budget deficit in the USSR has been concealed by official statistics for a long time: it was acknowledged for the first time in 1989, but according to experts' assessments it had been in existence since the mid-1960s, though small in size. However, within the conditions of the command economy it is difficult to speak about a real deficit. The State was free to dispose of the funds of all enterprises and was able to withdraw funds from them to the required extent. Therefore, it seems commonplace and unworthy to speak about the accumulated internal State debt or about the deficit of the past.[1] It is more important to note that by the beginning of *perestroika* (1985) the current budget deficit and the internal debt of the USSR had not been institutionalized. It is this fact that created a multitude of problems in the Soviet budgetary system, the majority of which were never resolved (Ofer, 1989).

A sharp increase in the budget deficit began in 1986, when simultaneously with the change in economic conditions (especially the change in the Soviet Union's terms of trade resulting from the fall in oil prices), a number of measures were taken which aimed at stepping up State investment and social expenditure and also reduced the revenue base of the budget (Table 4). At the same time, because of the gradual weakening of State control over the activities of enterprises, the State was gradually being deprived of the possibility of using, at its own discretion, the earnings of enterprises, which achieved a certain degree of independence regarding the utilization of their earnings. As a result, the share of wage increases in the growth of national income was two-thirds from 1986 to 1988; in 1989 it approximated 100%; and in 1990 the real remuneration of labour increased against an absolute reduction in real NMP.

Tax receipts were drastically reduced, while simultaneously budget expenditure was stepped up. As a result, the average annual increase in budget revenue from 1986 to 1989 was less than R 10 billion, and that of expenditure over R 60 billion. Consequently, the budget deficit and the internal State debt began to climb.

In these conditions the government chose to patch up the holes in the budget by raising funds from the credit resources of the USSR Gosbank. These loans frequently carried no interest, no terms of repayment were specified and there was no commitment on behalf of the State to repay.

An attempt was made in 1990 to shift to civilized methods of coping with the budget deficit — by issuing State bonds to the amount of R 75 billion. The experiment failed: neither the public nor enterprises wished to buy the liabilities of the State. It was only possible to sell bonds for R 60 billion, of which R 49 billion were bought by the Gosbank of the USSR.

The increase in the budget deficit became one of the main reasons for the deterioration of the economic situation in the USSR. However, while in the course of 1991 the central

[1] Soviet financial statistics concealed the methodology used in the computation of the budget deficit and the internal State debt. As a result, the state of affairs was extremely intricate and not quite clear, even to specialists.

Table 4

Current deficit of the USSR State budget and domestic State debt, 1985-91
(R billion, according to the methodology of the USSR Ministry of Finance)

	1985	1986	1987	1988	1989	1990	1991[1]
Budget deficit	18,0	47,9	57,1	90,1	91,7	88,0	170,0
in % of GNP	2,3	5,9	6,9	10,4	10,3	9,8	17,0
Internal debt	102,5	149,8	216,9	307,0	399,0	550,0	950,0
in % of GNP	13,1	18,7	26,2	35,5	44,5	60,7	54,3
Seigniorage (M1 increase to GNP ratio)			5,3	5,9	6,2	8,7	20,0

[1] Own estimates.

Sources: 1985-88: *A study of the Soviet economy*, 1991;
1989-90: Gosudarstvennyi budget SSSR, Moscow, 1990;
1990-91 *Ekonomika i Zhizn'*, 1991, No 38.

government seemed to realize the pernicious effect of underestimating the role of finance in the economy, the decentralization of the fiscal system and the weakness of republic governments threatened to lead to a further increase in the deficit.

2. Reorganizations: 1990-91

The period 1990-91 was one of the most critical in Soviet history: serious changes in the economy, politics, State organization and ideology took place. Of course they influenced the development of the economic situation and decision-making process. Unfortunately for economic reform, most of these measures had a negative effect on the budgetary system, and made the success of macroeconomic stabilization more problematic.

2.1. Introduction of a tax system

The legislation on taxation was adopted by the Soviet parliament in the spring of 1990 and became valid from 1 January 1991. Much has been written about the Soviet taxation system, and there is no point in repeating what has already been stated (Aven and Alexashenko, 1991; IMF et al, 1991).

Before the adoption of the tax laws there was a discussion in the USSR on the structure of the tax system and one widely accepted conclusion was that in any case it would not be possible to establish a fully-fledged tax system at once. The specific ways in which Soviet enterprises concluded their activity imposed many restrictions upon the freedom of choice for the authors of the tax system. Time proved that analysis right. Moreover, the final months when the tax system was in force showed that none of the taxation principles put forward by Adam Smith (equity, certainty and simplicity) were realized in the Soviet Union.

(1) Horizontal equity, understood as uniform treatment of all taxpayers, was realized neither in personal taxation nor in the taxation of enterprises. Unevenness, of course, is permitted to some extent both in theory and in practice, if the purpose is to differentiate the taxation of incomes according to their origin. But in the USSR the main reasons for uneven taxation were not these considerations but the ideological views of the creators of the tax system.

Thus, in personal income taxation five different schedules were used depending on the type of labour activity (wages and salaries at the principal working place, earnings from combining jobs or non-recurrent payments, incomes from creative activities, entrepreneurial activities and peasant farms). In enterprises' profit taxation, the tax rate could vary depending on the form of property, the kind of activity, the size of the enterprise and even on whether the enterprise was under Union or republic jurisdiction (such a ruling was found in the legislation of the Russian Federation). Moreover, the legislation provided for possible variations in the turnover tax rate not only in accordance with the kind of commodity, but also in accordance with the specific manufacturer.

Furthermore, the laws established numerous forms of tax relief which depended on the kind of enterprise. Such features of the Soviet taxation system are easily explained: many such privileges and exemptions had existed before, each of them being supported by a certain stratum of society which had ways and means of exerting pressure upon the parliaments. But the absence of a uniform and universal approach towards all taxpayers was indisputable and would have been quite difficult to overcome.

(2) The Soviet tax system showed an even smaller degree of certainty. The general political uncertainty caused by confrontation between the centre and the republics was manifested in contradictory laws and confusion in the legislative field. But even Union tax legislation was subject to uncertainty: new taxes could be introduced by presidential decree and by a decision of the Cabinet of Ministers, alterations in the law could be introduced within 10 days after its coming into force and then again within three months, the sales tax (for a wide range of goods) could be cancelled two and a half months after its introduction by a decision of the Council of Federation, a body which had no legislative rights.

Such uncertainty in the construction of a tax system, frequent changes in legislative acts, and lack of experience in the regulation of a tax regime resulted in a poor quality of the laws: many provisions were not clear or simply absent, and the solution of many questions was left to the discretion of the Cabinet of Ministers or the Ministry of Finance.

Taken together these factors led to a 'departmental creation of rules and regulations', i.e. distortions in the nature of the laws by ministerial administrative documents. The most dramatic proof of the above was the replacement of the sales tax by a value-added tax by means of an instruction of the Ministry of Finance (February 1991).

(3) Simplicity or complexity? For all practical purposes this question did not even confront the authors of the Soviet tax system: as the tax reform was bound not to change seriously the financial situation of enterprises, it was impossible to rely on a small number of taxes.

Parliamentarians refused to discuss the problem of introducing an inheritance tax and a property tax. Because of the lack of acceptable methodological approaches, the declared environmental tax was not introduced. Because of poorly developed market relations and lack of basic land valuation, the land tax did not come into force, and the attempt to delegate this question to the republic level or the level of the local soviets was seemingly 'buried'.

As a result, everything that was left, including taxes on profit, income, turnover, transport and sales was applied. But such an approach to taxation led to a loss of integrity, and not only because of the failure to introduce certain kinds of tax, but also because of the structure of the existing tax system. Thus, there were such anachronisms as the collective farmers' payroll tax being paid by collective farms as a substitute for personal income tax, or a turnover tax which could not be even called a proper tax because of its structure.

But the most serious disadvantage of the Soviet taxation system was not that its structure contradicted theoretical principles, but that it did not fulfil its most important function — the fiscal one. In other words, it failed to provide the budget with the necessary funds.

True enough, no reasonable tax system could have collected 75% of GNP, which was the amount of State planned expenditure for 1991 (through the budget and extra-budgetary funds). But in addition, the steps undertaken by the republics in order to decentralize public finance and tax systems led to a relaxation of control over taxation, and to losses in the amounts collected. As a result, the consolidated budget deficit threatened to reach 15 to 18% of GNP in 1991. In such a situation, the only option left to the State was to introduce the worst of taxes — the inflation tax.

2.2. System changes in 1991

2.2.1. Decentralization

In the 1970s the old budgetary system acted as a brake on the development of the initiative of the Union republics and local authorities.

The simplest way to receive necessary financial resources was to request the centre to include additional investments or social programmes in the plan, which resulted in the allocation of additional financial resources. Any arrears of local taxes were compensated for by additional allocations of funds from the centre. As a result, the expenditure of the republic budgets over the 10 years to 1991 doubled, while their own revenues increased only one and a half times. Neither the Union republics nor local authorities even tried to utilize their legal rights to develop an independent taxation base.

However, the traditional low awareness of all financial aspects of the economic system and the conservatism of the Ministry of Finance resulted in the lack of any serious changes in the budgetary system of the country until 1990.

In spring 1990, the Soviet parliament adopted the laws on 'Fundamentals of economic relations of the USSR', Union and autonomous republics, and on 'General principles of local self-government and local economy in the USSR'. Most of their provisions were so general that they could not be put into practice. The most important aspect was the provision of the 'Fundamentals' which provided for independence of the budgets at all levels. But the campaign to declare the republics' sovereignty had not yet started at that time (except in the Baltic countries) and no official paid special attention to that fact.

By autumn 1990, however, the conflicts between the central authorities and republics were at their height. The country was dragged into the 'war of laws', 'war of banks', 'budgetary war', etc. In such conditions, the implementation of the budgetary independence principle resulted in an actual breaking up of the country's budgetary system into numerous isolated fragments. No mutually acceptable solution regarding the distribution of revenue between the Union and republic budgets could be reached before the start of the 1991 fiscal year, and January began without an approved budget. Neither side wished to abolish its laws which contradicted those of the other. The answer was found in signing a budget agreement valid for one year which regulated distribution of revenue between the different budgetary levels.

This agreement could have played a certain stabilizing role, but it had four significant shortcomings:

(i) it was not agreed upon by the republics; after the agreement was signed by the Union and Russia, a number of republics made their signature conditional on a reduction of their contribution to the Union budget or an increase in the transfers from the Union budget;

(ii) the agreement did not entirely regulate the distribution of expenditure between the budgets, with the result that certain expenses were not planned in any budget (for instance the subsidy to prices of agricultural products);

(iii) the agreement did not stipulate any control over the status of the country's consolidated budget, any regulation of the deficit in the Union and republic budgets or of the methods for its financing;

(iv) the agreement did not provide for any responsibility for its non-fulfilment and hence the republics received 'full rights' to ignore the obligations they had undertaken.

Taken together these factors resulted in a substantial deterioration of the country's financial position in 1991; control over the national finances was completely lost.

2.2.2. The reform of the social insurance system

The separation of the social insurance fund from the budget and the establishment of extra-budgetary funds was another important step in the transformation of the Soviet budgetary system.

Until 1990 contributions of enterprises for social insurance amounted to about 50 or 60% of social insurance and social security expenditure. The remaining funds were allocated in the budgetary frameworks from other sources. Consequently, social security was an integral part of the Union and republic budgets. Such a system was in full accordance with the concept of finance in a command economy: the State did not care what the sources of funds were , and since the overwhelming majority of enterprises was its property, subsidies to the social systems proved to be subsidies to enterprises.

By 1990, on the one hand, a quite conspicuous non-public sector of the economy had emerged and the State could not pay subsidies to this sector too, and on the other hand, the financial situation in the country had become so dangerous that funds had to be procured to replenish the budget. In spring 1990 a new all-Union law on pensions was adopted in coordination with the forthcoming price reform.

According to the law, the system of social security was separated from the budget. A Pension Fund of the USSR was created, which was to be managed according to the principles of self-financing. It was necessary therefore to double the rates of contributions for social insurance. A payroll tax of 37% on enterprises was created for this purpose, and in addition employees had to pay 1% of their salaries.

Naturally, decentralization of the budget entailed decentralization of the Pension Fund. In spite of the central government's plans, some republics (Russia, Ukraine, Baltic republics, Georgia) rejected participation in the all-Union Pension Fund and established their own independent funds. As a result, the opportunity to redistribute financial resources through the Pension Fund of the USSR to the benefit of the regions where the demand for social security services was higher than the receipts (primarily Central Asia) was lost. In autumn 1990, Russia and other republics which did not join the all-Union Pension Fund adopted their own pension laws. According to the these laws, the existing surpluses of the republics' pension funds were allocated to an increase in the level of the benefits. Thus, the united system of social security, which was based on a principle (uniform rates of payment and uniform scales of pensions and allowances) was demolished. To discharge the obligations regarding payment of pensions and allowances, a deficit of R 5 billion was stipulated in the consolidated Pension Fund of the USSR for 1991.

2.2.3. Extra-budgetary funds

In 1991, the establishment of extra-budgetary funds came into fashion with the authorities at all levels. By the middle of the year, two all-Union and about a dozen republic extra-budgetary funds had been established. Unlike those of other countries, the Soviet extra-budgetary funds were created, as a rule, not for resolving a specific problem, but as a separate part of the budget.

It is possible to classify all extra-budgetary funds in two categories according to the source of income (budgetary funds or captive funds) and two categories according to the purposes of their existence (general or special).

The first all-Union extra-budgetary fund — the Fund for Economic Stabilization — was established under the decision of the President of the USSR at the end of 1990.[1] It received its own sources of income, and a number of outlays from the budget (investment, scientific research, transfers for less developed regions, etc.) were transmitted to this fund. Similar funds were created in the republics.

The second fund — the Inter-republic Fund for Social Security of the Population — was created in accordance with the decision to carry out the reform of retail prices of 2 April 1991.

Its receipts were supposed to consist of contributions from the republic budgets of resources acquired as a result of the retail price rise, and its expenditure was to be on payments of compensation and allowances to the people of the Central Asian republics and to all-Union consumers (armed forces, prisoners, etc.)

[1] The idea of establishing such a fund was initially put forward in the '500-day programme'. Its task was to support under rigid terms and conditions such enterprises which might be threatened by bankruptcy or could suffer serious damage in the course of an accelerated transition to a market economy, but whose survival was considered necessary for social or technological reasons.

In addition, the republics now actively created extra-budgetary funds for a variety of purposes (road building, elimination of the consequences of natural calamities and technological catastrophes, regional support, etc.)

3. 1991, the year of financial catastrophe

3.1. Budget planning

On the eve of 1991, the Soviet leadership faced for the first time the task of preparing a budget while the State had lost hold of the management of enterprises' activity and proclaimed that it was setting course for a market economy. Furthermore, the onset of this year coincided with major policy changes such as the reform of wholesale and retail prices, the introduction of new tax and pension legislation, and with changes in the conditions of foreign economic activity (new rouble exchange rate and CMEA reform).

It should be noted immediately that both Union and republic leaders failed to solve this problem, and that errors made in drawing up the budget for 1991 in many respects predetermined the course of events (Alexashenko and Yasin, 1990; Alexashenko, 1991b).

(a) As already mentioned, no agreement was reached between the Union and the republics regarding the budgetary structure of the country (revenue and expenditure, distribution and limitation of the budget deficit).

(b) In the planning of the budget, absolutely unrealistic assumptions regarding the economic prospects of the country were made: although industry was entering a recession, a general expansion of the economy was predicted; revenue increases from foreign economic activity were also forecast, in spite of the obvious decrease in oil production.

(c) The coming to power in the republics (and first of all in Russia) of populist-minded pseudo-democratic leaders resulted in the republics starting to set their tax authority higher than that of the Union; in competing with each other in their populism, they began to increase expenditure without ensuring that it was backed by any real financial sources.

As a result of this, control over the consolidated budget and the deficit was lost. The general status of the budgetary system in 1991 and its changes as compared with 1990 are shown in Tables 5a and 5b.

The Union Government, avoiding difficult negotiations and an honest search for compromises, proposed an unrealistic Union budget for 1991. It tried to shift the major part of the deficit to the republics (Alexashenko, 1991b). The lack of will to reach an agreement and the lack of understanding of its vital importance for all parties resulted in an agreement for 1991 being signed by all parties which proved to be only formal (Orlov, 1991).

Starting from the first months of 1991 many republics, in spite of the agreement, decided to retain a sizeable portion of the resources due to the Union budget and to the extra-budgetary funds to be established at Union level. The contributions from republic budgets to the Union budget in the first half of 1991 amounted to 50% only of the planned figure, and to less than 25% for the Fund for Economic Stabilization, and nothing was transferred to the Fund for Social Security. The Union Government was forced to resort to the credits of the State Bank of the USSR, which was tantamount to a monetary financing of its expenditure, and a promise to depreciate the rouble further.

As a result, the total deficit of the budgetary system may have amounted to 15% of GNP in 1991.

3.2. Price reform

The fulfilment of the comprehensive reform of wholesale, purchase and retail prices, conceived and elaborated in 1986-87, was delayed for more than a year in the USSR. The first step was to raise purchase prices for grain on 8 May 1990, and the last was the price increases of 2 April 1991. This step was one of the essential milestones of the economic strategy worked out by the Ryzhkov-Pavlov governments. The programme was intended to carry out a comprehensive, centralized and simultaneous price-rise accompanied by a partial price liberalization. Apart from other goals, not relevant to this paper, the price reform was supposed to improve the country's financial situation by reducing subsidies for agricultural goods and only partially compensating the real income loss that individuals suffered because of the retail price rise. In addition, it was intended to solve to a certain degree the monetary overhang problem by a depreciation in the savings of individuals and enterprises, and also the State debt.

As expected (Alexashenko and Yasin, 1991), the price reform failed to fulfil its major goals. True, the rise in retail prices reduced subsidies for agricultural products from 14,4 to 7,3% of GNP, halved the real value of the accumulated State debt and of enterprises' monetary reserves, and devalued personal savings by 45% (taking into account the legislated compensation). On the whole, these results were positive. But, the fiscal goals were not reached. According to the price

Table 5a

Changes in budgetary revenues, 1990-91

(R billion)

Incomes	1990	Factors causing change						Unallocated	1991 plan[2]	1991 forecast
		Tax legislation[1]	Decline in production (−10%)	Decline in exports (−10%)	Price reform wholesale	Price reform retail	Rouble devaluation			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Enterprise taxes (contributions)	117	−24	−20		25	3			101	145
Sales tax		66				1,5			67,5	20
Rent payments					18				18	18
Turnover tax	121		−23			80	−38		140	140
Revenue from international activity	67,8			−11	−5	10	7,2		69	35
Geological fees	4,4				3,3				7,7	7,7
Personal income tax	48,1	−2,1	10			−8			48	52
Other revenue	44							6	50	56
Total budgetary revenue	402,3	39,9	−33	−11	41,3	86,5	−30,8	6	501,2	472,7
Non-budgetary revenue/Social Security Fund	44,7				77,2	25			146,9	148
Stabilization Fund		120							120	45
Total revenue	447	159,9	−33	−11	118,5	111,5	−30,8	6	768,1	665,7

[1] All legal acts concerning taxation (laws, presidential decrees, government orders).
[2] Plan updated for 1 January 1991 taking into account Pavlov's projects for retail price reform.

Note: This table displays the main categories of budgetary revenues in 1990 and 1991 and an analytical decomposition of the change in several contributory factors. Colums 2 to 8 give the contribution of various policy and non-policy factors, so that (9)=(1)+(2)+ ... +(7)+(8). Column 10 gives the author's forecast for 1991, taking into account other factors (especially further changes in economic conditions and tax compliance).

reform draft proposed by Prime Minister Ryzhkov in May 1990, retail prices were to be raised by R 200 billion on a full-year basis,[1] 135 billion of which was supposed to compensate individuals while the budget deficit would be reduced by R 65 billion.

Calculations (Table 6) show that according to the government's plans the retail price rise of April 1991 was expected to result in retail price increases amounting to R 270 billion in the last nine months of 1991. The population was to receive various forms of compensation totalling R 215 billion and therefore to incur net losses of R 55 billion.[2]

In reality, by 1 August 1991 prices and tariffs had risen by an additional R 45 billion.[3] But the additional increase in the population's income in the form of various additional compensation and social plans (including those adopted by the republics), salary increases implemented under the pressure from various groups of employees, etc. amounted to more than R 107 billion for the same nine-month period. As a result, instead of a net loss, the population had gained some R 7 billion in income.[4]

In nine months, thanks to the retail price rise, enterprises were supposed to gain about R 40 billion, taking into

[1] According to the Soviet tradition, price rises are measured not in percentage terms but in absolute terms, i.e. as $(P_1-P_0)\,Q_0$, with P_1 = new prices, P_0 = old prices, Q_0 = (old) quantity.
[2] Correspondingly, R 360, 292, and 68 billion over the entire year.
[3] R 60 billion on a full-year basis.
[4] This does not correspond to a gain in purchasing power in the standard Western sense, since the calculation refers to the additional nominal income as compared to the additional cost of a constant consumption basket.

Table 5b

Changes in budgetary expenditure, 1990-91

(R billion)

Expenditures	1990	Factors causing change			Unallocated	1991 plan[1]	1991 forecast
		Price reform wholesale	Price reform retail	New budgetary programmes			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
National economy subsidies to prices	194	80	−120	40	11	205	240
Socio-cultural expenditures (excluding social security) and sciences	90	8	96	46		240	250
International economic activity	27,7					27,7	20
Defence	70,8	30	14,6	−4		111,4	103
Public administration and security	12	2,6	3	6,2		23,8	25
Other expenditures	32,5				17,5	50	60
Total budgetary expenditures	427	120,6	−6,4	88,2	28,5	657,9	698
Non-budgetary expenditures/Social Security Fund	83		29,2	44		156,2	160
Stabilization Fund					135	135	100
Total expenditures	510	120,6	22,8	132,2	163,5	949,1	958

[1] Plan updated for 1 January 1991 taking into account Pavlov's projects for retail price reform.

Note: This table displays the main categories of budgetary expenditure in 1990 and 1991 and an analytical decomposition of the change in several contributory factors. Columns 2 to 5 give the contribution of various policy and non-policy factors, so that (6) = (1) + (2) + (3) + (4) + (5). Column 7 gives the author's forecast for 1991, taking into account other factors.

Table 6

Income distribution effects of the April 1991 retail price reform

(R billion)

	Budget		Enterprises		Population	
	plan	actual	plan	actual	plan	actual
Increase in retail prices and tariffs	90	90	180	225	− 270	− 315
Compensation for price increases	− 131	− 145	− 47	− 62	178	207
Changes in taxation	85	83	− 93	− 95	8	12
Increase in income of population apart from compensation	− 29	− 73		− 30	29	103
Subtotal	15	− 45	40	38	− 55	7
Increase in budget expenditure resulting from retail price reform		− 28				
Total	15	− 73	40	38	− 55	7

Note: All figures refer to the 1 May to 31 December period.

Source: Author's calculations.

account the fact that they enjoyed the benefit of the price rise, but had to pay out compensation to their employees and pay more taxes. Actually, it is estimated that in nine months they had gained about R 38 billion.

What happened to the consolidated State budget (consolidating the Union and republican budgets)? According to the plans, in nine months the budget was to receive R 205 billion by way of subsidy cuts and tax revenue increases, whereas all its additional expenditure was estimated at R 197 billion. In reality, as of 1 August one could estimate that with almost no additional income during the same period, its expenditure would go up by R 73 billion (including R 40 billion due to the social plans adopted by republics). Consequently, the budget deficit grew roughly by R 73 billion instead of being reduced.

3.3. The transfer problem

Until recently, this problem had not been the subject of any discussion in the Soviet Union, because unlike assistance to less developed regions, internal redistribution to less developed regions was taken for granted. Nobody in the Ministry of Finance, in the State Planning Committee, or in the Academy ever asked himself for what amount, to whom, in what way, on what terms and for what purposes these transfers took place.

As the State arrangement of the Soviet Union became the subject of radical restructuring, this issue acquired a particular acuity for the recipient republics of Central Asia. Indeed, according to certain estimates, the volume of consumption in these republics substantially exceeds that of NMP.

The old system solved the problem of republican income equalization the following way: the central economic bodies held individual negotiations with representatives of republics

(i) to decide what part of the profit, withdrawn from enterprises, should be transferred to the republican budgets, in what proportions the yields from the turnover tax and private income tax should be divided between the Union and republican budgets,

(ii) to determine the amounts of direct transfers (subsidies, subventions) to be made from the Union to the republican budgets and the republican social security funds, and

(iii) to decide upon the territorial allocation of centralized investments.

It was all done within the framework of the general financial planning and redistribution of financial resources.

After the donor republics in 1990 declared their aspiration for independence and control over the collection of taxes, they cast doubt on the advisability of further free-of-charge regional support within the USSR.[1] In 1991 it was envisaged to carry out transfers at the expense of the all-Union Economic Stabilization Fund. But in practice, it turned out that the money-raising campaign for the fund failed — for the first six months of 1991 about 5% of the planned sums were received.

As mentioned, the retail prices reform of 2 April 1991 brought about the establishment of the Inter-republic Social Security Fund. Its conceptual objective was to redistribute the receipts from price reform in favour of the regions whose budget income did not suffice to cover payment of all-Union compensation and compensation of expenditure of all-Union consumers. But, as mentioned, instead of income the budget received new expenditure. Therefore this fund had no resources. It was thus evident that in order to pay out compensation, new resources would be needed. Thus, all methods of regional redistribution of resources in the USSR turned out to be blocked for various reasons, which could not but lead to new social conflicts and an aggravation of the financial situation in the country.

4. Looking ahead

The coup of August 1991 put an end to the development of the command economy in the Soviet Union, and in fact it became the demonstration of the impossibility of this system to resolve the problems that appeared in its path. The crash of the budgetary system and the inability to service the foreign debt indicated that the socialist State had become practically bankrupt internally and externally. This is the essential result of its own development.

The victory of democratic forces does not raise serious hopes for a rapid resolution of the budgetary problems and a successful balancing of the budgetary system in the Soviet Union (or on its territory). Rather, the opposite tends to be true. The non-signed Union Treaty included provisions that could have facilitated future budgetary stabilization on the basis of rights/responsibility, and revenue/expenditure sharing between central and republican levels of government. It could have led to some extent to the implementation of the principles of fiscal federalism. The defeat of the coup and

[1] This attitude also applies to intra-republic transfers. The largest of all republics, Russia, where regional differences are no less explicit than in the USSR as a whole, allocated only 3% of its consolidated budget to regional transfer expenditure.

subsquent move to independence of the Soviet republics led to the refusal of the Union Treaty and to the disappearance *de facto* of the single country and of the federal government.

Nevertheless, life is going on. Market reform not only becomes more necessary, but also more hard, both as regards the measures which have to be implemented, and as regards its short-term effects. The cost of reform will of course be greater, if its implementation is delayed.

Macroeconomic stabilization, and especially the stabilization of the budgetary system, has to become the background for the whole reform, otherwise its success will be extremely problematic. The scenario and perspectives of macroeconomic stabilization itself depend on the answer to the question: how will the Soviet republics implement their reforms? There are two principal scenarios, joint reform or separate policies whose probabilities are nowadays roughly equal. In the short term, the choice for one or the other option will be more conditioned by political ambitions than by economic calculations.

The first possible way — economic independence — may be realized in two variants: within some type of economic community (i.e. with coordination of monetary policies, a regulated system of exchange rates, etc.), or on a completely independent basis. To my mind, this last possibility would lead to a real economic war, because of the high degree of interdependence of the real economies, which implies that a rupture of the existing economic links between enterprises cannot be compensated by a recourse to alternative suppliers. There would be no winner among Soviet republics, and the population would be the main victim. Any rational economic policy would be impossible in such circumstances.

The creation of an economic community — even very loose — would mean that the republics are not able to pursue a fully independent fiscal policy. As the community implies a fixed exchange rate for currencies and freedom of capital movement, it will mean that the participating nations will lose part of their independence. The counterpart of rejecting monetary independence will be the consent by members at least to limit the financing of their budget deficits. Furthermore, an acceptance by the community members of budget deficit ceilings must be backed with efforts to find appropriate methods of regional reallocation of financial resources.

The second possible way was implicit in the Treaty on Economic Union. It is based on a single currency and a common fiscal policy. It presumes that republics will be responsible for determining their tax base, tax rates, and other essential elements of taxation, and for collecting taxes. Part of tax revenues in this case would go to cover central government expenditures.[1]

Political confrontation, strong decentralization, and centrifugal trends are making it hard to build a fiscal system patterned on a classic model with a strong independent central budget. Work in 1991 has shown that, at least, it is necessary to find solutions to several major problems:

(a) coordination in the design of the tax systems and the determination of the overall tax burden, agreements on tax matters, and mechanisms to prevent tax evasion;

(b) agreements on setting ceilings on the size of Union and republican budget deficits and methods of covering them;

(c) arrangements to guarantee revenues for the Union budget, the financing of inter-republican programmes and fines on defaulting republics;

(d) fixing the size of republics' contributions to the Union budget; and

(e) sharing among the republics of receipts from turnover tax and from external economic activities (customs tariffs and import and export taxes).

The search for solutions to the abovementioned problems will take much time and energy and calls for concord and compromise. In my view, the present generation of Soviet political leaders is not ready for this. Maybe documents will be signed, but their implementation is extremely doubtful; this increases the likelihood of the country's disintegration since it is impossible to resolve the budgetary crisis on this basis. The introduction of republican currencies and fiscal decentralization will become unavoidable.

Conclusion

The Soviet Union is trying to begin its market-oriented reform. Unfortunately this attempt coincides with the collapse of old structures in the country. Political transformations and battles among the politicians have relegated economic reform to second place. The largest part of the obstacles on the way of implementation of economic reform arises from the lack of a clear political future.

In such conditions chaos in the USSR becomes more and more possible. The crash of the budgetary system in 1991 showed the impossibility for the old mechanism to continue

[1] It is quite clear from a theoretical viewpoint that this approach is seriously flawed because it would deprive the central government of fiscal policy as a macroeconomic instrument, but nowadays this is only one variant acceptable to republics.

to support the functioning of the economy. No new mechanism has been created yet, and its creation has even been delayed.

Whatever kind of changes the Soviet republics may choose, they will have to answer the following questions when institutionalizing a new fiscal system:

(i) Will there be a common monetary system?

(ii) Who will be in charge of the macroeconomic policy and what instruments will there be at his disposal?

(iii) In what way will revenue, expenditure and responsibility be distributed between the various levels of power?

(iv) How will the tax burden be regulated and how will the tax regime be unified?

(v) How will the budgetary deficit be limited and financed?

The Soviet republics are facing the most dramatic transformations in the budgetary system, they need to find solutions for many issues, and there is hardly any experience available that they can use. In my opinion, the Soviet disintegration has gone much too far. It is very likely that the member States of the community will introduce their own currencies and put an end to the common Soviet budgetary system. Former Soviet republics will face all budgetary problems on their own.

Postscript

The events of November-December 1991 seriously changed the situation. The Soviet Union was disintegrated completely, the negotiation process on an economic community was broken under the initiative of Russia and the Ukraine — the largest countries on the territory of the USSR, all republics became independent States and were recognized by the world community. But as regards macroeconomic and financial stabilization nothing was done, and in the last weeks of 1991 republics began a new financial war, with Russia conquering the Gosbank and Goznak (printing press) in an attempt to influence the behaviour of other republics so that they would follow Russia in economic policy.

The deficit of the consolidated Soviet budgetary system reached 18% of GNP in 1991 and not one republic took steps to correct this. The crucial questions for the future reform — how to reduce the budget deficit, how to coordinate financial policy having a common currency unit — remain without answer. And this means that all projects of reform and macroeconomic stabilization have no serious background as yet.

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References

Alexashenko, S. (1991a), 'Reform of the fiscal system in the Soviet federation: the main complexities and possible solutions', paper prepared for the Senior Policy Seminar on Intergovernmental Fiscal and Macroeconomic Management in Large Countries, New Delhi, India, 26 to 28 February 1991.

Alexashenko, S. (1991b), *Nezavisimaya Gazeta*, 6 April 1991.

Alexashenko, S. and Yasin, E. (1990), *Izvestia* (Moscow issue), 30 December 1990.

Alexashenko, S. and Yasin, E. (1991), *Izvestia* (Moscow issue), 8 February 1991.

Aven, P. and Alexashenko, S. (1991), 'The Soviet tax system in 1991', in P. Aven and T. Richardson (eds) *Essays in Soviet transition to the market,* IIASA collaborative papers (forthcoming).

International Monetary Fund, The World Bank, Organization for Economic Cooperation and Development and European Bank for Reconstruction and Development (1991), *A study of the Soviet economy,* OECD Publication Service, Paris.

King, D. (1984), *Fiscal tiers: the economics of multilevel government,* George Allen and Unwin, London.

Knight, P. and Waxman, R. (1991), 'Fiscal federalism in the Soviet Union', paper prepared for the Senior Policy Seminar on Intergovernmental Fiscal Relations and Macroeconomic Management in Large Countries, New Delhi, India, 26 to 28 February 1991.

Ofer, G. (1989), 'Budget deficit, market disequilibrium and Soviet economic reform', *Soviet Economy,* Vol. 5, No 2.

Orlov, A. (1991), *Pravitelstvennyi vestnik* No 43, 1991.

Raiklin, E. (1988): 'On the nature and origin of Soviet turnover taxes', *International journal of social economics,* Vol. 15, Nos 5 and 6.

Inflation in the Soviet Union

Andrey Vavilov, Oleg Vjugin

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Introduction

Attempts to transform the Soviet economic system during the years of *perestroika* delivered a severe blow to the stability of the financial and credit systems and the monetary circulation in the Soviet Union. Over the course of five years, beginning in 1986, monetary stability has been replaced by the threat of hyperinflation.

The rise in inflation had its origins in the comprehensive destruction of the very basis of the command economy, and later was stimulated by changes in the State system of macroeconomic regulation. These destructive processes freed inflationary mechanisms that were inherent in the Soviet economic system from the beginning. Meanwhile the constructive processes of building a market economy and reforming macroeconomic policy on a Union-wide scale were carried out spontaneously, by economic actors at various levels, rather than directed from the centre, and then only with a delay. Moreover, progress in this direction was restrained by the central government and at present is blocked by acute political problems arising from the process of redistribution of powers among the former republics of the Soviet Union.

In Section 1 we describe the principal inflationary mechanisms that existed in the Soviet command economy before *perestroika* and remained intact during the transitional period of 1986-90. We also discuss how the influence of certain of these mechanisms has been sharply enhanced by fruitless and erroneous innovations in the area of economic management.

In 1991 a new phase of inflation began, as the measures undertaken by the administration of Prime Minister V. S. Pavlov, intended to stabilize the economy, in fact speeded up the disintegration of the centralized system of macroeconomic regulation. In Section 2 we show that by leaving in place the economic mechanisms inherited from the old paternalistic system, these drastic measures were doomed to failure. The economic and political contradictions between the republics in effect blocked any attempts to bring about financial stabilization within a single-currency system.

In Section 3 we consider the likely further development of inflation in the Soviet Union under alternative political and economic conditions that might result from future agreements among the republics. We present estimates of the inflation rate under the assumption that a new stabilization programme is implemented within the framework of an agreement to maintain a single-currency system and a single macroeconomic policy. We also give estimates for a scenario that assumes that the republics conduct independent macroeconomic policies within the existing monetary system.

The combined balances of income and expenditure for the State, enterprises, and the population (Annex 1) are the methodological bases for our analysis of inflation. In Section 3 we use the model of Dornbusch (1990) as well as our own model (Annex 2) to estimate inflation prospects.

1. Soviet inflation: sources, mechanisms and effects

1.1. An overview of the inflationary process

A tendency toward inflation has always existed in the Soviet economy. Its causes lie in the way a centrally planned economy functions, in the structure of its budgetary and banking systems, and in the price mechanism, which will be analysed in this part of the paper.

Although nominally the Soviet budget deficit remained minimal until the mid-1980s, in reality unlimited State credits to finance the deficits of inefficient enterprises gave rise to excess liquidity — the so-called monetary overhang. The dynamics that generated the overhang were a constant, ongoing process. However, the State had at its disposal mechanisms to restrict inflation and eliminate the overhang. The expenses of all State enterprises (which made up an overwhelming majority of the productive sector in the Soviet economy) were subject to the control of higher administrative bodies. Departures from planned rises in wages were severely punished. Unspent money balances were confiscated for the budget at the end of the year. However, wages and other incomes paid to the population and not spent for current expenditure could not be confiscated in the same way. This is why prices were regularly raised, reducing the value of money in the hands of the population and thus reducing the overhang. Moreover, restrictive monetary reforms were carried out in 1933 and 1948, and in the 1950s compulsory loans by subscription were used to absorb excess liquidity as well. Although sometimes such mechanisms temporarily resulted in an equilibrium, they suffered from grave shortcomings:

(a) the annual confiscations of enterprises' assets gave enterprises an incentive to spend all unused money balances before the end of the year, regardless of whether the money could be used efficiently;

(b) the balance improved for only a short time after the centralized rise in prices, whereas in the long run shortages were regularly observed;

(c) the rises in what had been fixed prices engendered inflationary expectations, which promoted increases in the excess stock of money.

The liberal reforms of 1987-88 eliminated the major instrument for maintaining macroeconomic equilibrium in a centrally planned economy, namely, administrative control over enterprises' expenditures and the confiscation of enterprises' assets for the budget. No sooner were these reforms implemented than it became evident that the existing price system and the central government's budgetary, wage-price and banking policies suffered from grave shortcomings. They proved to be unsuited to a programme of economic liberalization.

- Under these new circumstances the budget began to lose tax revenues as a result of differentiation of tax rates for enterprises. These revenues were instead being accumulated on the enterprises' accounts. Also, as open inflation strengthened in 1991, budget revenues began to be subject to the Tanzi effect. The irrational distribution of tax receipts among the different levels of government (local, republican, and Union) exacerbated the budget deficit. As the disintegration of the budgetary system proceeded, the local governments gained a certain advantage because of their more reliable revenue sources. The rapid growth of the central-government budget deficit was accompanied by the accumulation of surpluses on the accounts of the local budgets in the republics. Finally, these factors and the growth of social pressure on the budget due to populist forces resulted in enormous deficits in the State budget system.
- Paternalism in the ministries blocked the implementation of income policies. Each ministry strove to provide the enterprises under its direction with a larger wage fund, to enhance its branch ministries' prestige. The so-called normative method used to determine the wage funds and the economic stimulus fund guaranteed this result (see Section 1.3). Despite the energetic efforts of Prime Minister N. Ryzhkov's government, the rise in household incomes got out of control.
- The effective implementation of price reform was prevented not only by the deep-rooted paternalism in the minds of the economy's leaders, but also by the coexistence of sectors where prices remained fixed with other sectors where prices escaped State controls. This structure resulted in a permanent need for subsidies. The implementation of price reform was also prevented by the social and economic situation that developed in the country after 1985.
- Under these circumstances, attempts to initiate banking reform also weakened financial stability. The right to allocate credit to enterprises was transferred from the ministries and departments to the newly established branch banks, weakening State control over the emission of credit. Whereas the ministries were well informed about the financial position of the enterprises under their control, and could effectively use the credit mechanism to support inefficient enterprises, the new special banks solved this problem less effectively. Therefore, the pressure for subsidies increased.

These several factors in effect blocked the use of the traditional instruments for maintaining macroeconomic equilibrium and promoted the accumulation of the monetary overhang. The continued transition to a market economy was seriously complicated by the existence of this overhang on an unprecedented scale. The need to implement special stabilization policies, which threatened to derail the move to a market orientation, led to the coming to power of a government whose only goal was the overcoming of the crisis.

As economic and political disintegration proceeded apace, the Pavlov government assumed a stance of gradualism in macroeconomic policy. Its macroeconomic and price policies in effect legalized and strengthened the inflationary mechanisms that had existed before. After a corrective price rise, prices were decontrolled in a number of multiproduct industries. At the same time, prices for staple foodstuffs, agricultural products, fuel, and raw materials remained fixed and subject to State control. In the absence of effective mechanisms to limit budget deficit and credit emission, already by the middle of 1991 the rise in those wholesale prices which had been liberalized led to the need to restore subsidies to the fixed-prices sector on an even greater scale than before the reforms. The situation in the consumer goods sector was made worse by the failure of the government's restrictive incomes policy and by the fall in output and imports. After the price decontrol measures of April 1991, about 60% of the retail turnover of State trade was in principle to be sold at flexible (either free or regulated) prices, but hopes that this would play a balancing role proved unjustified. The right to set prices was never passed to the independent shops, but instead was left in the hands of the trade bureaucracies, which were not interested in negotiating equilibrium prices. The majority of 'free' retail prices proved to be quasi-fixed prices. As a result, open and suppressed inflation appeared simultaneously on the consumer goods market.

The further strengthening of financial destabilization by the maintenance of fixed prices eventually destroyed the basis for trade among the republics. The country began gradually to make the transition from a 'war of laws' to economic war among the republics. Instead of carrying out salutary policies of liberalization in their own economies, the republics' governments sought to improve their trade balances and terms of trade by manipulating fixed prices and commodity flows. It is evident that before they understand the error of this policy, the collapse of the general economic space will push the republics towards the collapse of their own economies. Possible scenarios are described in Section 3.

Measuring inflation

As increases in wholesale and retail prices take place in the presence of a monetary overhang, to measure inflation on the basis of observations of sale prices and trade deals is inaccurate. Commodities whose prices are fixed are sold at irregular intervals, and a tendency toward barter is observed. In such a situation, how best to estimate inflation is a matter of controversy. One way, suggested by Soviet economists, is to measure the components of inflation: increases in prices together with increases in forced savings, considered as a monetary equivalent. Forced savings consist of balances that economic agents are keen to spend on goods and services but which they have no opportunity to spend under existing conditions. Taking into account the controversial nature of the question, we will describe our approach to the estimation of inflation in the consumer sector (Table 1) in some detail. The conditional character of these estimates results from attempts to apply exclusively monetary terms to what is only a half-monetary economy, with inferior money circulation and where the exchange process is not always based on the leading role of money.

Table 1

Annual rates of consumer price inflation

(Change over the same period of previous year, %)

	1986	1987	1988	1989	1990	1991			
						(1)	(2)	(3)	(4)
Inflation in the consumer sector, total of which:	5,0	5,5	7,5	12,3	14,9	39,7	78,5	94,9	104,0
open inflation (the rise in prices and tariffs)	2,3	2,1	2,5	4,0	5,0	26,3	57,6	61,4	65,2
repressed inflation	2,6	3,3	4,9	8,0	9,4	10,6	13,3	20,7	23,5

(1) January to March; (2) January to June; (3) January to July; (4) January to August.
Source: Reports of Goskomstat of the USSR.

Inflation is calculated according to the formula:

$$i = \dot{p} + [(s - s_n)/(1 - s)]\,[1 + \dot{p}] \qquad (I)$$

where $\dot{p}$ is the rate of open inflation, s is the actual rate of savings in the current period, and $s\check{n}$ is the 'normal' rate of savings. The first term of the equation reflects the rate of price increases, or open inflation; the second reflects the rate of suppressed inflation, together with a joint effect.[1]

Different approaches to the estimation of the 'normal' saving rate $s\check{n}$ exist. The simplest method is based on analysis of the long-term dynamics of the rate of savings during a period when a comparative equilibrium was observed (Volkonskii and Vjugin, 1990). More complicated techniques are based on systems of regression equations containing an unobserved variable for forced savings, which for estimation is eliminated by algebraic transformations (Vjugin, 1986; Belousov and Polyakov, 1990). For the calculations presented in Table 1 the simpler approach was used. Table 1 shows estimates of Soviet inflation in 1986-91. Inflation before 1988 — the year when economic reforms actually began — was about 5% per year. In 1988-90, it reached 10 to 15% per year. The year 1991 was a year of severe inflation. Inflation accelerated in the first quarter of the year as a result of the January wholesale price rise. Because most retail prices remained fixed, suppressed inflation also intensified. After the retail price rise of 2 April, suppressed and open inflation increased in tandem. Little by little, retail prices escaped State control in the course of the year. The rate of inflation increased from month to month. Prices in the third quarter of 1991 were 44% higher than in the second, having continued to accelerate after the corrective price rise of 2 April.

[1] Derivation of this equation (I) is as follows. Start with the definition of repressed inflation as $i_r = (s - s_n)I/P_{-1}C$, where I is nominal income and C is consumption. Define inflation as $i = \dot{p} + i_r$.
Since $I = P\,C/(1 - S)$ by definition, equation (I) follows.

1.2. The budget-credit nexus

Money creation in the Soviet economy results from a system of interrelations between the budget and the banks on the one hand, and the budget and the enterprises on the other.

The main institutional defect of the system is the subordinate status of the State Bank of the Soviet Union to the Ministry of Finance, which represents the interests of the budget. Despite the parliament's decision of November 1990 to grant the State Bank independent status, one year later the real state of affairs had not changed in any significant way. Within the present arrangement, the financing of the budget deficit is not carried out on a voluntary basis through the purchase of securities by investors and banks, but by administrative redistribution of the financial means of the national loan fund. The inability of the Soviet economy to satisfy the effective demand of consumers (because of fixed prices and rigidities in production) creates forced savings, which cannot be converted into goods. Excessive government expenditures to maintain ineffective industries (including the arms industry) and expenditure for social purposes make it unavoidable to draw on these forced savings of the population to finance State debt. A vicious circle is created, providing for the continued growth of the State debt and of hidden inflation.

This shortcoming of the existing system is the flip side of its advantages in the context of the centrally planned system of regulation. Within this structure it performs its functions of redistribution of financial means in favour of ineffective sectors of the economy, which under the system of central planning have as much claim as more effective sectors. However, under conditions of weakening administrative control over enterprises' spending of their financial resources, the former — and to some extent logical — policy of highly centralized budgetary distribution of financial resources results in a rapid growth of the deficit (see Table 2). Beginning in 1986 the scale of State Bank credits to the national economy began steadily to decrease, and the credit resources of the banking system began to be used for the support of the budget. By 1990 credits to Union and republic budgets amounted to 61% of the assets of Soviet banks, compared with only 24% in 1986.

Table 2 shows that the increase in deposits of the State, enterprises, and households in 1987-91 was provided through an increase in State debt to the State Bank. Therefore the increase in the net assets of enterprises and the population was accompanied by a reduction in the net assets of the State. The State borrowed money from the State Bank in order to lend it to enterprises. In 1991 the growth in net assets of enterprises was supplied additionally by credits directly from the banks to the enterprises.

Within the Soviet banking system, the repayment of bank loans by enterprises has never been strictly enforced; on the contrary, the overdue debts of the State enterprises and kolkhozes are routinely forgiven. In addition, until recently the interest rate for the majority of loans was very low and played an exclusively symbolic role. In 1990, however, debt forgiveness reached an unprecedented level. The hopeless debts of enterprises were written off their accounts and attributed to the State debt. In that year R 104 billion worth of enterprises' bad debts (about 11% of GNP) were written off. Thus, as far as the development of inflation is concerned, there was no significant difference between the two sources contributing to the growth of the money supply: credits to the budget and cheap credits to the national economy.

The year 1991 witnessed the disintegration of the Soviet budgetary system. Flaws in the tax system added to the Union Government's mistakes, leaving the more reliable sources of revenue at the disposal of the local (i.e. municipal and regional) budgets. The lack of clear criteria for the distribution of budget revenues and expenditures among local, republic, and Union budgets led to deficits emerging at some levels (primarily the Union level) and surpluses at other levels. According to data collected by the Ministry of the Economy, in the first four months of 1991 the total assets of the local budgets increased by R 31 billion, while the Union budget lost approximately the same sum. The Union budget's total deficit for January through to April 1991 was R 32,2 billion; only 26% of revenues planned for the first half of the year were actually received. After the new laws on local self-government were approved, the Union budget completely lost control of the levers of revenue raising. The redistribution of a number of State expenditure items among the various budget levels turned out to be the only way to soften the loss of revenues. As a result, the republic budgets too experienced large deficits (see Section 3).

Another inflationary mechanism is at work in relations between the State banks and enterprises. It results from the lack of a clear instrumental criterion of efficiency and expediency in determining the volume and allocation of credit resources to the enterprise sector.

In a centrally planned economy the banking system consists in fact in a single bank with a number of branches. In the old Soviet system, the emission of credit by the State Bank did not depend on the volume of funds available, but was instead determined by a centralized credit plan. Credit resources allocated to enterprises were planned in the general credit plan of the State Bank.

Table 2

Financial flows between the State, enterprise, and household sectors

	State	Enterprise	Household	Total
1. Increase in deposits (including money in settlements)				
1987	2,0	−2,3	32,0	31,7
1988	6,9	22,8	41,9	71,6
1989	2,1	19,7	61,8	83,8
1990	7,0	−12,7	80,2	74,3
1991[1]	31,0	109,3	25,0	165,3
Total 1987-91[1]	49,0	136,8	240,9	426,7
2. Gross increase of liabilities to the State Bank				
1987	60,1	−21,7	0,7	39,1
1988	97,3	−26,3	2,7	73,7
1989	92,1	−13,5	1,6	80,2
1990	87,0	−26,7	4,2	64,5
1991[1]	99,7	70,6	—	170,3
Total 1987-91[1]	436,2	−17,6	9,2	427,8
3. Change in net assets (3 = 1 − 2)				
1987	−58,1	19,4	31,3	−7,4
1988	−90,4	49,1	39,2	−2,1
1989	−90,0	33,2	60,2	3,4
1990	−80,0	14,0	76,0	10,0
1991[1]	−68,7	38,7	25,0	−5,0
Total 1987-91[1]	−387,2	154,4	231,7	−1,1

Note: The sum of changes in net assets of the State, enterprises and households is equal to the balance of payments with reversed sign (see line 3). Increase of deposits minus gross increase of the debt to the banks is equal to the increase of net assets (1 = 2 + 3 or 3 = 1 − 2).

[1] 1991: January to April.

Sources: *Statistical yearbook* of 1989; *Dengi i credit*, No 3, 1991; Economic review of Goskomstat of the USSR, 'Soviet economy in January to April of 1991'.

The reform in 1987 that created the branch banks brought little change in the operating principles of the banking system, but made it easier for these banks to create money. It was assumed that the branch banks and their local departments, but not the ministries, would decide on credits. But no credit policy was defined. As in years past, the government interfered in the credit process, influencing the distribution of the State Bank's credit limits. After central banks were established in the republics, the republic governments began to follow the same tactics.

The springing up of new banks was followed by the establishment of special settlement centres, which were to consolidate claims between banks. The so-called method of interbranch settlements emerged and was implemented by these centres. It became an additional source of money creation within the banking system, because the consolidation of claims is carried out with a long delay. As a result, financial resources are credited at one bank without being at the same time debited at another bank. In 1987-90, one could observe the lengthening of the terms of settlements on mutual banking orders, which were carried out by the special system of settlement centres. As a result, about an additional R 75 billion were created on bank accounts during this period.

In 1991 the Law on banks and banking activities and the Law governing the State Bank of the Soviet Union were implemented, completing the transition to a two-tier banking system. All the former branches of the specialized banks were transformed into independent commercial banks. For-

mally, the right of emission was assigned solely to the State Bank. But in fact the volumes of emission (the so-called credit limits) are distributed among the republic central banks (the former republic branches of the State Bank), which are thus empowered to expand emission through political mechanisms. Under pressure from its government, and lacking any real autonomy, a republic central bank may be led to exceed the established credit limit. In theory, this could lead to a shortage of cash in the republic. In practice, however, republics are supplied with cash in accordance with their demands. In some regions shortages of cash have been observed, in recent months, but only because the USSR Goznak (a department of the Ministry of Finance) lacks adequate facilities for printing banknotes. In fact, since the 'banking war' of 1990, the State Bank of the Soviet Union has lost the strict control it once had upon the emission of credit.

The assets and liabilities of the branches of the former specialized banks have been distributed among the new commercial banks. The greater part of the accumulated bad debts has been distributed among a number of small provincial commercial banks, which lack the resources to roll them over. Thus, they are compelled to seek the support of the central bank. A portion of these bad debts was written off in 1990, providing an additional source of inflation.

Accumulated stocks of bad debts were thus inherited by a new banking system built in accordance with new principles, and prevent the use of available monetary policy instruments. An increase in interest rates on interbank credits runs into opposition from the banks, which hold large amounts of bad debts. Furthermore, there is no mechanism for enforcing claims — no formal bankruptcy procedures, nor a developed market for second-hand investment goods. Reserve levels for commercial banks are sharply differentiated, and this tends to maintain the inefficient redistribution of credit. For the banking system to operate effectively it would be necessary to carry out a large-scale write-off of hopeless debts: only under this condition would an effective monetary policy be possible.

1.3. The failure of incomes policy

From 1988 to 1990, while the incomes of the population increased by 44%, and those of enterprises by 35%, State budget revenues increased by only 13,5%. These sharp differences were caused by a partial liberalization of the former principles governing economic activities. Two aspects of the liberalization of economic regulation at the microeconomic level exerted a major influence on the distribution of incomes, providing ample opportunities for their redistribution in favour of enterprises, and from them into wage funds: first, the strict centralized regulation of enterprises' earning and spending was abolished for those State enterprises operating on a fully self-supporting basis; instead, sums payable to the budget as well as economic stimulus funds and wage funds were to be determined in accordance with indices of the enterprises' output against established norms; second, cooperatives and other enterprises and organizations not subject to direct centralized control began to spring up.

The Law on State Enterprises (1987) indirectly proposed that the standards under which enterprises had to operate were to be established or approved by higher ministries and departments. However, the branch ministries were in effect lobbyists for the interests of the State enterprises. So the right to establish the norms used to determine payments to the budget, to the economic stimulus funds, and especially to the economic incentive fund were used by the branch ministries in the interests of the State enterprises. Even during the first stage of economic reform, these norms were formed in a bottom-up fashion by the ministries and departments, which as a rule supported the interests of the enterprises under their administration. This resulted in a nearly uncontrolled channel for transferring profits and depreciation allowances into economic stimulus funds, and from there into wage funds. In 1988, 40% of enterprises had been converted to new operating conditions on a self-supporting basis. Already in the same year, the rate of growth of the wage funds was 1,6 times higher than that of industrial output, up from 0,7 times in 1987.

In an effort to offset these negative tendencies, State governing bodies tried to rely on incomes policy. In particular, they tried to limit increases in average wages by linking them to increases in productivity. Not fully trusting the ministries, the government instructed the banks to control the corresponding normative ratio, but the ministries and departments also overcame this limitation by getting preferential normative ratios established for their enterprises, according to which a 1% increase in labour productivity led to more than a 1% increase in wages.[1] In 1989, the increase of the wage fund in industry exceeded the increase in output by 5,8 percentage points.

At the end of 1989, a law establishing progressive taxation of increases in wage funds exceeding 3% was adopted. However, its influence was weakened by the introduction in

[1] This procedure was not applied at all to a number of enterprises and branches. For example, in the first quarter of 1989, only 32% of the enterprises controlled by Promstroybank (Bank for Industry and Construction) had a normative ratio exceeding 1.

practically all industries of a large number of preferences and exceptions.

The distribution of the financial resources to cooperatives and other types of quasi-private enterprises was not controlled at all. The increase in financial resources at the disposal of enterprises led to the widespread practice of cooperatives affiliating themselves with State enterprises, carrying out part of their work, and paying additional wages. At the same time, the wage funds of enterprises did not decrease. This created an additional channel for transferring money to the population. The creation of cooperatives attached to enterprises (which now make up about 70% of all cooperatives) makes it possible, first, for the enterprises to increase their output and enlist additional workers; and, second, to reduce the number of workers directly attached to the enterprise and to redistribute the wage fund among a smaller number of employees. A decision of the Council of Ministers of the Soviet Union providing for a decrease in the wage funds of enterprises that entered such arrangements with cooperatives was never effectively implemented.

A sharp acceleration in the growth of incomes in the self-financing sector has rapidly spread to the other incomes of the population, including that part of the population whose income depends on the State budget. A considerable increase in pensions, grants, and wages in budget organizations became practically unavoidable. Whereas at the beginning of the 1980s some R 2 to 3 billion were spent for these measures, or 0,5% of the total volume of incomes, in 1990 a total of R 13,5 billion, or 2% of the volume of incomes were spent, and in 1991 spending of about R 65 billion was planned, or 9% of the volume of forecast money income of the population.

In 1991, a tax was introduced on the increase in enterprises' total spending for consumption (that is, the wage fund plus expenditures for social needs). The tax was equal to the sum exceeding the untaxed volume of these means, the untaxed level being calculated by multiplying the value of the consumption fund of 1990 (increased by 4%) by the output growth rate in comparable prices. In addition, a decreasing coefficient was applied to the basic fund (this coefficient varies from branch to branch, from 0,4 to 0,9). Difficulties in calculating this tax, constant changes in the parameters owing to price reform, and the abolishment of the tax in Ukraine, Belarus, and the Baltic republics, and in part in Russia, made any reasonable incomes policy in 1991 impossible. The decision by the Pavlov government to set a maximum wage rate of R 700 for all kinds of enterprises sets up the only real barrier to the growth of high incomes. In other words, the monthly wage fund is limited to R 700 times the total number of employees. However, the majority of enterprises have not yet reached such a high level of average wages.

1.4. The limits of price policy

In the pre-reform period, prices could change by either of two means. The first was centralized price rises decreed by State authorities. Changes in these listed prices are recorded in official statistics. The second was uncontrolled rises in prices in multiproduct industries.

Centralized control over prices is effective only in single-product industries. As a rule, these are raw materials industries (for example, electric power generation, oil and gas, coal, metallurgy, and timber). In industries that produce a wide range of products, centralized control of prices has never been very effective in practice. These are, as a rule, manufacturing industries and other industries that produce final products. Price rises in these branches can be achieved to circumvent the authorities by substituting expensive goods for inexpensive ones. This 'hollowing out' of the range of inexpensive goods was a widespread practice in the Soviet system. Price dynamics of this kind were not measured and therefore were not reflected in the price indices published by Goskomstat (the statistical office). However, a number of researchers have estimated these dynamics (Hanin, 1981, 1988; Faltsman, 1980, 1989; Volkonskii et al., 1986). For example, the annual increase in industrial building costs for 1970-82 was estimated by Faltsman to be 5 to 6%. In the 1975-82 period the cost of 1 m^2 of dwelling space increased by 3,4% annually.

During the period of centralized price rises, prices for fuel, raw materials and foodstuffs were therefore stable while prices for other goods were increasing. As a result, disproportions were arising: the relative prices of raw materials were being understated, and those for manufactured goods were being overstated. Periodic centralized mass price revisions attempted to correct these disproportions, only to have them reappear. This phenomenon can be illustrated by the ratio of price indices for various branches in 1949, 1967 and 1981 (Table 3). The same table shows the profitability of these branches before and after price revision.

As is obvious from the table, the profitability of multiproduct manufacturing industries fluctuated and in practice changed little over time. At the same time, profitability in raw materials industries was steadily falling between price revisions, to be restored only after a centralized rise in their output prices.

Thus, centralized price revisions temporarily reduced the excessively high and inflationary financing of ineffective single-product industries whose prices were fixed. However, because of the invariability of retail prices for foodstuffs and other basic goods, the main burden of financial support for

Table 3

Index of prices and profitability before and after centralized price rises

Branches	1949 I	1966 P	1967 I	1968 P	1981 P	1982-84 I	1983-85 P
Metallurgy	2,75	9,2	1,47	19,2	7,1	1,22	11,0
Coal	3,1	−18,0	1,81	8,2	−9,4	1,43	4,5
Oil and gas industry including:	1,2	11,1	1,08	25,5	14,3	1,67	19,0
oil production					6,8	2,2	23,5
oil processing					23,2	1,57	14,5
gas					14,4	1,38	20,9
Energy	1,53	4,3	1,16	10,6	5,9	1,38	6,7
Construction materials	2,23	6,6	1,19	14,2	3,2	1,12	7,9
Machine building	1,3	19,3	1,0	21,2	15,3	1,0	11,6
Chemicals	1,71	17,5	1,0	19,2	14,6	1,0	9,4
Forestry and paper	3,27	6,1	1,21	20,1	5,8	1,16	12,3
Light industry	1,05	31,4	1,0	39,6	24,7	1,09	25,3
Food industry	0,92	19,2	1,0	22,4	18,4	1,03	18,5
Other industries	1,17	13,3	1,08	20,1	11,5		12,4
Agriculture				1,0		1,11	
Construction		6,7	1,11	6,8	11,4	1,1	10,2
Transport and communications		14,5	1,0	18,9	10,8	1,1	12,3

Note: I = production price index, base previous year = 1;
P = profitability (ratio of profit to capital) (%).
Source: Statistical yearbooks for 1968 and 1984.

inefficient industries was gradually shifted to the budget in the form of expenditures for subsidies, resulting in a disastrous increase in the State debt.

The same method was used for the reforms of 1991. Moreover, the decisions to maintain fixed wholesale prices for fuel and raw materials and fixed procurement prices for the main agricultural products were made simultaneously with the introduction of free prices for the output of multiproduct industries. Given the ineffectiveness of monetary control this has sharply speeded up inflationary processes in the economy. Maintaining stable fixed prices in some branches while free-market prices in the other branches are increasing requires rapid growth in State subsidies.

The retail price reform of 2 April 1991 provided for three types of prices: fixed, regulated, and free (contractual) prices. The principal foodstuffs were to be sold at fixed State prices (meat and dairy products, eggs, bread, fish products, sugar, tea, etc.). Prices for ordinary (i.e. non-synthetic) kinds of textiles, clothes, footwear, children's goods, and some household and cultural goods could be raised within limits established by the government. These limits were defined in the price lists of the State Pricing Committee (Goskomtsen) of the Soviet Union and of the regional pricing bodies. No changes were allowed in the prices of the following goods: medicines; coffee; synthetic textiles, knitwear, clothes, furs, hosiery, footwear, and toys; fuel for household use; vodka. According to calculations based on Goskomstat data, in 1991 fixed prices increased by 100%, and goods sold at these prices made up 40% of total retail turnover. This figure includes 12% of turnover sold at unchanged prices and 28% sold at fixed prices that were raised by about 150% on average.

About 40 to 45% of goods were to be sold to the population at free (contractual) prices.[1] Free prices were negotiated freely between the producers and the State trading organizations, which regulated the deliveries to the shops. The retail price was strictly linked to the selling price: the mark-up

[1] This group included vegetables, fruits, and potatoes, free prices for which were introduced on 15 November 1990; also confectionery, ice-cream, soft drinks and mineral water, imported tobacco products, natural textiles and textile goods, fashion and imported clothes and footwear of high quality, carpets, sporting goods, clocks and watches, certain kinds of radio and electrical apparatus, and other goods.

could not exceed 20% (in some regions 30%) of the selling price. Free prices for imported goods purchased with centralized currency resources were established by the Pricing Committee of the Soviet Union and those of the republics.

All other goods (15 to 20% of the total) were subject to the regulated prices regime, under which pricing bodies defined the key parameters that determined the level of prices. These parameters could be the following:

(a) the maximum level of retail prices (for example, 5 copecks for a box of 50 matches);

(b) the rate of profitability, and the trade margin (in this case the producer based the selling price on well-established production expenses plus some level of profit not to exceed the permitted maximum; this selling price was then the base for the regulated price);

(c) maximum increases for fixed listed prices (for example, the maximum coefficient for light industry production was 20%, and that for liquor production 30%).

This system resulted in the State shops in fact not participating in the process of retail price formation. This right was granted to the Goskomtsen of the Soviet Union, to local authorities and to old trade bureaucratic structures, which had no economic interest in establishing equilibrium prices. It soon became clear that regulated prices were quasi-fixed prices and that 'free' prices at least included regulated retail trade margins.

1.5. Conclusions

During the first phase of *perestroika*, up to mid-1990, accelerating inflation resulted from attempts at liberalization that proved to be only cosmetic, since all the institutional features of the centrally planned system remained. These included in the first place the paternalism inherent in the system and the mechanisms of macroeconomic regulation.

The existing budgetary and banking systems in the Soviet Union could not withstand inflation without administrative control being exerted over the spending of enterprises' financial resources and wages, and without confiscation of their balances for the budget. The price system stimulated an ongoing need for increasing subsidies to those enterprises whose output prices were fixed. Centralized price revisions were periodically needed to correct the levels of profitability and the price correlations among various products. As the reforms of 1991 did not change the fundamental principles of macroeconomic regulation, the above features remained in place.

As a result, in 1987-91 the processes by which budgetary financial resources were redistributed in favour of enterprises and households were sharply strengthened. This resulted in massive excess liquidity at the disposal of enterprises and households and in a sharp increase in the State debt.

After the middle of 1990 coherence in macroeconomic policy was lost as the budgetary and banking systems began to disintegrate. The banks in the republics seized the opportunity to create money without any control of the State Bank. The second stage of *perestroika* began.

2. The economic consequences of Mr Pavlov

2.1. The economic strategy

At the end of 1990 the authorities had the following alternatives:

(a) to restore centralized control and to confiscate excess monetary holdings through monetary reform, postponing the transition to a market economy until better times. Political forces supporting this choice did exist in the Soviet Union, but in our view the chances of this happening were limited;

(b) to liberalize quickly the conditions of economic activity in conjunction with a strict stabilization policy of the shock-therapy type. Realization of this alternative was also unlikely, because there was no practical way of implementing it;

(c) to undertake a gradual mixed policy, aimed at both stabilization of the situation and liberalization of economic conditions.

In the summer of 1990 some 20 different economic programmes were proposed, reflecting all three of these points of view. Only two were officially considered in the parliament. One of these was the so-called '500 days' plan, which called for liberalization and shock therapy as a measure of financial stabilization; the other was the programme proposed by President Mikhail S. Gorbachev, which called for a mixed policy based on gradualism. The Gorbachev programme was the one actually implemented by the parliament.

Thus, the third variant of economic policy among those listed above was the one chosen. But in reality the majority of decisions were made under the pressure of circumstances, not in accordance with a considered plan. The central

government had no plan for the consecutive liberalization of economic conditions and the creation of a market infrastructure. Liberalization was in fact initiated from below, with improvements going on under pressure from economic agents themselves (entrepreneurs, directors of State enterprises, bankers, cooperative workers, and so on). Without giving a detailed analysis, we can offer several examples: commercial banks sprang up in 1988, even though the law governing these banks was adopted only in 1990; commodity exchanges sprang up in the middle of 1990, and even today there is no legislation concerning them; the foreign-currency exchange has been in existence for more than two years (in the form of auctions, currency transfers, and so on), whereas the currency exchange of the State Bank of the Soviet Union has been in operation for less than half a year, and cannot yet be considered successful.

The main aim of the activities of the central government was to stabilize the economic situation. Until 1991 stabilization was understood as an attempt at maintaining existing commodity flows through administrative methods. In 1991, after V. S. Pavlov became Prime Minister, some measures aimed at achieving macroeconomic equilibrium were also attempted. From our point of view, the main task of central government at the end of 1991 was stabilization.

Within the framework it had set, the Pavlov government implemented (or tried to implement) a number of mixed measures aimed at eliminating the monetary overhang and achieving macroeconomic equilibrium:

(i) increases in the level of taxation, notably to finance new social programmes adopted by parliament in the autumn of 1990;

(ii) a restrictive incomes policy to stop the process of redistribution of financial flows from the budget to enterprises and households. However, price reform and the resistance of local authorities kept both this and previous measures from being carried out;

(iii) gradual increases in interest rates to limit the volume of banking credit to enterprises. This policy was not carried out in time because of the opposition of the Russian Central Bank;

(iv) confiscation of a part of the population's cash holdings and a freeze on the savings deposits. These measures did not influence the financial situation in 1991 because the conditions under which they were implemented were too soft, reducing the results to a minimum (only 3,5% of the money supply narrowly defined was confiscated, and the freeze was cancelled at the end of February 1991);

(v) price reform was the main measure aimed at stabilizing the situation.

In the next section we consider the results of the main components of the mixed policy, namely, price and tax reforms.

2.2. Price reforms

Prime Minister Ryzhkov's government originally planned to carry out reforms of wholesale, retail, and procurement prices simultaneously, beginning on 1 January 1991. However, owing to social and political circumstances, the price reform was instead carried out in three stages.

In the first stage, in July 1990, procurement prices for grain and some other foodstuffs were raised. This was done to stimulate the supply of grain, and the government planned to compensate for the budgetary consequences of this rise by raising retail prices for bread and grain products. The latter measure was, however, not carried out because of resistance from the parliament and the public. In the autumn, under pressure from the kolkhozes' lobby, the government had to raise prices for animal produce, because these had become too low in comparison with prices for forage. As a result, the rise in procurement prices in 1990 imposed a budgetary cost of R 22 billion (2,4% of GNP) in additional subsidies for the full year.

In the second stage, which began on 1 January 1991, wholesale prices and tariffs for services were raised. In the summer of 1990 the Ryzhkov government had planned to introduce basically fixed prices, but in October 1990 a presidential decree declared that contractual wholesale prices were to be established for about 40% of production. Liberalization of these prices was carried out in accordance with the so-called 'product principle'. Theoretically fixed prices for total output were to be established in the same way, but in reality prices remained fixed for the share of production which met State orders, and the rest was sold at free prices. Fixed prices were established basically for undifferentiated products: fuel, agricultural products, and the greater part of foodstuffs purchased by the population. As a result, indices of wholesale and procurement prices (by gross product) increased in January by 66%, although they were initially planned to increase by 53%. For the first six months of 1991, the price index was 87% above the same period of the previous year.

In reality, free-market prices changed slowly. Rapid changes could indeed be observed on the commodity exchanges, but the volume of trade there was too small — only a few percent of the total volume — to be considered as reflecting the entire market. The greater part of commodities were sold by

contract. Changes in prices required changes in the terms of these contracts and are otherwise possible only upon the expiry of the previous contract, which might be from several weeks to several months. As at the same time monetary aggregates were increasing fairly rapidly, the result was a paradoxical situation where the price revision mechanism failed to keep up with the rise in demand. Thus, the deficit was maintained. However, the introduction of contractual wholesale prices and a gradual increase in their share resulted in a more rapid rise of the wholesale price index than in previous years. In July/August 1991 wholesale prices increased by 8 to 10% per month (Table 4).

At first, changes in the prices of fuel and raw materials (for which basically fixed prices were established) and manufactured goods (whose prices were free and contractual) evolved in favour of the former. Later on, however, their relative price once again dropped to the level of the previous year (Table 5). Thus, the objective of price reform, to improve the structure of relative prices, was not fulfilled, and additional financing of the fuel and raw materials industries from the Union budget (about R 20 billion, or 1,3% of GNP) and of the kolkhozes from the republic budgets (about R 25 to 30 billion, or 1,6 to 1,9% of GNP) proved necessary.

Table 4

Wholesale price inflation, 1991

(Change over the same period of the previous year, %)

	First quarter	First half-year	April	May	June	July	August
Industry — total	+ 83	+ 100	+ 112	+ 118	+ 122	+ 139	+ 154
of which:							
intermediate and investment goods	+ 85	n.a.	+ 100	+ 111	+ 114	+ 119	+ 121
consumer goods	+ 80	n.a.	+ 123	+ 135	+ 136	+ 158	+ 186

n.a.: not available.
Source: Report of Goskomstat of the USSR.

Table 5

Relative prices, 1991

Branches	Plan		Actual			
			January-March		January-June	
	I	II	I	II	I	II
Metallurgy	1,71	1,12	1,68	0,95	1,75	0,94
Fuels and energy	1,82	1,19	1,99	1,13	2,01	1,07
Machine building	1,25	0,82	1,73	0,98	1,79	0,96
Chemicals	1,58	1,03	1,82	1,04	1,85	0,99
Forestry and paper	1,83	1,20	2,11	1,20	2,17	1,16
Construction materials	1,68	1,10	2,13	1,21	2,18	1,17
Light industry	1,28	0,84	1,90	1,08	2,20	1,18
Food industry	1,98	1,29	1,79	1,02	2,10	1,12
Agriculture	1,20	0,78	1,60	0,90	1,61	0,86
Construction	1,40	0,92	1,80	1,02	1,80	0,96
Transport and communications	1,15	0,75	1,22	0,69	1,22	0,65
Total	1,53	1,00	1,76	1,00	1,87	1,00

Note: I = price index relative to the corresponding period in 1990;
II = change in relative prices, total = 1.
Sources: Report of the Council of Ministers of the USSR, 'On the economic condition of the country and the transition to regulated market economy', Moscow, 1990; Reports of Goskomstat of the USSR.

At the beginning of 1991, the Government of the Russian Federation tried to cut subsidies for foodstuffs, having already permitted agricultural enterprises to sell up to 30% of their output at free prices. However, the output of food-processing industries was sold at fixed prices, and so it was unprofitable for these industries to buy foodstuffs at free-market prices. This led to cuts in the volume of production of meat and milk products (which received the largest subsidies) by 12 to 14% in the first half of 1991.

Our preliminary analysis leads to the following conclusions:

(i) The mere fact that prices were liberalized for a considerable part of Soviet production was a positive development.

(ii) The reform of wholesale and procurement prices effectively legalized and sharply speeded up the pre-reform dynamics, in which prices for raw materials remained fixed for long periods and were then raised sharply. During the periods between rises, prices for manufactured products were steadily increasing, and this led to the level of prices for raw materials falling behind in relative terms.

(iii) The underpricing of raw materials led to the need for financial support of all enterprises producing these goods, even the most profitable ones. Fixed prices and the lack of any market estimate of the level of necessary expenditure required financial support of any expenditure. Such a situation requires enormous financial injections into unprofitable enterprises and does not permit any solution of the problems of balance in flows without large-scale redistribution through very high taxes and regular confiscation of enterprises' financial assets.

The third stage of price reform addressed retail prices. On 2 April 1991, new principles for retail prices were announced: prices for some goods (basically foodstuffs) were raised and kept fixed, while centralized price setting was discontinued for other goods, which however remained subject to regulation by republic and local authorities.

In the first quarter of 1991, retail prices increased by 26% over the same period of 1990. On 1 January wholesale prices were increased, and this increased the pressure on retail prices, especially those for which centralized price setting had been ended in November 1990. After the retail price reform of April, the retail price index stood at a level 95% above that of April 1990. But during the next few months prices increased by only 1 to 2% monthly, and by July prices had stopped rising altogether (Table 6.)

Reductions in the real volumes of sales of goods and services to the population took place simultaneously with the rise in

Table 6

Retail price inflation, 1991

(Change over the same period of the previous year, %)

	First half-year	Second quarter	May	June	July	August
State and cooperative trade	56,9	95,5	95,0	97,0	98,3	102,1
Gorkooptorg[1]	83,9	115,3	115,9	112,0	112,0	112,0
Total official sector	57,5	96,0	95,5	97,3	98,6	102,1
Kolkhoz market	84,4	91,8	95,2	87,8	100,2	118,0
Total goods	57,9	95,3	95,5	95,3	98,7	102,9
Paid services	39,5	57,6	64,0	66,8	75,6	77,5

(Change over the previous month, %)

	May	June	July	August
State and cooperative trade	2,3	1,0	0,2	0,5
Gorkooptorg[1]	−2,0	−1,8	−5,3	−3,9
Total official sector	2,2	0,9	0,05	0,4
Kolkhoz market	−5,1	−13,4	−10,2	−12,8
Total goods	2,0	−0,1	−0,4	−0,1
Paid services	108,0	102,0	105,0	101,6

[1] A special form of trade in the USSR.

Source: Report of Goskomstat of the USSR.

retail prices. Recession and price dynamics corresponded to the effect of the stabilization shock. Although in April retail prices and tariffs for services doubled, the cash money supply remained the same: on 1 June the cash holdings of the population amounted to R 133,8 billion, only slightly above the level of 1 January (R 132,7 billion).

2.3. Tax reforms

The staged implementation of price reform led to many wholesale prices exceeding retail prices. With tax revenues constant at 1990 levels, such a disproportion could provoke a State budget deficit of more than 20% of GNP. To avoid such an outcome, the government proposed additional taxes. Some existing taxes were raised, some others lowered, and new taxes were introduced.

On 1 January 1991 the following tax changes took place:

- A profits tax was introduced at a rate of 45% (previously the share of payments from profits was about 55%); in Russia a 38% profits tax was introduced.
- The tax paid by enterprises to cover social insurance for their employees was raised to the rate of 26% of the wage fund from its earlier rate of 7 to 14% depending on the industry. The law on pensions originally assumed that this rate would be 37%, but political pressure caused it to be brought down to the lower level. In addition, a 1% obligatory payment was deducted directly from wages.
- A stabilization fund was set up, with 11% of the wage fund paid into it as a tax together with 20% of the enterprises' depreciation payments; some other deductions from incomes were also paid into this fund.
- A 5% sales tax was introduced.
- Rent payments were introduced in the fuel and raw materials industries, but at a low rate.
- A tax on profits exceeding a maximum level was introduced to limit price rises.

Detailed analysis of the impact of these tax innovations is beyond the scope of this paper; here we limit ourselves to a few observations:

1. The sharp strengthening of pressures to raise taxes beginning on 1 January 1991 was caused by the need to bridge the financial gap in the State budget caused by the time-lag between the introduction of new wholesale and retail prices. Later on it became necessary to ease the pressure, especially after the introduction of new retail prices. The shares of tax contributions are given in Table 7.

Table 7

Taxes on enterprise income

(as a percentage of income)

	1990	1991 plan from 1.1.1991	1991 (estimate)
T/I	21	39	24
T/(I=W)	44	68	47

Note: W = wage fund;
I = gross income of enterprises (including wage fund);
T = tax payments to the budget and non-budgetary funds.

Source: Authors' estimates on the data of Annex 1.

As the table indicates, the shares of tax contributions were sharply raised (from 44 to 68%) and then reduced to a level that was still higher than in 1990 (47%). These measures had some success in bringing the budget closer to balance.

2. The introduction of the new taxes was badly prepared, and the tax rates and their bases were being constantly revised; this contributed to the instability of budget revenues. The main goal of the government, to balance revenues and expenditure in the short term, was being carried out without careful analysis and without taking into account its very short-term consequences. However, it is quite possible that this was the only politically feasible approach. During the first half of 1991 the taxation system operated under a so-called 'budget agreement' among the republics. In fact there was no agreement at all. The Union Government presented a proposal establishing fixed payments by the republics to the Union budget, with the size of the payments based on the assumption that GNP growth would be 3%. The republics signed the proposal only after including provisions for a possible decrease in the payments. In reality GNP fell by 10%, the republics could not pay the sums required, and as a result the revenues of the Union budget dropped sharply. The lack of clear rules for the distribution of budget revenues had led to a situation in which the republics paid into the budget only as much as they considered that they could. As a result, the revenues of the Union budget in the first half of the year amounted to only 20% of those planned for the year as a whole.

3. During 1991 the introduction and reform of taxes was not carried out as well as it could have been:

(i) The profits tax was initially set at a rate of 45%, but it was reduced by the republics to 38%, and after retail price reform it was reduced by three more percentage points to 35%. The tax was paid in advance once or

twice a month, on the basis of expected profits, which were estimated independently. Of course, with prices rising rapidly, the expected profits and hence the advance payments were understated. At the end of the quarter the underestimate would be compensated for, but these additional payments would be depreciated by inflation. Hence these tax payments were subject to the Tanzi effect (Tanzi, 1977). On the other hand, social insurance payments increased in proportion to wages, and for these payments the lag between the origin of income and payment of the tax is minimal. Compensation payments were also imposed by this tax, and this in effect indexed the tax at the same rate as the incomes of the population. In this case, therefore, the Tanzi effect was minimal.

(ii) Enterprises did not pay taxes to the stabilization fund. For four months, payments of the wage tax and the depreciation tax should have amounted to about R 13 billion to R 15 billion — in fact only about 1,5 billion were paid. This situation probably arose from a lack of experience and a lack of clear rules for transferring payments to the stabilization fund. However, the delay of these payments did not permit the planned expenditures to go forward, and a special decision of the parliament on drawing credits for this fund was required. Thus, the tax contribution to the stabilization fund cannot be called good, but the separation of these taxes from the budget at least permitted expenditures to be held in check.

(iii) It was initially proposed that the sales tax would be paid on every sale. However, its payment was soon abolished in those industries that produced primary and intermediate goods, and the tax ultimately applied only to goods for final consumption by the population. As a result the volume of receipts was reduced from R 100 billion to R 25 billion. Later, many consumer goods (mainly foodstuffs) were also freed from payment of this tax, and revenues derived from the tax decreased to R 10 billion annually.

(iv) Taxes on profits exceeding some maximum allowed rate of return and on increased consumption were ineffective. Under the conflicting legislation of the Union and the republics, some of which abolished these taxes, enterprises managed to avoid paying the taxes and to get around the limitations.

(v) After retail price reform the average rate of income tax for the population was reduced, essentially by legislating that low incomes would not be subject to taxation and by lowering the maximum level of taxation for those with high incomes from 60 to 30%.

(vi) Revenues from the turnover tax and the import tax increased as a result of retail price reform. However, in a majority of cases, the turnover tax was, as previously, equal to the difference between fixed wholesale and retail prices, and the amount of this difference depended on the product. Its transformation into an *ad valorem* tax on goods sold at unfixed prices was delayed. Raising the tax in this way lowered the effect of indexation of budget revenues and strengthened the Tanzi effect. Import taxes were set as a percentage of the cost of the commodity, and this could have the effect of indexing revenue from this tax to the depreciation of the rouble. However, this did not happen, because the commercial exchange rate (R 1,8 to USD 1) was applied for settlements.

A detailed analysis of tax revenues is provided in Annex 1.

As a result of a change in the conditions of taxation in 1991, about 30% of budget revenues and off-budget funds (mostly social insurance payments) were indexed simultaneously with a rise in prices and money incomes of the population. An additional 35% of revenues could be indexed with small transformations in the proper elements of taxation or by a change in the exchange rate of the rouble (the turnover tax and the import tax). For all other taxes there was a long lag between the origin of the income and the payment of the tax, and this caused revenues from these taxes to depreciate more rapidly as inflation accelerated.

2.4. Income distribution

The attempt by the government to raise tax rates and to set higher prices for foodstuffs and some other goods subject to subsidies was intended to depreciate existing money stocks. At the same time it was also aimed at halting the redistribution of financial resources from the budget to enterprises and the population. However, the idea was to achieve this aim without carrying out a full liberalization of the economy. The governing circles understood that these measures could be effective only if they were supplemented with a restrictive incomes policy, including in particular not granting large budget subsidies to compensate for the price rise. In addition, a more effective credit policy, limiting the access of enterprises to the credit resources of the banks, was needed. The statements of Deputy Prime Minister V. Sherbakov about the important decisions being prepared in the area of credit, and the resistance of the cabinet to the demands of the workers for higher wages, prove this. But analysis of the data for the January to July period of 1991 shows that none of the government's intentions was fulfilled.

The interest rate policy proved ineffective. Only in August 1991, after long negotiations with the republics, did the Soviet Central Bank increase the annual rate on centralized credit resources (those issued by the Soviet and republic central banks) from 8 to 12%. This was done to limit credit emission. But with monthly inflation already at 10 to 12%, this level of the interest rate could not prevent the inflationary expansion of credit emission. At end-1991, credits to the national economy were increasing by R 40 billion (or by about 10%) on average per month.

The planned compensation and incomes policies were gradually abolished. The republic authorities decided to give the population additional compensation from the budget (see Section 3 below). Ukraine, Belarus, Uzbekistan, and (in part) Russia abolished their limitations on rises in wages. The compensations policy was based on fixed allowances paid from the budget amounting to R 60 to 65 for adults and R 40 to 45 for children (this was equivalent to 20 to 25% of the average wage rate, and 70% of the average pension).[1] Maintaining these compensations for the last nine months of 1991 would require R 104 billion in budgetary expenditures.[2] Compensations to the employees of those enterprises operating on a self-supporting basis were to be paid by the enterprises from their revenues (i.e. from the rise in output prices, and from the decrease in the profits tax rate). According to Ministry-of-Finance calculations, the total amount of compensation from all sources was R 225 billion. This total included government and enterprise subsidies to workers' canteens (May 1991). In fact, given the subsequent decisions on the rise in incomes of the population, total subsidies for 1991 may well have reached R 270 billion, including at least R 130 billion from the budgets of the various governments.

As a result of the government's ineffective incomes policy, in the January to August period of 1991 the wage fund increased by 34% in spite of the fall in output. The introduction of compensation allowances led to a 14% increase. Measures for assuring the social protection of workers in public health, education, culture, and basic industries resulted in a further increase by nine percentage points. The remaining 10 percentage points' increase was due to the redistribution of enterprises' incomes in favour of wages.

The sharp increase in budgetary expenditures at all levels for payments directly to the population was the source of a rapid growth in incomes. More than 50% of the revenues of the consolidated budget of the Soviet Union went to the population in the form of incomes (social payments, wages, compensation allowances). In 1990 that share was only 34%. This is the main reason for the sharp rise in the 1991 budget deficit. The other sources of the rise in incomes of the population were the rapid growth of profits (180% in the January to August 1991 period) and bank credits. The price reform strengthened the tendency among enterprises to redistribute their profits quickly in the form of wages. Cheap bank credits provided the necessary liquidity. In 1991 a strengthening of the negative tendency toward inflationary redistribution of financial resources arose not only from the expansion of budgetary credit limits but also from a rise in direct bank credits to enterprises.

Because monetary policy was weak, the price rise failed to depreciate financial flows significantly, while the money stocks were being gradually restored in real terms. The government increased the value of deposits and other financial assets held by the population by 40% to compensate for the retail price reform. About 25% of this sum could be used by the population after 1 July 1991, and the rest was frozen in special accounts until 1994. These measures also promoted the re-establishment of the real volume of assets (Table 8).

Table 8

Nominal and real effects of price reform, 1991

(Change over the same period of previous year, %)

	January to July	
	Nominal	Real
Flows (change within a period)		
Enterprises (profits in industry)	+102	−5
Population (money incomes)	+59	−1
Enterprises	+54	−27
Stocks (change at the end of the period)		
Population:		
without compensations for savings frozen until 1994	+22	−39
with compensations for savings frozen until 1994	+46	−27

Source: Monthly statistical reports of Goskomstat of the USSR.

1 *Izvestia*, 24.4.1991.

2 Beginning in January 1991, average pensions were increased by 45%. In 1991 pensions increased their 1990 levels by 2,2 to 2,5 times.

Changes in incomes of the State, enterprises and population are given in Table 9. Detailed changes in flows in these sectors (as income and expenditures balance) are given in Annex 1.

Socialist enterprises do not strive for a rise in their profits but instead redistribute their incomes as quickly as possible through wage increases. It can be seen from Table 9 that the reforms in the areas of prices and taxation raised the profits of enterprises by R 135 billion, increased the budget deficit by R 90 billion, and decreased the incomes of the population by R 45 billion. However, macroeconomic changes reduced the profits of enterprises practically to zero and increased the incomes of the population to R 175 billion, while increasing the budget deficit by the same amount.

2.5. Have the reforms eliminated the monetary overhang?

The size of forced savings in the Soviet Union has been estimated using different methods. A range of estimates have emerged: from R 115 billion (20% of total financial assets of the population) at the end of 1990 (CEC, 1990) to R 260 billion (45,6% of the total; Belousov and Polyakov, 1990).

Table 9

Annual changes in income flows in 1991[1]

(billion R)

	State	Enterprises	Households
1. Changes in net assets, 1990[2]	−80	14	76
2. Effect of January wholesale price increase and tax reform	−15	25	−10
wholesale price increase	−290	290	0
legislated tax reform	275	−265	−10
3. Effect of April retail price reform	−75	110	−35
changes in retail prices and tariffs	130	240	−370[3]
changes in tax legislation	−35	20	15
compensation payments	−130	−150	280
compensation payments to household accounts and bonds to be paid in 1991	−40	—	40
Subtotal effect (2+3)	−90	135	−45
4. Changes in macroeconomic conditions			
social programme in 1991	−65	−35	99
wage increase	−20	−100	120
Subtotal effect (2+3+4)	−175	1	175
Changes in net assets, 1991	−255	15	240
5. Memo = full year theoretical effect of retail price reform[4]			
changes in retail prices	195	290	−485
changes in tax legislation	−85	70	15
compensation payments	−140	−200	340
Full year total effect (2+5)	−45	185	−140
Subtotal effect with changes in macroeconomic conditions (2+4+5)	−130	51	79

[1] Total saving-investment balance differs from zero because of the balance-of-payments deficit.
[2] Only changes in taxes on incomes of the population and on the profits of enterprises (after taking into account the increase in profits).
[3] Including both the increase in prices and the decrease in real volumes.
[4] Effect of the price reform for the full 1991 year, instead of April to December.

Source: Authors calculations and simulations. See Annex I.

The influence of price reform upon the size of forced savings has also been estimated in different ways. For example, according to Belousov's method, the nominal size of these savings will slightly increase. If one estimates the increase in the demand for normal savings in proportion to price growth, then forced savings should be zero. The increase in nominal demand for money (normal savings) can be estimated in proportion to the growth of the nominal income of the population. Different estimates of changes in normal and forced savings are given in Table 10.

As Table 10 indicates, different methods of estimating forced savings after price reform yield results ranging from R − 180 billion to R 210 billion. (A negative value means that either the initial estimate was understated or some other method is needed.) In our view, the best estimate is in the range of R 60 billion to R 120 billion (8 to 17% of the accumulated financial assets of the population). This represents a return of the Soviet economy to the state of 1983-85, when forced savings were approximately the same size. Depreciation of forced savings stocks can be put down as a positive result of reform, for with liberalization of all prices their sudden change will not be so great as it would have been without the reforms of 2 April 1991.

2.6. Conclusions

Reforms of prices and taxes did not solve the problem of unbalanced flows and had little impact on the financial situation in the economy: the real current budget deficit increased by 160%, the real State debt by 110%, and the savings rate from 13 to 20% (Table 11).

The simultaneous introduction of free and fixed prices did not bring much profit to the State, and instead promoted the rise in its deficit. The enterprises cancelled out any gains to the State by rises in free prices and by the immediate payment of increases of profits in the form of wages, and thus promoted the quick restoration of the real purchasing power of the incomes of the population. The process of redistribution of incomes, which began in 1988, sharply speeded up in 1991.

Tax reforms, which had sought to bring about a sharp strengthening of tax pressure on enterprises, for all practical purposes failed, and the share of tax receipts was left nearly at the level of 1990.

Depreciation of the money savings of the population by 20 to 25% sharply reduced the real size of forced savings, and in the short term this allowed price liberalization without fear of great sudden changes in prices.

The principle of price regulation chosen by the central government maintained the policy implemented under central planning. Fixed prices were established for fuels and raw materials and for foodstuffs. Between periodic revisions of fixed prices, manufacturing industries proceeded with

Table 10

Alternative estimates of forced savings

(billion R)

	CEC	IMF, IBRD, Belousov EBRD, OECD	Polyakov
1. Monetary overhang at the end of 1990	**115**	160 - 180	**260**
2. Normal savings at the end of 1990	425	360 - 380	**280**
3. Volume of savings at the end of 1991[1]	715	715	**715**
4. Normal savings at the end of 1991[2]			
variant 1	895	755 - 800	**590**
variant 2	765	650 - 685	**505**
5. Monetary overhang at the end of 1991 (5=3−4)			
variant 1	− 180	(− 40) - (− 80)	125
variant 2	− 50	30 - 65	210

[1] Estimated as the sum of savings at the end of 1990 and the increase in savings in 1991 (from Table 9).
[2] In variant 1, the increase in normal savings is proportional to the price increase (× 2), while in variant 2 it is proportional to the nominal income growth (× 1,8).
Sources: CEC, 1990; IMF, IBRD, OECD, EBRD, 1991; Belousov and Polyakov, 1990; authors' calculations.

price rises for their output. Liberalization of prices for this output sharply speeded up price increases, and this required more frequent revisions of fixed prices. Soviet prices for fuel and raw materials that were too low by comparison with world prices persisted, and this required additional subsidies to unprofitable enterprises and to agriculture.

Table 11

Soviet economy: basic indicators

	1990	1991 actual (seven months)	1991 forecast	Change 1991/90 (%)
1. GNP	1 000		1 700	70,0
2. Internal debt				
in billion R	550	925	1 020	85,5
percentage of GNP	55,0		60,0	5,0[1]
3. Increase of the internal debt				
in billion R	184	375	470	155,4
percentage of GNP	18,4		27,6	9,2[2]
including:				
current deficit of the budget[3]				
in billion R	80	130	215	168,8
percentage of GNP	8,0		12,6	4,6
Enterprise debt forgiveness	104	63	63	−49,5
Compensation to accounts, bonds and insurances	—	182	182	—
4. Net debt to the Central Bank				
in billion R	520	880	970	86,5
percentage of GNP	52,0		57,1	5,1
5. Money (M0)	136	167	240	76,4
6. Money (M1)	534	715	865	62,0
7. Money (M2)	946	1 231	1 492	57,7
8. Additional money balances frozen until 1994	—	120	120	—
	—	120	120	—

[1] Authors' estimates based on Gosbank and Goskomstat data.
[2] Absolute change in percentage points.
[3] Including quasi-fiscal deficit of the Central Bank for the payment of subsidies.

Sources: *National Economy* in 1989; Reports of Goskomstat of the USSR; *Dengi i credit*, No 3, 1991; authors' estimates.

3. Prospects for inflation and possibilities for stabilization

In 1991, the uncontrolled disintegration of the budgetary and banking systems became the main problem in the area of macroeconomic regulation. Attempts by the Union Government to implement effective stabilization measures failed and indeed only deepened the fall in output and consumption; the result was the emergence of the threat of high inflation and even hyperinflation. Besides the problems of macroeconomic regulation typical in countries with high inflation (Dornbusch, 1990), in the Soviet Union the spontaneous process of redistribution of powers among the republics became the most important factor restricting the chances of achieving stabilization.

3.1. Instruments of macroeconomic regulation in 1991

At present, macroeconomic policy in the various republics is not synchronized. In 1991 the republics took different approaches to fiscal policy, pricing, incomes policy, and monetary policy.

One may distinguish three types of budgetary policy being practised in the different republics at present (Table 12).

1. Inflationary financing of the budget deficit through credit expansion by the republic's central bank. Higher budgetary expenditures are mainly due to the financing of additional social programmes, payment of subsidies for foodstuffs, and support for unprofitable enterprises. The republics relying on these kinds of policies are experiencing an especially rapid growth of the money supply and of forced savings. This strategy has been used, for example, by Russia and the Asian republics.

The so-called 'extraordinary budget' of the Russian Republic for the second half of 1991 envisaged about R 3 billion in additional expenditure, more than half of which was to be defrayed by credits from the Central Bank. During the first half of 1991 the Russian budget deficit (including the quasi-fiscal deficit of the Central Bank for subsidies to the producers of foodstuffs) amounted to about R 37 billion (about 8% of Russian GNP). In 1991 we forecast the deficit of the Russian budget at a minimum to equal 6 to 7% of the republic's GNP, in addition to the deficit of the Union budget.

This strategy is quite similar to the policy of the former central government. High levels of budget expenditure provide for the investment needs of the State structures of economic regulation and for populist measures aimed at increasing the nominal incomes of the population.

2. The second approach is similar to the first, but in addition the authorities use various monetary surrogates — for example, coupons in Ukraine. This measure is used to defend the regional market from the demand of consumers from neighbouring republics, and from the excessive demand of its own consumers. The use of coupons in Ukraine results in a comparatively high level of equilibrium in the consumer market (coupons cover only 70% of the nominal incomes of the population). Excessive monetary savings not covered by coupons constitute a demand to be satisfied outside the republic. This measure cannot result in a long-term equilibrium, because it will inevitably lead to inter-republican conflicts and to the closing of frontiers.

3. The strategy adopted by the Baltic republics involves a liquidation of the republic's budget deficit. In Latvia this aim was achieved by restriction of expenditure while maintaining the system of fixed prices, whereas in Lithuania and Estonia it was accomplished by price liberalization and the abolition of subsidies.

Incomes policy in the republics also differed in 1991. The Union-wide level of compensations for price rises was set at R 60 per month for employees and R 65 per month for pensioners. In Ukraine, Latvia, and Estonia these compensations were raised to R 85 to 90. In Ukraine, Belarus, the Baltic republics, and Turkmenistan; compensations for children were raised above the Union rate.

Whereas in 1991 the Union minimum wage rate was fixed at R 160 per month, in Russia it was R 220 per month.[1]

[1] This refers to measures in force at mid-November 1991, i.e. for Russia before the new measures designed under the responsibility of Deputy Prime Minister Gaidar.

Table 12

Deficits of republic budgets in the first half of 1991

	Current deficit (billion R)	Percentage of republic GNP	Debt forgiveness (billion R)	Percentage of republic GNP
Russia	37	8,2	57	13
Ukraine	15	11,5		
Belarus	0	0		
Baltic republics	0	0		
Asian and Transcaucasian republics	11	9,2		
Total deficit of republic budgets	63	8,0	63	4,0
Central budget	61	7,8		
Total deficit of consolidated budget	124	15,8	63	4,0

Source: Ministry of Finance of the USSR, Ministry of Finance of Russia, (Orlov, 1991).

Under the Russian law on indexation adopted in the autumn of 1991, the minimum wage rate would determine the rate of indexation of incomes: for incomes not exceeding twice the minimum wage rates the rate of indexation would be equal to 100%, for incomes equal to between twice and four times the minimum wage rates it would be 50% (for the part exceeding twice the minimum wage), and for incomes exceeding four times the minimum wage, there would no indexation (for the part exceeding four minimum wages). In the middle of the year the average monthly wage in Russia was R 360, and the average income was R 320 to 330 per month. Assuming that the distribution of incomes around the average level is stable, one can easily calculate that the indexation coefficient for gross incomes would be about 0,75. In Belarus and Ukraine, all limitations on increases in wages were abolished, and in Russia they were partly abolished.

Differences in price policy led to different price levels in the republics. The lists of goods sold at fixed prices in the republics differ, as did the levels of fixed prices for the same goods. Whereas the average Union price index rose by 95% from April 1990 to April 1991, in Uzbekistan prices increased by 83%, in Kyrgyzstan by 72%, in Belarus by 90%, and in Ukraine by 92%. In Estonia prices for foodstuffs were raised at the end of 1990, and in the summer of 1991 all these prices were liberalized. As a result, prices for foodstuffs in Estonia were more than double the Union level, and the average wage rate exceeded the Union average by 90%, according to data from Goskomstat of the Soviet Union.

In these circumstances monetary policy is not an exogenous parameter with respect to the other elements of macroeconomic regulation. Instead it accommodates the needs of the budgets to expand their expenditure. The lack of any bankruptcy mechanism results in the need to write off hopeless debts, incorporating them into the State debt. The money-creation functions of the Central Bank are in fact distributed among the republics. Through political mechanisms the republics maintain the scale of emission necessary to cover their budget deficits. Under these circumstances any coordinated anti-inflationary policy is impossible.

3.2. Stabilization: possible scenarios

After the August 1991 *coup* two tendencies emerged. The Union Government wanted to keep all the instruments of macroeconomic management in its own hands. To achieve this objective, the Treaty of Economic Community was prepared and signed by the republics. But this agreement did not contain concrete arrangements and operational procedures. About 30 special arrangements were prepared but not signed. Neither the Treaty nor these agreements contained measures directed to economic reforms.

During the autumn of 1991, Russia declared its intention to embark on economic reforms independently from the other republics. The Russian economy is so large (55 to 60% of the whole of the Soviet Union) that the other republics will be forced to follow Russia's lead, although an alternative for the republics is to introduce national currencies and attempt to carry out independent budget and monetary policies.

A successful outcome to the Russian reforms will be possible only under the following conditions:

(i) the Union and Russian budgets are consolidated;

(ii) the State Bank of the Soviet Union and the Central Bank of Russia are consolidated, with control of monetary emission in the rouble zone taken over by the latter.

Under these conditions the Union will cease to be the centre of economic management. The elimination of conflicts between the Russian and Union Governments will make it possible to arrive at a balanced budget, to stop excess monetary emission, and to liberalize prices and foreign trade.

These measures could produce a stabilization shock in the Russian economy. In order to estimate the results of such a shock, we used the model described in Annex 2.

The model is a three-sector, two-period model aimed at describing the effects of a stabilization shock. Prices are supposed to be freed at once, simultaneously with a devaluation and the introduction of current account convertibility.

The model we use is a simplified three-sector, two-period model. Demand depends on income and relative prices. Nominal supply is linked to wages through a coefficient of financial pressure (elasticity of nominal output with respect to the nominal wage), which represents the impact of supply and demand policies upon enterprises' behaviour. For example, higher taxes lead to an increase in this coefficient since enterprises tend to raise prices in response. Wages and more generally households' incomes are indexed on prices. The degree of indexation is characterized by a coefficient. Imports depend on the real exchange rate. The nominal exchange rate is supposed to be set in order to achieve external equilibrium, taking into account partial debt rescheduling and foreign assistance. Finally, two cases are examined as regards the level of unsatisfied demand: in the first one, there is only an *ex-ante* disequilibrium in flows; in the second, inherited imbalances combine with those of the current period.

The key parameters are displayed in Table 13. These are:

(i) the indexation coefficient (0,75 or 0,95);

(ii) the 'coefficient of financial pressure', i.e. the elasticity of nominal output to wages (1,1);

(iii) the level of initial excess demand, both in flow (9,9% of supply) and in stock terms (0,0 or 16,3%).

The first variant represents an ideal situation in which there is no imbalance and indexation is moderate. The second variant assumes soft indexation and a high level of initial imbalance. The coefficient of financial pressure remains the same (either real interest rates are stable and budget revenues are not depreciated or depreciation of revenues is compensated by an increase in real interest rates). The first case results in a rise of prices by 100%. However, the second implies 420% price inflation.

Table 13

Changes in prices and real consumption under stabilization shock

Variants	Price increase (%)	Change in real consumption (%)	Exchange rate (rouble per dollar)
Flow disequilibrium, moderate indexation			
Indexation coefficient = 0,75			
Coefficient of financial pressure, k = 1,1			
Initial excess demand (%)			
in flows = 9,9			
in stocks = 0,0	100	−4	6
Flow and stock disequilibrium, high indexation			
Indexation coefficient = 0,95			
Coefficient of financial pressure, k = 1,1			
Initial excess demand (%)			
in flows = 9,9			
in stocks = 16,3	420	−10	8

Source: Authors' simulation (Annex 2).

If the Russian stabilization policy fails and the economies of the other republics are not closed, there is a very strong likelihood that monetary policy will be passive, because the authorities will aim at a relatively high household purchasing power target. Given a passive money supply, inflation will materialize whenever the sum of indexed real incomes exceeds the actual level of real income available. Free prices will be introduced in a situation in which there is excess demand. The initial price jump (because of the excess demand) will come from indexation. Assuming that the supply of consumer goods and the velocity of monetary circulation are stable, the inflation rate is determined by the indexation coefficient (v) and the size of the initial price jump (p_0). So, inflation can be estimated as:

$$\dot{p} = \prod_{i=1}^{N} \dot{p}_i, \text{ with } \dot{p}_i = vp_{i-1} \qquad \text{(II)}$$

(dotted variable indicates rates of increase),

where N, the number of multipliers, is determined by the periodicity of indexation. This in turn depends on the existing system of wage, pension, and other payments. In the Soviet Union this system provides for only one or two payments per month. Acceleration in the velocity of money circulation in the Soviet economy is impeded by the existing system of intrabranch banking settlements.

The estimated initial price jump (Vavilov and Vjugin, 1991; CEC, 1990), given the existing overhang (see Table 10), can make up to $p_0 = 1,5$ with 100% indexation; the price index would therefore reach:

$$p = (1,5)^{12} \cong 130$$

Thus, according to these calculations, in 1992 inflation could reach up to 13 000%, or 50% per month.

3.3. Conclusion

In 1991, the Union Government made several attempts to stabilize the economic situation in the Soviet Union. This was done in a context of deepening recession and growing political tensions between the centre and the republics, which led to the fragmentation of the fiscal system and to differences in price and incomes policies. Meanwhile populist decisions by the Union and republic parliaments (in particular to approve new social programmes) resulted in a 150% increase of the State budget deficit in real terms.

Price reform led to devaluation of the internal State debt and of financial assets and flows, but current trends show that by the end of 1991 the real volumes of these assets and flows will be restored and even somewhat increased. Only household savings were really devalued, by 20 to 35%. This helped to restrict accumulated unsatisfied demand, which was perhaps the only positive result of the price reform.

The fiscal reform, aimed at reducing the State budget deficit and, correspondingly, restricting excessive growth of enterprise revenues and household incomes, actually failed. The tax burden on enterprise incomes grew by an insignificant amount. On the other hand, indecisiveness in price liberalization, the decrease in the size of the fixed price sector and growth of free prices required additional subsidies for those industries producing fixed-price goods. The coexistence of fixed prices for fuel, energy, and foodstuffs with liberalized prices for manufactured goods helped to maintain relatively low prices for the former and relatively high prices for the latter (in comparison with the structure of international prices).

The lack of unity and distrust in the idea of a single economic policy made strict stabilization measures, based on an agreed set of macroeconomic policy instruments, virtually impossible. Under these circumstances the acceleration of inflation in 1992 became practically inevitable. The initial conditions (the high level of imbalances in flows and the accumulation of excess liquidity) will definitely cause — in the very near future — monthly inflation rates in the two-digit range.

References

Abramova, E. A., Belousov, A. R. and Golovka, A. V. (1991), 'Soviet economy in the 1990s: the problem of resources', *Problems of Forecasting*, Journal of the Institute for National Forecasting, Moscow, No 2.

Belousov, A. R. and Polyakov, I. V. (1990), 'Improvement of methodology of forced savings estimation', Goskomstat USSR (mimeo).

Commission of the EC (1990), 'Stabilization, liberalization and devolution', *European Economy*, No 45.

Dornbusch, R., Sturzenegger, F. and Wolf, H. (1990), 'Extreme inflation: dynamics and stabilization', *Brookings papers on economic activity*, No 2.

Faltsman, V. K. (1980), 'Capacity equivalent of basic funds', *Voprosy Economiki*, No 8.

Faltsman, V. K. and Kornev, A. K. (1989), 'Reserves of reducing capital capacity of powers (capacities) in industry' (mimeo).

Hanin, G. I. (1981), 'Alternative estimates of economic results of production units in industry', Izvestia Academy of Sciences of the USSR, *Economic series*, No 6.

Hanin, G. I. (1988), 'Economic growth: alternative estimate', *Communist*, No 17.

International Monetary Fund, International Bank for Reconstruction and Development, Organization for Economic Cooperation and Development, European Bank for Reconstruction and Development (1991), *The economy of the USSR*, OECD, Paris.

Orlov, V. Y. (1991), 'The Union budget: problems of fulfilment', *Finansy SSSR*, No 8.

Tanzi, V. (1977), 'Inflation, lags in tax collection, and the real value of tax revenue', IMF staff papers, No 24, March, pp. 154–167.

Vavilov, A. P. and Vjugin, O. V., 'On the conditions for macroeconomic stabilization', *Economica i matematicheskiye metody*, Vol. 27, No 2.

Vjugin, O. V. (1986), 'Simulation of forced money savings of the population taking into account the correlation between supply and demand', *Economica i matematicheskiye metody*, Vol. 21, No 2; 'Value of tax revenue', IMF staff papers, No 24, pp. 154–167.

Volkonskii, V. A. and Chernikova, T. I. (1987), 'Calculations of closing expenses for branches of the agriculture and timber industry', (pre-print), CEMI AS USSR, Moscow.

Volkonskii, V. A., Hanin, G. I., Vavilov, A. P., Pavlov, N. V. and Soloviev, Y. P. (1986), 'Methods of estimating dynamics of wholesale prices', (pre-print), CEMI AS USSR, Moscow.

Volkonskii, V. A. and Vjugin, O. V. (1990), 'Inflationary gap increased', *Voprosy Economiki*, No 5.

Annex 1

Table A.1.1

Incomes and expenditures of the enterprise sector

(billion R)

	(1)	(2)	(3)	(4)	(5)
Income (a)	780	741	1 050	1 050	1 295
including:					
Profit (b)	241	181	286	278	343
Depreciation	95	100	100	100	100
Expenditures	766	764	1 055	1 088	1 279
including:					
Labour compensation of which:	404	419	419	526	670
profit-related bonuses	49	71	41	22	122
payroll tax (c)	40	41	105	130	166
Contribution to stabilization fund (d)	—	—	40	6	6
Sales tax (e)	—	—	100	10	10
Profit tax (e)	127	110	121	111	122
Depreciation tax (f)	—	—	20	—	—
Rent	—	—	30	18	18
Investment (g)	145	155	165	232	232
Other expenses	50	39	55	55	55
Changes in net assets	+14	−23	−5	−38	+16

(1) 1990, actual;
(2) 1991, planned without tax and price reform;
(3) 1991, planned with wholesale price and tax reform;
(4) 1991, forecast with wholesale price and tax reform;
(5) 1991, forecast with retail and wholesale price and tax reform.

Sources: Report of the Council of Ministers of the USSR, 'On the project of all Union forecasts on the functioning of the economy in 1991 by the Council of Ministers of the USSR', Moscow, 1990; monthly reports of Goskomstat of the USSR; information of the Ministry of Finance of the USSR; authors' estimates.

Notes to Table A.1.1

(a) Incomes in 1990 are calculated as the sum of profit, depreciation and wages. On 1 January 1991, the change in wholesale prices was planned to be equal to 37,2%. But in January, the increase in wholesale and procurement prices amounted to 65,7%. Later on we had the growth of prices shown in Table A.1.2.

(b) Profit is estimated as a difference between income and expenditure. Our estimates differ from those of the USSR Ministry of Economy and Forecasting, which include wages and compensations paid from the economic stimulus funds (the source of which is gross profit). In the table these payments are included under the heading 'labour compensation'.

(c) Payroll tax is estimated as 26% of the wage fund.

(d) Planned payments to the stabilization fund are equal to 11% of the non-agricultural wage fund. In fact, the enterprises did not pay this tax and we estimate the revenue of the stabilization fund to be about R 6 billion.

(e) For the sales, profit and depreciation taxes, estimates are given by the Ministry of Economy and Forecasting.

(f) Payment to the stabilization fund (20% of depreciation).

(g) Regarding investment from enterprises, i.e. excluding centrally financed investment in 1990, total investment amounted to R 210 billion (R 53 billion financed from the budget, R 145 billion from enterprises and R 12 billion from other sources). For 1991, enterprises investments are estimated on the basis of the following assumptions: a reduction in aggregate investment by 16% (0% in the plan), 80% inflation (45% in the plan), investments from the budget in new prices total R 80 billion (same as in the plan), and investments from the stabilization fund make up R 6 billion (R 60 billion in the plan).

Table A.1.2

Determinants of changes in enterprise income[1]

(Change over the corresponding period of the previous year, %)

	January	January-February	January-March	January-April	January-May	January-December	
						Variant 1	Variant 2
Prices	65,7	71,5	76,1	80,5	84,0	101,0	91,0
Volume of sales						− 17,5	− 12,0
Income						+ 65,0	+ 67,0
Income (in billion R)						1 290	1 300

[1] Period of 1990 to the same period of 1991.

Note: Variant 1 = forecast of the Ministry of Economy and Goskomstat;
Variant 2 = our forecast.

Sources: Goskomstat; Ministry of Economy; authors' estimates.

For Table A.1.1, an average estimate of R 1 295 billion is assumed.

Table A.1.3

Revenues and expenditures of the State budget (including pension and stabilization funds)

(billion R)

	(1)	(2)	(3)	(4)	(5)
Revenues	452	429	518	409	455
Turnover tax	122	116	104	99	135
Profit tax	127	110	121	111	122
Rents	—	—	30	18	18
Taxes on households	47	50	50	53	38
Revenues from external economic activities	68	75	81	86	100
Sales tax	—	—	100	10	10
Payroll tax	45	46	—	—	—
Other revenues	43	32	32	32	32
Expenditures	532	575	668	715	678
Financing of the economy:	216	221	341	381	281
investment	42	40	80	80	80
food subsidies (a)	119	115	160	200	100
other subsidies	17	17	30	30	30
operation expenditures	12	12	16	16	16
other expenditures	26	37	55	55	55
Expenditures for external economic activities	28	30	30	30	30
Science	11	11	16	16	16
Social programmes	162	205	110	110	110
Military expenditures	71	67	99	99	99
Debt service	15	12	12	14	14
Other expenditures	29	29	60	65	65
Compensation for price rises (b)	—	—	—	—	63
State budget balance of which:	−80	−146	−150	−306	−223
Union budget	−63	−81	−110	−126	−120
republic budgets	−17	−63	−40	−180	−103
Revenues of pension fund	—	—	122	148	190
Expenditure of pension fund (b)	—	—	130	130	177
Balance of pension fund	—	—	−8	+18	+13
Revenues of stabilization fund	—	—	60	6	6
Expenditure of stabilization fund	—	—	60	6	6
Stabilization fund	—	—	0	0	0
Total revenues	452	429	700	563	651
Total expenditures	532	575	858	851	861
Total deficit	−80	−146	−158	−288	−210

(1) 1990, actual;
(2) 1991, planned without tax and price reform;
(3) 1991, planned with wholesale price and tax reform;
(4) 1991, forecast with wholesale price and tax reform;
(5) 1991, forecast with retail and wholesale price and tax reform.

Sources: Report of the Council of Ministers of the USSR, 'On the project of all Union forecasts on the functioning of the economy in 1991 by the Council of Ministers of the USSR', Moscow, 1990; monthly reports of Goskomstat of the USSR; information of the Ministry of Economy of the USSR; information of the Ministry of Finance of the USSR; estimates by Sergey Aleksashenko; authors' estimates.

Notes to Table A.1.3

(a) For 1990, subsidies include R 22 billion non-budgetary subsidies (non-reported in official budget data). These were financed through a Gosbank credit, which was not repaid at the end of the year.

(b) Total compensations amount to R 110 billion for 1991, of which R 63 billion are paid from the State budget and R 47 billion from the pension fund.

The most reliable figures in this table are shown in the first and last columns. The first column (1) is based on figures from the Ministry of Finance of the USSR. The last column (5) represents a forecast based on report figures for the first half of 1991 and on planned figures for the whole year. Intermediate variants are based on different hypotheses.

Column 2 represents 1991 figures with prices and taxes of 1990, taking into account social programmes and other expenditure introduced from 1 January 1991 (R 43 billion) and also assuming a 5% drop in output, leading to a decrease in incomes of R 23 billion owing to a reduction of the taxation base.

Column 3 represents 1991 figures at new wholesale prices, as planned by the Council of Ministers of the USSR from 1 January 1991 and also taking into account the tax reforms, adopted by the Supreme Soviet of the USSR, the President and the Council of Ministers of the USSR and corrected by decisions of the republics' governments.

Column 4 represents 1991 under the same conditions as in the previous column, but assuming a 10% cut in GNP and realistic estimates for food subsidies (R 200 billion instead of R 160 billion) and the sales tax (R 10 billion instead of R 100 billion).

Table A.1.4

Incomes and expenditures of households

(billion R)

	(1)	(2)	(3)	(4)	(5)
Incomes	652	711	711	850	1 190
Wages and salaries	447	464	464	570	730
Other labour compensation	14	16	16	26	30
Proceeds from agricultural product sales					
Pensions, benefits, and student grants	91	134	134	134	260
Payments from financial system	28	27	27	30	70
Other income	44	39	39	45	50
Expenditures					
Purchases of goods and services[1]	497	472	472	447	850
Obligatory payments and voluntary contributions	75	74	74	75	100
Increase in savings	80	165	165	328	240

(1) 1990, actual;
(2) 1991, planned without tax and price reform;
(3) 1991, planned with wholesale price and tax reform;
(4) 1991, forecast with wholesale price and tax reform;
(5) 1991, forecast with retail and wholesale price and tax reform.

[1] Purchases of goods and services in 1991 are estimated for columns 2 and 3 with a 5% decrease in volumes, and for columns 4 and 5 with a 10% decrease in volumes.

Sources: Report of the Council of Ministers of the USSR, 'On the project of all Union forecasts on the functioning of the economy in 1991 by the Council of Ministers of the USSR', Moscow, 1990; monthly reports of Goskomstat of the USSR; information of the Ministry of Economy of the USSR; information of the Ministry of Finance of the USSR; authors' estimates.

Annex 2

Estimating the stabilization shock

Here we use a three-sector model, which includes production of foodstuffs, alcohol, and non-food products. We consider two periods: at $t = -1$, prices are supposed to be fixed, and supply/demand imbalances lead to rationing; at $t = 0$, prices are freed. The previous and current situations in each sector are described with two equations (we omit indexes of sectors):

$$J_{-1} + S_{-1} = D_{-1} - E_{-1} \quad (1)$$

$$J + S = D + E_{-1} \quad (2)$$

where J is the supply of imported goods, S is the supply of domestic goods, D is internal demand, and E is unsatisfied demand (all variables in nominal terms). Equation (1) means that at $t = -1$, the supply of each good was insufficient to satisfy the demand D_{-1}. Equation (2) corresponds to the balance of supply and demand at $t = 0$ in a regime of free prices, taking into account accumulated unsatisfied demand E_1. Combination of (1) and (2) leads to:

$$(1-\gamma)\, s + \gamma\, j = (1 + w)d + w \quad (3)$$

where $\gamma = J_{-1}/(J_{-1} + S_{-1})$ is the share of imports in supply at $t = -1$, $W = E_{-1}/(J_{-1} + S_{-1})$ is the ratio of unsatisfied demand to supply at $t = -1$ and j, s and d are the index values of J, S and D ($j = J/J_{-1}$).

Nominal demand for each category of goods is a function of nominal income and relative prices:

$$d = i^{\alpha} p_r^{\beta} \quad (4)$$

where i is the rate of growth of income, and p_j is the relative price index for the sector under consideration. α and β are the corresponding income and price elasticities of demand.

The supply of domestic goods in nominal terms is assumed to be directly proportional to sectoral wages:

$$S = k\, w \quad (5)$$

where k is interpreted as an indicator of financial pressure: if $k > 1$, then 1% growth of wages leads to a bigger increase in nominal output. k is meant to represent the effect of (supply and demand) policies upon enterprises' behaviour: with the stabilization shock, the financial pressure is increased due to heavy tax and restrictive budget and credit policies.

Wages and incomes depend on the price level:

$$(W - 1) = \alpha(p_c - 1) \quad (6)$$

$$(I - 1) = \nu(p_c - 1) \quad (6')$$

where α and ν reflect the levels of income and wage indexation, and p_c is the consumption price index.

To describe the supply of imported goods, we used Branson, Williamson and Braga de Macedo (1987). On the basis of this work:

$$j = e\left(\frac{e}{p}\right)^{-m} = e(1 - \gamma)^m \left(\frac{e}{p} - \gamma\right)^{-m} \quad (7)$$

where e is the change in the exchange rate, and m is an elasticity coefficient.

Aggregating equations (3) to (7) for each sector, we get a system of three equations (indexes of sectors are omitted):

$$\gamma(1 - \gamma)^m e\left(\frac{e}{p} - \gamma\right)^{-m} + (1 - \gamma)k(1 + \alpha(p_0 - 1)) =$$
$$(1 + w)\,(1 + \nu(p_0 - 1))^{\alpha}\, p_c^{\beta} + w \quad (8)$$

to which we shall add a definition equation for the consumption price index:

$$1/p_c = \sum \frac{sh}{p} \quad (9)$$

where sh is the share of each category of consumer goods in aggregate consumption. In solving the system for p, it has to be taken into account that shares γ and sh change if prices change. Therefore, at first the system is solved with fixed shares. After the solution is found, shares γ and sh are recalculated, and then the system is solved again until the iteration process stops.

Using this model we estimated the effects of a stabilization shock for two situations:

(i) at the beginning of stabilization there is only a disequilibrium of flows; i.e. at $t = 0$ and at fixed prices nominal demand exceeds nominal supply because of the current period imbalances;

(ii) at the beginning of the stabilization period, disequilibrium includes a stock component (accumulated forced savings).

In both situations we made the following, we believe, realistic, assumptions: the income policy is not strict, i.e. indexation level is close to 1. The upper limit of the acceptable financial burden on enterprises is mainly dependent on the possibilities of diminishing subsidies and of increasing the nominal interest rates on credits.

The devaluation is defined proceeding from the assumption that a stabilization fund of USD 10 billion is created, and that the West grants a partial delay of payments on the external debt. In this case the currency resources would account for about USD 30 to 35 billion (USD 30 to 35 billion for export receipts, USD 10 billion for the stabilization fund, and USD 10 billion for payments of about half the debts). The demand for imports expressed in roubles can be roughly assumed to be equal to the cost of imports in 1991 expressed in internal prices: R 230 billion. In this case the exchange rate will be as follows: 230/30 = 8 roubles per dollar, and devaluation will be equal to e = 4.

Table A.2.1

Initial parameters and results of the stabilization shock

	Without stocks				With stocks			
	Foodstuffs	Non-food	Alcohol	Total	Foodstuffs	Non-food	Alcohol	Total
Structural, behavioural and policy parameters								
Consumption structure	0,342	0,535	0,123	1,00	0,342	0,535	0,123	1,000
Indexation coefficient	0,750	0,750	0,750	0,950	0,950	0,950	0,950	0,950
Share of imports	0,150	0,100	0,050	—	0,150	0,100	0,050	—
Excess demand ratio (%)								
in flows	11,1	8,7	8,7	9,9	11,1	8,7	8,7	9,9
in stocks	—	—	—	—	17,6	14,9	12,4	16,3
Import elasticity	−0,3	−0,4	−0,3	—	−0,3	−0,4	−0,3	—
Coefficient of financial pressure	1,1	1,1	1,1	1,1	1,1	1,1	1,1	1,1
Price elasticity of demand	−0,570	−0,430	−0,590	—	−0,570	−0,430	−0,590	—
Income elasticity of demand	1,030	0,918	0,830	—	1,030	0,918	0,830	—
Exchange-rate devaluation	—	—	—	3,0	—	—	—	4,0
Results								
Price index	2,1	1,9	1,8	2,0	6,6	4,9	3,9	5,2
Output index	0,92	0,98	1,0	0,96	0,72	0,95	1,1	0,90
Consumption structure of expenses	0,350	0,513	0,119	—	0,347	0,531	0,122	—
Share of imports	0,210	0,136	0,072	—	0,135	0,095	0,046	—

Source: Authors' calculations.

Rouble convertibility in the context of Soviet economic reform

Andrei Vernikov

Senior Research Associate,
Institute for International Economic and Political Studies, Moscow

Contents

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Tables

1. Soviet debate on rouble convertibility

1.1. General remarks and concept definition

A new wave of theoretical debate on currency convertibility arose in the USSR from the mid-1980s. As usual for Soviet reform-thinking, this debate was launched in popular periodicals rather than in professional publications. Very few writings on the topic were supported by technical details or calculations. The general mode of discussion and the terminology used might produce the impression that the phenomenon of convertibility is perceived very vaguely. Many Soviet authors have presented the problem as a dichotomy — convertibility versus non-convertibility; they often failed to differentiate between diverse exchange restrictions and stages of convertibility on the path towards full convertibility. There was a widespread belief that establishment of convertibility meant a one-off assumption by the Soviet currency of all functions inherent in an international reserve currency.

The evidence of the chervonetz (Soviet gold-backed convertible currency of the 1920s) has often been brought to the fore as a historical and methodological reference (see Petrakov, 1987). The glitter of the chervonetz has, for some authors, overshadowed the dualism of the NEP system and the limited scope given to natural market forces (Manevich, 1989; Simonov, 1990). As a matter of fact, the chervonetz was doomed from the outset, so it would be more proper to regard it as a negative lesson of a failed systemic transformation rather than a success story.

Relevance for the former Soviet Union of other countries' experience in establishing convertibility of their currencies remains a point of controversy. The majority of authors have emphasized a complete peculiarity of the Soviet case, which presumably requires a search for unprecedented indigenous scenarios of introducing convertibility of the currency.

When still pushed to find reference points, Soviet authors have chosen the post-war economic history of Western Europe, but not the contemporary developments in the transitional economies of Central and Eastern Europe. This is despite the obvious systemic similarity with the economy of the former Soviet Union and the similar policy choices in the last decade.

1.2. The rouble or a parallel currency?

The dilemma between moving towards convertibility or introducing a new currency has been at the centre of the Soviet debate. Starting from assessments of the inflationary rouble overhang — both in liquid and illiquid forms — and the loose monetary and fiscal policies, not a few Soviet economists abandoned the idea of stabilizing the rouble, and thereby opted for an alternative currency. The range of suggested scenarios has included the introduction of foreign currencies in domestic transactions ('dollarization'); a confiscatory monetary reform and the issue of new roubles; the issue of a new parallel currency; introduction of a gold-backed Soviet currency unit into foreign economic operations, etc. Along with relatively rational schemes, one can find also quite exotic projects, unimaginable for economic thinking in the West or in Central Europe, for example the plan of 'laundering' the existing money through the consumer sector.

Introduction of a new currency, meant either to be circulated along with the rouble or to replace it, was envisaged in a large proportion of papers submitted to an international contest for the best project of converting the rouble, held in Moscow in 1990 (see Dzarasov, 1990). The jury of the contest, however, gave its preference to projects that pursued a gradual strengthening of the rouble (Anulova, 1990; Panov, 1990).

1.3. External or internal convertibility?

In the majority of cases, the discussion in Soviet literature has placed the accent on external convertibility. It originates from the analysis of the post-war West European policies (Borisov and Kuzanov, 1989). An inverse algorithm — first internal, then external convertibility — has not been examined seriously in Soviet literature. Immediately after introduction of internal convertibility (on current account, for residents) in Eastern Europe in 1990, most Soviet experts were extremely sceptical. The practical evidence from these economies did not exert a substantial impact on the course of the Soviet debate during 1990 and the first half of 1991.

The common argument for disregarding the scenario of internal convertibility for the USSR was that conditions in smaller East European economies differ too much from the USSR. (Do they really?) The implementation of external convertibility would require less resources, would imply less responsibility and credibility of policy-makers, and would bring about a much narrower range of consequences for the real sphere of the domestic economy. External convertibility of the rouble or of an eventual new currency was also expected to be more effective in attracting foreign investors to the USSR.

1.4. Timing and method

'Timing' refers to introduction of currency convertibility either at an early or a later stage of reform, and 'method' signifies basically the option between shock and gradualism.

In Western literature on East European issues, there is a growing consensus that transition to convertibility should be assigned to the early stages of the reform. Among Soviet experts, there are two well-defined camps — one for introducing a new convertible currency in the nearest future or immediately, and the other for convertibility at the very final stage of a market-oriented reform. The former group of experts envisages using a new hard currency as the main instrument of restructuring, while their opponents rely upon the 'classical' pattern of removing exchange restrictions in Western Europe. Over the past years, supporters of early convertibility have not dominated the debate, or at least their views have not been translated into the terms of policy-making.

There has been a general reluctance to accept the relevance for the former Soviet Union of shock methods similar to those used in Poland. The preference for a gradual approach to currency convertibility was based on reasons of unbearable severity of the shock, hyperinflation and the high social costs of this kind of remedy (Sarafanov, 1991). Most experts did not believe that the Soviet market, if liberalized in one go, could clear and not destroy the entire economy. As of the second half of 1991, one can nevertheless evidence a radicalization of views on the method of reforms, and 'shock' was no longer a dirty word in economic discussions.

1.5. Convertibility within the strategy of reforms

Rouble convertibility was invariably mentioned among the main hallmarks of economic reform in the USSR. Nevertheless, issues related to convertibility have usually appeared in the area of foreign trade and finance, i.e. somewhere at the periphery of the blueprints for reform. It clearly indicates that convertibility was not regarded as a key element of economic transformation, but as an externality.

There has been little recognition of the impact that rouble convertibility would have on the economic regime and on the real sphere of the economy. Many Soviet experts suggested explicitly or implicitly that introduction of convertibility need not be synchronized with the rest of macroeconomic stabilization: hence, on the one hand, the recipes of very early convertibility, and, on the other, the formulas of stabilization and liberalization of the economy without convertibility. Fedorov (1990) wrote that 'regretfully, rouble convertibility is not today a feasible opportunity, nor a priority task. Furthermore, convertibility cannot appear as an unconditional requisite for economic prosperity'.

2. Foreign exchange policies, 1986-91 (a summary)

Foreign exchange policies in the USSR from 1986 to 1991 were shaped by the following main features:

(i) partial decentralization of foreign exchange allocation;

(ii) emergence of elements of regional and nationwide markets for foreign exchange;

(iii) multiple exchange-rate system;

(iv) 'dollarization' of the domestic turnover;

(v) decreasing central reserves of foreign currency.

In 1990, economic agents, other than specialized foreign trade organizations, carried out 57% of all Soviet imports and 33% of exports. Decentralization of foreign exchange allocation was embodied in export retention quotas and foreign currency accounts held by economic agents. Some 20 000 Soviet companies and entities were operating such accounts. It was intended that in 1991 the volume of retentions by exporters would grow 2,5 times in relation to 1990 figures. However, estimates suggest that up to 90% of all foreign exchange was still allocated through centralized channels.

Foreign exchange auctions and, as of April 1991, the Moscow foreign exchange market represented the first elements of market allocation of foreign currencies among agents. To begin with their scope was very narrow: no more than USD 550 million was traded at the auctions over 1990, and USD 81 million was sold at the Moscow foreign exchange market during the period from April to August 1991. Inflationary expectations of enterprises, multiform restrictions on foreign exchange and trade transactions and a huge rouble overhang might explain the unattractiveness of foreign exchange auctions for potential sellers. This trend continued in 1991, and the average amount of foreign currencies traded weekly in Moscow never exceeded USD 10 million. Foreign exchange auctions held by republic banks in the Baltics, Belarus and other regions had a still smaller turnover.

A multiple exchange-rate system evolved in the USSR from 1986 (see Table 1). By the end of October 1991, the following rates existed:

(i) an official rate (R 0,6/USD 1), applied mainly to operations related to settlement of rouble-denominated external credits;

(ii) a 'commercial' rate (R 1,8), applied to foreign trade settlements;

(iii) an 'auction' rate of exchange (R 73);

(iv) a tourist rate (R 32 in Moscow);

(v) a 'black market' rate, averaging R 43,5 in Moscow;

(vi) a 'currency transfer' rate (R 56), employed in non-auction transactions between agents, with the intermediation of commercial banks.

Table 1

Rouble/dollar exchange rates, August 1990 to November 1991

	Aug. 1990	Sept. 1990	Oct. 1990	Nov. 1990	Dec. 1990	Jan. 1991	Feb. 1991	Mar. 1991	Apr. 1991	May 1991	June 1991	July 1991	Aug. 1991	Sept. 1991	Oct. 1991[1]	Oct. 1991[2]	Nov. 1991[1]
Official rate	0,6	0,6	0	0,5	0,6	0,6	0,5	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6
Commercial rate	—	—	—	1,6	1,6	1,7	1,6	1,7	1,7	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8
Tourist rate	5,7	5,7	5,6	5,5	5,6	5,6	5,5	27,6	27,6	27,6	27,6	32,0	32,0	32,0	32,0	32,0	47,0
'Auction' rate	22,7	—	20,9	20,9	21,4	23,9	29,4	35,4	27,6	27,6	42,0	60,0	52,1	55,0	56,5	73,1	110,0
Black market rate (purchase rate, Moscow)	15,0	15,5	16,0	15,5	19,5	28,0	25,5	23,5	31,0	28,0	30,0	30,0	33,5	35,0	43,5	50,0[3]	56,0

1 First half.
2 Second half.
3 Own estimate.

Source: Official data from Gosbank; estimates by *Kommersant*, various issues.

In few countries throughout the world has the premium between the official and the parallel rates of exchange reached 3 000 to 4 000%, as in the former Soviet Union.

'Dollarization' of domestic transactions has reflected a low 'commodity convertibility' of the rouble and high inflationary expectations. At first, the government itself had encouraged 'dollarization' and tolerated foreign currency payments between agents. In 1991, a presidential decree did ban domestic transactions in foreign currencies, but in practice they remain widespread in disguised forms.

The amounts of foreign exchange holdings in the household sector are very low — their estimates vary between USD 10 and 30 per capita. It is on a scale of magnitude less than the figures for other reforming economies of Central and Eastern Europe (Poland: USD 300 by the end of 1989).

3. Rationale for rouble convertibility

3.1. Main advantages

Economic reasons for introducing convertibility of the rouble are twofold: (a) to eliminate the inefficiencies and constraints of the present regulation of foreign exchange; and (b) to use the advantages brought about by having a convertible currency. This paper discusses current account convertibility only, since capital account convertibility remains a target for a distant future.

The defects of the present system of foreign exchange allocation include, in particular:

(i) non-economic, administrative methods of allocation; lack of transparent criteria;

(ii) inefficient utilization of foreign exchange by all economic agents;

(iii) dissipation of foreign exchange funds between a rapidly growing number of non-market agents with non-market motivations;

(iv) low mobility of interflow of foreign exchange between regions, sectors, enterprises and individuals;

(v) lack of incentive to exporters towards modernization and restructuring;

(vi) decomposition of the circulation into the 'rouble area' and the 'dollar area'.

To sum up, the foreign exchange allocation system created from 1986 to 1991 has no prospect of evolving into a fully-fledged market. A further diminution of the State's claims

on enterprises' foreign currency revenues (suggested in the 1990 report of the Commission of the EC as presumably one of the next steps in a gradual move towards convertibility) leads away from a unified domestic market and a single exchange rate. Nor is the system of currency auctions worth developing; such auctions have succeeded in no country of the world.

The functioning of dual and multiple exchange rate systems in a post-planned economy creates additional distortions (Goldberg and Karimov, 1991).

The main advantages expected from establishment of rouble convertibility can be summarized as follows:

elimination of the defects of the present system;

unification and development of the domestic market for foreign exchange;

realization of a consistent foreign exchange policy;

'nominal anchor'; promotion of price reform,

demonopolization and competition;

expansion of the agents' economic freedom;

encouragement to direct foreign investment;

and last but not least, a radical change in the economic regime.

3.2. Prices and a 'nominal anchor'

Relative prices in the USSR remain heavily distorted with regard to world market prices. Consumer goods and manufactured products are 'overvalued', and raw materials, energy and services are undervalued (see Commission, 1990). The one-off administrative price increase in April 1991 did not eliminate the distortions.

Administrative adjustment of prices is unable to achieve relative prices consistent with those in the market economies. It is also hard to select a 'model' country whose relative prices would reflect a combination of production factors and comparative advantages similar to the former Soviet Union's. Due to the influence of sectoral lobbies, administrative price adjustments usually fail to challenge the existing price distortions.

It makes more sense, therefore, to rely on price liberalization. The common argument in favour of a price liberalization before 'opening' the Soviet economy was that, given the magnitude and the comprehensiveness of its production structure, this country does not have to adopt 'alien' relative prices but can rely on its national basis for price-making. In addition, the USSR is not to a full extent a 'price-taker' for a series of industrial inputs. Nevertheless, this concept is misleading: no country in the world can afford using an exclusively national basis for pricing.

A price liberalization, which occurred in Russia in the beginning of 1992, cannot yield positive results within a closed and imbalanced economy. Intense shortages can produce a higher level of liberalized domestic prices *vis-à-vis* those abroad. As Portes puts it, 'it would be unnecessarily costly to go first to "rationalized" cost-plus prices, then to a closed economy equilibrium price structure, and only then to the open economy equilibrium, with many misdirected decisions along the way' (Portes, 1991b).

The most reliable method for moving towards better relative prices is allowing world market prices to penetrate into the home economy through convertibility of the rouble and import liberalization. Prices of tradables would react almost immediately, while those of non-tradables would be more 'sticky', particularly in the case of the former Soviet Union. Setting the relative prices between tradables and non-tradables would constitute one of the main points of reference or 'anchors' for the liberalized economy.

Liberalization was expected to produce an overall price increase of 2,5 or 3 times (estimate by the Ministry of Economics) as a result of repressed inflation becoming open. If combined with rouble convertibility, price growth would gain additional momentum, depending on the rate of exchange. For example, the official wholesale price of one tonne of crude oil in November 1991 was R 70; the lots allocated on the 'free' domestic market were traded at R 1 000 on average.

In order to reach the external level of USD 120, that equal to R 6 840 at the 'auction' rate of R 57 per dollar, the domestic 'free' market price would have had to rise six or seven times. Under a more realistic rate of R 10 per dollar, the figure would still have been higher than the equilibrium level. Anyhow, the resulting prices would have exceeded the official prices prevailing at that time by tens of times (for a comparison of internal wholesale prices with world market prices, see Table 2).

Under the presence of huge price distortions, the applicability of the 'nominal anchor' concept as a tool for bringing open price inflation down is then questionable, at least in the short term. Before a 'nominal anchor' comes into effect

Table 2

Comparison of internal wholesale prices in the USSR and world market prices for selected products, 1991

	Unit	Internal wholesale price (1 000 R)	World market price (1 000 USD)
Oil	1 000 tonnes	70,0	127,0
Natural gas	1 000 m^3	42,0	100,0
Engine petrol	1 000 tonnes	227,0	200,0
Coal	1 000 tonnes	21,0	44,3
Rolled ferrous metals	1 000 tonnes	328,0	372,1
Pipes of steel	1 000 tonnes	388,9	511,2
Polyethylene	1 000 tonnes	701,6	923,3
Calcinated soda	1 000 tonnes	119,7	133,4
Metal-cutting lathe	piece	29,1	36,5
Truck	piece	13,8	19,7
Tractor	piece	10,9	18,5
Excavator	piece	49,9	79,4
Bulldozer	piece	52,7	92,3
Timber	1 000 m^3	46,9	50,0
Saw-timber	1 000 m^3	194,9	144,5
Cellulose	1 000 tonnes	1 089,8	625,0
Cardboard	1 000 tonnes	888,1	519,2
Paper	1 000 tonnes	958,5	583,3
Cement	1 000 tonnes	60,0	65,6
Cotton fibre	1 000 tonnes	7 819,4	1 952,8
Natural wool	1 000 tonnes	37 940,6	2 116,7
Fertilizers	1 000 toones	205,9	124,4
Meat and meat products	1 000 tonnes	9 500,0	1 616,1
Potatoes	1 000 tonnes	382,4	254,8
Tea	1 000 tonnes	15 720,0	2 810,5
Vegetable oil	1 000 tonnes	3 252,0	495,0
Sugar	1 000 tonnes	2 070,4	481,5
Grain	1 000 tonnes	485,0	140,0

Data from Ministry of Economics of RSFSR.
Source: *Ekonomika i zhizn* (1991), No 44, p. 6.

as a tool of stabilization, there might be a wave of four-digit inflation (not just the Polish or Czechoslovak-style 'corrective inflation'). This runaway inflation can obtain dynamics of its own, leading to a critical destabilization rather than anything else. Probably, prices for main inputs, foodstuffs and services should be controlled at the first stage of transition, and an outflow of such inputs to external markets must be controlled by quantitative restrictions.

As for the exchange-rate regime, East European and world-wide experiences prompt a 'crawling peg' with pre-announced regular adjustments as an optimal solution. An inflexible fixed rate for a long period and a floating rate from the start both have many negative effects.

3.3. Demonopolization and competition

The impact of current account convertibility on the domestic market includes a direct benefit offered by an inflow of imported consumer goods and production inputs, and an indirect effect embodied in the establishment of a more competitive environment. Both factors would serve to overcome the extreme monopolism of the Soviet system of production and distribution.

Current account convertibility establishes a high degree of freedom of choice for consumers and producers, thus exposing them to pressures of global competition. It implies a rapid increase of supply of imported goods to the domestic market, able to eliminate the chronic shortages. In the short term, a competitive environment can emerge in the Soviet economy through external factors mainly, because domestic agents will need time to adjust and to react to price signals.

3.4. Radicalization of market-oriented reforms

Currency convertibility appears as an inseparable element of a market-oriented economic reform, i.e. as an 'external' continuation of market principles. Establishment of current-account convertibility of the rouble would change dramatically the economic regime and undermine the present system of economic management. External factors would exert a hard destructive effect on domestic economic structures, by enforcing a mass-scale redeployment of factors, hitting inefficient producers, and destroying the administrative pricing and resource allocation.

By creating convertibility of the currency, a government leaves itself no chance to suspend reforms or to restrict their degree of radicalism.

3.5. Risks involved by establishment of convertibility

Western Europe was deterred from rapid establishment of convertibility by the fear that the foreign exchange constraint would preclude operation of the economy at full employment. While this potential cost is macroeconomic in nature, the benefits of convertibility are the classic microeconomic gains of more efficient resource allocation (Williamson, 1990).

The main risks involved in an early current-account convertibility of the Soviet currency include:

current-account deficit;

exhaustion of foreign exchange reserves;

negative effects of foreign competition on production and employment;

crisis for importing companies and sectors, due to a drastic devaluation of the rouble and the resulting one-off price shock;

rupture of domestic economic links between agents, due to a rapid trade diversion in favour of developed market economies;

sharp increase in unemployment and the consequent additional social spending, with inflationary effects; and

social tensions and political instability.

4. Preconditions for rouble convertibility

4.1. Macroeconomic and financial stabilization

Monetary overhang, shortages, budget deficits, price inflation, 'soft' credit, price controls and high inflationary expectations represent the major obstacles to a solid currency, be it convertible or not.

Neutralization of the 'stock' of monetary overhang would affect hundreds of billions of roubles (see Table 2). Under the assumption that currency substitution of the 'stock' component of the overhang is to reach the dimensions as in Poland by the end of 1989 (roughly three-quarters of all assets), a liberalization of the foreign exchange regime would thereby require around USD 86,5 billion at an exchange rate of R 10/USD 1. A bigger problem consists, however, in the enterprise sector's insatiable demand for imports paid from current revenues ('flow'), which is still uncontrollable.

Inflation rates are estimated at between 600 and 1 000% for 1991, and they are increasing from one month to another, particularly since August 1991. On the one hand, inflation depreciates the money 'stock' and reduces the overhang in real terms. On the other hand, high inflationary expectations do fuel an increase of the overhang and encourage currency substitution in both sectors.

Is macroeconomic stabilization a precondition for convertibility, or is there a case for introducing convertibility as part of a stabilization package? (Williamson, 1990). A strong feedback between the two does exist. Pegging the rouble might constitute the basic tool of macroeconomic stabilization, if linked to a sound macroeconomic policy. Fulfilment of the simultaneity requirement is crucially important here. Currency convertibility cannot be launched before macroeconomic and financial stabilization has begun, but one must not necessarily wait several years until a complete stabilization before shifting to current-account convertibility.

4.2. Market infrastructure and the banking system

A minimal infrastructure for normal functioning of markets includes establishment of horizontal links between agents through commodity exchange markets, independent brokers, subcontracting, etc., to replace administrative of allocation inputs. Enterprises need a higher degree of autonomy and an environment in which explicit and stable legislation exists. In addition to commodity markets, there should also be markets for money and capital. Generally speaking, the Soviet economy should become more monetized than now.

The banking system in the former Soviet Union is inadequate from the perspective of developing a foreign exchange market. Several tens of commercial banks now hold licences for foreign exchange transactions, but they do not possess sufficient facilities, particularly away from the main centres. In order to become operational as the key institutional element of the foreign currency market, the banking sector must substantially expand its capacities. That implies additional installations, communications, computing facilities, personnel, operative reserves of currency of several denominations, etc .

4.3. Rate of exchange

For the sake of stabilization, a fixed exchange-rate regime has various advantages over a floating rate regime. International experts have come to a consensus with regard to this (Portes, 1991b; Marer, 1990; Greene and Isard, 1991).

As for an anchor currency, the ecu appears to be a good solution for the former Soviet Union, given the weight of Western Europe in Soviet foreign trade and finance.

The salient problem is to choose the 'right' rate of exchange at which to peg the rouble. A huge disequilibrium between supply and demand for hard currency at present is pushing towards a marginal rate. This trend will remain if a dual-rate system is adopted.

A strong devaluation of the rouble has its pros and cons. As for advantages, it would severely limit the demand for imports, thus improving the balance of payments and providing the necessary protection to domestic producers. Historically, countries with uncompetitive industries and foreign exchange shortages have generally sought to restrict the convertibility of their currencies, or to maintain other forms of import restrictions, rather than to rely on a heavily depreciated exchange rate for attaining a sustainable current-account position (Greene and Isard, 1991). Transitional economies can reasonably adopt a different approach, in order to eliminate distortions and imbalances over a relatively short period of time.

Altogether, a serious undervaluation of the rouble would be damaging. 'Overshooting' for the sake of sustainability of the exchange rate can cause a very deep recession, as happened in Poland in 1990. A strong cost-push inflation will emerge. In the former Soviet Union, it would be a bad solution to peg at the marginal exchange rate of the parallel market, for both conceptual and practical reasons. That rate is exceptionally far removed from purchasing power parity (Marer, 1990). It is distorted also because of unrepresentativeness: only small portions of all foreign exchange available in the country, namely 1,5% of hard currency export receipts, are traded on the parallel market. According to Williamson (1990), domestic currency should be devalued by enough to ensure a substantial competitive export sector, but by no more than can be relied on to achieve that purpose.

The level of exchange rate depends on supply of foreign currency, and more specifically on the volume of exports, debt servicing and inflow of direct foreign investment. Lushin and Vernikov (1991) compiled a static model of supply/demand on the Soviet foreign exchange market for 1992, the variables being the volume of debt servicing (USD 0, USD 10 billion or USD 20 to 22 billion), and the availability of a USD 10 billion stabilization fund, under the assumption that this fund can be used during one year.

Minimal import demand for foreign currency was postulated at USD 35 to 40 billion, and exports at USD 30 billion. The resulting rate of exchange varies very broadly between R 6,6/USD 1 (no debt servicing, a stabilization fund available) and R 46,0/USD 1 (full debt servicing, a stabilization fund unavailable).

Calculations carried out by the Ministry of Economics of the USSR suggested the limit point of devaluation as R 7/USD 1, taking into consideration the viability of various sectors. However, R 10/USD 1 might be regarded as a more realistic target. An attempt to peg at a much lower rate would condemn to death the absolute majority of importing industries, under monetary stringency.

Independently of a far-reaching market liberalization and rouble devaluation towards a market-clearing level, a straightforward adjustment of the 'commercial' rate of exchange is advisable, from R 1,8/USD 1 in November 1991

Table 3

Monetary overhang in the USSR and an estimate of currency substitution

	(a)	(b)	(c)	(d)	(e)
1. Cash money in circulation	157,6	78,8	2,5	7,8	11,3
2. Call deposits	537,1	388,8	12,2	38,9	55,5
of which: households	282,5	205,5			
companies	254,6	183,3			
3. Term deposits	36,8	264,1	8,3	26,4	37,7
of which: households	289,5	210,6			
companies	74,3	53,5			
4. Money in settlements and other assets (balance)	267,1	133,6	4,2	13,4	19,1
5. Monetary assets of households and companies, total	1 058,5	865,3	27,0	86,5	123,6

(a) Monetary assets of the Soviet economic agents by 1 July 1991, in billions of roubles.
Source: data from Gosbank (Gerashenko, 1991).
(b) Amount of money potentially subject to currency substitution, in billions of roubles (own estimate). The estimate is based on the assumption that currency substitution in the USSR can reach the same proportion as in Poland in December 1989.
(c) Amount of foreign currency (in billions of USD) needed for currency substitution, at the exchange rate of R 32/USD 1.
(d) Amount of foreign currency (in billions of USD) needed for currency substitution, at the exchange rate of R 10/USD 1.
(e) Amount of foreign currency (in billions of USD) needed for currency substitution, at the exchange rate of R 7/USD 1.

down to at least R 3,5 or 4/USD 1. This alone, however, cannot improve the balance of payments under a lax monetary policy, but it can start the way out of the impasse of the multiple rate system.

4.4. Foreign currency reserves and settlement of debt-servicing obligations

A move towards currency convertibility implies the availability of foreign exchange reserves. Soviet reserves of gold were recently estimated at a pessimistically low level of 240 tonnes. The reserves of foreign exchange kept with Western banks have decreased to a critically low level too. The central banks of the former Soviet Union republics are not in a position to intervene on the market and to influence the rate of exchange. Accumulation of foreign exchange reserves from domestic sources is extremely problematic, in view of falling export receipts, current-account deficits and insignificant holdings of foreign currency in the household and company sectors. Therefore, current-account convertibility cannot be established without a stabilization fund contributed by foreign countries and financial institutions. Estimates of desirable magnitudes of such a fund usually vary between USD 10 and 20 billion. At the G7 summit in July 1991, no concrete understanding was reached regarding a stabilization fund, so the issue remains suspended. The West may feel reluctant to contribute to what might seem an overvalued rate of the rouble instead of the parallel market rate of exchange. However, saving resources at the cost of an excessive devaluation will certainly produce Polish-style depression problems in the economy.

Disequilibrium between the former Soviet Union's export receipts and its import requirements is aggravated by foreign debt servicing, which may leave as little as USD 10 billion for the domestic market to cover a demand for imports at least four times bigger. Export aversion and import hunger can partly be solved by a drastic devaluation of the rouble, but even in that case an extreme scarcity of foreign exchange in the short term would bias the functioning of the market and the stability of the pegged rate.

The only visible solution consists in renegotiation and rescheduling of the external debt. There have been such precedents in Eastern Europe (Poland), though similar attitudes would be harder to justify for the former Soviet Union, given its traditionally high solvency (as distinguished from the present constraints on liquidity).

In any event, Western financial support will become available only for a clearly cut and internationally approved package of market-oriented reforms.

4.5. Microeconomic precondition

By basing their decisions on international relative prices, domestic investors will allocate resources in conformity with the country's comparative advantage. To accomplish this, there should exist, at least, domestic agents able and willing to react to price signals, which has not been the case in the former Soviet Union. The entry of a sufficient number of market-type agents is a crucial microeconomic precondition for exposing the economy to foreign competition ('opening') via current account convertibility. Otherwise, 'opening' will prove to be counterproductive, as was the partial decentralization of foreign trade and exchange in the USSR in the second half of the 1980s.

Coping with this microeconomic precondition implies a far-reaching institutional reform aimed at privatization and redefinition of property rights (for the transitional period 'commercialization' of State-owned companies); demonopolization; and creation of a competitive environment. Such a reform certainly requires a long period of time, but a stabilization package cannot be put off until its completion.

4.6. Political precondition

Commitment to early convertibility raises the stakes for the government in charge. It increases the cost — perceived and actual — of reneging and enhances policy-makers' credibility (Portes, 1991a). A government which undertakes to move towards currency convertibility must be popular, strong, professional, pragmatic and flexible. The hardships of transition in the former Soviet Union will be of a greater order of magnitude than elsewhere in Eastern Europe, due to a more heavily distorted economy, lower standards of living, and lesser manageability. Political instability and polarization are likely to increase within individual republics immediately after the start of stabilization programmes.

4.7. Single economic space

Stabilization and convertibility of the rouble as the only CIS or Russian currency requires centralized policy-making in the area served by this currency. It is impossible to conceive that within the rouble area there will be several autonomous centres in charge of monetary and credit policy, foreign trade and exchange regulation, foreign reserves management, external borrowing and debt repayment.

5. Policy options with regard to rouble convertibility, 1991

5.1. The Union Government's plan

In May 1991, the Union-Republic Foreign Exchange Committee decided to shift to 'internal convertibility' of the rouble as of 1 January 1992. That was an unexpected and somewhat improvised decision, given the background of reform thinking and reform-making over the preceding period. A group of experts elaborated a draft concept, spelling out the essence of internal convertibility, its main preconditions and probable effects. The general conclusion was that most preconditions did not exist in summer 1991, nor were they likely to emerge by 1 January 1992. Besides that, a transition towards rouble convertibility could not be started in the absence of a general stabilization programme.

Both the initial draft concept of internal convertibility and the gradualist scenario prepared by the Ministry of Economics were rejected by representatives of the republic governments. It was done for reasons of conceptual disagreement rather than technical problems of implementation. The ideas most unacceptable to the republics were: (a) liquidation of foreign exchange retention quotas; (b) accumulation of all foreign currency funds with the banks; (c) centralization of gold reserves with the central bank; (d) equal access to foreign exchange on the market for all agents regardless of their territorial location, sectoral subordination and export/import profile; (e) unified rate of exchange for all transactions on the current account.

In rejecting the internal convertibility plan of the Union Government, the republics pursued an objective of maximum autonomy from the centre in spheres such as monetary and macroeconomic policies, international reserves management and exchange regulation.

There was no interest in creating a unified domestic market for foreign exchange, since each republic's authorities would prefer to administer all export receipts obtained by companies located on their territory. One may conclude that the internal convertibility plan was, for the first time perhaps, a case in which the centre proposed a more market-oriented plan than the individual republics. Still, administrative-minded separatist scenarios were preferred. The Union Government did not have enough time to push forward its plan. After the August 1991 coup, Union-level authorities finally lost the initiative and power.

5.2. The Russian Government's plan

The first stabilization programme, submitted by the Government of Russia in April 1991, proclaimed the intention to achieve rouble convertibility (presumably in the first place external convertibility in order to attract foreign investors). The programme envisaged the right of all Russian citizens and enterprises to buy and sell foreign currency (Programma, 1991).

The Russian Government — more precisely, its Ministry of Foreign Economic Relations — opposed the Union Government's plan of internal convertibility with its own blueprint in August 1991. The latter envisaged the taxation of export earnings (to be channelled towards debt servicing and centralized import programmes), entitling the exporter to retain the remainder — not less than 50%. The strategy of movement towards convertibility of the rouble, as exposed in the plan, mainly consisted of vague statements and did not spell out the mechanism of implementation, nor did it provide quantitative estimates.

In the autumn of 1991, ideas for rouble 'internal convertibility' were discussed at inter-republic meetings in Moscow. Still, in the economic reform programme for Russia, announced on 28 October 1991, nothing definite was said on currency convertibility.

5.3. Yavlinsky's plan

The 500-day plan (Perekhod, 1990) envisaged a two-phase scenario of shifting towards convertibility of the rouble: at the first stage (1991) — complete decentralization of exchange allocation among agents, except for a proportion destined for debt servicing; during the second stage (as of 1992 and according to maturity of premises) — establishment of internal convertibility and liberalization of exchange transactions for individuals. One might question, however, the consistency between these two phases. The ambiguity (export earnings left to exporters versus a single market) was later reproduced in other documents prepared by Yavlinsky's group.

In September 1991, Yavlinsky presented a blueprint for an economic union (of former Soviet republics), where internal convertibility of the rouble was mentioned as one of the immediate tasks. The rouble would be kept as the single common currency. The scenario admitted introduction of local currencies to the extent that these would not undermine the rouble.

Subsequently, Yavlinsky's blueprint acquired the form of 'Convention on the Economic Community', signed by eight

ex-republics of the USSR by October 1991. The community member States that use a single currency would hereby envisage a transition to internal convertibility of the rouble in the near future and would prepare and implement an agreed schedule to this effect.

6. Convertibility of currency (-ies) in the USSR: a speculative outlook

6.1. How many currencies?

Unlike other transition economies in Central and Eastern Europe, the former Soviet Union cannot concentrate its efforts on stabilization of a single domestic currency. There have been explicit declarations on the issuing of own currencies in Estonia, Latvia, Lithuania, Ukraine and Georgia. The list may have new entries at any moment, however. For technical reasons, monetary reforms in the ex-republics are unlikely to be accomplished before the second half of 1992. Ukraine plans to introduce its 'grivna' by the middle of 1992, before which date coupons will serve as quasi-money in order to protect the market.

6.2. Rationale for convertibility with republic currencies

In 1990, the authors of the report of the four institutions (IMF, IBRD, OECD and EBRD) on the Soviet economy noted that when the rouble became convertible, a unified policy of currency interventions would be needed, thus leaving no justification for dispersion of foreign currency reserves among regions and republics (IMF et al., 1990).

The drive towards introduction of separate currencies by the republics originates predominantly from political motivations and ambitions. Newly established authorities wish to acquire all the attributes of independent States as soon as possible and at any price. As for economic motivation, the foremost is the uncertainty of financial stabilization at the Union level and the magnitude of the rouble overhang.

After August 1991, decomposition of the USSR and the forthcoming introduction of republic currencies was no longer just a theoretical assumption, but almost an accomplished fact. Will it be easier for the new currencies to become convertible than for the rouble?

Opinions differ strongly in this respect. On the one hand, disintegration can be considered advantageous, in view of the inability of the Soviet Union as a whole to achieve convertibility of the present single currency, the rouble. Many Soviet experts argue that financial stabilization under the aegis and clear responsibility of a single republic becomes more feasible, because this way financial discipline can presumably be controlled better. The main externalities that hindered Union-level stabilization can thus be avoided. An increment in output of consumer goods by local industries would improve the equilibrium and not be absorbed by the monetary overhang of non-residents. More developed republics in the western parts of the former Soviet Union have relatively good prospects with regard to output structure, labour efficiency and ethics, infrastructure and geographic position.

The above argument must not altogether be taken for granted. Judging by the practical evidence of the past years, financial discipline at the republic level is not necessarily better than at the Union level. Quite the opposite: the deficits of the republics' budgets were growing faster than the Union budget deficit, and the budget of Russia is an illustration of that. Nothing indicates at present that republic governments can afford to suddenly abandon their irresponsible policies in public spending, taxation and wages, and to curb inflation efficiently.

As for the balance of payments of individual republics, inevitable current-account deficits will not be offset by an inflow of foreign finance, because individual republics have insufficiently attractive markets and high risks of political instability. The bargaining potential of individual republics in settling issues of foreign credit and debt rescheduling cannot be compared with that of the entire USSR.

The argument that there will be 'no negative effect of the transition from the rouble to a 16-currency system on economic efficiency' (Bofinger, 1991) appears to be very vulnerable too. Despite the rouble's failure to provide the main monetary functions, its existence within the USSR did mark a certain degree of economic integration, not necessarily irrational. Replacement of the rouble by local currencies will in any event increase transaction costs and information costs. The trend towards delinkage, self-sufficiency and minimization of inter-republic flows of factors becomes stronger. Autarchy cannot but affect economic efficiency. Besides that, the cost of transition and restructuring will be great, due to the rupture of interregional links and the crisis of industries most integrated into division of labour between ex-republics, and an aggravation of shortages. Losses from trade diversion may well exceed the gains (Mac Auley, 1991).

In the short and medium term, no republic, not even Russia, will benefit from delinkage and the collapse of the rouble area. Therefore, the new currencies to emerge will face much

stronger inflationary pressures than those currently faced by the rouble. Republic currencies' convertibility requires very similar conditions to those for rouble convertibility, plus even greater efforts to offset the costs of delinkage and trade reorientation.

In view of the disintegration of the USSR and the introduction of local currencies, it may appear to be politically wise to accept this trend as supposedly a factor for promoting economic reforms in each republic. However, the cost of this development should not be underestimated, nor should one be too optimistic about the prospects for convertibility of republic currencies.

6.3. Russia: monetary reform and currency convertibility in the light of the latest developments

The emergence of republic currencies does pose new challenges to the rouble. The currency substitution or parallel circulation of various currencies in the republics outside Russia forces the roubles out and thus worsens the monetary overhang in Russia. The prospect of keeping the rouble as the currency unit of inter-republic trade transactions does not seem to be viable, because introduction of local currencies reflects exactly the attempt to escape from the rouble area.

An eventual substitution of the rouble by republic currencies affects the credibility of the rouble for agents in the respective republics. Hence the trend of 'flight from the rouble', already started in the Baltics and visibly depressing the rouble/dollar exchange rate on the entire Soviet territory.

Under these conditions it becomes extremely hard to stabilize the rouble and to introduce its convertibility. As long as the rouble remains the single currency in the area, Moscow must coordinate its stabilization efforts with other republics' authorities, but the latter do not manifest much readiness to cooperate in this field. Russian financial authorities may find it meaningless to guarantee the internal convertibility of the rouble with Russia's reserves and stabilization funds, if there is a lack of similar policies and financial discipline in other republics.

In the light of these new developments, the former scenarios of monetary stabilization and rouble convertibility lose relevance. What was correct in July 1991 was no longer so in November 1991. In particular, the idea of a monetary reform and introduction of an alternative currency in Russia was gaining ground. At the end of October 1991, the Russian leadership threatened the republics unwilling to remain inside the rouble area, and those planning to introduce their own currencies, with a monetary reform.

Gradualist approaches to currency convertibility, on the other hand, have much less justification now, because the risks of 'early' convertibility are becoming comparable to, if not smaller than, the cost of postponing it. The most specific feature of the USSR, namely its federative structure, has disappeared, so the imperatives for 'early' convertibility in Russia have become more similar to other Central and East European economies. Last but not least, the political situation in Russia at the end of 1991 had become more appropriate for launching a stabilization package, of which current-account convertibility for residents could constitute one of the main elements.

References

Aglietta, M. (1990), 'La convertibilité du rouble: fondements théoriques et conclusions pratiques', *Economie prospective internationale*, No 44, Paris, pp. 7-34.

Anulova, G. (1990), 'Konvertiruyemost natsionalnoy denezhnoy yedinitsy', *Voprosy ekonomiki*, No 9, pp. 3-16.

Anulova, G. (1991), 'Dollarizatsiya', *Ekonomika i zhizn'*, No 1, p. 13.

Anulova, G., Vernikov, A. and Lushin, A. (1991), 'Tsena konvertiruyemosti rublya: razniye izmereniya', *Ekonomika i zhizn'*, No 25, p. 14.

Asselain, J. (1991), 'Convertibility and economic transformation', *European Economy*, Special Edition No 2, pp. 215-241.

Bofinger, P. (1991), 'Options for the payments and exchange-rate system in Eastern Europe', *European Economy*, Special Edition No 2, pp. 243-261.

Borisov, S. and Kuzanov, M. (1989), 'K voprosu o konvertiruyemosti sovetskogo rublya', *Vneshnaya torgovlya*, No 11, pp. 37-39.

Commission of the European Communities (1990), 'Stabilization, liberalization and devolution', *European Economy*, No 45.

Dolan, E. (1991), 'Kakaya denezhnaya sistema predpochtitelneye', *EKO*, No 5, Novosibirsk, pp. 5-12.

Dzarasov, S. (1990), 'Put' k otkritoy ekonomike', *Voprosy ekonomiki*, No 9, pp. 40-50.

Fedorov, B. (1990), 'Valyutnaya politika SSSR: vzglyad v budusheye', *Finansy i statistika*, Moscow.

Geonomics Institute (1989), 'A phased plan for making the rouble convertible. A multilateral proposal', *Geonomics global policy report*, No 1, Middlebury (Vermont), August.

Gerashenko, V. (1991), 'Dlya chego nuzhna kreditnaya ekspansiya?', *Ekonomika i zhizn'*, No 38, p. 4.

Goldberg, L. and Karimov, I. (1991), 'Internal currency markets and production in the Soviet Union', IIASA Working Paper WP-91-25, Laxenburg.

Greene, J. and Isard, P. (1991), 'Currency convertibility and the transformation of centrally planned economies', IMF Occasional Paper 81, Washington (DC), June.

IMF, IBRD, OECD and EBRD (1991), 'Ekonomika SSSR: vyvody i rekomendatsii', *Voprosy ekonomiki*, No 3, pp. 6-72.

Kornai, J. (1990), *The road to a free economy. Shifting from a socialist economy. The example of Hungary*, W. W. Norton, New York.

Lushin, A. and Vernikov, A. (1991), 'Rubl': perekhod k rynochnomu kursu', *Ekonomika i zhizn'*, No 33, p. 8.

Mac Auley, A. (1991), 'Costs and benefits of de-integration in the USSR', *MOST*, No 2, Bologna, pp. 51-65.

McKinnon, R. (1991), 'Stabilizing the rouble: the problem of internal currency convertibility', Joint ICEG-PEG/USSR Working Paper No 2, San Francisco, CA, February.

Manevich, V. (1989), 'Denezhnaya reforma 1922-1924 gg. i valyutno-denezhnaya sistema NEPa', *Ekonomika i matematicheskiye metody*, Vol. 25, No 4, pp. 599-610.

Marer, P. (1990), 'Pitfalls in transferring market-economy experiences to the European economies in transition', OECD conference paper, Paris, 28 to 30 November.

Newbery, D. (1991), 'Sequencing the transition', conference paper, University of Warwick, July.

Panov, K. (1990), 'O putyakh i metodakh dostizheniya konvertiruyemosti rublya', *Voprosy ekonomiki*, No 9, pp. 28-39.

Perekhod (1990), 'Perekhod k rynku. Kontseptsiya i programma', Moscow, Arkhangelskoye, August.

Petrakov, N. (1987), 'Zolotoy chervonetz vchera isegodnya', *Novyi mir*, No 8, pp. 205-221.

Polischuk, L. (1991), 'A denezhki vroz'...', *EKO*, No 5, pp. 13-21.

Portes, R. (1991a), 'The transition to convertibility for Eastern Europe and the USSR', CEPR Discussion Paper No 500, London, January.

Portes, R. (1991b), Introduction to *European Economy*, Special Edition No 2, pp. 1-15.

Programma (1991), 'Programma pravitelstva RSFSR po stabilizatsii ekonomiki i perekhodu k rynochnym otnosheniyam', *Rossiyskaya gazeta,* Moscow, April 25.

Sarafanov, M. (1991), 'Tsena konvertiruyemosti rublya', *Ekonomika i zhizn',* No 23, p. 6.

Shatalin, S. et al. (1991), 'Konventsiya o sozdanii ekonomicheskogo soobshestva. Proekt', *Izvestia,* 4 September.

Simonov, N. (1990), 'Krakh zolotogo chervontsa', *Izvestia AN SSSR, seriya ekonomicheskaya,* No 6, pp. 119-129.

Tsimaylo, V. (1989), 'Kakaya konvertiruyemost nam nuzhna', *Ekonomicheskaya gazeta,* No 2, p. 20.

Vernikov, A. (1991a), 'Vnutrennaya konvertiruyemost natsionalnikh valyut pri perekhode k rynku', *Voprosy ekonomiki,* No 8, pp. 88-97.

Vernikov, A. (1991b), 'New entrants in the Soviet foreign trade: behaviour patterns and regulation in the transitional period', *Soviet Studies,* Vol. 43, No 5, Glasgow, pp. 823-836.

Williamson, J. (ed. 1991), Currency convertibility in Eastern Europe, Washington, Institute for International Economics.

Wolf, T. (1990), 'The exchange rate and the price level in socialist countries', IMF Working Paper 90/50, May.

Yershov, M. (1990), 'Valyutniye auktsiony v SSSR', *Vneshnaya torgovlya,* No 8, pp. 40-41.

Zakon SSSR o valyutnom regulirovanii (1991), *Biznes i banki, No 9, pp. 4-5.*

Zverev, A. (1989), 'Obratimost rublya: tselesoobraznost, predposilki, perspektivy', Vneshnaya torgovlya, No 3, pp. 45-48.

Part 2

Structural reform issues

Soviet market legislation: ownership rights in Soviet legislation[1]

Philip Hanson[2]

Centre for Russian and East European Studies
University of Birmingham

Contents

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[2] The author is indebted to Mario Nuti, Richard Portes and Jürgen Voss for comments on an earlier draft. A related paper covering developments to end-1990 was published in *Soviet Economy*, No 6, p. 2. The author is indebted to Victor Winston for comments on that paper.

List of tables

1. Introduction

State ownership of most capital assets is incompatible with a market economy: that has become the standard view amongst Soviet reformers over the past few years. The aim of *razgosudarstvlenie* (literally, destatification) was incorporated into the Soviet Government's plans for transition to a market economy. This article reviews the main recent measures of destatification now in place or (where the drafts are known) in draft form at the federal (USSR) level. It also reviews the programme of destatification incorporated in the so-called 'Shatalin plan' *(Perekhod k rynku. Chast' I,* 1990, and *Transition to the market. Part II,* 1990), and some RSFSR legislation, and compares these with the federal government's 1991 programme.[1]

The dissolution of the Soviet Union at the end of 1991 makes the details of legislation passed before that time seem of doubtful interest. It is a safe bet that much of it will be revised. Different territorial jurisdictions are now responsible for the legal framework(s) of the economic space that until recently was occupied by the USSR. And how much of any of it will be implemented in practice? The lack of an appropriate general civil-law framework is another concern (EC Commission, 1990, p. 96). (Though it will be shown below that there have now been some signs of progress in relation to property as loan security.)

Despite these doubts, the general direction of recent legislation on ownership, and the thinking behind it, do matter. The various laws and decrees may not serve as reliable guides to the precise shape of things to come, but it will be argued here that this legislation, with all its ambiguities and lacunae, and all the doubts about its life-chances, reflects a considerable degree of agreement within the economic policy élite in Russia and the former Union.

James Noren has recently argued (Noren, 1990) that it is premature to write of some sort of muddling through in Soviet economic transformation. He observes, however, apropos of the Shatalin programme, that 5 000 days might be more plausible than the 500 days. Suppose then that in five to 10 years' time observers could look back and say that there had after all been a successful transformation; if that were to be the case, the present thinking on ownership would have contributed to it.

[1] The text of Gorbachev's compromise plan was given in *Izvestia,* 27.10.1990, pp. 2-5. It seems consistent with one conclusion of this paper: that differences between the programmes identified here as the Shatalin-Yavlinskiy and Ryzhkov-Abalkin plans with regard to intended ownership forms (though not on the transition to them) are numerous but mostly minor. Therefore, radically new ideas on ownership are unlikely to emerge.

Section 2 of the paper contains a brief account of the meaning of some of the key terms currently in use in Soviet legislation and public debate, followed by some remarks on the evolution of the Soviet ownership debate and the earlier legislation. These are topics the author has dealt with at greater length elsewhere (Hanson, 1989 and 1990).

Section 3 is a summary of the major legislative developments at the USSR, or Union, level. Here the focus is on the legislation that is of a generally 'liberalizing' character, but it includes a section on the outbreak of restrictive measures between September 1990 and March 1991. Section 4 considers the ownership ingredients of the Shatalin programme and some republic programmes in comparison with those found in the Union programme. Section 5 offers an assessment, taking into account the presidential compromise programme for transition to a market economy (*Izvestia,* 1990) and the Pavlov anti-crisis programme of spring 1991 (TASS, 1991).

The treatment here is not comprehensive. Events — at any rate, legislative events — are moving so fast that one has to choose between trying to take stock of them in a rough and ready way and leaving them to the definitive assessment of some future economic historian.

One more disclaimer: the legislation is considered only from the point of view of its economic rationale and economic implications. A lawyer would approach it somewhat differently. Most Soviet economic legislation is regarded by Western lawyers as poorly drafted and therefore problematic on technical legal grounds. No doubt some of the gaps and ambiguities that are apparent to a lawyer are also apparent to an economist, but some will not be.

2. Terminology and background

In English-speaking countries, the term 'public sector' refers to that part of the economy in which the capital assets are owned and the labour is employed by the State, by agencies of the State, or by corporate bodies established and owned by it as entities with their own legal existence. The last of these may be public corporations in the British sense or commercial concerns in which the State is the sole or the majority shareholder.

Whether the State is involved at national/federal level or at some other level, including local or municipal, makes no difference so far as our use of the term 'public sector' is concerned.

Conversely, the private sector is everything else, including producer cooperatives.

In the present Soviet debate and legislation there has been a tendency to restrict the scope of the terms 'private' *(chastniy)* and 'privatization' *(privatizatsiya)*. This does not apply to some writers like Vasilii Selyunin (see Selyunin, 1990, where he comments on this difference of terminology), but it is true of most.

The attempt to limit the scope of these terms was most pronounced in the speeches and documents coming from Gorbachev, Ryzhkov (during his premiership) and others associated with the USSR authorities. They generally avoid referring to privatization in a favourable sense. (In this respect the Gorbachev compromise document of October 1990 comes rather closer to the more 'radical' use of language.) The authors of the Shatalin programme were more relaxed about it, treating 'privatization' as an important part of their agenda. But they also use the terms 'private' and 'privatization' more narrowly than is normally done in Britain or the United States.

The mainstream Soviet public debate, and the USSR and Russian legislation, tend to use these terms only in relation to small firms owned and run by individuals, families or small partnerships. The notion that some large firms might also be 'private' in this sense is not addressed. It is usually assumed that large enterprises, if they leave State ownership, will pass into some form of what is referred to as 'collective' ownership. This may include workforce control under leasing of assets that remain State-owned; it may include workforce ownership (producer cooperatives); but it is expected that the quantitatively most important form of 'collective' ownership will in the medium-to-long term be the joint-stock company. Thus the corporation or, as in British terminology, the public limited company, is referred to as a form of collective ownership, though such firms are the core of what we routinely refer to as the private sector.

Razgosudarstvlenie, or destatification, therefore, is not equivalent in this Soviet usage to privatization. Rather, the latter is treated as a special case of the former. Destatification by transformation into 'collective' forms of ownership, mainly joint-stock companies, is treated as the main type of ownership change that is planned for the medium term. From a Western point of view, all of this is rather confusing. By and large, what the Soviets call destatification is what we would call privatization.[1] It should also be noted, however, that conversion of a State enterprise into a joint-stock company with shares owned by the State Property Agency (see below), as a stage on the way to public sale, would also, in Soviet usage, be destatification. This corresponds to what one study has called 'commercialization' (IMF et al., 1990).

The Soviet public debate on economic reform has moved quite quickly to confront the issue of property rights. In 1987, the dominant reform view was that 'market relations' could and should be combined with State ownership of all land and nearly all capital. Since late 1989, all major policy-making groups have been advocating the sale of a large proportion of State assets and the introduction of small family firms and larger joint-stock companies, with such institutional concomitants as a stock exchange and a network of commercial banks clearly separated from the central, State bank. The differences now are over terminology and the pace and final extent of the transformation.

A letter in the literary journal *Novyi mir* in May 1987 marked the most conspicuous shift in the debate (Popkova, 1987). It was written by a young radical economist, Larisa Piyasheva. She argued that the most prosperous economies in the world were market economies, that none of them was socialist, that experiments in combining planning and the market in the West had been written off as failures and that socialism was incompatible with the market. That view was outside the rules of the public debate at the time; it is now regarded as conventional by many of the economists, officials and elected deputies who are drafting programmes for the transition to a market economy.

The route along which the Soviet debate has evolved has not led through an abstract analysis of the economics of property rights. One does not see references to the Western economic literature on principal-agent relations or the market for corporate control. The emphasis has instead been on two closely linked phenomena widely observed in the Soviet economy. The first is the wasteful use of natural resources and capital assets in the absence of identifiable proprietors with a direct interest in their value. The second is the failure of attempts to induce enterprises to behave independently, short of cutting all links between them and the central authorities.

At the same time, favourable references both to Western and to Hungarian and Polish experience have proliferated.

Writings about, and translations of, Hayek and Friedman have begun to appear (for example, Pinsker and Piyasheva, 1989), but the discussions related most closely to policy tend to appeal to common sense rather than theory. Through 1990, semantic differences such as those already described,

[1] Admittedly, British usage is not always clear. 'Privatization' can mean both the sale of State assets and the device of offering for open, competitive tender contracts to carry out services previously provided in-house by (e.g.) city council employees. The latter procedure goes one step further than leasing a State-owned café or factory to its existing employees. Vickers and Yarrow (1988), in their study of UK privatization, concentrate on asset sales.

over the meaning of 'private', loomed large in public discussion. Thus the USSR President and Prime Minister and the USSR Deputy Prime Minister responsible in 1990 for reform, Leonid Abalkin, continued to describe their plans for the future as socialist while preparing for a stock exchange, foreign direct investment and the transformation of State enterprises into 'joint-stock companies' and 'small firms'. This linguistic conflict seems to have disappeared in 1991, under the aegis of the otherwise-conservative Pavlov government.[1]

More radical policy-makers, including Boris Yeltsin, speak favourably of 'private ownership', without displaying an obviously different view of future economic institutions. These differences of terminology are considered by the radical reformers to signal real differences: above all, differences in willingness to create an economy composed largely of firms that are genuinely independent of the central authorities.[2]

Before 1990 the only pieces of legislation that could have facilitated a significant departure from the general rule of State ownership[3] were the 1987 decrees on joint ventures on Soviet territory and the 1988 law on cooperatives. The 1986 law on individual labour activity was extremely limited in scope and did little more than clarify the legal status of minor sideline activities already in existence — and make them liable to licensing fees and taxation. In the implementation of the April 1991 USSR law on entrepreneurship (see below), this 1986 law is to be annulled.

The law on cooperatives provided a framework in which firms that were *de facto* private could operate. It allowed cooperative members, who could be as few as three in number, to employ non-members, without any ceiling on the number of the latter. Whether these hired workers could legally be both full-time and long-term employees, remains obscure, even after some amendments to the law.[4] The fact is that many (though probably not most) Soviet cooperatives are for all practical purposes private businesses. The present distribution of fixed capital assets by ownership, according to Goskomstat, is such that around 95% are either State or collective-farm property. Table 1 gives data from an October 1990 source, described as illustrating the position 'now': mid-1990 is the most plausible interpretation of the time to which the table refers.

Table 1

Soviet fixed capital assets by ownership, mid-1990

(billion R)

	Book value	
	Gross of depreciation and net of retirements	Net of depreciation and retirements
State	2 612	1 690
cooperative	55	44
kolkhoz	203	156
private	101	69
Total	2 971	1 959
Productive assets		
State	1 771	1 035
cooperative	28	21
kolkhoz	165	123
private	22	19
Total	1 986	1 198

Note: Values are at historic cost and exclude land, mineral, etc. deposits, forests and purely personal possessions, but not livestock. Productive assets are those used directly in material production, so assets used in some commercial service activities are excluded from the lower half of the table but included along with housing and other infrastructure assets in the top half. 'Private' probably includes private-plot assets.

Source: *Ekonomika i zhizn'*, 1990, No 40, p. 15.

In the UK in 1979, before the privatization programme of the Conservative government began, the share of public corporations (of which there were then 47) in the UK economy was as indicated in Table 2. (These figures do not of course include the other elements in the UK public sector.)

Table 2

Importance of public corporations in the UK, 1979

(%)

	Share of UK total
GDP	10,5
Employment	8,1
Capital stock	17,2
Investment	15,2

Source: Vickers and Yarrow (1988), p. 140, citing *National income and expenditure*, 1984.

1 See Ryzhkov speech to the Congress of People's Deputies, (*Izvestia*, 14.12.1989, pp. 2-4); his report to the 20 July joint meeting of the Presidential and Federation councils (*Izvestia*, 22.7.1990, pp. 1-2). For Pavlov see TASS (1991), and speeches by Pavlov in April 1991 (*Izvestia*, 22.4.1991 and 24.4.1991).

2 See Selyunin, 1990.

3 The author follows Soviet reformers' practice in disregarding the largely formal ownership differences between collective farms and State enterprises.

4 Original law, *Izvestia*, 8.6.1988; revisions approved on 6.6.1990 (*Izvestia*, 24.6.1990).

The disparity in the scale of UK and Soviet 'destatification' programmes would be hard to overstate. Yet even the comparatively tiny UK programme, conducted within an existing framework of market institutions, has been problematic and is not yet complete.

The legislation discussed in the next section is part of the USSR Government programme of transition to a market economy.[1] Originally formulated in late 1989, that programme was rejected by the Soviet parliament in spring 1990, and strongly criticized in the Soviet press. Later variants (the Gorbachev compromise programme of October 1990 and the Pavlov anti-crisis programme of April 1991) have, however, been adopted.

Legislation associated with the rival team of transition-planners operating under the Gorbachev-Yeltsin agreement of 27 July 1991, but closely linked to the Russian Republic leadership, is discussed in the section after this. Some of that latter legislation (in draft form, in the source available to me) was intended to be Russian Republic legislation, but some is would-be USSR legislation. All of it appears to emanate from the Shatalin group rather than the Ryzhkov-Abalkin team. That is the reason for treating it separately.[2] Subsequent RSFSR legislation is also discussed — briefly and with incomplete coverage.

3. The main USSR Government measures

The following are the main laws and decrees bearing on property rights that have been approved, or of which drafts have been published or circulated, since late 1989.[3] They go into effect from the date of publication unless otherwise specified. They are listed in approximate order of approval and publication, to provide a sense of the course of legislative events.

(i) Leasing. The foundations of USSR and Union-republic legislation on leasing *(arenda)*. Approved by the USSR Supreme Soviet, 23 November 1989.[4]

(ii) Ownership in general. (Framework law.) The law on property in the USSR. Approved by the USSR Supreme Soviet on 6 March 1990, to go into effect in July 1990.[5]

(iii) Land. The foundations of USSR and Union-republic legislation on land.[6]

(iv) Intellectual property. The draft law on inventive activity in the USSR.[7]

(v) Business units in general. The law on enterprises. Approved by the USSR Supreme Soviet on 4 June 1990, mostly to go into effect from the start of 1991.[8]

(vi) Joint-stock companies. A USSR Council of Ministers statute *(polozhenie)*, approved on 19 June 1990.[9]

(vii) Securities. A USSR Council of Ministers statute, details as for the previous statute.[10]

(viii) Currency market. USSR Council of Ministers resolutions *(postanovleniya)* of 20 and 24 July 1990, on the establishment of an internal market in foreign currency and of shops selling consumer goods for hard currency.[11]

(ix) Small businesses. USSR Council of Ministers resolution of 8 August on the creation of small businesses[12] and a draft Supreme Soviet resolution on their activities.[13]

(x) State holding company for privatization. A presidential edict *(ukaz)* of 9 August 1990, creating a USSR State Property Fund.[14]

(xi) Privatization procedures. Non-binding government recommendations to local councils on procedures for taking property out of State ownership.[15]

(xii) Investment. Bases of legislation of 10 December 1990, with effect from 1 January 1991.[16]

(xiii) Banking. Law of 11 December 1990 on the State Bank of the USSR and law of 11 December 1990 on banks and banking activity in the USSR.[17]

(xiv) Land reform. Presidential edict *(ukaz)* of 5 January 1991 on the implementation of land reform.[18]

1 See the list of planned legislation associated with an early version of the transition programme (*Izvestia*, 26.9.1989, p. 1).

2 See two articles by Mikhail Berger, "Sosny' i Sosenki,' and 'Sosenki bez 'Sosen", *Izvestia*, 13.8.1990 and 27.8.1990, respectively (both on p. 2). Ownership aspects of the Shatalin plan are discussed in a later section of this paper.

3 The degree of detail of the information available to me varies amongst these measures, so in some cases the account given here is less full than in others.

4 *Izvestia*, 1.12.1989, p. 3.

5 *Izvestia*, 10.3.1990, pp. 1, 2.

6 *Ekonomika i zhizn'*, 1990, No 11, pp. 17-20.

7 *Izvestia*, 7.4.1990, pp. 2-3.

8 *Izvestia*, 12.6.1990, pp. 2-3.

9 *Ekonomika i zhizn'* (henceforth *EZh*), 1990, No 27, pp. 12-14. The author has also seen a typescript draft of a law on joint-stock companies.

10 *EZh*, 1990, No 29, p. 14.

11 *EZh*, 1990, No 33 (supplement).

12 Ibid.

13 *EZh*, 1990, No 34, p. 18.

14 *Kommersant*, 1990, No 31, p. 4.

15 *EZh*, 1990, No 36 (supplement).

16 *Izvestia*, 16.12.1990, p. 2.

17 *Izvestia*, 18.12.1990, pp. 3-4.

18 *Izvestia*, 7.1.1991, p. 1.

(xv) Employment. Bases of Union and republic legislation of 15 January 1991, with effect from 1 July 1991.[1]

(xvi) Privatization. Draft bases of Union and republic legislation on the destatification and privatization of enterprises.[2]

(xvii) Foreign currency markets/rouble convertibility. Law on currency regulation of 1 March 1991, with effect from 1 April 1991.[3]

(xviii) Openness to import competition. The USSR Customs Code and the law on the customs tariff, both of 26 March 1991, with effect from 1 July 1991.[4]

(xix) Entrepreneurial activity. Law of 2 April 1991 on the general principles of entrepreneurship of citizens of the USSR.[5]

(xx) Foreign investment. A draft law on foreign investment.[6]

In addition, there is legislation either already approved or in draft that is important to the future working of the new economic system but is not directly and exclusively to do with ownership: the new laws on individual and enterprise taxation; various decrees and draft laws dealing with the creation of a civil service and (within that) a tax inspectorate; the 16 August 1990 government decree on anti-monopoly measures,[7] and the law of 1 April 1991 giving the revised and slightly slimmed-down list of ministries (and therefore of economic-branch and economic-functional ministries).[8]

The leasing legislation is a framework for republic laws that could (so far as the USSR legislators are concerned) contain some variations. It applies to producer durables, land and, apparently, mineral rights. The lessor is the owner of the asset in question, and the law envisages all possible categories of owner with respect to reproducible capital assets — including foreign citizens or firms and Soviet individuals — but only a State authority with respect to land and natural resources in general.

Leasing may be from some person or juridical person authorized by the owner to act in the capacity of lessor, so a branch ministry could, as in previous practice, act for practical purposes as the lessor. For a workforce to lease its enterprise from the State, there must be a two-thirds majority in favour of this action amongst the workers. A lessee may by negotiation purchase the leased assets outright — though this probably does not apply to land.

The law on ownership in general has been criticized by radicals. In August Boris Yeltsin said he would ask the Russian parliament to abolish it (presumably with respect to Russian territory; *Literaturnaya gazeta,* 1990, No 34, p. 2). It certainly contains some fudges. Ownership is defined as rights of possession or control *(vladenie)*, use *(pol'zovanie)* and disposal *(rasporyazhenie)*. Article 1.4 seems to open the way to private-sector employment by stipulating that an owner can conclude agreements with other citizens to use their labour to exploit the asset owned — subject to USSR and republic laws; yet Article 1.6 states that ownership must not be used for the alienation of the worker from the means of production and the exploitation of man by man — a provision that has been mocked as meaningless by the more secularly minded Soviet commentators, but could still be used to restrict the consequences of Article 1.4.

Ownership (allowable in the USSR) is categorized in the law as citizens' ownership, collective ownership and State ownership. Citizens' ownership can include shares, but there is no clear statement of a right of individual citizens to own whole businesses employing other people. Joint-stock companies are classified as a collective form of ownership, though Article 15 states that shareholders in such companies do not have to be workers in those companies themselves — again with the ambiguous proviso that this must also be allowed by Union and republic legislation.

Land, mineral deposits and other natural resources are said in Article 20 to be the 'inalienable property of the peoples living on the given territory' (Article 20.1) but the same article also provides for the USSR to have the control and use of natural resources needed for all-Union purposes, including defence, trunk pipeline networks, etc. (Article 20.2). This was a fuzzy compromise between USSR and republic claims, leaving open the question of who is to decide what constitutes a necessary all-Union function. This has become a major issue between republics, especially Russia, and the USSR since the law was approved. Much of the subsequent USSR legislation in effect extends, or interprets liberally, this early law. Much subsequent republic legislation contradicts it, with respect above all to the Union/republic division of property rights —which of course has no direct bearing on the public sector/private sector division.

The legislation on land elaborates what is implicit in the previous two pieces of legislation. The intention clearly is

1 *Izvestia*, 25.1.1991, pp. 3-4.
2 *EZh*, 1991, No 7, pp. 18-19.
3 *EZh*, 1991, No 12, pp.18-19.
4 *Izvestia*, 18.4.1991, pp. 3-6; ibid. 19.4.1991, p. 2.
5 *Izvestia*, 10.4.1991, p. 2.
6 Mimeo, obtained August 1990. See also Stepovoi, A. and Chugaev, S., 'Inostrannym investitsiyan — rezhimbl agopriyatstvovaniya' *Izvestia*, 30.6.1991, pp. 1, 3; Ershov, Yu. A., 'Usloviya dlya inoinvestitsii v SSSR', *EZh*, 1991, No 11, pp. 18-19; reports of the Geonomics Institute's review of a draft of the law, Robert Lyle, NCA from Washington, DC, 10.5.1991.
7 *EZh*, 1990, No 38 (supplement), pp. 2-3.
8 *Izvestia*, 9.4.1991, p. 2.

that natural resources remain State property, though the 'State' will usually be the Union or autonomous republic where the resources are located. Land can be leased, and leases can be heritable and of indefinite duration; the lessee has rights of control and use (usufruct) but not of disposal, i.e. sale. The possibility of a land market seems to be excluded, but that of a market in land-use rights may not be.

The draft law on inventions has been controversial and its approval long-delayed. The key provision in published drafts is that inventors would have exclusive rights of use of registered inventions, as in most Western patent laws, and could therefore sell (license) the right to use the invention to others. This is a major departure from the old 'inventors' certificate' regime in which inventions were treated as public property, with no right on the part of the inventor to monopolize their use. Simplifying somewhat, one could say that the traditional system amounted to a giant company suggestions scheme, in which USSR Inc. exercised a monopsonist's power to set the terms of any reward to inventors. The draft would open the way to a Western-style market in industrial property.

The law on the enterprise was originally scheduled to be the law on the socialist enterprise. The dropping of the adjective in the course of parliamentary review of the original draft is one sign of the rapid secularization of thinking among the policy-making elite. The law is general, covering all sorts of business entities: State enterprises, cooperatives, family firms, joint ventures and others. The general principle is enunciated that all new enterprises, of whatever type, must be registered with the local council and are then entered on a national register of businesses.

Managers are said to be appointed by the owners. This represents a step back from the earlier moves towards workforce election of management. Cooperatives and workforce-leased enterprises will be the only types of business in which the workforce is the owner, and even in cooperatives, this will not be true where there are non-member employees. The workforce is to be represented on the enterprise council in numbers equal to the representation of the owners — but the enterprise's statute may provide otherwise.

The law specifically states that enterprises can choose their own customers and suppliers, but adds that State enterprises will only acquire this right at the beginning of 1993. That, under the original Ryzhkov-Abalkin transition plan, would be when centralized supply allocation and placing of State orders would begin to be phased out to a more than marginal extent. The State, according to the law, can control some prices, especially those of monopolists, but no operational definition of monopoly is provided. That presumably will be done by specific anti-monopoly legislation, still to come.

The statute on joint-stock companies allows for the establishment of Western-style corporations or public limited companies. Individual Soviet citizens, Western citizens and Western firms (as well as Soviet juridical persons) can be shareholders. This statute — to be replaced by a law later — should in principle allow the creation of, and the transformation of existing State enterprises into, the kind of business organization that is the core of the Western private sector.

For joint-stock companies, the law sets a minimum size of initial capital, of R 500 000, with shares required to have a minimum nominal value of R 100 each. The so-called 'shares' issued by Soviet State enterprises hitherto have often not been real shares: they have paid a fixed return on nominal value, and carried no rights of control.[1] This statute and the associated statute on securities envisage the issuing of recognizable equity shares, and the development of a secondary market in shares. Individuals are restricted to holding named shares, i.e. they cannot hold bearer shares. This need not prevent a secondary market developing in which individuals could participate.

The law on enterprise taxation[2] covers several different forms of business taxation, and deals with USSR taxes plus some federal-level rules about republic and lower-level taxation. It envisages a federal profits tax of 22%, and a ceiling of 45% on the total of federal-plus-lower-level profits taxes. Soviet commentators have assumed that 45% would in fact be the overall rate of profits tax, and many have criticized it as 'too high'.

What is more obviously objectionable is the inclusion of a 'supertax' of 80% on the first 10% of enterprise profits over and above the profits that would represent twice the industry-average return on capital, and 90% tax on the next 10%. That would be questionable on incentive grounds in an operating market economy. It is true that in an economy still emerging from massive distortions of product prices and asset values, such high rates of return may bear very little relation to enterprise behaviour at all; but controlling them early in the transition is hardly conducive to rapid liberalization.

The presidential decree of 4 October, 'On priority measures for the transition to market relations', (*Izvestia*, 5 October 1990, p. 1), only strengthens such doubts. It calls for a substantial shift to 'contract pricing' in 1991, but makes it clear that the new prices should be based on the central planners' revised wholesale prices worked out in 1988 and

1 See I. Zhagel' in *Izvestia*, 21.6.1990, p. 2 and I. Kitaigorodskii in *EZh*, 1990, No 27, p. 15.

2 *Izvestia*, 29.6.1990, pp. 1-3, approved by the Supreme Soviet on 14 June, to take effect from the start of 1991.

1989. Moreover, an absolute ceiling is to be put on profit rates. This decree was promptly criticized from a liberal viewpoint in the Soviet press (e.g., I. Demchenko in *Izvestia* 6 October 1990, p. 2). Price revisions so far in 1991 have confirmed these doubts about the liberalism of the measure.

The detailed regulations on the foreign currency market were embodied in later legislation, early in 1991 (see below). The main ideas at mid-1990 were that private citizens should be able to open their own hard currency bank accounts more freely than at present, and that trading in currencies, including the purchase and sale of freely convertible currencies against roubles, should be widely conducted by enterprises and organizations (but not private citizens), through interbank transactions and currency exchanges. This should allow a market rate to emerge — something that the small and highly controlled Vnesheconombank currency auctions have not achieved. As of early June 1991, however, the functioning of the new interbank currency market has been too restricted to constitute a major change in the situation.

The resolution on small businesses covers small enterprises of all varieties of ownership, but is primarily intended as the framework for private enterprises on a scale smaller than the joint-stock companies covered in earlier legislation. There are size limits on the labour force: 200 in industry and construction, 100 in research and development, 15 in retail trade and 25 in the rest of the services sector.

The small firm can have limited liability, though the exact relationship between the enterprise, as a juridical person, and its founders has not been clearly specified. There are no special tax concessions.

Registration is with the local district council, and is meant to be quick and simple. The first small private firm was registered in the Oktyabr'sky district of Moscow on 21 August 1990, to market a board game called 'Capital' and perhaps later to go into publishing on the occult.[1] Evidently those local authorities that are sympathetic will already register private firms without delaying to prepare detailed regulations. This squares with the description of the government recommendations on privatization procedures as non-binding. Several more such small private businesses have since been set up.[2]

The small business legislation could be used by existing cooperatives or State enterprises. A co-op that was in reality a private business could register under this heading and avoid possible legal hassles over its employment of contract, non-member labour — unless, of course, it was already employing more than the ceiling number of staff. A State enterprise could be privatized by splitting it up into a number of small firms (few State enterprises are small), as an alternative to conversion into a joint-stock company.

The State holding company arrangements have caused controversy. The USSR State Property Fund, created by the presidential *ukaz* of 9 August 1990, was meant to arrange the privatization of State enterprises, ensuring also that monopoly positions are destroyed. It is apparently meant to cover enterprises subordinate to federal level (USSR) ministries only, applying to about 40% of the book value of all non-infrastructure capital assets, concentrated in only about 8 500 enterprises. It was planned to convert a quarter of them to joint-stock companies by the end of 1990. To a considerable extent, this was already happening; but it has often not been a process of public and transparent marketing of the assets in question, but often a low-cost *nomenklatura* pseudo-buy-out.

The fund will itself be a State body, but not subordinate to the government. In principle, therefore, it will not be under the thumb of the branch ministries which have hitherto been the *de facto* owners of these enterprises. Its powers are supposed to be defined by the President, its activities regulated by parliament. Its tasks include the valuation of assets and the protection of 'State interests' during the process of valuation and sale.

The main worry expressed by Soviet reformers is that the fund will try to keep a majority stake in the new companies, in the cause of 'protecting State interests'. For these critics, the provision that, while the fund and its staff are taking shape, its powers will be temporarily delegated to other State agencies — the Ministry of Finance and possibly the branch ministries — is ominous.

Several drafts of the law on foreign investment are circulating in typescript. The draft seen by the author is probably a USSR Council of Ministers staff draft. It is relatively liberal. The key points in it are as follows.

Foreign investment is defined broadly to include the placing of deposits in Soviet banks and the purchase of Soviet shares by foreign firms and individuals, as well as the acquisition of buildings and equipment, and of leases on land and natural resource deposits. Foreign direct investment is explicitly included, so it is made clear that foreign firms can purchase or establish subsidiaries in the USSR. Military enterprises and establishments owned by the KGB or the Ministry of Internal Affairs are not for foreign purchase; nor can foreigners set up wholly owned banks or insurance

[1] *Kommersant*, 1990, No 33, p. 1 describes this firm gleefully as the first real capitalist business in Moscow.

[2] Conversation with a deputy director of one of them, Andrei A. Ponomrayov of Rost, 20 October 1990.

companies outside special economic zones, or media or educational concerns anywhere: everything else can be done.

Whether 'military enterprises' means those directly under the control of the Ministry of Defence or the much larger category that comes under the Military-Industrial Commission ministries is not clear.

As with the existing joint ventures, wholly or majority-owned foreign subsidiaries are to be registered with the Ministry of Finance. Before that, government permission is needed for the creation of wholly owned new firms: republic government approval where the capital is R 100 million or less, USSR government approval for larger values. Tax treatment is to be not less favourable than for domestically owned enterprises, and normally as for joint ventures (30% on profits after a two-year grace period, plus 20% on repatriated profits). A list of product groups for which there is preferential profits tax treatment includes manufactured consumer goods, food processing, electronics and pharmaceuticals. Foreign-owned firms will not usually be allowed to spend more in convertible currency than can be covered from their own revenue, but repatriation of profits through a consortium of foreign-owned firms is not ruled out, and exceptionally the Soviet or a republic government may provide hard currency to cover the repatriation of rouble profits.

In its operating activities in the USSR the foreign-owned firm must provide its Soviet staff with standard Soviet social insurance arrangements. There will not be restrictions on its pricing of its products or its choice of currency for settlements. Nor does it require import or export licences from the Soviet authorities except for the export of any item to whose price its own value-added contribution is less than 30%.

The law on investment activity in the USSR is a framework for republic laws. The equality of all investors, including private and foreign, in the USSR is proclaimed. The rights of all investors are said to be guaranteed by the State: legislation reducing the rights of existing investors will have to be accompanied by compensation; no nationalization without compensation.

The law on the State Bank of the USSR creates a two-tier banking system with a central bank with the traditional roles of lender of last resort to other banks, banker to the government, regulator of monetary growth, etc., with powers to set reserve ratios of commercial banks, license commercial banks, etc. Gosbank will be responsible to the USSR Supreme Soviet, not to the government. USSR Gosbank together with the central banks of union and autonomous republics are to form a single central-bank system, managing a single currency and single monetary policy. Gosbank Central Council is to be composed of a chairman and first deputy (centrally appointed), plus 10 of the heads of the republic central banks (potentially 35 of them). USSR Gosbank is to hold (USSR total?) gold and foreign currency reserves. The degree of central control envisaged is not acceptable to several republics, including Russia.

The law on banks and banking activity deals with the rest of the banking system. Its provisions include the following. No single shareholder is to own more than 35% of the equity of a bank (Article 10.1). Where a foreign legal person is amongst the owners, it must be a bank (Article 10.2). Foreign participants must show documentation of conformity with banking laws of their own country (Article 13a). USSR Gosbank is to keep a central register of all commercial banks (Article 17), though licensing of banks that are not all-Union is left to republic central banks. Banks can declare debtors insolvent, and inform their creditors and the local soviet with which the debtor organization is registered (Article 32). Licenses from Gosbank/republic central banks are needed for dealing in foreign currency (Article 34). Foreigners may be bank directors (Article 39).

The anti-monopoly measures are a necessary ingredient in any successful privatization programme. The USSR Government decree on them provides for the establishment of an anti-monopoly committee under the aegis of the USSR Council of Ministers. Its functions would include the fostering of small businesses as well as the monitoring and possible breaking-up of monopolies. The exact scope of its powers is not clear from the decree, for many of the provisions of the decree contain instructions apparently addressed to other government agencies.

The main aim of the decree is the prevention of market domination by an individual producer. This is defined at two levels: a 70% market share during the process of transition to the market — apparently this degree of concentration is to be avoided or prevented — and a lower level of 35 to 70%, where enterprise behaviour is to be monitored, but which will presumably be treated as not necessarily constituting a *prima facie* case for action.

The committee is to monitor large investment projects for their monopoly effects. It is also to monitor the working of the (increasingly numerous) 'associations' and 'concerns' *(kontserny)*, which often cover whole sub-branches of industry.

The committee is specifically charged with investigating market-sharing arrangements, activities that create barriers to market entry, price rings, and the like. It also has a remit

to deal with 'unfair trading practices'. Enterprise actions that create or sustain market dominance in the above sense make executives liable to sanctions imposed through the courts.

Amongst the provisions that are not addressed specifically to this committee there is a ruling (point 8) that the sale of State enterprises should incorporate separate sales of technologically independent production units within a given enterprise. This is presumably addressed to the State Property Fund and investment funds created by it.

There is also a provision that branch ministries should cease to be responsible for the fulfilment of contracts by enterprises attached to them (point 6). But this is not to come into effect until after the economy has been stabilized in a macroeconomic sense. The importance of the monopoly power built into the supply system is recognized by a provision (point 15) that Gossnab offices be turned into independent commercial wholesaling enterprises. They will have to compete with the large number of local commodity exchanges already created 'from below' (Cohen, 1991).

The other points worth noting here are provisions that the statutory monopoly of insurance be ended (point 20), that foreign trade organizations at present subordinate to the Ministry of External Economic Relations become independent of it (point 22), and that competition via foreign direct investment be encouraged (point 23).

The edict on land reform instructs republic and local governments to prepare by the end of June 1991 an inventory of all unused or 'irrationally used' land, whether controlled by collective farms, State farms or ministries. This land is then to be incorporated in a local authorities' land fund, from which land can be provided on a lifetime (inheritable) leasehold basis to individual peasant farmers, other individuals or agricultural cooperatives, for use for farming or dacha construction. Between 3 and 5 million hectares (compare this with 1 055 million hectares of land in agricultural use at 1 November 1989) are to be made available before completion of the inventory, in the spring. There is also a recommendation to the parliaments of all republics that they remove 'unfounded' restrictions on the development of the existing subsidiary household plots. (Probably this refers mainly to restrictions on numbers of livestock.) In addition, the Union and republic governments are told to work out ways in which 'ineffective' State and collective farms could be transformed into associations of peasant and small cooperative farms. The enforced break-up of State and collective farms is expressly forbidden.

The edict makes no reference to any non-agricultural uses of land, apart from dacha construction; urban land is implicitly excluded. There is no reference to foreigners being allowed or not allowed to lease farm land, but an earlier decree on leasing did not rule out foreign lessees, and the foundations of USSR and republic legislation on land, approved by the USSR parliament in spring 1990 (*Ekonomika i zhizn'*, 1990, No 11) specifically listed foreign legal persons — for example, foreign companies — amongst those to whom local soviets could lease land. In general, this presidential edict does nothing significant to affect the general circumstances of land ownership and use. It is more in the nature of a campaign, and a campaign of limited scope, that leaves implementation to local soviets.

The bases of legislation on employment provide guidelines for more detailed legislation at republic level. (NB: the title of the measure refers just to 'republics'; most earlier guideline legislation of this sort referred specifically to Union republics, but the distinction has become blurred as many autonomous republics have claimed Union republic status.) It defines the unemployed as people who for reasons not of their own making are without a job, who are registered with the State Employment Service as job-seekers, and who have not received offers of suitable employment through that service. Suitable employment is defined as employment appropriate to the age, experience and qualifications of the person concerned, and whose location makes it accessible to them.

The measure states the principles of the Soviet State's employment policy (Article 4) and defines the State 'guarantees of the right to work' (Article 5). These do not include a blanket assurance that jobs will be available to all job-seekers. The principles include equal job opportunities, the voluntary nature of work, the coordination of Union and republic employment policies, and the participation of both trade unions and associations of employers (*rabotodateli*, a newish Soviet term) in the formulation of employment-promoting measures. The guarantees include free education and training, free choice of occupation, free assistance in finding work, and protection against job discrimination. Article 15 provides for State assistance with the costs incurred by individuals in moving geographically to new jobs (by implication — when this is done through job placement via the State Employment Service).

Article 18 provides for the creation of a State Employment Service (henceforth SES), financed by a special State Employment Fund (SEF), and with a network of offices across the country. Commercial employment agencies are to be subject to licensing (it is not clear by whom: the SES?)

The SES can require all employers to provide information on planned changes in their employment levels; it can pro-

pose lists of job slots to be reserved for people in need of social protection (the handicapped, etc.), subject to review and approval by local authorities. This applies potentially to all employers. The SES can also propose to republics and local soviets that they impose a six-month statutory delay on the implementation of substantial numbers of redundancies by any employer in circumstances where there would be difficulty securing re-employment. This would be with full 'or partial' compensation to the employer(s) in question by the SES (Article 19). Union, republic and local authorities can offer tax concessions to employers in return for their taking on employees in the social-protection category (Article 20). The SEF is formed from obligatory employers' contributions (Article 22).

Section IV (with effect from July 1991) outlines the benefits available and the conditions attached to them. It appears (Articles 25 and 36) that the various benefits either definitely will not, or at local discretion need not, be made available to those who are unemployed after voluntarily quitting a job, were sacked for breaches of labour discipline, or who, after being legitimately classed as unemployed, have refused two offers of suitable work. People returning to seek employment after being out of the labour force for a year or more, however, are eligible for benefits.

There are four kinds of benefits: guarantees to those made redundant, stipends during retraining, unemployment benefits proper, and further assistance on a selective basis to dependants.

The guarantee to those made redundant is an assurance that their previous average earnings will continue for three months after redundancy, provided that they register as job-seekers with the SES within 10 days of being made redundant. This payment is to be disbursed at their former workplace but appears to be financed from the SEF. Their status changes to that of unemployed after three months without a suitable job offer through the SES or after two refusals of suitable offers, whichever comes first.

The standard rate of unemployment benefit is 50% of previous earnings (Article 31). The duration of this benefit is 26 weeks minimum plus a further two weeks for every year worked above the number needed to qualify for a retirement pension (Article 28). Labour market entrants who cannot find employment (and who register with the SES) are classed as unemployed, and receive a benefit rate of 75% of the statutory minimum wage (Article 33). Unemployment benefit for demobilized servicemen or KGB employees is to be not less than the minimum wage (Article 32).

The stipend during training/retraining is 50% of the unemployed person's previous basic pay or, if they have dependants, 50% of previous earnings. It appears that the period of training is envisaged as coming after the period of guaranteed continuation of previous pay, but whether it is meant to precede or be continuous with the period of receipt of unemployment benefit, is not clear. If a redundant former employee needs retraining and did not have the opportunity to undertake training during his last two years in employment, his former employer is liable to pay the cost of his retraining (Article 26).

(NB: this legislation apparently imposes additional costs on joint ventures and foreign-owned companies: contributions to the SEF; possible obligation to employ disadvantaged persons, with possible but not automatic tax concessions in return; possible injunction to delay redundancies for six months, with possibly less than full compensation; liability to pay for retraining of redundant ex-employees if they had not had training opportunities with their JV/foreign employer.)

The draft bases of legislation of the USSR and republics on the destatification and privatization of enterprises set out the Union authorities' proposed framework for all denationalization in the USSR, whether conducted by Union, republic or lower levels of government. It defines destatification as the changing of ownership from State to non-State entities, and privatization as the transfer to private citizens of the ownership of some or all of the shares in joint-stock companies or the ownership of complete enterprises (where the latter become partnerships or family firms). This draft legislation does not deal with land (Article 2.4).

For all-Union enterprises, the USSR State Property Fund (created by the presidential edict of 9 August 1990) determines what can and cannot be sold (Article 3.2); can itself acquire State enterprises (Article 6); and is responsible for drawing up annual programmes listing enterprises to be denationalized (Article 7.2). For other enterprises, analogous republic and local organizations are expected to perform this role, and to act within the guidelines set by the bases of legislation. For each enterprise included in the programme, the USSR State Property Fund or its republic/local equivalent creates a commission to carry out the valuation and organize the transfer of ownership; there must be representatives of the 'owner' (branch ministry?), labour collective and trade union on the commission (Articles 9 and 10).

Anybody (Soviet citizens, whether or not working at the enterprises in question; foreign persons and legal persons, etc.) can become the new owners (Article 6). The principles set out for transfer of ownership are (i) that transfer should generally be for payment; (ii) that preference be given for ownership by the workforce; (iii) that the workforce's

interests be taken into account, and (iv) that the process should be open (Article 4.1). However, republics may legislate to give away 'their' enterprises if they wish (Article 4.2) and a later article specifically states that an enterprise may be denationalized against the wishes of its workforce (Article 8).

The intent behind the second principle of Article 4.1 is embodied in the right given to workforces by Article 18.2 to use the proceeds of sales of assets they already own (for example, through the ploughing-back of profits in enterprises already leased by the workforce) and their retained profits to finance purchase of the enterprise; also by Article 20's provision that the workforce can be offered shares at preferential rates and other benefits up to a value of 30% of the value of the enterprise, and, additionally, have right of first refusal as buyers. The intent behind the third principle of Article 4.1 seems to be embodied in another provision of Article 20, to the effect that social infrastructure assets of the enterprise can be given free to the workforce. (This could perhaps include housing owned by the enterprise.) It is also reflected in Article 21, which requires that three months' redundancy benefit must be given to workers sacked within six months of denationalization and that there must be a collective labour agreement in place by that time.

The articles of association of joint-stock companies can prescribe the process of privatization of their shares (Article 2.2). (This provision appears to make it easy for a *nomenklatura* group that has already turned a State enterprise into a joint-stock company (as many have) to arrange to distribute the hitherto State-owned shares in ways that suit them.) Article 12 provides (presumably for State enterprises that have not already been turned into joint-stock companies) that the founder must, in the case of all-Union enterprises, be the USSR State Property Fund or its representative. (This may or may not hinder corrupt *nomenklatura* privatization, depending on the degree of venality of State Property Fund officials.)

Valuation must take into account the prospects of the enterprise (Article 17). (In other words, the gross error of requiring valuation to reflect historic or replacement cost of assets only, is not built into the legislation.) Sale can be by any method, including auction or tender; enterprises can be sold on credit, but there must be a 20% down payment and a maximum credit term of 10 years (Article 11). The proceeds of the sale belong to the State and priority as to their use is given to financial stabilization (Article 19). The State (presumably through the State Property Fund(s)) can impose conditions on a sale, such as maintaining the size of the workforce for a prescribed period, or maintaining specific levels of product supply to designated customers for a prescribed period.

The law on currency regulation defines currency (*valuta*) to include bank money, precious metals (some of them strategic, such as palladium), precious stones and pearls, as well as cash (Article 1). It distinguishes between resident and non-resident persons and legal persons. A foreign-owned or partly-owned firm is a resident legal person, if it is registered in the USSR. A foreign firm's representative office that does no business on Soviet territory is treated as non-resident (Article 1).

The law restates the traditional position that roubles may not be taken across Soviet borders except in specific instances authorized by USSR Gosbank (Article 2).

USSR Gosbank is the main executive agency with respect to currency regulation (Article 8). It determines the scope of use of foreign currency in the USSR and licenses commercial banks to operate in foreign currency (Article 8). It also sets the exchange rates (Article 4). In line with 1990's banking legislation, the republics' central banks have analogous powers within their own borders (though not with respect to exchange rates), but must act within USSR Gosbank guidelines (Article 8). USSR Vneshekonombank is licensed *ex officio* to deal in foreign currency (Article 8) (though the legislation is not drafted so as to give it a monopoly).

Ultimate authority rests with the USSR Supreme Soviet, to which both USSR Gosbank and the Union-republic *valuta* fund (henceforth URVF) report (Article 6).

The URVF controls the foreign currency that is compulsorily sold to the central authorities by resident earners of foreign currency. It can buy more through the official currency market (auctions, interbank market amongst authorized banks, etc.), and it can also raise credits abroad. Its responsibilities include the funding of centrally determined imports, the service of (USSR) debt and the stabilization of the exchange rate (Article 11). Firms that are at least 30% foreign-owned are not obliged to sell foreign currency to the State (Article 15). Republic and local-authority URVFs have analogous roles and powers, including the right to raise credits abroad, but operate within rules set by the USSR authorities. (It appears that the proportion of foreign currency earnings that must be sold to republic, etc. authorities by foreign-currency earners is set by the central authorities) (Article 12).

Resident legal persons can keep foreign currency in bank accounts abroad provided they make their compulsory sales of foreign currency to the State and notify the authorities (USSR Gosbank?) of their foreign accounts (Article 15). They can also borrow abroad (presumably at their own risk).

Resident citizens can send or take abroad foreign currency, and deposit it with authorized banks or foreign banks, provided it was earned abroad or received legally (for example, by inheritance) from abroad or obtained *legally* (emphasis added) in the USSR. Deals among resident citizens or between resident and non-resident citizens in foreign currency are forbidden, but the purchase of foreign currency for roubles through authorized banks (at a market-determined rate) is allowed (Article 16).

A USSR Supreme Soviet decree of the same date deals with the introduction of this law (same source). Amongst other things, it specifies that earlier legislation must be annulled and/or reconsidered. It refers specifically to the presidential edict of 2 November 1990 (setting a special 40% compulsory sale of foreign currency earnings to the central authorities) as requiring reconsideration in the light of the new law. However, there is nothing in the present law that entails the cancellation or suspension of the key provision of that edict. The decree also requires the USSR Government to come up within three months with a draft law on State insurance of the commercial, investment and currency risks of (Soviet) enterprises. This might include a Soviet equivalent of Western governments' official export credit support arrangements.

Implementation of the law on currency regulation has been limited. The first interbank currency trading under the law took place on 1 April 1991, and a market rate of R 27,6 = USD 1 emerged. This is close to the auction and black market rates. The tourist rate of around R 6 = USD 1 was abolished. At the time of writing, the rate has not changed since then, apparently because the volume of transactions has been less than the USD 10 million (in a day) required to trigger a change in the announced rate. This means that the central monetary authorities — perhaps the only agent in a position to offer larger quantities of convertible currency for sale at the existing rate — have chosen not to do so. Thus the 'market' can only begin to function at the discretion of USSR Gosbank.

Soviet citizens travelling abroad on a personal (non-business) basis can now purchase foreign currency from a bank licensed to trade in currency, at the market rate, under new USSR Gosbank rules for the purchase and sale of currency for foreign travel by Soviet citizens [travelling] on their own account (*Izvestia*, 1 April 1991, p. 2). The rules allow such travellers to buy up to USD 200 or the equivalent in other foreign currencies once a calendar year, and people emigrating to take out only USD 100 per person. Thus a Soviet citizen making a personal visit abroad would need to pay about 50% more than an average year's salary in order to have at their disposal enough currency to pay for two nights' bed and breakfast at a mid-price hotel in Western Europe.

Regular interbank currency trading was to start on 9 April, and to take place every Tuesday and Thursday from then on, at the Centre for Interbank Currency Operations (103066 Moscow, Neglinnaya ulitsa 12 — the address of several USSR banks) (*Izvestia*, 3 April 1991, p. 2). Only the members of the new Exchange can trade directly on it; other legal persons must do so through them, paying up to 1,3% commissions. Any bank licensed to deal in foreign currency in the USSR can become a member of the Exchange. There are at present 11 members.

The Soviet Customs Code is part of the reorganization of Soviet foreign trade away from the old State monopoly system. The reorganization of customs arrangements arises from two circumstances. One is that policy since 1986 has been to diffuse the right to engage in foreign trade from 100 or so foreign trade organizations tightly controlled by Gosplan and the Ministry of Foreign Trade/Ministry of Foreign Economic Relations to over 20 000 different trading and production entities. This means that regulation and reporting of foreign trade flows have to be conducted under explicit, published regulations instead of as an internal, administrative matter. The other is that the USSR wishes to gain GATT membership, and therefore seeks to present to the world a set of trade procedures that is relatively transparent and that lends itself to the introduction of a tariff system appropriate to a market economy.

The Code announces a single USSR customs policy, operating within the borders of the USSR and administered by the USSR Customs Committee. Republics' input to customs policies is via representation to a Customs-Tariff Council attached to that Committee. The USSR Customs Committee is to have a number of regional offices at Soviet borders. The Customs Committee staff have the same rights of investigation, etc. as the (new) USSR Tax Inspectorate, with respect to the collection of export and import taxes. The Committee is responsible *inter alia* for chasing narcotics, for ensuring that customs duties are paid to the Union budget and for customs statistics. It will staff checkpoints at special duty-free zones. Tariff rates are to be published separately.

The law on the customs tariff is complementary to the preceding law. The text covers general principles; it does not list specific rates.

It covers duties on both imports and exports. Import tariffs will be at two rates: MFN or non-MFN; export duties are simply determined unilaterally by the USSR (Articles 6 to 7). The rates may be *ad valorem* or fixed unit amounts or a mixture of the two. There can also be special duties (emergency protection or as counter to unfair competition), anti-dumping duties (where the criterion is that the 'dumped'

item is being sold at a price below that in its country of origin) and compensatory (to offset subsidies to foreign exporters) (Articles 9 to 12). The standard international tariff classification will be used. Rates are to be set by a Customs-Tariff Council, in whose meetings representatives of producers can participate. There are arrangements for determining country of origin (basically country of production for raw materials, etc., or country of further processing if the result of the processing is to change the product's classification or add more than a proportion to be specified to its value). There are provisions for duty-free zones (Article 19). (No reference is made to any special treatment for inputs to joint-venture/foreign-owned production in the USSR (outside duty-free zones) or for their exports.)

Regarding government structure for economic administration, it is appropriate to include here the USSR law of 1 April 1991 'On the list of ministries and other central organs of government of the USSR', with effect from publication (*Izvestia*, 9 April 1991, p. 2)

The new list of ministries sets out the structure of State administration at the Union (USSR) level. The list covers ministries, State committees, and commissions of the USSR Cabinet of Ministers for steering economic complexes (i.e. broad sectors). There has been some reduction from the numbers of a year or so ago (76 Union ministries at the start of last year, *Izvestia*, 28 January 1990, p. 2, as against 49 now). The principle of economic branch ministries has not been abandoned, however. (Nor has it been abandoned at the republic level by most republics.)

The following summary gives a broad idea of the new structure; it lumps State committees and ministries together where their responsibilities seem to be similar in character.

Type of activity	Number of agencies
Non-economic (justice, health, internal, etc.)	7
Functional economic[1]	13
Inter-republic organs of USSR State administration[2]	2
Total branch sectoral agencies	27
comprising:	
Cabinet commissions for economic complexes[3]	2
Industrial branch ministries, etc.	16
Other economic branch ministries	9

[1] Includes the new Ministry of Economics and Forecasting (formerly USSR Gosplan), the new Ministry of Material Resources (formerly Gossnab), the Ministry of External Economic Relations, the Ministry of Labour and Social Problems, etc.
[2] The Union-Republic Valuta Committee (see the law on currency regulation above), and the State Council for Economic Reform.
[3] The Military-Industrial Commission (overseeing seven of the industrial branch ministries), and the Commission for the Fuel-Energy Complex.

Regarding entrepreneurial activity, 'entrepreneurship' or 'enterprise' is defined in the law as 'independently initiated action of citizens, aimed at profit or personal income, undertaken at [their] own risk and on their own material responsibility'. It is applied here to individual, unincorporated business activity and to business conducted through a legal person (firm). The activities of a firm come under the law on enterprises in the USSR, while the activities of a firm created by foreign citizens come under that law and the law on foreign investment. (One draft of the latter has been offered to the Geonomics Institute in Vermont for comments, and they have criticized it for some ambiguities and for a tendency to leave too much scope for *ad hoc* government intervention. Robert Lyle, NCA report from Washington, DC, 10 May 1991.)

The law specifically states that middleman activities are legitimate (a great many earlier Soviet laws and decrees penalized them). It also specifies that entrepreneurs may draw up labour contracts, hire and fire, and decide on the allocation of net profits (Article 5). They may not (Article 6) operate without a labour contract, pay less than the State minimum wage or hinder the formation of a trade union. There is to be State registration of persons engaged in unincorporated business, and it is delegated to republics. The enabling decree calls for a review of existing legislation to remove anything in conflict with the new law. It also calls for people at present registered under the 1986 law on individual labour activity to be re-registered under this law, and for the 1986 law to be cancelled. (The 1986 individual labour activity legislation was highly restrictive: it ruled out full-time private business activity by fit persons of working age and it forbade the employment of non-family labour.)

In general, it is obvious that much of this Union-level legislation is declaratory in character, not necessarily user-friendly, and simultaneously needlessly specific in some respects (long lists of things that are allowed) and insufficiently specific in others (often lacking operational definitions of key terms). Its generally liberalizing direction, with respect to property rights, is none the less clear.

4. Ownership elements in the Shatalin programme and the Russian Republic legislation

Privatization (in the broad, Western sense) was treated clearly and prominently as a central element of the Shatalin '500 days' programme. It is the clear and prominent presentation of this fact that chiefly distinguishes the Shatalin programme from the various documents that constituted the Soviet Government programme, so far as property rights are concerned.

Section 3 has shown that the privatization envisaged in the latter programme is very extensive indeed, and therefore necessarily a central element in the government programme as well; but Soviet government officials have nowhere presented this fact in a clear and forceful way.

This section is concerned, however, with differences of substance between the two programmes, including subsequent Russian Republic legislation, rather than differences in presentation. It will be suggested that these lie chiefly in the clarity of the relevant draft legislation and the role of privatization in the transformation strategy as a whole. Differences in the general character of the institutional changes that were planned are not fundamental.

The short, programmatic statement about the Shatalin group's proposals, 'Man, freedom and the market', conveys the general approach of the group to property rights.[1] In that statement the Shatalin group say that their programme will achieve reform at the expense of the State, not of the people. The Soviet Union, they say, has 'a rich State and a poor people'. By returning resources to the people, the programme will end their poverty. (This claim can be given some meaning by reference to any or all of the gains in allocative efficiency, gains in X-efficiency or movement along the production-possibility curve in favour of consumption; but its implication that restructuring can be painless is specious.)

After the introduction, the statement (which is only about 3 500 words long) has six sections, each dealing with some right. The first two are 'Man's right to property' and 'The citizen's right to economic activity'. The return of property to the people is described as 'an act of social justice'. The desirability of selling, rather than giving away, State assets, is asserted as a general principle, though some scope for free distribution of assets is accepted. The underlying theme is the interest of identifiable proprietors in maintaining and increasing the value of their assets, and therefore in using them effectively.

No top Soviet policy-makers have ever made such a strong and prominent statement of this philosophy of ownership; this is true not only of Ryzhkov and his associates, or later of Pavlov, but also of Gorbachev.

The documents that set out specific proposals of the Shatalin group deal with ownership primarily in the form of a section in the programme itself (*Perekhod k rynku. Chast' I*, pp. 55-69) and in the supplementary volume of draft legislation (*Transition to the market. Part II*, mainly pp. 69-157). The two sources will be discussed in that order.

The programme puts its emphasis on republic legislation. It says that a presidential *ukaz*, 'On Freedom of and the defence of entrepreneurship', provides an all-Union guarantee of equal opportunities for all the various forms of ownership. (The April 1991 USSR law on entrepreneurial activity might be seen as performing this function.) Republic legislation, however, will provide the specific rules of the game.

The general guideline for this Union-republic division is that the Union should continue to control (and not destatify) defence plants not subject to conversion, nuclear facilities, trunk pipelines, main railways, 'communications' (probably the phone system) and defence facilities; and it should supervise the sale of assets in aerospace, electronics, shipbuilding, the merchant marine and major ports. Enterprises in these latter branches should become joint-stock companies, initially with shares held by the State property funds of the republics. Everything else should be handled at republic level.

Union responsibilities are therefore restricted to the military-industrial sector, in the sense of the enterprises that come under those ministries that report to the Military-Industrial Commission (VPK), plus a few other branches in the continued-Union-control category that are apparently thought of as either providing public goods or constituting natural monopolies.

That telephone systems and rail networks can be privatized and have competition introduced into at least some of their activities is, in the Soviet context, a minor criticism. Provided that the other category of Union-responsibility industries is meant to be privatized in due course by its republic holding companies, the division of responsibility between Union and republics is a reasonable one. Problems are likely to arise, however, when it comes to deciding the precise republic shares, and how to do business with separatist republic leaderships.

The Shatalin group was criticized for proposing an implausibly high pace of privatization. They did, but their aspirations in this respect were not as far-fetched as was suggested by the semi-literate critics who read nothing in the programme except the words '500 days'. An imaginative-looking diagram on p. 63 suggests that they in fact envisaged about 20% of industry having been converted to joint-stock enterprises by (the end of ?) 1992, while nearly 70% would still be in State hands. At several points in the programme they in fact acknowledge that State assets simply cannot be sold off quickly. They sensibly point out that it is very hard to sell large blocks of assets before basic capital-market institutions have been created.

[1] 'Chelovek, svoboda, rynok', *Izvestia*, 4.9.1990, p. 3. Also supposedly contained in *Transition to the market. Part II*, 1990 (according to the contents list), but not in the author's copy.

The emphasis is on an early declaration of intent and a preliminary listing of enterprises for sale, plus an early and quick start on the privatization of assets in road haulage, building, the building materials industry (where workforce leasing of enterprises was first developed), retail trade, catering, other services, and the textiles, clothing and food-processing industries.

The early-privatization sectors are intended for sale to individuals, families, small cooperatives and partnerships. The Shatalin group's first target in this area is the sale of half of all retail food stores with a workforce of less than eight by the spring of 1991, and half of all retail non-food stores with less than 11 workers. Together these would apparently account for about 15% of present State retail sales, in outlets at present employing about 600 000 people. Small-scale privatization would continue rapidly through 1991.

One example of such a programme is the Leningrad City Council's sale of an initial tranche of leases on 100 food shops (*Kommersant,* 1990, No 34, p. 4; Yakovchuk, 1990). The aim is to continue for the time being to supply these shops as before through centralized supply channels, while encouraging the new, independent shopkeepers to supplement the centralized supplies on their own initiative — something the existing managers had little incentive to do under State ownership. The number of bidders for these shop premises comfortably exceeds the number of shops offered.

The Shatalin group envisaged the State share of industrial-sector assets falling below 50% in the fifth year of the transformation process — i.e. well after the period of 500 days has elapsed. They envisaged it levelling off at about 20% after eight years or so (*Perekhod,* p. 63). Presumably they expected small-scale privatization in other sectors to move somewhat faster.

The legislative drafts in the Shatalin programme that will be discussed here are the following (page numbers refer to *Transition to the market. Part II):*

RSFSR law on joint-stock companies (pp. 69-87),

RSFSR law on circulation of securities and concerning stock exchanges (pp. 87-96),

(USSR) Regulations for the Committee on Management of State Property (pp. 96-100),

(RSFSR) Regulations on the State Agency for Supervision of operations in securities (pp. 100-105),

USSR law on the property liability of enterprises (pp. 105-112),

USSR law on bankruptcies of juridical persons (pp. 112-120),

USSR law on the bankruptcy and reorganization of enterprises (pp. 120-138),

RSFSR law on foreign investment in the RSFSR (pp. 138-157).

All of these were presented as drafts. The Russian Republic parliament approved the Shatalin programme in early September 1990, so it was, at least in principle and in outline, committed to the Shatalin drafts that were intended for RFSFR legislation.

The discussion of the Shatalin legislative programme on ownership will not be comprehensive. There will first be comments on its general character, in comparison with that of the USSR legislative programme, and then selected points will be discussed on which specific differences appear to be important.

The drafting of the Shatalin documents looks, at any rate to an economist, to be less ambiguous and rather more purposeful: it has fewer statements of general desiderata and more concentration on matters that might plausibly be regulated by law.

It is at the same time less comprehensive in coverage. There is no general framework law on ownership, and no law on land, on intellectual property or on foreign currency markets. The reasons for this difference of coverage are presumably some or all of the following: satisfaction with existing USSR legislation on the subject in question, belief that no legislation on it is needed at all, and the existence of RSFSR laws that were either already approved or still being drafted.

The inclusion in the Shatalin programme of a law on the property liability of enterprises is a definite advantage. It tackles the fundamental question of loan securities and penalties for breach of contract. How successfully it does so, in comparison with Western commercial law, is for lawyers to judge; but there was no comparably serious attempt at this in the contemporaneous batch of legislation associated with the Union government transition programme. There was, however, a reference to future legislation on loan security in the first draft of the Pavlov Government's anti-crisis programme (TASS, 1991).

The drafts on bankruptcy and reorganization also appear fuller and more systematic than any comparable existing USSR legislation.

The draft RSFSR law on joint-stock companies makes it clear that foreign investors are, with some specified restrictions, to be treated on a par with locally based investors. It sets the minimum number of shareholders somewhat higher than the USSR statute: three for closed companies and 10 for public limited companies. It also allows a smaller minimum size of initial capital (R 10 000 and R 50 000, respectively) and of nominal values of shares (R 10). There are no restrictions on individual citizens' ownership of bearer shares, and the legal requirements for internal structure do not include the rather elaborate supervisory board set-up included in the USSR statute.

Registration procedures are not much different, except that the RSFSR Ministry of Finance accepts and maintains lists of registrations. The Union statute, finally, has no counterpart to the requirement that purchases (on the secondary market) of more than 10% of a company's shares have to be reported to and approved by the republic Ministry of Finance.

The draft RSFSR law on securities markets is clearer on the matter of secondary markets, stating specifically that anyone can buy and sell on them. (Reliance on the principle that whatever is not specifically forbidden is allowed, is still problematic in the USSR, partly because a great deal of conflicting earlier laws and regulations are still on the books.)

The Shatalin securities law is also specific in excluding from its ambit the so-called 'enterprise shares' and 'workforce shares' issued under USSR Council of Ministers decision No 1195 of 15 October 1988. (These are referred to in Section 3.) And it addresses the question of capital gains tax on share dealings: it provides for such gains to be treated for tax purposes as income, pending any new legislation on the subject.

In general, it seems fair to say that the Shatalin legislation on companies and securities was more businesslike. One obvious problem was simply that it conflicted on a number of points with the USSR legislation.

The Shatalin draft USSR regulations for a committee to manage the sale of State assets make it clear that the investment trusts to be created as State holding companies under the committee are to do their best to sell off the assets they hold, retaining responsibility for control and management only as an interim arrangement. The presidential *ukaz* of 9 August, setting up the USSR State Property Fund, leaves a good deal of detail to be worked out, and does not exclude the possibility of continued State control; nor do the subsequent draft bases of legislation (see Section 3).

The draft RSFSR law on foreign investment seems on the whole to be simpler, clearer and more generous than the draft USSR law.[1] Registration with the republic Ministry of Finance is required only for firms with majority foreign ownership; others can be registered with local authorities (this is at odds, however, with the law on companies). A foreign firm can set up a branch in the Russian Republic by a fairly simple procedure; the republic Finance Ministry must respond within 90 days of the application and a negative response can be appealed.

Hard-currency profits can be repatriated, including hard currency bought for roubles. No export or import licences are needed. The taxation exemptions appear to be more generous than in the USSR law. The awkward and unclear distinction between joint ventures and wholly or majority-owned foreign firms that emerges from the USSR draft law is not present in this draft. The Shatalin group seem, sensibly, to be assuming that the term 'joint venture' will become redundant, as far as their legislation is concerned. Finally, the list of product groups on whose production there are tax concessions for foreign companies is rather more detailed than in the USSR draft.

Differences between these two draft laws are probably not too serious, since the USSR legislation specifically allows for republic variations.

To complete this outline comparison, it may be noted that the Shatalin programme also contains draft USSR and RSFSR bank laws (*Transition to the market. Part II*, pp. 1-53). Here the key difference is that the Russian Republic reform team envisaged a USSR central bank modelled roughly on the US Federal Reserve Board (they call it the USSR Reserve System). The idea was to give greater authority to republic central banks without departing from monetary union and a single monetary policy.

The Shatalin group's draft legislation on ownership looks on the whole stronger than that of the Union Government. It does however complicate the situation in several areas where either (a) conflicts of USSR and RSFSR legislation arise and it is still not clear whose jurisdiction prevails, and (b) the Shatalin group is backing draft USSR legislation that differs significantly from that of the rival team.

The draft legislation in the Shatalin programme seems to have had some influence on completed RSFSR legislation and, since the spring of 1991, on some USSR legislation as well (see above).

[1] The English translation, the only text available to the author, however, is unclear in some places.

It has not been possible in the time available to conduct anything like a comprehensive survey of recent Russian Republic legislation, let alone the legislation of other republics. Some notes on that of the Russian Republic follow; it will be seen that completed Russian legislation is not necessarily free of the kinds of loopholes and compromises associated with the USSR legislation.

The pieces of legislation in question are the following:

(i) the 3 December 1990 decree of the RSFSR Congress of People's Deputies on the 'Programme of revival of the Russian countryside', which contains changes in the legal framework of land ownership;[1]

(ii) the RSFSR law of 25 December 1990 on enterprises and entrepreneurial activity;[2]

(iii) the RSFSR law of 22 March 1991 on competition and the limiting of monopoly behaviour on product markets.[3]

(i) The main features reported in *Kommersant* are an annual allocation of 15% of RSFSR national income (probably net material product) from 1991 to the development of infrastructure and other investment in the countryside; the writing-off of R 23 billion of short-term State and collective-farm debt; the establishment of a single-rate tax on (farm) land ownership, including private; and the possibility for individuals to buy land from the local soviets, as the local representatives of the State (to which, in principle, the land used by State and collective farms, like all other land, has so far belonged). Land thus purchased cannot be resold for 10 years, and if resold (in the meanwhile, at any time?) must be sold only to the local soviet. The 15% of national income is implausibly high; it would *prima facie* mean over half of all investment going to rural areas; and it is not clear how such an open-ended government pledge can be consistent with a programme of financial austerity and privatization. The compromise over resale of land impedes the development of a market in land, though perhaps not a market in land-use rights.

(ii) The law on entrepreneurial activity covers much of the same ground as the USSR law on the enterprise of 4 June 1990. In other words, it is a framework law covering all forms of business activity. The associated, enabling RSFSR parliamentary decree (same date as the law) provides, however, that the USSR law on the enterprise ceases to be effective within the RSFSR from the date of operation of the new Russian Republic law. This is partly because there are some differences in provisions with respect to forms of enterprise, but mainly because of a dispute over control of enterprises on RSFSR territory that are of all-Union status and therefore traditionally subordinate to USSR ministries.

The main differences from the USSR law are the following:

Rights of management, usufruct and disposal of all State enterprises reside with the RSFSR.

More emphasis is placed on 'entrepreneurship' as an important category; provisions relating to municipally owned enterprises are rather more substantial; the terms 'collective' and 'cooperative' ownership are not used; the right of the work collective to take part (with the 'owner') in appointing the director is reasserted with respect to State and municipal enterprises (Article 31; it was dropped in the USSR law).

The listed forms of ownership are: State, municipal, individual/family (with no hired labour), unlimited liability partnerships (*polnoe tovarishchestvo;* Article 9), limited liability partnerships/closed companies (Article 11), partnerships/companies combining limited-liability and unlimited-liability owners (Article 10), public companies (joint-stock with freely tradable shares, Article 12); workforce leasing or purchase is also referred to (Article 15), but is presumably envisaged as combined with one or other of the above forms of company.

Article 24, dealing with foreign trade, makes no reference to import licensing. It simply asserts the right of all enterprises to engage in foreign trade; it also refers to RSFSR export controls over selected items, and to profits in hard currency being subject to RSFSR (only) tax.

(iii) The Russian law dealing with monopoly and unfair competition. It does not appear radically different from the USSR law on the same subject, of 16 August 1990 (*Ekonomika i zhizn'*, 1990, No 38 (supplement), pp. 2-3).

The law sets up an RSFSR State Committee for anti-monopoly policy, under the republic's Council of Ministers. Its coverage extends to restrictive agreements made outside the RSFSR if they affect markets in the republic. It specifically excludes anti-monopoly policies with respect to financial markets, which are to be provided for in other legislation.

Like the USSR law, this republic law defines anti-monopoly policies as directed against 'dominant market positions' from which an enterprise can determine the terms of transactions within a particular market. It resembles the Union-level legislation, again, in being also directed at unfair trading, in

1 As outlined in *Kommersant*, 1990, No 47, p. 10; with effect from (apparently) 1.1.1991.
2 *EZh*, 1991, No 6, pp. 16-18.
3 *EZh*, 1991, No 19, pp. 24-25.

the sense of deception of customers; in providing for powers to break up enterprises/other entities; and in being aimed in part at State administrative structures such as branch ministries.

It differs from the USSR law in several ways. It sets a 35% market share as one criterion for a presumption of market dominance, while allowing for a firm with a share of more than 35% to defend itself by showing that it did not determine terms of transactions, whereas the USSR law treats a 70% market share as providing a presumption of dominance, and treats shares between 35 and 70% as providing grounds for a watching brief. It refers to restrictions on market entry as a form of market dominance, while the Union law does not. It does not, unlike the USSR law, deal explicitly with interlocking shares, though that may be because financial-sector legislation is meant to do this. It gives far less attention than the Union law to prescribing moves away from administrative price-setting from above and to dealing with related issues like the traditional differentiation of pay-scales according to enterprise size.

Both laws enjoin their anti-monopoly agencies to assist in creating market infrastructures and otherwise positively to encourage competition. The Union law refers to the facilitating of imports as a means to this end, while the Russian Republic law does not.

5. Preliminary assessment

The first point to be made is that there is extensive agreement on major issues of principle in the various established and draft pieces of legislation on ownership. The general aim implicit throughout is the creation of a mixed economy. The thinking behind it is also reasonably clear.

The various teams of establishment reformers all appear to endorse the following proposition: the attempt at transforming Soviet economic performance would begin to succeed if the managers of production units found they had to worry more about customers and actual or potential competitors than about the higher authorities; if this was true for investment and market entry and exit decisions as well as for current output decisions; if all such decisions were taken in an environment where prices tended to reflect relative scarcities; and if there were more or less predictable rewards for success and penalties for failure.

Similarly, there seems to be agreement that only an economy with identifiable proprietors of capital assets can provide such an environment.[1] The arguments for this second proposition are often implicit rather than explicit. They include the following:

(a) if there is no market in which capital assets are valued, there is no reliable basis for product prices that reflect opportunity costs in production (the existence of a product market is also necessary for the appropriate valuation of capital assets, so the link runs both ways);

(b) the existence of a capital market with competition for asset ownership provides both the possibility of free product-market entry and exit and of a market for corporate control, through which the managers of assets are under pressure to respond to asset-owners' interests in maintaining and increasing the value of assets;[2]

(c) arrangements of this sort are more conducive to static allocative efficiency, X-efficiency and technological progress than the existing system of State ownership.

The Soviet and Russian legislation and draft legislation reviewed in the previous two sections are widely criticized by Soviet radical reformers as inadequate.[3] The outside observer, however, is bound to say that these measures are at any rate clearly aimed at the creation of the legal framework for a mixed economy. The Union government measures contain their share of bureaucratic traps and half-measures; but those weaknesses seem to be less with the more recent measures than with the earlier measures within the package.

For example, the ambiguities in the framework law on ownership in general (see above) are greater than those in the joint-stock company statute or the draft law on foreign investment. And in successive drafts of the law on the central bank, subordination of USSR Gosbank to the USSR Government gave way to subordination to parliament — in the Soviet context, this is probably an improvement.

There are also some missing elements and loose ends in one or both programmes that are quite important. First, the question of the future ownership of land is still contentious and far from any apparent solution. The development of a market in land-use rights may be sufficient to support the general development of the market, but there is so far no clear provision for such a market.

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1 Earlier papers (Hanson, 1989 and 1990) cite a range of recent Soviet sources to this effect. Interviews by the author in Moscow and Leningrad in August 1990 with more than a dozen reform thinkers have reinforced this interpretation.

2 For a review of Western literature on the relationships between ownership and control see Vickers and Yarrow, 1988.

3 This includes some severe criticism of the Shatalin programem, e.g., Larisa Piyasheva in Hayekian vein in "Sotsial'noi spravedlivosti v ekonomike ne sushchestvuet...", *Komsomol'skaya Pravda*, 6.10.1990, p. 2.

Second, the half-measures, bureaucratic traps and disabling lower-level counter-measures have not disappeared from the Union-level legislation. It is not clear, for example, why there should be labour-force ceilings on 'small enterprises' when some of the dynamism of mixed economies comes from those small firms that succeed in getting big.

And there is a real risk that the conversion of State enterprises into companies will be managed in such a way that the State keeps a majority stake or ex-*nomenklatura* managers become the new owners, with undiminished monopoly power.[1] Nor are such problems absent from the Russian legislation — notably on land.

Third, the instability of the political situation in 1990/91 has been such as to generate a sudden rush of re-centralizing, illiberal measures from the Union authorities, between autumn 1990 and spring 1991. Unlike the lower-level counter-measures referred to in the previous paragraph — which are a chronic problem — this little outburst of anti-reform measures came from the top: from the President of the USSR, in the form of presidential edicts, and from the USSR parliament.

They included a law of 31 October 1990 increasing penalties for speculation and middleman activity; a presidential edict of 30 November 1990 strengthening workers' control over retail trade, to maintain order; another presidential edict of 26 January 1991 on measures to combat economic sabotage, which appeared to open the way to arbitrary searches of the premises and documents of foreign firms; various clumsy measures designed to combat inflation by, for example, a centrally directed raising of (nominally still controlled) retail prices; and the imposition of a special regime in the energy and transport sectors.[2]

Some of these measures made some sense in the context of the USSR anti-crisis programme, which was simultaneously liberal on price decontrol and ownership (TASS, 1991; Bush, 1991). Most of it, however, was simply in conflict with the liberalizing measures discussed above. This little outburst of illiberal measures appeared to reflect a strengthened Gorbachev alliance with conservatives. So far as a programme of liberal reform is concerned, however, it simply underlined the fragility of the political base for the legislation reviewed here.

Fourth, the implementation of the legislation calls for an infrastructure of skills and institutions that is still only rudimentary: commercial law and accountancy skills, stock exchange institutions and so on. These cannot be built up overnight.

Finally, experience in China, Hungary and Poland already makes it clear that privatization of a large proportion of the economy — in part for the reasons just given — simply cannot be rapid.

The ownership measures must also be considered, not merely as a framework to be arrived at, but as part of the transition process towards a new system. In other words, the timing and pace of their adoption and implementation are crucial.

How should the timing and pace of the Soviet privatization programme be determined if the economic transformation is to succeed? This is not the place to embark on the difficult question of desirable sequencing of the transformation process. The following remarks, however, address the narrower question of how the timing of the initiation of ownership legislation and the speed of its implementation can affect other elements in that process.

The main groups of policy measures in a transformation of the Soviet economy to a market system are: macroeconomic stabilization; decontrol of prices and quantities; privatization; and opening up to the international economy. The process of structural change is also part of the transformation, but is a consequence of these measures rather than a set of measures in itself.

All of these groups of measures take extended periods of time to design, introduce and implement. They are more or less certain to overlap one another in time, so that sequencing cannot be reduced to saying: do A before B. Moreover, policy-makers have to get the sequence right in a cardinal, and not merely an ordinal sense.

In general, the linkages between the various groups of measures run in all directions. There are at least four major linkages between a privatization programme and the other components of the transformation process.

First, privatization can contribute to stabilization because it promises to change the prevailing patterns of microeconomic behaviour of enterprises that help to generate inflationary pressure. In Kornai's terminology, the introduction of hard budget constraints (presumably on some critical mass of enterprises) may be a necessary condition of macroeconomic stabilization. This consideration is strengthened by the simple observation that the sale of State assets provides revenue that helps to bring the State budget deficit under control.

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1 This has been a serious problem in Poland and Hungary. See the contributions by Paul Marer, David Stark, Marton Tardos and others to the April 1990 Trento Conference on Self-Employment and Entrepreneurship in the Socialist Countries, (proceedings forthcoming).

2 Respectively, *Izvestia*, 3.11.1990; *Izvestia*, 1.12.1990; *Izvestia*, 28.1.1991; *Izvestia*, 27.3.1991; *Izvestia*, 29.4.1991.

In other words, it may be futile to wait for purely budgetary and monetary reforms to create a stable monetary environment before embarking on privatization. Some analyses suggest that this has been the case so far as banking reforms in China are concerned (Herrmann-Pillath, 1990).

Second, there is a chicken and egg relationship between privatization and decontrol. Assets cannot be sensibly valued while product prices are controlled; decontrolled product prices, however, will not reliably reflect opportunity costs until there is a market in which capital assets are valued according to their yields in alternative uses.

Third, there is a tricky relationship between privatization and opening up the product market to import competition. If assets are sold while the product market is still heavily protected, and if this protection is not expected to be removed soon, the values of the assets will be greatly different from what they would be if the assets had to be operated in conditions of strong import competition.

German unification illustrates one extreme solution, in which the value of former GDR assets, at least those used in the production of tradables, was sharply reduced by the abrupt and complete opening of the product market. Conversely, in less open product-market conditions (say, Skoda rather than Trabant conditions), any initial privatization without the opening of product markets is subject to a threat of substantial losses of asset values later. Therefore if you privatize first, you strengthen domestic political pressures to maintain protection. Both early opening of product markets (perhaps step-by-step in a pre-announced programme) and early opening to foreign direct investment seem desirable.

Finally, the sequence of privatization itself must be affected by the speed and sequence of other measures. Thus it makes sense to start first and move fastest with small-scale privatization, for several reasons. The estimation of expected returns on assets is likely to be easier, in part because retailing, consumer services and building are less vulnerable to import competition than manufacturing, and in part because they are already selling to hard-budget-constraint buyers — namely, households. The monopoly problem is also generally smaller in these sectors.

One conclusion, then, would be that the various privatization programmes are generally sensible with respect to the branch sequence of assets to be privatized.

Finally, with respect to sequencing, the hope of achieving rapid stabilization before significant ownership changes are in place could turn out to be doomed, for the Kornai-type reasons suggested above.

All of this illustrates the difficulty of the transformation process. The Shatalin programme sought to handle such difficulties by early announcement of a complete package of measures and an announced timetable of rapid implementation. Over-precise and over-ambitious as parts of the Shatalin programme appear, the serious attempt to influence expectations in this way was a strength when the programme first appeared. The Pavlov anti-crisis programme, with dates for price decontrol and for stages of privatization, has benefited from the Shatalin programme's example.

For all their deficiencies, the various pieces of ownership legislation may be capable of contributing to an eventual muddling-through solution, however hard that may be to imagine at present. The transformation of establishment thinking that they represent is the most encouraging aspect, and it is an important one: not a sufficient, but at any rate a necessary condition for progress.

References

Bush, K. (1991), 'Pavlov's anti-crisis programme,' *Report on the USSR,* RFE/RL Research Institute, Vol. 3, No 20, 17 May, pp. 1-7.

Cohen, A. (1991), 'The developing Soviet market: commodity exchanges,' *Report on the USSR,* RFE/RL Research Institute, Vol. 3, No 20, 17 May, pp. 11-16.

EC Commission, (1990), 'Stabilization, liberalization and devolution: assessment of the economic situation and reform process in the Soviet Union,' *European Economy,* No 45, December.

Hanson, P. (1989), 'Capitalism or socialism? A minor semantic issue in the Soviet reforms', *Détente,* No 16, December, pp. 3-8, 14.

Hanson, P. (1990), 'Ownership issues in *perestroika*', in J. Tedstrom (ed.), *Perestroika and the private sector of the Soviet economy,* Boulder Co, Westview Press, pp. 67-99.

Herrmann-Pillath, C. (1990), 'Anpassungsprobleme des chinesischen kreditsektors wahrend der Austeritätspolitik', *Aktuelle Analysen,* No 33, Bundesinstitut für ostwissenschaftliche und internationale studien, 1 June.

IMF, IBRD, OECD, EBRD (1990), *The economy of the USSR,* Washington, DC.

Noren, J. H. (1990), 'The Soviet economic crisis: another perspective', *Soviet Economy,* Vol. 6, No 1, January/March, pp. 3-56.

'Osnovnye napravleniya po stabilizatsii narodnogo khozyaistva i perekhodu k rynochnoi ekonomike' (1990), *Izvestia,* 17 October, pp. 1, 3.

Perekhod k rynku. Chast' I. Kontseptsiya i programma (1990), (Rabochaya gruppa obrazovannaya sovmestnym resheniem M. S. Gorbacheva i B. N. El'tsina), Moscow, Arkhangel'skoe, August.

Pinsker, B. and Piyasheva, L. (1989), 'Sobstvennost' i svoboda', *Novyi mir,* No 11, pp. 184-199.

Popkova, L. [now writing as Larisa Piyasheva] (1987), 'Gde pyshnee pirogi?', *Novyi mir,* No 5, pp. 237-240.

Selyunin, V. (1990), 'Ekonomika bez kommunistov', special issue of *Referendum,* July (16 pp.).

TASS (1991), 'Proyekt programmy deistvii Kabineta Ministrov SSSR po vyvodu SSSR iz krizisa', 9 April.

Transition to the market. Part II. (Draft of legal acts), (1990), (A working group formed by a joint decision of M. S. Gorbachev and B. N. Yeltsin), Moscow, Arkhangel'skoe, August (Part II of *Perekhod,* above; translated and printed by the Cultural Initiative Foundation, Moscow).

Vickers, J. and Yarrow, G. (1988), *Privatization. An economic analysis,* Cambridge MA, MIT Press.

Yakovchuk, N. (1990), 'Leningrad, fondovaya birzha', *Ekonomika i zhizn',* No 41, p. 7.

Labour issues in the USSR[1]

Susanne Oxenstierna

Research Fellow, Swedish Institute for Social Research,
University of Stockholm, Sweden

Contents

[1] Revised version, 23 August 1991.

Tables

1. Introduction

Evidence from Eastern Europe, particularly from Poland and former East Germany, shows that the transition of a Soviet-type economy to a market-oriented economy is associated with a sharp rise in unemployment. In the Soviet Union the transition of the economy has not come very far yet. Nevertheless, the economic reform process initiated in 1987 and the crisis situation which evolved in the Soviet economy have produced noticeable changes on the labour market. Previously, people could only be employed in the State sector or the collective farm sector, the risk of being laid off was minimal, wages were centrally fixed and stable, and labour relations were under strict control. Now, people have the opportunity to be self-employed and to work for cooperatives, unemployment is rising, nominal wage increases have been dramatic, and strikes have become a common phenomenon.

This study attempts to give a tentative picture of some aspects of developments on the Soviet labour market in recent years. We start by describing the basic characteristics of the labour market before the transition. Then we discuss labour supply trends in the 1980s and 1990s using recently published data from the last population censuses. We find that labour force participation rates have been declining among the active population, and that there are sharp differences between the different parts of the USSR. This suggests that regionally differentiated approaches should be adopted in labour policy during the transition. The fourth section describes employment trends in the late 1980s and early 1990s, and their causes. State-sector employment has decreased markedly since the start of economic reforms in 1987. It is widely believed that these reforms have had some dampening impact on labour demand in the State sector and that the decline in employment is basically a result of labour shedding. This study argues that factors influencing labour supply might have been as important, if not more important, for this development. The major portion of the growth of the labour force can be found in Central Asia and Transcaucasia,[1] where labour force participation is lower than the USSR average. In addition, the economic reforms have brought about a wide range of changes in economic variables which may have caused some decline in State-sector employment. In particular, the introduction of a legal private sector has affected the labour market. The fifth section analyses the various estimates of unemployment which have been forwarded by Soviet and Western observers; and the sixth considers options for labour market policies. Finally, the conclusions that can be drawn from the foregoing discussion are presented.

[1] Central Asia includes the republics of Uzbekistan, Tadjikistan, Turkmenistan, and Kyrgyzstan. Transcaucasia includes Georgia, Armenia, and Azerbaijan.

2. The labour market before the start of the transition

Since the 1960s, the allocation of labour in the Soviet economy has been accomplished by a mixture of planning and market elements. The demand for labour was an integrated part of production planning. Centrally set priorities and investment allocations formed the basis for the level and structure of employment. The number of workers of different categories to be employed in each plan period by a particular enterprise was regulated by plan indicators dictated from above.

The regulation of labour supply was more indirect. In April 1956, Khrushchev abolished the harsh restrictions on workers' mobility which had been imposed in 1940.[2] Since 1956, workers have been able to change jobs at their own initiative, an opportunity which has been used by over 20 million persons in the non-agricultural work-force per year.[3] Mobility was governed by economic incentives such as wages, fringe benefits and working conditions, and relative living standards, in particular by the varying availability of housing and consumer goods and services among regions. The difficulty of acquiring a (city) residence permit (*propiska*) limited migration to big urban centres.

First-time job-seekers with higher education or specialized secondary education were subject to administrative compulsory placement. Usually the assignment in the first job was three years (Oxenstierna, 1990, pp. 108-10). Also, graduates from vocational training establishments were placed in jobs, usually at a large enterprise associated with the vocational training establishment (Oxenstierna, 1990). Apart from these administrative instruments, the institution of 'organized recruitment' (*orgnabor*) served as a special channel for mobilizing labour, particularly for construction projects in Siberia and the Far East. There were also the particular recruitment channels for mobilizing young people to particular projects (Komsomol appeals, *obshchestvennye prizyvy*), and the local recruitment of labour for priority tasks (patronage, *shefskaya pomoshch'*), such as bringing in the harvest (Oxenstierna, 1990, pp. 111-13). However, in the beginning of the 1980s, administrative forms of placement accounted for only 15 % of all hirings (Oxenstierna, 1990, p. 98). Thus, although administrative instruments have been important for allocat-

[2] These entailed that an employee could not leave his job without the permission of the employer, and that employers had the right to order compulsory transfer of workers between factories and regions (see further Hauslohner, 1984, pp. 98-101).

[3] Several sources quoted this figure in the 1980s (see, for example, Manevich, 1983, p. 4; Kotlyar and Talalai, 1981, p. 34).

ing certain segments of the labour force, it is relevant to talk about a labour market even before the start of Gorbachev's economic reforms.

The main Soviet employment problem in the past was inefficiency in labour allocation and utilization.[1] On the macro-level there was no mechanism to guarantee that labour was allocated where it would be used most productively; and on the micro-level economic incentives encouraged employers to hoard rather than economize on labour resources. Up to the 1980s, the manpower requirements of the extensively growing economy (at least of priority activities) had nevertheless been ensured either by mobilizing new groups into the labour force (as in the 1960s, when labour force growth was high because of a great influx of women to the labour market) or by high growth in the working-age population (as in the 1970s). In the 1980s, however, when labour force participation was already high and the rate of growth of the working-age population fell markedly, it was no longer possible to solve the problem using an extensive approach. Pensioners were encouraged to continue working after reaching retirement age and people were encouraged to take a second job, but it soon became clear that the only remedy for the labour 'shortage' was to raise efficiency and labour productivity.

The measures undertaken in the early 1980s were primarily geared to the 'X-inefficiency' in labour utilization at the enterprise level and the 'poor work ethic' of Soviet workers. Andropov launched his discipline campaign (1982-83) to get people to be at work during working hours, not to be drunk during working hours, and actually work at their jobs. Legislation relating to labour discipline was significantly reinforced in August 1983, and measures were introduced to reduce the leaving-rate (turnover, *tekuchest'*). Andropov also launched new plan indicators and new rules for managers' bonuses to spur the growth of labour productivity. An experiment in alternative management methods was launched in 1984. The measures had a temporary effect on labour productivity and worker turnover declined, but soon economic indicators resumed their earlier tendencies (see further Teague, 1988).

3. Labour supply trends

Up to the 1980s, labour force participation rates (LFPRs) increased in the Soviet Union. In the 1960s, the growth was primarily accounted for by a sharp rise in women's LFPRs. In 1959, 69 % of women in the working-age age-groups[2] participated. In 1970, this was 82 %. In the 1970s, LFPRs remained high (the LFPR of working-age men declined from 88 % in 1970 to 87 % in 1979, and women's LFPR rose from 82 % to 84 %) and labour force growth was primarily due to growth in the working-age age-groups.

Labour force participation rates are derived from the tables giving data on people's major source of income in the population censuses. Since the war, four censuses have been conducted, in 1959, 1970, 1979, and 1989. Unfortunately, the detailed tables for 1979 and 1989 with a breakdown of age-groups and sex have not been published yet, which inhibits the study of the changes in LFPRs among different groups. Nevertheless, from the information available we can calculate the LFPRs of the working-age population (16-59 years for men; 16-54 years for women) and of the population beyond the statutory working ages. This reveals two interesting trends. First, we find that the LFPR of the working-age population fell during the 1980s, second that the LFPR of the older population rose (Table 1).

Table 1

Labour force participation[1] in the USSR, 1959-89

(%)

	1959	1970	1979	1989
Population 16-54/59 years[2]	78,2	84,9	85,5	83,9
Population > 55/60[3]	21,3	12,9	12,3	17,8
Standardized LFPR[4]	73,9	75,5	78,4	76,2

1 Excludes those employed in private subsidiary agriculture.
2 Refers to the population of normal working ages, which according to Soviet standards are 16-54 years of age for women, and 16-59 years for men.
3 Refers to population over normal retirement age, which in the Soviet Union is 55 years of age for women, and 60 years of age for men.
4 Total labour force divided by population aged 15-64 years.

Sources: Oxenstierna, 1990, p. 185; *Statisticheskii press byulleten'*, No 13, 1990, pp. 76 and 78; *Vestnik statistiki*, No 6, 1990, p. 62; *Naselenie*, pp. 48-9.

The standardized labour force participation rate also fell by 2,2 percentage points in the 1980s. This is a break from the previous trend of a rising labour force participation rate in the 1960s and 1970s. These developments entail that there were 3,6 million more non-employed persons among the working-age population in 1989 than in 1979. At the same time the number employed in the population over 55/60 years has increased by the same magnitude. In 1989, the population in the working-age age-groups made up 94 % of

1 Various explanations for these inefficiencies have been forwarded in the Western literature (see Oxenstierna, 1990, Chapter 2, for a review).

2 According to Soviet standards the working-age age-groups are 16-54 years for women and 16-59 for men. Normal pensionable age is 55 years for women and 60 years for men.

the total labour force of 142 million, compared to 96 % in the 1970s (Table 2).

The falling labour force participation of the working-age population appears primarily to be accounted for by the uneven geographical distribution of the growth in these age-groups. During the 1980s, the growth of the working-age population was around 7 million persons and nearly all of the growth took place in the Central Asian republics. As shown in Table 3, labour force participation rates in the working-age population in the Central Asian and Transcaucasian republics are significantly lower than the USSR average. In 1989, over 6 million people (24,4 %) in the working-age population were non-employed. This means that while 16 % of the Soviet working-age population were in Central Asia and Transcaucasia in 1989, almost a fourth of all the non-employed in these age-groups could be found in this region.

Is this a problem or not? In 1986-87, resolutions were passed by the secretariat of the Central Committee of the CPSU expressing concern about these numbers; 3 million of the 6 million non-employed were considered a 'labour reserve' which could be drawn into social production (*Izvestiya TsK KPSS*, No 5, 1989; *cf* Marnie, 1991, pp. 10-11). Later these figures have been used to argue that there are considerable numbers of unemployed in this area. For instance, one observer claims that the 3 million are active job-seekers who cannot find work (Semenov, 1990, p. 49). Marnie (1991, p. 12) arrives at an estimate of 2 million unemployed, of which half are living in Uzbekistan.

However, much of this concern is a result of past approaches and practices concerning the active population. Soviet authorities have estimated how many could possibly be mobilized into social production, or the 'labour resources' of the country. These calculations do not take account of people's actual labour market behaviour. In fact, many cultural factors might explain considerably lower participation rates in the southern republics compared to the European parts of the USSR.

For example, the number of children per thousand of population is much higher here than in other parts of the USSR. The USSR average was 17,6 in 1989. In Uzbekistan the corresponding figure was 33,3, in Tadjikistan, 38,7, in Turkmenistan, 35,0, and in Kyrgyzstan, 30,4. In the Transcaucasian republics, this indicator is lowest for Georgia, 16,7, while for Armenia and Azerbaijan the indicator is above 20 (*Ekonomicheskoe i sotsial'noe...*, p. 37). The growth of the population in Central Asia is around 30 per thousand of population, while the USSR average is around 7 to 8 (ibid., p. 38). Average family size is 5 to 6 in the Central Asian republics, and 4 to 5 in the Transcaucasian republics, as

Table 2

The Soviet labour force, 1959-89

(1 000)

	1959	1970	1979	1989
Total labour force	99 130	115 204	134 860	142 014
Labour force aged 16-54/59 years[1]	93 692	110 511	129 864	133 326
Labour force > 55/60[2]	5 438	4 693	4 996	8 688

[1] Refers to the labour force in the normal working ages, which according to Soviet standards are 16-54 years for women, and 16-59 years for men.
[2] Refers to labour force over normal retirement age. Employees have been eligible for an old age pension upon reaching the age of 55 (women) and 60 (men) if they have spent at least 25 years (men) or 20 years (women) in employment (see further Oxenstierna, 1990, pp. 194-8).

Sources: Oxenstierna, 1990, p. 185; *Statisticheskii press byulleten'*, No 13, 1990, pp. 76 and 78; *Vestnik statistiki*, No 6, 1990, p. 62.

Table 3

Number of non-employed in the working-age[1] population in the USSR and selected republics, 1989

	Working-age population	Non-employed working-age population	
	(1 000)	(1 000)	(%)
USSR	158 911	25 585,0	16,1
Central Asia	16 024	3 600,2	22,5
Uzbekistan	9 720	2 148,1	22,1
Tadjikistan	2 410	641,1	26,6
Turkmenistan	1 751	369,5	21,1
Kyrgyzstan	2 143	441,5	20,6
Transcaucasia	8 785	2 443,7	27,8
Georgia	3 039	699,0	23,0
Armenia	1 858	652,2	35,1
Azerbaijan	3 888	1 092,5	28,1
Central Asia and Transcaucasia	24 809	6 043,9	24,4

[1] Population aged 16-59 years (men) and 16-54 (women).

Sources: Vestnik statistiki, No 6, 1990, pp. 62-77. *Statisticheskii press byulleten'*, No 13, 1990, pp. 78-9.

compared to the USSR average of 3,5 in 1989 (*Vestnik statistiki*, No 6, 1990, pp. 78-9). In the rural population, family size is larger, and a larger part of the population lives in rural areas in the southern republics than in the rest of the USSR. Thus, the way of life, particularly in the predominantly Muslim republics of Central Asia, differs considerably from that in industrialized parts of the country and lower participation in the labour market is probably largely explained by a lower proportion of the active population, especially women, wanting to participate.

Moreover, the proportion of the population engaged in private subsidiary agriculture (which was not regarded as productive work in the past) is larger in these republics than the USSR average. In 1989, 2,6 % (4,3 million, including private farmers) of the total estimated 'labour resources' (164 million) in the USSR were reported as working in private subsidiary agriculture (*Ekonomicheskoe i sotsial'noe* ..., p. 43). In the Central Asian republics over 10 % of the estimated labour resources (the absolute figures are not given) were engaged in this sector, and in the Transcaucasian republics around 6 % (ibid.). These figures probably underestimate the amount of people doing productive work on the private plots, and it can be assumed that if the correct figure of these people could be obtained and if people engaged in the subsidiary economy were included in the labour force, the difference in labour force participation between republics would diminish. Data from Goskomstat (the State Committee on Statistics) on the percentage proportion of the estimated labour resources in employment including private plots support this hypothesis (ibid.).

Thus, the numbers of non-employed, or the proportion of the active population which is non-employed, does not in itself indicate a serious unemployment problem in the Central Asian and Transcaucasian republics. A large part of those who do not participate on the labour market do so by their own choice (or for social and cultural reasons). Data that would seem to indicate a serious unemployment problem in this region probably reflect unemployment concentrated in big urban centres and amongst young age-groups. Thus, it is crucial to obtain disaggregated information on the non-employed population and preferably straightforward information on the numbers actively searching for a job, that is, the unemployed. This way much confusion regarding the aggregate unemployment estimates (see Section 5) could be eliminated and, what is more important, relevant policies on how to cope with unemployment in this region could be worked out.

Between 1990 and 1995, as well, the large part of the increase in the working-age population will occur in the less-developed republics. According to a forecast made by Goskomstat, of the increase of 3,6 million persons in 1990-95, 80 % are located in the Central Asian and Transcaucasian republics. Thus, in the European parts of the country the growth in the working-age population will be only about 600 000 over the five-year period. Between 1995 and the year 2000, the increment is forecast at 8,3 million, of which about 50 % will come from Central Asia, Kazakhstan, and Transcaucasia. About the same proportions will prevail in the period 2000-2005. However, in the following two five-year periods, when the net increment is forecast at 4,4 million and 3,2 million, respectively, the whole increase will take place in the southern parts of the USSR, while the Slavic republics will experience an absolute decrease in the working-age population (*Vestnik statistiki*, No 10, 1991).

Thus, there are and will be great regional differences on the supply side of the labour market in the USSR. This implies that a disaggregated approach must be applied both in analyses of the situation as well as in recommendations of appropriate labour policies.

4. Employment

The two major changes in the Soviet pattern of employment after the start of the transition have been the decline in State-sector employment and the rise in legal private employment. As shown in Table 4, State-sector employment has declined by about one and a half to two and a half million persons a year since 1988, or by almost over 5 million persons between 1985 and 1990. Including employment in the *kolkhoz* (collective farm) sector, the decrease over five years was 6 million. As a result, the number employed in the State sector is now below the 1980 level. Meanwhile, employment in cooperatives and other legal private activities (excluding private subsidiary agriculture) has risen from nil in the mid-1980s to over 4 million at the beginning of the 1990s. The Soviet authorities have started to publish figures also for total employment including private subsidiary agriculture. From these we can see that altogether, employment in the State, the collective farms, and the cooperative and individual sectors rose to 139,3 million persons in 1989. Thereafter total employment declined to 138,4 million in 1990 (*Ekonomika i zhizn'*, No 5, 1991). Further decline occurred in the first six months of 1991, when total employment fell to 135 million (*Ekonomika i zhizn'*, No 17, 1991). The greater part of this decrease took place in the State and collective farm sector where employment fell by about 3,5 million.

Developments in recent years represent a sharp break with the previous trend in employment. In the 1960s and 1970s, State-sector employment rose by around 10 million persons

Table 4

Trends in Soviet employment, 1986-91 (Jan.-June)

(1 000)

	1986	1987	1988	1989	1990	Jan.-June 1991
State sector[1]	118 503	118 572	117 236	115 433	112 936	109 976
Annual change	705	69	−1 336	−1 803	−2 497	−2 960
Kolkhoz sector	12 560	12 236	11 700	11 600	11 500	10 700
Annual change	−127	−324	−536	−100	−100	−800
State and *kolkhoz* sector	131 063	130 808	128 936	127 033	124 436	120 676
Annual change	578	−255	−1 872	−1 903	−2 597	−3 760
Consumer cooperatives	n.a.	n.a.	n.a.	n.a.	3 500	3 400
Cooperatives[2] (excl. part-time)	n.a.	n.a.	743	3143	4 208	4 500
Annual change	–	–	–	2 400	1 065	300
Self-employed[2]	n.a.	427	734	673	200	200
Private subsidiary agriculture	n.a.	n.a.	n.a.	4 000	4 200	3 700
Private farmers	n.a.	n.a.	n.a.	n.a.	100	100
Reported total employment	n.a.	n.a.	n.a.	139 300	138 400	135 000

[1] The figures regarding State-sector employment in 1990 and 1991 should be regarded with some scepticism. Since 1989 Goskomstat has changed the breakdown in their reports on employment each year. Heleniak (1991) explains the inconsistency of the figures, which have appeared in different publications, by Ministry of Defence employment being included in some figures and excluded in others. The initial figures for State-sector employment given in the plan reports for 1990 and Jan.-June 1991 were 114 600 and 111 900 respectively, which, according to Heleniak's interpretation, includes Ministry of Defence employment. The figures given in this table are from Narkhoz (1990) and an unpublished table provided to me by Goskomstat, and should exclude Ministry of Defence data. If Heleniak's interpretation of the different figures is right, this implies that part of the decline in State-sector employment is explained by an increase in Ministry of Defence employment. From Heleniak's analysis of the available data this rise would particularly be due to increases in Ministry of Defence employment in construction, transport and communications.

[2] The reported numbers of self-employed and those employed in cooperatives vary between different sources. Here the numbers for cooperative employment in 1988 and 1989 are calculated from the figures on total cooperative employment and the number of holders of several jobs in Narkhoz, 1988 and 1989, and that for 1990 from the corresponding figures in *Ekonomika i zhizn'*, No 20, 1991. The numbers of self-employed in 1987 is the number reported in *Trud v SSSR*, and those for 1988 and 1989 are the numbers reported in Narkhoz, 1988 (p. 329), and Narkhoz, 1989 (p. 275). The remaining figures for these two items are from the plan fulfilment reports in *Pravda*, 28 January 1990, and *Ekonomika i zhizn'*, Nos 5 and 30, 1991.

n.a.: not available.

Sources: Trud v SSSR, pp. 30-1, 76 and 276; Narkhoz, 1988, pp. 322 and 329; Narkhoz, 1989, pp. 48-9 and 268; Narkhoz, 1990, p. 108; *Ekonomika i zhizn'*, Nos 5, 20 and 30, 1991; *Pravda*, 28 January 1990; unpublished data from Goskomstat.

in each five-year period. In the first half of the 1980s, the growth in employment slowed down, but nevertheless the increment was about 5 million persons (Table 5).

As shown in Table 5, it is employment in the productive sector[1] which has lost ground in absolute terms. Agricultural employment decreased by over 2 million (including *kolkhozy)* in 1985-89. The transportation sector employed 2 million, or 20 %, fewer workers in 1989 than in 1985. Employment in railway transportation has decreased by 10 %, and in road transportation by 24 %. The only productive sectors which have experienced an increase in employment during the period are the construction sector and the unspecified activities included in the productive sector.

Employment in the non-productive sector[1] increased by almost 1 million in 1985-89. All sectors except State and local administration and sciences have increased their employment. The rise in employment in the two largest non-productive sectors, education and health care, was around 10 %. The State bureaucracy has declined by a third compared to 1985, and the number employed by scientific institutions by 10 %.

[1] Soviet economic science distinguishes between two sectors: the 'productive sector' (also called the material sphere of production) which has encompassed industry, construction, transportation, agriculture, trade and communications; and the 'non-productive sector' (or the non-material sphere of production) consisting of education, health care, housing and other public services, science, State and local administration, finance and banking, art and culture.

Table 5

Change in employment stocks, 1965-89

	1965-70 (1 000)	1970-75 (1 000)	1975-80 (1 000)	1980-85 (1 000)	1985-89 (1 000)	1985-89 (%)
State and *kolkhoz* sector, total	11 342	10 432	8 509	4 643	−3 452	−2,6
State sector[1]	13 271	11 974	10 338	5 300	−2 365	−2,0
Productive sector[1]	7 597	6 682	5 113	2 521	−4 441	−4,5
Industry	4 146	2 461	2 837	1 212	−1 689	−4,4
Agriculture	−1 214	−440	−700	−67	−2 161	−8,7
State	715	1 102	1 129	590	−1 074	−8,8
Kolkhoz	−1 929	−1 542	−1 829	−657	−1 087	−8,6
Construction	1 751	1 522	666	252	1 692	14,7
Transportation	733	1 230	1 109	554	−2 194	−20,2
Rail	12	128	157	23	−276	−10,5
Road	699	1 068	923	513	−1 886	−24,2
Water	22	34	29	18	−32	−7,1
Trade	1 528	1 320	837	337	−154	−1,5
Communications	323	198	106	37	−132	−7,9
Forestry	31	20	5	−2	−63	−13,8
Others	299	371	253	198	260	13,7
Non-productive sector[1]	3 745	3 750	3 396	2 122	989	3,2
Education	1 202	889	1 031	721	1 137	11,5
Health	803	689	454	561	713	10,5
Housing	666	753	707	382	155	3,2
Science	374	791	589	175	−449	−9,9
State administration	302	231	240	156	−792	−33,2
Culture	268	232	234	96	198	14,3
Finance	88	131	130	30	10	1,5
Art	42	34	11	1	17	3,7

[1] Includes sectors listed below this heading.

Source: Oxenstierna, 1990, p. 233; *Narkhoz* 1989, pp. 48-9; *Trud v SSSR*, p. 76.

By disaggregating these figures over the republics, we see that in absolute terms the major part of the decrease took place in the RSFSR. However, in relative terms the decline in employment in this republic is rather small. State employment declined by around 3 % between 1985 and 1989 (Table 6). Yet, this is a significant change compared to previous periods, for instance between 1980 and 1985, when employment rose by 3 % in the RSFSR. In the three Slavic republics together, employment declined by 2,4 million (2,6 %). Other republics had more significant decreases in relative terms, for instance, Moldova (8 %), Estonia (6 %), and Latvia (5 %). The Transcaucasian republics experienced a decline in employment of only 1 %. However, in the first half of the 1980s, employment grew by 12 % in this area. In the Central Asian republics employment increased by about 300 000 (4,3 %), but the increase is only a third of the increase in 1980-85.

Further, we note that parallel to the decline over 1985-89, the number of women employed in the State sector decreased by 1,3 million. This corresponds to 54 % of the total decline (Table 7). Since women make up over 50 % of the State labour force, this decline in female employment cannot be taken as an indication that women are being displaced to a greater extent than men.

4.1. Why is State-sector employment declining?

The decline in State-sector employment raises several questions. Has the contraction of employment come about because labour demand has declined in this sector? That is, have hardened budget constraints led State employers to dismiss workers? Or is the decline primarily due to compe-

Table 6

Number of employed in the State sector in the republics, 1980-89

	Average annual employment (1 000)			Change in employment			
	1980	1985	1989	1980-85		1985-89	
				(1 000)	(%)	(1 000)	(%)
USSR	112 498	117 798	115 433	5 300	4,7	-2 365	-2,0
Slavic Republics	89 700	92 591	90 194	2 891	3,2	-2 397	-2,6
RSFSR	65 612	67 641	65 634	2 029	3,1	-2 007	-3,0
Ukraine	20 042	20 679	20 249	637	3,2	-430	-2,1
Belarus	4 046	4 271	4 311	225	5,6	40	0,9
Moldova	1 511	1 619	1 491	108	7,1	-128	-7,9
Baltic Republics	3 363	3 512	3 399	149	4,4	-113	-3,2
Estonia	700	718	675	18	2,6	-43	-6,0
Latvia	1 202	1 231	1 171	29	2,4	-60	-4,9
Lithuania	1 461	1 563	1 553	102	7,0	-10	-0,6
Transcaucasian Republics	4 972	5 591	5 523	619	12,4	-68	-1,2
Georgia	1 978	2 178	2 161	200	10,1	-17	-0,8
Armenia	1 192	1 355	1 304	163	13,7	-51	-3,8
Azerbaijan	1 802	2 058	2 058	256	14,2	0	0,0
Central Asian Republics	6 909	7 985	8 325	1 076	15,6	340	4,3
Uzbekistan	4 169	4 834	5 061	665	16,0	227	4,7
Tadjikistan	927	1 101	1 161	174	18,8	60	5,4
Turkmenistan	711	811	854	100	14,1	43	5,3
Kyrgyzstan	1 102	1 239	1 249	137	12,4	10	0,8
Kazakhstan	6 043	6 500	6 501	457	7,6	1	0,0

Source: *Narkhoz*, 1989, p. 52.

Table 7

Number of women employed in the State sector, 1980-89

(1 000)

	1985	1986	1987	1988	1989	1980-85	1985-89
Total	60 011	60 171	60 054	59 273	58 729		
Change		160	-117	-781	-544	2 442	-1 282

Source: *Narkhoz*, 1989, p. 53.

tition for labour from the private sector? Or is it due to factors related to labour supply?

Part of the decline may be attributed to the regional mismatch between jobs and job-seekers. Growth in the active population is taking place mainly among the peoples of the southern republics where employment opportunities are scarce, and these people are reluctant to migrate to places where there is employment. Furthermore, wage rises, price increases, and changes in taxation rules may have had both positive and negative effects on labour supply. Labour supply may increase or decrease when real wages increase depending on whether the substitution or income effect dominates. A problem in studying the Soviet situation is that it is difficult to determine whether real wages have increased or decreased and what the impact of income taxes on the take-home wage is. Moreover, the shortages on consumer markets complicate matters, since money incomes do not guarantee access to goods and services. Labour supply may have declined because of supply multiplier effects, that is, people choosing to be non-employed (or reduce their working time) because shortages on consumer goods markets have intensified.

Since we do not have data on the number leaving employment and lay-offs (which would tell us whether people have left their jobs on their own initiative or whether they have in fact been laid off) or detailed information on the development of non-employment and unemployment in recent years, it is not possible to give clear-cut answers to these questions. We can only name a few factors which have probably contributed to this development.

The wage reform launched in 1986 appears to have had some impact on the employment level. This reform was aimed at raising basic wages in the productive sector by 20-25 % and increasing wage differentiation. Enterprises were supposed to cover the resulting rise in labour costs by their own means, through rationalization of production and labour shedding (see Oxenstierna, 1990, pp. 242-4; Chapman, 1988). The reform was estimated to raise the wage bill in industry alone by about R 20 billion (Maevskii and Maevskaya, 1986, p. 9). According to the latest reports, 5,5 % (3,3 million) of the work-force affected by the reform has been displaced (*Statisticheskii press byulleten'*, No 13, 1990, p. 38). Many of those losing their jobs have been re-employed in the State sector (often in the same enterprise). The figures for 1988 reveal that about 3 % of the workers who were transferred to the new wage scales were actually laid off, of which about a third entered retirement (Oxenstierna, 1990, p. 251). If we assume that lay-offs are still around 3 %, then the wage reform would thus account for about 1,8 million or 30 % of the total decline in State-sector employment during the period 1985-90.

Because of the drastic changes in many variables at the same time, one should not read too much into this kind of mechanical calculation. In fact some Soviet employment specialists tend to attribute very little importance to the wage reform and other reform measures in explaining the decline in State-sector employment.[1]

In any case, the effects on labour productivity have been much weaker than those observed when the reform was tried out on an experimental basis,[2] and the effects on the nominal average wage level have been much more dramatic than expected. In 1988, the average nominal wages in the State sector rose by 8,3 %, in 1989 by 9,4 %, and in 1990 by 12,5 %,[3] compared to about 2,5 % per year in the early 1980s.

This is largely due to the fact that the wage reform was implemented in an environment set by the 1987 law on State enterprises[4] introduced in 1988. Among other provisions, this law gave enterprises some freedom in setting their output prices and adjusting their product mix towards more expensive output. Combined with the absence of competition in the product market, this opened the opportunity to raise wages by increasing prices instead of shedding labour.[5]

In addition, the wage determination mechanism in the new enterprise law which was chosen by most enterprises made it possible to raise wages without improving labour productivity. The law offered the enterprise a choice between

1 In a discussion in Stockholm on 14 June 1991, Professor I. Maslova (Institute of Economics, Moscow) stressed the importance of people changing their labour market behaviour (e.g. women becoming less inclined to work) and Professor A. Kotlyar (Central Labour Institute at the RSFSR Ministry of Labour, Moscow) pointed at regional imbalances, claiming that labour shortage is still a problem in many areas.

2 The wage reform was tested on the Belarus railways during 1985-86. Labour productivity rose by 32 % compared to 1983, and around 13 % of the work-force was displaced. Wages rose by over 22 %. In 1987 the reform was adopted in the whole railway sector, and employment decreased by about 10 % (Oxenstierna, 1990, pp. 243-4).

3 These are the percentage growth rates for State-sector wages which may be deducted from Narkhoz (1989, p. 78) and *Ekonomika i zhizn'*, No 5 (1991, p. 9). Åslund (1991, pp. 8 and 30) presents higher growth rates based on the total remuneration paid out to the population for the given years. Of course, if the earnings of *kolkhozniki* (which rose more than average State wages in 1989 and 1990) and the wages in cooperatives are included, wage and salary rises are higher.

4 Zakon SSSR 'O gosudarstvennom predpriyatii (ob edinenie)', 30 June 1987. *Ekonomicheskaya gazeta*, No 28, July 1987.

5 In 1988, over 50 % of the increase in the wage funds was generated this way (Deripasov and Semenov, 1989, p. 90). Total remuneration rose by R 30 million in 1988. Previously, the yearly increase had been around R 10 billion (Åslund, 1991, p. 6).

two alternatives with respect to wage determination. With the first, the major part of the wage budget was dependent only on revenues and only a small part was profit-related. In principle, this model copied already-existing practices. In the second alternative, the total wage budget was dependent on net revenues (total revenues minus all costs except labour costs).[1] Most enterprises adopted the first alternative, which implies that wages would be paid out, no matter how bad overall results were. That is, budget constraints have continued to be particularly soft with regard to wages.

Despite the intensified decline in 1990 the trade-off between wages and employment level appears very weak. State wages rose by 12,5 %, while State-sector employment declined by 2,2 %.

The development during the first six months of 1991, when State-sector employment was reported to have fallen by almost 3 million, might of course be a lagged effect. A new enterprise law (a law applicable to all types of enterprises) has been introduced together with a new tax legislation.[2] Enterprises might have been expecting continuing soft budget constraints and therefore were postponing dismissals until it had been made clear whether loss-making enterprises would have to cut down employment or close down. If constraints have in fact hardened, the wholesale price reform in January 1991, and the postponement of retail price rises until April, would have put many enterprises in trouble and led to dismissals.

The general disintegration of the material supply system is another factor which has distorted production, and maybe this is the major cause for the decline in employment at the beginning of 1991.[3] Lack of inputs means that output levels will fall with a consequent loss of revenues. If enterprises are operating under hard budget constraints this should lead to labour shedding. Only a thorough empirical investigation can reveal whether this is the story behind the decline in the first half of 1991.

4.2. The private sector

The legalization of employment outside the State and *kolkhoz* sector is certainly one of the factors explaining the decline in State-sector employment. The development of this sector is in itself a central element in the transformation of the economy.

The process of legalizing private employment started with the law on individual labour activity of 19 November 1986,[4] which permitted people not required to work in the State sector to engage in a variety of activities such as private taxi businesses, car repair, and housing construction. The number of people in these activities has not been very high (see Table 4), but the psychological impact of legalizing self-employment certainly prepared the way for successive reforms (see further Plokker, 1990).

Permitting cooperatives has had a more substantial impact on private opportunities. When the law on cooperatives[5] was adopted in May 1988, employment in this sector rose dramatically (see Tables 4 and 8). The growth slowed down slightly between 1989 and 1990, and during the first months in 1991, employment was reported to have fallen by a few thousand persons (see Table 4).

In 1988, cooperatives in consumer goods production and consumer services grew rapidly. By January 1989, there was a total of 77 500 cooperatives, of which over 50 % were in consumer-oriented production (Tedstrom, 1989). Public opinion became rather critical of cooperatives, and since then the growth in the number of cooperatives has been concentrated in activities which are not so visible to the public.

At the end of 1990, the cooperatives employed about 6,1 million persons of which 31 % were reported as persons holding several jobs (*sovmestiteli*). This means that they did not work full-time in the cooperatives; many probably have a job in the State sector as their primary job. This suggests that about 4,2 million can be regarded as employed full-time in the cooperatives (*Ekonomika i zhizn'*, No 20, 1991). Total sales turnover was R 67 billion, and net revenues were R 44,2 billion, of which 74 % (R 32,5 billion) was at the disposal of the cooperatives (ibid.). The wage fund of this sector rose by about R 10 billion, compared to 1989, to R 26,8 billion. This implies that those employed in cooperat-

1 Oxenstierna, 1990, Ch. 10, contains a detailed presentation and analysis of these models.

2 Zakon SSSR 'O predpriyatiyakh v SSSR', *Ekonomika i zhizn'*, No 25, June 1990. Zakon SSSR 'O nalogakh s predpriyatii, ob edinenii i organizatsii', *Ekonomika i zhizn'*, No 30, July, 1990.

3 During my visit to the Baltic Republics in February 1991, this was the most common cause cited both by government officials and enterprise management. See further Oxenstierna (1991).

4 Zakon SSSR 'Ob individual'noi trudovoi deyatel'nosti', *Pravda*, 21 November 1986.

5 Zakon SSSR 'O kooperatsii v SSSR', *Ekonomicheskaya gazeta*, No 24, June 1988.

ives (about 4 % of total employment) received 20 % of the total increase (R 53 billion) in the economy-wide wage fund. The average wage paid in the cooperative sector was R 417 per month (ibid.). This is 1.5 times the average wage in the State sector.[1]

As Table 8 indicates, construction cooperatives accounted for almost 40 % of total sales turnover, over 40 % of cooperative employment and almost 50 % of the total wage budget of the cooperative sector. The amount in the wage fund per worker was over R 5 000 per year (R 426 per month), and sales turnover was R 10 385 per worker. Consumer goods production, consumer services and public catering account for 40 % of sales turnover, one-fourth of employment, and 20 % of the total wage sum in the cooperative sector. The amount in the wage fund per worker was lower than in construction, R 3 700 per year (R 306 per month), but sales turnover per worker was within the same magnitude, R 10 220.

A majority of all cooperatives are linked in some way to a State enterprise. In 1990, this proportion was as high as 80 % (*Ekonomika i zhizn'*, No 20, 1991). This means that in many cases part of an enterprise's activities have simply been taken over by a cooperative formed by workers employed at the enterprise. Large Soviet enterprises have always handled a vast spectrum of activities, for instance, they have had their own construction department, their own recreation facilities, and social services. This kind of auxiliary activities as well as parts of the main production have now been reorganized into cooperatives. For the cooperatives the link to a State enterprise is essential because it allows them to lease equipment and buildings and means they do not have to raise their own capital. The underdeveloped level of the market for production capacities and material inputs and shortages are other factors which make it crucial to be linked to an enterprise well established in the old network for the distribution of capital goods and inputs.

The close link to the State sector, together with the fact that cooperatives to a large extent provide services to State producers, is part of the reason for the increased amount of money in circulation. Through the selling of services to State enterprises, the passive money in the State-enterprise sector enters circulation via purchases of cooperatives and wages and salaries paid to their staff. The growth in the cooperatives' wage funds has been greater than the average for the State sector. Thus, although minor in size, the cooperative sector has contributed to the current wage-price spiral. The proportion of wages in total costs is much higher in the cooperative sector (40 %) than in the State sector.[2]

Throughout their existence, a large share of those working in cooperatives has been those holding several jobs (or part-time workers), which in most cases implies that they have a State-sector job beside their work in the cooperative. The distribution of cooperatives among republics reveals regional differences in this respect (Table 9). The proportion of part-time workers is lowest in the Central Asian republics. This might be an indication that cooperative jobs are representing new job opportunities to a larger extent there than elsewhere in the USSR (see further Malle, 1990).

The sheer numbers of cooperatives which are established in direct connection to State enterprises imply that new work-places are not being created to any large extent. In 1989-90, only 12,5 % of the growth in cooperative employment represented a growth in work-places. That is, of the total rise in employment of 3,5 million, only around 400 000 were new jobs (Malle, 1990). The most important obstacle to further development of the cooperative sector is probably the lack of equipment and inputs. Changes in tax laws have not been advantageous for the cooperatives, and both the physical impediments and the less favourable financial situation have contributed to the slowing growth of the sector.

5. Unemployment

Some unemployment has always existed in the Soviet Union. Primarily this has been in the form of frictional unemployment because of people changing jobs or being dismissed for disciplinary reasons. In Soviet parlance this phenomenon has been called 'unplanned turnover' (*tekuchest'*). In the Western literature, estimated frictional unemployment rates for the USSR have been calculated from data on *tekuchest'* and estimated average duration of unemployment between jobs. For the 1980s, this methodology renders an unemploy-

[1] In the construction industry the cooperative average wage was R 463, and in the State sector it was R 339 (1,34 :1). In agriculture the average cooperative wage was lower (R 230) than in State agriculture (R 270). In retail trade the cooperative wage was R 574 while that in the State sector was R 227 (2,5 :1), in health care the corresponding wages were R 398 and R 184 (2,16 :1), in scientific work, R 484 and R 333 (1,45 :1), and in construction design, R 495 and R 392 (1,26 :1) (*Ekonomika i zhizn'*, No 20, 1991). Because the proportion of part-time workers is greater in the cooperative sector than in the State sector, the actual average cooperative take-home wage for full-time workers is higher than these figures reveal. On the other hand, work intensity is probably much higher in the cooperative sector than in the State sector.

[2] According to Narkhoz, 1989 (p. 343), the average labour share in Soviet industry's total costs was 14 % in 1989.

Table 8

The cooperative sector, 1990 (end of year)

	Number of cooperatives (1 000)	Number of workers (1 000)	Wage fund (million R)	Sales turnover (million R)
Total	245,4	6 098,2	26 836,0	67 313,0
Selected branches:				
Construction	75,5	2 548,2	13 015,4	25 961,5
Consumer goods, production	41,8	1 010,0	4 069,7	11 994,4
Consumer service	27,6	420,8	1 291,1	2 888,3
Producer goods, distribution	8,9	380,1	1 730,5	5 941,4
Data processing, information services	4,0	77,2	287,0	1 736,0

Source: Ekonomika i zhizn', No 20, 1991.

Table 9

Development of employment in cooperatives in the USSR and its republics, 1989-90

	January 1989		January 1990			July 1990	
	1	2	1	2	3	1	3[a]
USSR	1 395,9	46,8	4 855,4	35,3	3 459,5	5 219,5	364,1
RSFSR	707,9	47,0	2 688,4	34,1	1 980,5	2 958,8	270,4
Ukraine	249,0	50,2	779,4	39,2	530,4	784,2	4,8
Belarus	43,6	53,8	123,9	44,6	80,3	137,1	13,2
Moldova	38,5	61,0	83,0	36,7	44,5	111,4	28,4
Estonia	21,5	68,4	42,1	54,9	20,6	47,1	5
Latvia	28,7	67,6	134,8	48,1	106,1	158,6	23,8
Lithuania	25,4	61,2	81,4	50,1	56,0	77,9	−3.5
Georgia	32,4	40,2	135,9	31,7	103,5	127,8	−8,1
Armenia	56,4	25,9	138,1	40,3	81,7	171,3	33,2
Azerbaijan	15,8	32,3	62,8	32,3	47,0	63,7	0,9
Uzbekistan	71,6	35,7	250,5	28,1	178,9	243,2	−7,3
Tadjikistan	12,5	36,0	40,7	22,1	28,2	44,2	3,5
Turkmenistan	4,8	18,7	30,5	24,3	25,7	33,5	3
Kyrgyzstan	15,8	37,3	38,7	28,7	22,9	34,4	−4,3
Kazakhstan	72,7	35,7	225,2	25,3	152,5	226,3	1,1

[1] Number of employed (1 000)
[2] Proportion of part-time workers *(sovmestiteli)* (%)
[3] Change in number of employed
[a] Change during the first six months of 1990.

Sources: Nalle, 1990, p. 210; Narkhoz, 1989, p. 269; *Statisticheskii byulleten'*, No 20, 1990, p. 44.

ment rate in the range of 1-3 %,[1] depending on the average duration of unemployment spells. For instance in 1985, if the average duration of unemployment was one month, the frictional unemployment rate was 0,9 %. If the average duration was two months or three months, the unemployment rate was 1,8 or 2,7 %, respectively (Oxenstierna, 1990, p. 224). In the 1980s, reported job-changing involved about 13-14 % of the State-sector labour force (some 15 million persons) and the resulting simulated unemployment rates correspond to 1,2-3,5 million unemployed on a yearly basis.

In addition to frictional unemployment, the most important types of unemployment have probably been unemployment due to migration from rural areas, and unemployment of first-time job-seekers. Unemployment in connection with migration has not been documented, and little is known about first-time job-seekers. In the 1980s, 4-5 million persons in the age-group 15-24 years finished school or graduated from higher educational establishments each year. It appears that typically the time required to find employment has been longer (3-6 months) for these categories than for job-changers. It is uncertain to what extent the school-leavers and graduates have been actively searching for jobs during this period, but a very rough estimate indicates that first-time job-seekers would add about 1-2 % to the simulated unemployment rates for the mid-1980s (Oxenstierna, 1989, p. 865). This suggests that it is not unreasonable to assume a 'natural' or lower-bound unemployment rate for the Soviet economy of 2-5 % (2,4-6 million)[2] even before the onset of *perestroika*.

5.1. How many are unemployed?

In the light of these figures, the claim made by Goskomtrud (the State Committee on Labour and Social Questions) that there were around 2-2,5 million unemployed in 1990 appears a bit low (*Ekonomika i zhizn'*, No 15, 1990). The number of people changing jobs has not decreased. The frictional unemployment rate due to *tekuchest'* was in the range of 1,1-3,4 %,[3] and there are several indications of increased difficulties of first-time job-seekers in finding jobs. The figures for the number of school-leavers neither working nor studying have increased, and there are reports of graduates from higher education having increasing difficulties finding jobs. According to the population census in 1989, 422 000 persons aged 16-29 years did not work. The number of school-leavers neither working nor studying has risen from 23 600 in 1985 and 36 200 in 1987, to 90 600 in 1989 (Kirillov, 1990, p. 59). This represents 4 % of the total group of school-leavers (2,25 million) in 1989 (Kirillov, 1990, p. 58). Of those neither working nor studying in 1989, 32 800 were engaged in private subsidiary agriculture. Yet, even if these are subtracted from the total number, there were more than twice as many non-employed school-leavers in 1989 (57 800) than in 1985.

In addition, some of the decline in State-sector employment may be attributed to people who have been laid off and who are searching for jobs, and who therefore should be regarded as unemployed. Further, there are reports of increasing numbers of migrants, and of refugee-migrants. Goskomstat reports around 600 000 refugees on the territory of the USSR in 1990 (*Ekonomika i zhizn'*, No 5, 1991; Volokh, 1991, p. 50). These are people who had to leave their permanent place of residence because of natural catastrophes or ethnic conflicts. One might also suspect that food shortages in some regions have put people on the move. Many of the refugees come from Azerbaijan and Armenia. (In 1988-89, 422 000 persons left these areas, in the first quarter of 1990, 100 000 left.) There are also refugees from Uzbekistan and Kazakhstan. (In 1989, 100 000 left these areas.) Among the refugees are also military personnel and their families (about 50 000) (Volokh, 1991, p. 50). (How much unemployment was caused by the demobilization has not been reported yet.) The refugees face many problems, not the least of which is finding work. In big cities such as Moscow and Leningrad, refugees are now considered a special category among the unemployed. Apart from these indications that unemployment is rising, there is the latent problem of non-employment and unemployment in the labour surplus regions of Central Asia and Transcaucasia.

The Goskomstat report on the state of the economy in 1990 reveals that the number of non-employed and non-studying persons in the working-age population exceeded 8 million persons; and of the temporarily non-working population, 2 million could be regarded as unemployed. Meanwhile, there were about 3 million vacancies in the State sector (*Ekonomika i zhizn'*, No 5, 1991).

The figure of 8 million appears to be an estimate of the proportion of non-employed persons out of the estimated total labour resources (estimated at 164 million in 1989). Of the total, about 25 million were non-employed (those in private subsidiary agriculture and private farming have been included among the employed), 12 million were reported to

[1] These figures relate only to the State-sector labour force (that is, *kolkhozy* are not included) and to obtain the ratio, the number of unemployed has been divided by State-sector employment.

[2] This interval is, of course, too large to be satisfactory.

[3] Calculation based on the *tekuchest'* figures in Narkhoz, 1989 (p. 69) and an average duration of unemployment spells of 1-3 months. If anything, duration of unemployment should have increased.

be in education. The remaining 13 million were in the armed forces, staying at home, or temporarily out of work (*Ekonomicheskoe i sotsial'noe razvitie*, p. 43). The armed forces appear to include around 4-4,5 million persons,[1] so the number potentially available for work is 8,5-9 million. Of these, about 4 million may be assumed to be women not in the labour force.[2] Thus, there are about 4,5-5 million persons who are potentially unemployed. Of these, at least between one-half to 1 million may be considered people who do not wish to work,[3] so the potential stock of unemployed appears to be around 3,5-4,5 million rather than the 2 million Goskomstat reports. Unemployment due to changing employment in the State sector has probably not been included in Goskomstat's 8 million, so 1,1-3,8 million should be added. The unemployment rate is thus in the range of 3,2-5,8 %.[4]

However, since it is not known how long people go without a job, and one might be suspicious about the number of 'labour resources' which does not take account of people's labour market behaviour, this estimate is still very shaky. It lies near the estimate of unemployment made by the Shatalin group at the beginning of 1990. The figure they suggested was 6 million (*Perekhod k rynku*, p. 111).

5.2. Unemployment scenarios

In connection with the various reform programmes presented during the autumn of 1990 and the writing of the new employment law[5] different unemployment scenarios were drawn up. In these, the primary cause for the rise in unemployment would be a reduction of overmanning due to privatization and structural change. In addition, the duration of unemployment might be expected to increase which would increase the unemployment rate even if the number of people in unemployment were constant.

Goskomtrud came forward with two projections of labour market implications of a move towards a market economy. The Shatalin group presented their unemployment scenario related to the 500-day programme. Furthermore, the joint agency study of the Soviet economy presents two hypothetical scenarios for 1991 and 1992 (*A Study of the Soviet Economy*, Vol. 2, pp. 148-9).

The first scenario described by Goskomtrud involved a transition period of 8-10 years and the second a transition period of two years. In the first gradual scenario employment in the State sector was projected to fall by 40 million over the 8-10 years, and by 9,5 million in 1991. Only about one-third of the contraction in 1991 was expected to come about because of workers being made redundant: 500 000 was to be because of ownership changes and thereby reduced overmanning, 1,5 million because of loss-making enterprises closing down, and 1,5 million as a result of structural change in industry. The remaining persons were supposed to leave the State sector on their own accord (ibid., p. 147). In this scenario, the total employment level in the economy would remain at its 1990 level. This implies that the gradual increase of the number of unemployed persons from about 2 million up to 4,5 million (3,25 % of the labour force) in 1994 would be in line with the projected increase in the labour force of about 700 000 persons per year (ibid.). In the second, more radical scenario, the lay-offs in 1991 were projected at 6 million in 1991, because of more rapid structural change and faster privatization (ibid.). Goskomtrud did not explicitly state the unemployment consequences of this alternative.

Goskomtrud also projected the regional distribution of the unemployed who would be in need of help, primarily in the form of income support, in 1991. This forecast indicates that 46 % of these persons would be located in the Slavic Republics, 30 % would be located in the Central Asian Republics (almost 40 % if Kazakhstan is included), and about 12 % in the Transcaucasian Republics (ibid., p. 212). Even if we assume that the number of unemployed in need of help is only 3 million persons, it is evident that in relation to the numbers in the population, the proportion of those unemployed would be high in the southern republics.

The Shatalin group put the figure for the number of unemployed at 6 million at the beginning of 1990, of which 4,5 million would represent long-term unemployment and 1,5 million frictional unemployment (*Perekhod k rynku*, p. 111). According to their prognosis, the number of unemployed would reach 6,3 million by January 1991 (*Perekhod*

1 Sobell (1988) reported military personnel per 1 000 population in the USSR at 16,1. Calculated on the 1987 population this implies that the Soviet armed forces consisted of 4,5 million persons. According to *Pravda* of 28 January 1990, the number in the armed forces was 4 million in 1989. Gorbachev announced an overall reduction of 500 000 men in the Soviet military establishment by 1990 in his speech to the UN General assembly on 7 December 1988 (Clarke, 1988).

2 This is the estimate reported for 1989 in *Pravda* of 28 January 1990.

3 Various figures for this group are given. See, for example, Shcherbakov (1991, pp. 14-15) and Chizhova (1990, p. 64).

4 Here the rate has been calculated as the total number of full-year equivalent unemployed, 4,6 million and 8,3 million respectively, divided by total employment in 1990, 138,4 million, plus the respective stock of unemployed. That is, 4,6/142 and 8,3/143.

5 'Osnovy zakonodatel'stva soyuza SSR i respublik o zanyatosti naseleniya', *Izvestiya*, No 22, 26 January 1991.

k rynku, p. 111). The rise in unemployment during 1990 (10 000) was due to a rise in frictional unemployment because of an increasing number of displaced workers and a slight increase in the duration of unemployment between jobs (from one to one and a half months), and a rise in the number of long-term unemployed (plus 20 000). During 1991, the number of unemployed would rise to almost 12 million because of three factors: a rise in long-term unemployed (to 6,1 million), a rise in frictional unemployment due to a rise in the numbers of job-changers and job-losers (from 17 million in 1990 to 25 million in 1991), and an increase in the duration of unemployment between jobs (from one month in 1990 to two months at the end of 1992).

The two hypothetical unemployment scenarios for 1991 and 1992 presented by the agency (IMF, World Bank, OECD, EBRD) study are based on Goskomtrud's forecasts but have less modest assumptions regarding the degree of overmanning and the average duration of unemployment spells (*A Study of the Soviet economy*, Vol. 2, pp. 148-9). In both scenarios, enterprises are assumed to eliminate overmanning in two years and the initial stock of unemployment is set at 2,5 million at the end of 1990. In the first gradual scenario it is assumed that initial overmanning is 12,5 % and that average duration of unemployment is to rise to 7,5 months in 1992. In this scenario the unemployment stock rises to 8,3 million (which corresponds to an unemployment rate of 6 %) at the end of 1991 and to 13 million (9,4 %) at the end of 1992 (ibid., p. 200). In the second scenario, overmanning is assumed to be 25 % initially, and the average duration of unemployment is to rise to 10 months. In this case, the stock of unemployed is to rise to 17 million at the end of 1991 (about 12 %) and then to settle at around 15 million (about 10 %). The first scenario suggests a rise in the unemployment rate from 1,8 % (2,5 million) at the end of 1990, to 6 % (8,3 million) at the end of 1991, and to 9,4 % (13,2 million) at the end of 1992 (ibid., p. 200). The second scenario indicates a rise of unemployment to 9,3 % (13 million) in 1991, and 10,8 % (15 million) in 1992 (ibid.).

Since none of the economic programmes presented in 1990 was ever put into action, none of these scenarios is likely to materialize, and as shown above, there are indications that unemployment at the end of 1990 already exceeded these prognoses. Yet, the scenarios give some indication of possible developments even if the timing might not be correct. The hypothetical scenarios of the agency study highlight the importance of taking into account how the prolonged duration of spells contributes to the unemployment rate.

The present crisis of the Soviet economy indicates that unemployment could rise even more than in these forecasts. Recently, Prime Minister Pavlov has presented three new scenarios (*Ekonomika i zhizn'*, No 18, 1991). In the first, no measures are taken against the crisis. In this case, the national income is supposed to fall by 20 %. According to Pavlov, this would result in 18 million unemployed (12-13 % of the labour force) by the end of 1991. Pavlov does not explain how he arrived at this figure, but one might suspect that he means that 18 million persons would be displaced during the year. The second alternative is a *laissez-faire* scenario where State intervention would cease completely. The Prime Minister assumes that setting the market forces free would cause the national income to fall by 30 % and unemployment to rise to 30 million persons (21 % of the labour force). Again, it might be assumed that Pavlov had the number of displaced in mind, and does not take into account that this shock treatment might lead to new opportunities and create new jobs. The third alternative, which is the government alternative, envisages measures which would stop the national income from falling by more than 10 %. Pavlov does not give an estimate for the number of unemployed in this alternative, but says the figure for possible unemployment would fall to a manageable level, and people could find work in small-scale enterprises, the developing service sector, road construction, and as a last resort, they could be given unemployment benefit. The other two estimates indicate that for each percentage point decrease in the national income, the number of job-losers rises by 0,7 % of the labour force. This would mean that the number of job-losers in the last scenario would be around 9 million persons, or 6 %.

Thus, this is near the first Goskomtrud scenario, which assumed that 9,5 million persons would leave the State sector in 1991, and that around 3 million of these would become unemployed. Perhaps one reason that Pavlov finds this a more manageable figure is that the government's policy for taking care of the displaced and the unemployed and its financing would provide coverage for about this number of persons.

A common deficiency in these forecasts is that very little is said about which categories of workers will primarily be displaced and about the regional location of the unemployed. This is of extreme importance in order to work out appropriate labour policies. Early reports on displacement indicated, for example, that white-collar workers, and particularly young professionals, were laid off to a greater extent than blue-collar workers and had difficulty finding new jobs (Zaslavskii, 1988, p. 30). It might be difficult to persuade these people to take manual jobs, and it follows that unemployment may rise more dramatically due to a structural mismatch between jobs and job-seekers. Another special category is made up of workers in the defence industry, who have enjoyed special privileges. According to the draft State

Programme on Conversion, in 1990 alone half a million workers were to leave employment involving military production and were to transfer to civilian manufacturing (Cooper, 1991, p. 134). It is recognized that those displaced by the conversion in the defence industry will require retraining and compensation for reduced earnings. However, how this is to be handled has not been made clear. Similarly, virtually no attention has been devoted to how displaced armed forces personnel are to be assimilated into the new labour market. The potential distribution of unemployment over the country is of interest, since mobility between different parts is impeded by cultural, ethnic, social, and economic factors. Thus, regional mismatch between jobs and jobseekers might become a more pronounced problem than these prognoses indicate. Finally, the question of how a restructuring of the USSR's federal structure might possibly affect the labour market remains to be answered.

6. Easing the transition with labour market policy

A sharp rise in unemployment would cause concern and most likely lead to increased social tensions. Therefore, it is of importance that there is a policy which can mitigate the unemployment problem.

After long discussion, all-union legislation on employment was finally adopted in January 1991.[1] This is a basic legislation for the entire country which provides definitions for 'employed', 'unemployed', and 'suitable work'; gives general directions for labour market policy and employment programs; and lays down minimal levels of income support for the unemployed. The republics, however, are supposed to work out their own employment laws which may differ in accordance with regional conditions.[2]

Before the adoption of this law, the rights of laid-off workers were regulated by a decree adopted by the CPSU Central Committee, the Council of Ministers, and the VTsSPS[3] in December 1987.[4] In March 1988, this decree was confirmed by Goskomtrud and VTsSPS by a decree spelling out the conditions in more detail.

According to these regulations, laid-off workers were formerly entitled to severance payment from their former employer at the level of their former average wage two to three months after the lay-off. To be eligible for pay in the third month, the worker had to be registered at the employment service. Workers who chose to leave on their own initiative (i.e. whose lay-off was classified as 'separation on their own initiative') were not formally entitled to severance pay or wage. The decrees also stated that workers should be offered retraining. The retraining of a worker was supposed to be organized by the enterprise hiring the displaced worker. Training was to be offered either at the enterprise itself, or at some organization that could provide the necessary training. The employment services were supposed to provide the employers with information on the availability of training at various training institutions. The worker was entitled to his or her former average wage if he or she was undergoing retraining on a full-time basis. Also, when working part-time and training part-time, he or she was entitled to at least the former average wage. The costs were to be borne by the new employer.

6.1. The employment law

The new 1991 Law on employment clearly states that employment is voluntary and that voluntary non-employment cannot be used for legal prosecution of a person. Citizens are regarded as employed if they work for pay according to a contract, are self-employed, if they have been elected to a paid position, if they are in the military service, or work temporarily abroad (Article I:1-2).

A citizen is counted as unemployed if he or she is of working-age and capable of working, but for reasons beyond his or her control, does not have a job and income from work, is registered with the State employment service, is searching for a job, is capable and available for work, and has not been offered a suitable job by the employment service. If the employment service cannot offer a suitable job to an unemployed person, he or she can be offered retraining (Article I:2). A suitable job is judged in terms of the professional training of the job-seeker, his or her age and work experience, as well as the geographical location of the job. A job is not suitable if the job-seeker would have to move to less favourable living conditions, if it is based too far from the present residence, if the wage and other working conditions are worse than those of his or her previous job, or if there are 'valid' reasons, in particular personal or family reasons, for him or her to refuse it (I:3).

1 'Osnovy zakonodatel'stva soyuza SSR i respublik o zanyatosti naseleniya', *Izvestiya*, No 22, 26 January 1991.

2 For instance, Lithuania adopted its employment law as early as November 1990 (Oxenstierna, 1991). Russia adopted its law in May/June 1991.

3 All-Union Central Trade Union Council.

4 Joint decree on efficient employment, job placement for laid-off workers, and the rights of laid-off workers to compensation (*Polnyi khozyaistvennyi...*, pp. 117-33).

The definition of unemployed in the new law means that a person leaving a job on his or her own initiative will not be counted as unemployed. The argument for this is of course that the status of 'unemployed' gives the right to claim income support and if voluntary job-changers were made eligible for benefits, they could prolong their spells of unemployment. Another category excluded from the status of unemployed is old-age pensioners. As I have shown above, people beyond retirement age make up a significant portion of the labour force. This is largely due to low pensions.[1] The idea is apparently that pensioners should be provided for in other ways.

The definition of a 'suitable' job appears generous, in view of the possible changes in labour demand. It is already difficult to find suitable jobs for displaced professionals with specialized secondary or higher education, particularly in big urban centres. These people must either accept jobs below their professional status or move in order to be redeployed. In a longer perspective the problem of people having the wrong professional profile will certainly grow and involve blue-collar workers as well.

Rules for income support given to the unemployed are differentiated for different categories. Laid-off workers are to receive a severance payment from their former employer corresponding to their average wage for a maximum of three months. The laid-off worker must register with the employment service 10 days at the latest after being dismissed. If no suitable job has been found for the displaced worker during the three-month period, he is regarded as unemployed (IV:26). If the person worked for at least 12 weeks during the 12 months preceding the unemployment spell, he will be entitled to receive unemployment benefits for at least 26 weeks over a 12-month period. During the period of receiving benefits, the unemployed must actively search for work (IV:28).

Re-entrants (persons who have been absent from the labour market for at least one year) will receive unemployment benefits from the 11th day after registration at the employment service for at least 26 weeks during any 12-month period (Oxenstierna, 1990, pp. 194-201). First-time job-seekers have the right to unemployment benefit from the 11th day after registration for 13 weeks (ibid.). Job-seekers who have fulfilled the required years of service for receiving old-age pension (normally 30 years of employment for men and 25 years for women) have the right to an extended period of income support. Two weeks are added for every year the person has worked in excess of the required years in employment. Those who are unemployed and who would thereby have the right to 52 weeks of unemployment benefit (i.e. they have worked 13 years more than is required for receiving a pension) are eligible for old-age pension one year before they reach the stipulated pension age (IV:29).

The sizes of unemployment benefit to laid-off workers are to be based on the basic (*tariff*) wage of their previous job (IV:30). This means that bonuses and extra payments, which may be a substantial part of earnings, are not taken into account. If the unemployed person has children below the age of 14 and other dependants, the size of the benefit is adjusted according to republic-level legislation. The minimum size of the benefit should not be less than 50 % of the former basic wage or the minimum wage (IV:31). For those displaced from military service and those completing professional training or retraining, the minimum size of the benefit must not be less than the minimum wage (IV:32, 35). For first-time job-seekers and re-entrants after long spells of non-employment, the minimum level is 75 % of the minimum wage (IV:33-34).

The right to unemployment benefit is not granted, or is withdrawn for a period or diminished, if the unemployed person turns down two job offers made by the employment service. The same applies if the unemployed person receives income compensation from his former employer, if he has been dismissed for infringements of work discipline or left on his own initiative without 'valid reasons', if he takes a temporary job, does not fulfil the terms for 'active job search', is absent from his permanent place of residence, or if the benefits have been granted on deceptive grounds (IV:36).

Apart from income support, the unemployed person should be offered retraining if necessary. If an enterprise hires a displaced worker and organizes training for him, the worker has the right to receive his former average wage during the training period (from the new employer), but the enterprise will be able to deduct the costs of the training from its taxable profit (IV:26). Persons who are difficult to place in a job should be offered retraining opportunities by the employment service. The training could be organized either in centres under employment service management or in existing establishments for vocational training. In this case, costs are to be borne by the special State fund for employment assistance (III:24). A person undergoing retraining should receive income support corresponding at least to unemployment benefit. For displaced workers with dependants, the stipend should be at least 50 % of the former average wage or the minimum wage, but not more than the average wage in the republic (IV:27).

Besides income support and retraining, the employment law gives outlines for how employment programmes should be

[1] See further Oxenstierna, 1990, pp. 194-201.

organized, how public relief works, and how labour policy should be administered. A network of public employment services is of vital importance for the administration of these policies. At present there are only 3 000 employment offices, of which 570 are called centres for 'employment service, retraining, and professional guidance'. The number of employees is around 15 000 (*Ekonomika i zhizn'*, No 19, 1991).

The resources for labour policies are to be raised by a 1 % levy on the pay-roll. At least 10 % of this revenue is to be transferred to a central all-union fund, and the rest will be retained in republic employment funds for republic-level needs. The central fund is needed for redistributional purposes, since the tax base and estimated number of persons who will be in need of help are unevenly distributed over the country.

7. Conclusions

The decline in State-sector employment since 1988 is due to changes on both the demand and supply side of the labour market. The wage reform launched in 1986 has induced State employers to shed some labour. However, the trade-off between nominal wage increases and the employment level is still very weak, which indicates that State employers have been operating under soft budget constraints at least up to 1990. The 1987 Enterprise law has contributed to the development of high wage rises without improvements in labour productivity by granting monopolistic enterprises more discretion over price formation and the enterprise remuneration funds, and by a wage-determination mechanism which does not link wage payments directly to profit. In addition, the legalization of private employment has drained the State sector of labour and the increased competition on the labour market has also pushed nominal wages upwards.

With the data available it is not possible to say whether these measures are the primary causes of the decline. To a greater or smaller extent, decreased labour supply may have interacted. The demographic situation, with large increases in the labour force in Central Asia and Transcaucasia where job opportunities are scarce, might have affected the employment level. Jobless people in these regions have a low propensity to migrate, and the proportion of non-employed persons is considerably higher in these regions than the USSR average. The fact that labour force participation has tended to fall among the working-age population in the 1980s might be a consequence of a greater proportion of the population choosing not to work. It follows that the decline in State-sector employment may be a result of a supply constraint.

Apart from the fact that the growth of the active population has been concentrated in regions where labour market participation has traditionally been lower than the USSR average, decline in labour supply (to the legal economy) may have resulted from responses to changes in wages, prices, and tax laws. Intensified shortages on consumer goods markets may have produced supply multiplier effects, that means people choose not to work since wages and salaries do not guarantee command over goods and services.

Moreover, ethnic conflicts, demobilization, natural catastrophes, and the economic crisis have induced people to move, which also means they have left their jobs. These developments may also be reflected in the declining employment.

In order to analyse the trends in employment properly, better statistics are needed. For instance, if we had time-series of the number leaving employment and lay-offs, we could be more precise on whether the decline in State-sector employment is primarily due to factors affecting demand or supply.

The study of the development in unemployment is also impeded by lack of relevant labour statistics. Since there are no data which can clearly distinguish the unemployed from the non-employed, all estimates of unemployment are tentative. From the available data, we can estimate the stock of unemployed at 3,5-4,5 million at the end of 1990, to which 1-4 million unemployed due to job changing should be added. This means that the unemployment rate would be in the range of 3-6 %. In order to obtain a better picture of developments in unemployment, it would be helpful if labour force surveys were conducted at least in some regions of the country. To shape labour market policies it is important to know how many people are actually unemployed, how this number is growing, and who are unemployed. In addition, better data are crucial in order to forecast the consequences in terms of unemployment of any reform programme.

Several tentative scenarios of the unemployment consequences of further transition have been presented. These indicate that unemployment may increase sharply when the economy is undergoing privatization and structural change. Some of the scenarios presented in the USSR seem to be of more political importance than economic. For instance, the government is seeking support for their particular programme by claiming that a high unemployment rate would result if their policy is not pursued. Nevertheless, an unemployment rate of around 10 % is not implausible during the transition, and it will rise more sharply if economic deterioration continues.

It is difficult to foresee what capacity the economy will have to create jobs during the transition period, especially because

it is hard to tell now what kind of transition the economy will have to go through. So far, the economic reforms have not succeeded in creating the prerequisites for economic growth. Instead, elements of the old system prevail side by side with elements of a new system, and as a result, economic activity is heavily distorted. The development of the private sector is impeded by the lack of equipment and inputs and uncertainty regarding future prospects. As long as these obstacles persist, the job-creation capacity in this sector is limited. The future of the big State enterprises is far from clear; they are to be subject to 'de-nationalization' (*razgosudarstvlenie)* and privatization (*privatizatsiya)*, but it is not resolved how this process will be realized, and with the impediments inherited from the past, any revitalizing effect of this process could take a long time to materialize.

Furthermore, it must be recognized that the transition of the Soviet economy is not only a question of transforming a command economy into a market economy. In addition, the transition involves the reorientation of military production towards civilian activities. The conversion of the Soviet defence industry has already been shown to be slow and difficult, and is fraught with compound political and social implications. Another prominent complication is the restructuring of the Soviet federal structure. This process has added to the economic disruption, and will continue to offer a complex environment for economic reform. Thus, apart from the non-trivial difficulties in assessing the prospects of turning the Soviet economy into a market economy, privatization, and structural change of the economy in general, the particular problems of the conversion towards civilian production and of the reshaping of the federation have to be taken into account in any evaluation of Soviet economic prospects.

Even if the Soviet Union can find a way out of its present crisis, open unemployment will rise and it is important that there is a willingness to mitigate this problem in order to avoid increased social tension and a backlash on the whole transition process. It is also vital that labour policies should be designed in a way which does not impede the transformation of the economy. In particular, labour policies should not be geared to saving jobs without a future, but instead to easing the reallocation of workers from shrinking sectors of the economy to expanding sectors. In addition, some kind of income support programme must be put into effect to provide short-term help to the unemployed in order to avoid destitution.

The all-union employment legislation passed in January 1991 copies many elements of labour policies in market economies and is a reasonable start for working out relevant labour policies in different republics. What may be questioned is whether it is possible to live up to this costly legislation during the transition period. For instance, the provisions for the kind of job an unemployed person can refuse while still being eligible for income support are very generous. A network of public employment services is required for effective administration of these labour policies. The number of offices and their resources are at present far below what would be required to fulfil this task. The commitment to providing relevant retraining will be difficult to realize because no one knows which kinds of professional skills will be in demand in the future. The State's ability to finance any employment programmes, if only income support for the unemployed, may be questioned as well, in the light of the general financial situation, the reluctance of many republics to contribute to the all-union funds, and the possibility that a great number of people will be unemployed.

References

Åslund, A. 'The Soviet economic crisis: causes and dimensions. Stockholm Institute of Soviet and East European Economics, Working Paper, No 16, 1991.

IMF, The World Bank, OECD, EBRD. *A Study of the Soviet Economy*, Paris, 1991.

Chapman, J. 'Gorbachev's wage reform', *Soviet Economy*, 4 (4), pp. 338-65, 1988.

Chizhova, L. (Ed.). *Strategiya zanyatosti.* Moscow, Ekonomika, 1990.

Clarke, D. 'Gorbachev's proposed restructuring of the Soviet army', *Radio Liberty Research Bulletin*, RL 544/88, 1988.

Cooper, J. 'Military cuts and conversion in the defense industry', *Soviet Economy*, No 7, pp. 121-42, 1991.

Deripasov, A. and Semenov, A. 'Analiz sootnosheniya proizvoditel'nost' truda i zarabotnoi platy v narodnom khozyaistve', *Planovoe khozyaistvo*, No 2, pp. 89-94, 1989.

Goskomstat. *Ekonomicheskoe i sotsial'noe razvitie soyuznykh respublik.* Moscow, 1990.

Hauslohner, P. 'Managing the Soviet labor market: politics and policymaking under Brezhnev'. Unpublished PhD Thesis, University of Michigan, 1984.

Heleniak, T., 'Puzzling Soviet labour force statistics. Declining State-sector employment and employment in Ministry of Defence'. US Bureau of the Census, December, 1991.

Kirillov, I. 'O zanyatosti molodezhi, okonchivshei srednyuyu shkolu', *Vestnik statistiki*, 10, pp. 58-60, 1990.

Kotlyar, A. and Talalai, M. 'Puti snizheniya tekuchesti kadrov', *Voprosy ekonomiki*, No 5, pp. 33-44, 1981.

Maevskii, V. and Maevskaya, L. 'Proizvoditel'nost' truda i fond zarabotnoi platy', *Voprosy ekonomiki*, No 8, pp. 51-62, 1986.

Malle, S. 'Labour redeployment and cooperatives in the Soviet Union', *Recherches économiques de Louvain*, 56, No 2, pp. 191-220, 1990.

Manevich, E. *Problemy povysheniya effektivnosti ispol'zovaniya rabochei sily v SSSR.* Moscow, Nauka, 1983.

Marnie, S. 'Regional aspects of labour market reform and unemployment in the USSR'. Paper prepared for the International Conference on the Restructuring of Labour Markets in Eastern Europe, Milan, 13-14 June 1991, 1991.

Narkhoz. *Narodnoe khozyaistvo v 1988 g.* Moscow, Finansy i statistika, 1988.

Narkhoz. *Narodnoe khozyaistvo v 1989 g.* Moscow, Finansy i statistika, 1990.

Naselenie SSSR 1987. Moscow, Finansy i statistika, 1988.

Oxenstierna, S. 'Perestroika and unemployment'. Papers of the Sixth Annual Conference of the Italian Association for Comparative Economic Studies, Urbino, 12-14 October 1989, pp. 859-80, 1989.

Oxenstierna, S. *From labour shortage to unemployment? The Soviet labour market in the 1980s.* Stockholm, Almqvist & Wiksell International, 1990.

Oxenstierna, S. 'Labour market policies in the Baltic Republics', *International Labour Review*, Vol. 130 (2).

Perekhod k rynku. Moscow, Arkhangel'skoe, 1990.

Plokker, K. 'The development of individual and cooperative labour activity in the Soviet Union', *Soviet Studies*, 42 (3) (July), pp. 403-28, 1990.

Polnyi khozyaistvennyi raschet i samo-finansirovanie. Moscow, Pravda, 1988.

Semenov, A. 'Rynok truda i stoimost' rabochei sily', *Sotsialisticheskii trud*, No 6, 1990.

Shcherbakov, V. 'Rynok truda i zanyatost': sostoyanie, problemy, perspektivy', *Sotsialisticheskii trud*, No 1, pp. 6-16, 1991.

Sobell, V. 'Perestroika and the Warsaw Pact military burden', Radio Free Liberty Research, RAD Background Report/103, 1988.

Teague, E. *Solidarity and the Soviet Worker.* London, Croom Helm, 1988.

Tedstrom, J. 'The Soviet cooperative movement: an update', Radio Liberty, Report on the USSR, 1, No 41, 1989.

Trud v SSSR. Moscow, Finansy i statistika, 1988.

Volokh, V. 'Nuzhen zakon o bezhentsakh', *Sotisalisticheskii trud*, No 4, pp. 50-2, 1991.

Zaslavskii, I. 'Obespechenie zanyatosti v usloviyakh perestroiki', *Rabochii klass i sovremennyi mir*, No 5, pp. 27-37, 1988.

CMEA collapse and Soviet trade with European CMEA countries

O. Ivanova

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Tables

Officially the Council for Mutual Economic Assistance (CMEA) ceased to exist on 26 September 1991. However, the basic decision to abandon the old system of trading arrangements and to organize trade on a commercial basis was taken more than a year and a half earlier, in January 1990. From 1 January 1991 CMEA trade was to be conducted on the basis of world market prices, with settlement in convertible currencies. The new rules were considered more advantageous both by the USSR and by its European trade partners, although for different reasons, and were expected to promote market-oriented reforms. It did not take long to prepare the appropriate bilateral agreements, and by the end of 1990 everything was ready.

The former CMEA partners were surely aware of some inevitable losses which would result from breaking established trade and industrial links, but these were thought to be eventually outweighed by gains. The European member countries of the CMEA (ECMEA — Bulgaria, Hungary, Poland, Romania and Czechoslovakia) expected their short-term losses would be offset by political gains as well as by an expansion of trade with the West. The USSR was gravely preoccupied by the rapid worsening of its payments situation and expected to improve its current-account deficit and reduce outstanding debt to ECMEA by a sharp improvement in its terms of trade *vis-à-vis* ECMEA.[1] But the outcome proved to be more complicated, and the hopes were not fulfilled. The poor trade performance with the former ECMEA in the beginning of 1991 caused major domestic problems and aggravated the economic situation.

1. New trade and payment arrangements

The new basis of trade with the former ECMEA is formed by the bilateral treaties on 'transition' to the new mechanism of mutual economic relations and according agreements on trade and economic cooperation in 1991.[2] These were concluded between the USSR and each of the former ECMEA countries at the very end of 1990.[3] The treaties and the agreements declare the transition to payments and settlements in convertible currencies on the basis of world market prices, but in order to limit immediate trade disruptions they provide measures for 'preserving in the transitional period the procurements which are established and indispensable for the national economies'.

The settlements with Bulgaria and Czechoslovakia are to be performed on a clearing basis in convertible currencies with the US dollar as the agreed accounting unit. One part of trade is to be centrally regulated and the other is to be free. The regulated trade will be conducted in 1991 within the framework of so-called 'indicative lists' of commodities and manufactured goods offered for trade. For this purpose special accounts with fixed limits of technical credit were established in the corresponding banks for foreign trade.

The agreements with Poland, Hungary and Romania do not mention clearing arrangements, so the trade is to be conducted on a cash basis. But in fact there are 'hidden' clearing arrangements, for a part of the turnover is to be regulated according to similar 'indicative lists' for the year 1991, and any trade surplus should be used for extra purchases of goods, for balancing bilateral payments and for paying off credits.

Another major feature of the agreements is that governments do not undertake obligations to procure the items and volumes mentioned in the indicative lists, but only that they 'should provide conditions necessary for the fulfilment of the mutual deliveries of goods and services included'. For the Soviet Union it means including the indicated goods in the State export plan and providing export licences automatically.

On the Soviet export side, the goods included in the indicative lists are energy products and some other raw materials, equipment for nuclear power stations, vehicles and parts. On the import side, they are deliveries of parts, components and accessories in the framework of cooperation agreements, spare parts for vehicles, medicines, food products and equipment for the oil and gas industries. All in all the goods in the indicative lists account for approximately one-third (Bulgaria and Romania) and one-half (Hungary, Czechoslovakia) of total trade with these countries in 1990. The sharpest reduction is in Soviet imports of capital goods and intermediate materials for food and light industries (one-third of former volume) and consumer goods (one-tenth of former volume). Machinery and equipment account for 40 to 50% of their 1990 volume. The example of an 'indicative list' — for trade with Hungary — is presented in Annex A.

It is worth noting that most Soviet export items (being raw materials) are indicated in volume terms, whereas imports

[1] The potential gains of the Soviet Union from the new mode of pricing and terms of trade improvement were discussed widely. Even the pessimistic scenario provided in *European Economy*, No 45, 1990 (sharp decline in oil exports and pre-Kuwait price level) projected the trade surplus with the CMEA at USD 1,6 billion after a USD 1,2 billion deficit in 1989 and a USD 3,8 billion deficit in 1990.

[2] The agreement with Poland is without fixed term.

[3] With Poland, on 13 November; with Hungary, on 11 December; with Czechoslovakia, on 17 December; with Romania and Bulgaria, on 20 December.

from ECMEA are indicated in value terms (in US dollars). Still, there were hidden assumptions concerning future commodity prices. It was understood that the regulated trade would not be balanced bilaterally and that Soviet exports would have to exceed imports in order to pay back accumulated ECMEA surpluses from the past. The latter were denominated in transferable roubles (TR) which are converted to US dollars. For example, the regulated exports to Hungary account for USD 2,1 billion, whereas imports account for only USD 1,7 billion. [1] The total value of Soviet exports to Czechoslovakia according to the indicative lists is estimated at USD 1,9 billion and imports at USD 1,4 billion. [2] In addition, the Soviet Union 'will grant Czechoslovakia a possibility' to buy, in 1991, an additional 7,5 million tonnes of crude oil, two of which will be on barter terms with enterprises of the Ministry for the Oil and Gas Industries, and the rest on a cash basis in hard currency without matching Soviet purchases in Czechoslovakia.[1] Similar agreements were concluded with Romania (raw materials and some machinery against equipment for the oil and gas industries) and Bulgaria. The centrally regulated volume of trade in the latter case is particularly small because of the overwhelming share of 'soft commodities' in Soviet purchases from Bulgaria, which is reported to be about 90% (50 to 60% with other countries). [3]

As for the indicative lists, there was no real change in trade regulation (except for settlements in convertible currencies on the basis of world market prices), for they strongly resembled the annual protocols prepared previously with each trading partner, although they were less detailed and covered only half the 1990 volume. But the other part of trade, besides and beyond the negotiated lists, was to be conducted on the basis of commercial agreements with the republics, regions and individual enterprises, and on their own responsibility. As the republics, regions and most enterprises are deprived of convertible currencies and the Vneshtorgbank no longer guarantees non-centralized loans, their trade with the former ECMEA can be conducted virtually exclusively in the form of barter.

Consequently according to the new regulation during the transitional period there will be four levels of decision-making in export-import operations with former ECMEA partners:

(i) the centre (all-Union),

(ii) republics,

(iii) regions,

(iv) enterprises,

and three different types of settlements:

(i) clearing (or 'hidden' clearing) arrangements,

(ii) barter,

(iii) cash payments in hard currencies.

2. Recent trade performance and underlying factors

The Soviet Union's trade with ECMEA stagnated from the mid-1980s onwards and contracted sharply in 1990 due to a sharp fall in oil exports that caused a similar decline in the volume of ECMEA exports to the USSR. The latter declined by 12% in value terms (denominated in 'valutny' roubles). The value of Soviet exports fell by one-quarter partly because of a 15% drop in oil prices, which, according to the 'Moscow formula', reflected almost entirely the decline in the oil price on world markets since 1985.

In the first half of 1991 Soviet trade with the CMEA was reported to have dropped dramatically: exports declined as much as 45% and imports 50% (in value terms). But official data on changes in values of exports and imports are meaningless without knowing the underlying price movements which took place because of the new system of pricing in CMEA trade, and surely these data are incomparable with those concerning trade with other countries where there had been no severe price changes. Furthermore, the official data on value changes do not appear to be very reliable: Goskomstat is engaged in a total revision of trade statistics.[2] For example, Goskomstat relates 1991 data on CMEA trade without the GDR to 1990 data with the GDR, and this accounts for an additional 11% drop in export value and a 10% decline in import value.

So we will use our own calculations based on the following main assumptions: trade values in 'valutny' roubles for 1990-91 were converted to US dollars at the rate of USD 1 = R 1,69 (assuming TR 1 = R 2,8 and applying then an official rate of USD 1 = R 0,605), and trade values in roubles for the first quarter of 1991 were converted by

[1] In August 1991 the Soviet Union and Czechoslovakia came to an agreement about future cooperation in development of gas fields and related matters. The Soviet liability in the framework of this common project was stated to amount to one billion transferable roubles. The sum is to be covered by delivery of 16,35 billion cubic metres of natural gas. [2]

[2] The revision includes a transition to a new trade classification as well as conversion factors for external trade, not to mention the complications arising from the unification of Germany. The technique to deal with these matters seems to be in transition too, as it changes from quarter to quarter.

a common commercial rate of USD 1 = R 1,672. These techniques seem to be as close as possible to the last known variant of Goskomstat's procedure.[1]

With these assumptions, total Soviet exports to ECMEA declined in the first quarter of 1991 by 11,3% while imports dropped by 45,5%, both in dollar value terms. Total energy export value rose 42,5% and non-energy exports declined by 45,5%. As a result, the energy exports' share rose steeply — from 45% in the first quarter of 1990 to 68% of total exports in the first quarter of 1991 (see Table 1).

Table 1

Soviet trade with ECMEA countries

	1990 (First quarter) (million USD)	1991 (First quarter) (million USD)	Change (%)
Bulgaria			
Exports	802	532	−33,7
Energy	333	292	−12,3
Oil	180	113	−37,2
Other	470	240	−48,9
Energy share (%)	41,5	54,9	
Imports	986	438	−55,6
Surplus (+) or deficit (−)	−184	+94	+278*
Hungary			
Exports	519	336	−35,2
Energy	233	224	−3,5
Oil	70	77	9,0
Other	286	112	−60,9
Energy share (%)	44,8	66,7	
Imports	555	346	−37,7
Surplus (+) or deficit (−)	−36,0	−10	+26*
Poland			
Exports	636	757	19,0
Energy	285	537	88,9
Oil	146	356	143,0
Other	352	220	−37,5
Energy share (%)	44,8	71,0	
Imports	1 115	599,6	−46,2
Surplus (+) or deficit (−)	−479	+157	+636*
Romania			
Exports	401	244	−39,2
Energy	165	100	−39,4
Oil	36	30	−17,8
Other	237	144	−39,1
Energy share (%)	41,0	40,9	
Imports	268	190	−29,1
Surplus (+) or deficit (−)	+133	+54,0	−79,5*
Czechoslovakia			
Exports	735	875	19,1
Energy	381	692	81,6
Oil	187	408	118,9
Other	354	183	−48,2
Energy share (%)	51,8	79,1	
Imports	902	512	−43,2
Surplus (+) or deficit (−)	−167	+363	+530*
Total ECMEA			
Exports	3 094,8	2 744	−11,3
Energy	1 396	1 871	34,0
Oil	619	993	58,8
Other	1 698	873,5	−46,6
Energy share (%)	45,1	68,2	
Imports	3 826	2 085	−45,5
Surplus (+) or deficit (−)	−732	+659	+1 391*

* Million USD.

NB: The 'totals' include estimates of oil products' exports not included in country data. 1990 imports are fob and 1991 imports are cif. No adjustment was made because of lack of data, but the cif/fob factor seems to be rather small for trade with ECMEA. With proper adjustment import performance would be even poorer.

The changes were caused by significant moves both in trade prices and in trade volumes, which were of different sign in most cases. To estimate volume and price changes uniformly:

(i) the change of the energy export price was calculated (from price index with 1990 weights);

(ii) the similar price index for non-energy goods was calculated with estimated price changes for these goods.

The latter turned out to be rather a tricky problem since exports and imports of 'Other' (mostly manufactures) are reported usually only in value terms.[2] The analysis of available data permitted the following price changes (these are both for exports and imports of other goods and commodities) to be assumed:

other primary commodities and chemicals: an increase of roughly 60%;

[1] In fact it does not really matter what conversion rate between the transferable rouble and the US dollar is chosen for 1990, for the purpose here is to estimate relative price and volume changes which do not depend on it: the answer would be the same even if all trade prices and values were measured in barrels of oil. The estimation of the 'true' value of CMEA exports and imports is quite a different problem.

[2] To complicate matters, because of the transition to a new trade classification and absence of revised data for 1990, the range of comparable goods was still smaller.

machinery and equipment: 50%;

food: 70%;

manufactured consumer goods: 15%.

Because of differences in the structure of non-energy exports and imports (imports from ECMEA are assumed to be exclusively non-energy) this procedure yields an increase in export prices of other goods of 52% and a rise in import prices of 47%. The data on price and volume changes are summarized in Table 2.[1]

Table 2

Soviet trade with ECMEA countries: volume and price changes

	1990 First quarter level (million USD)	Volume (%)	Price (%)	Value (%)	1991 First quarter level (million USD)
Exports	3 094	−53	89	−11	2 774
Energy	1 396	−36	110	34	1 871
Oil	619	−40	163	59	983
Other	1 698	−66	52	−49	873
Imports	3 826	−63	47	−46	2 085

Oil export volume dropped by more than 40% in the first quarter, and total energy exports by 36%. The steepest decline was in other — mostly manufactured — products, more than 60% both for Soviet exports to ECMEA and for imports from these countries.[2] There were differences in country performance, of course, as shown in Table 1, but these will not be discussed here.

The total terms-of-trade improvement may be estimated at about 29% only. This is much less than was envisaged in most projections (see for example [4] and [5]) mostly due to underestimation of the change in relative prices of manufactures. It was generally assumed that these prices would drop sharply because manufactured goods were overpriced in CMEA trade relative to their poor quality. But although all prices declined relative to oil, the decline was less than projected and they still rose considerably in nominal terms.

This was partly because of the nature of the trade agreements between the USSR and CMEA countries (the major part of this trade is still bilaterally regulated) and the fact that there cannot be overnight substitution of CMEA products for those from other countries, especially for semi-finished industrial products. The interesting thing is that prices for industrial consumer goods (television and radio sets, refrigerators, footwear, etc.) rose much less than average: it may mean that the market for consumer goods is more competitive and that price increases were moderated in order to prevent a shift in demand.[3] So it might turn out that future manufactured goods' price adjustments would contribute to some recovery in Soviet trade with the former ECMEA countries, with, of course, further ECMEA losses in terms of trade.

The improvement in the Soviet terms of trade was less than expected not only because of a significant rise in non-energy prices, but also because the rise in oil prices, due to the Kuwait war, was short-lived: the Soviet oil export price for ECMEA in the first quarter of 1991 was about USD 142 per metric tonne or USD 19,6 per barrel, while at the end of 1990, when the indicative lists were compiled, it was believed that the price would be no less than USD 25 per barrel. If the 'Moscow formula' had still been in force and if pricing had still been in TR, the 1991 CMEA oil price would have dropped another 14% to USD 46,5 per tonne (about USD 6,4 per barrel).

In fact the trade balance for the first quarter improved not only because of the terms of trade improvement, but also because import volume contracted even more strongly than export volume. In the second quarter exports apparently declined sharply; however, over the first half-year as a whole the surplus with ECMEA evaporated — trade was barely balanced.[4]

The most obvious explanation of the poor trade performance is the collapse of the CMEA. The effect of the changes in payment arrangements and new terms of trade surely was to cause trade diversion and changes in the commodity structure of exports and imports within the CMEA. Still, the contraction seems to have overshot somewhat. Most authors blame this on the haste with which the transition to the new rules was accomplished — virtually overnight and without the necessary preparations and provisions. [6] This is true to some extent, but it is not the complete explanation.

[1] The volume change estimates are biased, of course. Thus, the energy export volume change estimated by 1990 weights of the volume index is −33,7% and not −36,3% as is stated in Table 2.

[2] Part of these were deliveries under 1990 contracts, so that for 1991 as a whole the drop might be even greater.

[3] Another factor is that trade data for the first quarter of 1991 include some deliveries according to the previous year's contracts, at 'old' prices.

[4] These data are obtained from trade statistics, which are on a transaction basis.

Reasonings of the kind *post ergo propter* are irrelevant mainly because of the poor performance of Soviet external trade as a whole in 1991 — Soviet exports to the industrial and developing countries declined by about 26%, and imports as much as 54% in dollar terms, according to estimates. Exports to industrialized countries declined by some 4%, and to developing countries by as much as 64%. Import values dropped 51 and 68% respectively. Considering the rise in prices, it makes the decline in volume terms similar to those registered in trade with ECMEA countries. It shows that the reason for the Soviet-ECMEA trade collapse is of a less particular nature and that some of the explanation lies with the generally poor trade and economic performance of the Soviet Union in 1991.

2.1. Domestic supply — physical constraints

Raw materials account for more than a half of the total Soviet exports to ECMEA. They are even more important in centrally regulated trade — these items account for 80 to 90% of the total value of goods and commodities included in the indicative lists of Soviet exports. For delivery of energy products, in particular, a special transportation system was constructed with the participation of ECMEA countries: pipelines for oil and gas as well as a common electricity transmission net.

The pessimistic projection in *European Economy*, No 45 of December 1990 ('oil exports drop sharply') based on a forecast provided by the Soviet authorities turned out to be too optimistic. It was supposed that exports of energy products to ECMEA would drop some 10 to 15% from their 1990 level: in particular oil exports (a half of total energy exports) would decline by 30% with export volume of other energy products unchanged. But the output decline in the Soviet oil and gas industries, in coal and in electricity production turned out to be more pronounced than predicted, and consequently there was a more than proportional reduction in exports (see Table 3).

As a result, the volume of total energy exports dropped by 28% during the first quarter of 1991, for crude oil the fall was 42%, for oil products 27%, for natural gas 6,5%, for coal 34% and for electricity 23,5%. This was exclusively at the expense of ECMEA countries; energy exports to them declined by 33,7%, with oil and coal roughly in line with the total, and gas down 20%. Energy exports to the rest of the world did not decline at all.[1]

The sharpest fall — almost to zero — was reported for oil products. But this is mainly because of a decrease in ECMEA demand. Oil products (only 4,7% of the total Soviet energy exports to ECMEA in 1990-91) do not seem to have been included in the new indicative lists. Vast oil refinery capacities in ECMEA countries are to be idle because of the contraction of oil imports from the Soviet Union and from Iraq, and there is no need to purchase them centrally. Moreover, exports of oil products are much more profitable for hard currency, so surely the Soviet trade authorities were reluctant to include them in the indicative lists. As a result, although total Soviet exports of oil products declined in 1991, exports to some countries in the convertible-currency area (notably to Belgium, France, Italy and Japan) rose.

[1] In the first half-year total oil exports declined by 50%, oil products by 43%, coal by 27%, and electricity by 13%. There are no data on geographical distribution, so it is impossible to estimate the decline of energy exports to ECMEA, but probably the situation was the same as in the first quarter.

Table 3

Exports of some primary commodities as a share of production

	Production		Exports		Share (%)	
	1990: First half	1991: First half	1990: First half	1991: First half	1990: First half	1991: First half
Oil (million tonnes)	289	263	62,0	31,0	21,5	11,8
Gas (billion m^3)	409	400	54,0	52,0	13,2	13,0
Coal (million tonnes)	360	320	24,0	13,0	6,7	4,1
Electricity (billion kWh)	872	864	18,0	16,0	2,1	1,9
Wood and lumber (million m^3)	144	125	11,0	9,0	7,6	7,2
Saw-timber (million m^3)	34	29	2,8	1,8	8,2	6,2

Source: Goskomstat surveys.

A similar situation was observed for other commodities: while total Soviet exports declined, exports to CMEA countries declined either as much as or more than to the rest of the world.

The fall in manufactured goods exports was more profound, but this was largely due to a decline in ECMEA demand. There were physical constraints on the supply side too: the output of manufactured goods fell, partly because of insufficient purchases of parts and components from ECMEA countries. This particularly affected those export sectors where the import content was highest.

2.2. Domestic supply — misguided regulation

Thus the decline in output is an important, but certainly not the only, reason for the sharp decline in Soviet exports to ECMEA. In the same way that the fall in total output was a result of the loosening of State control without any market mechanisms to take its place, a number of inept and partial reforms in the external trade sector caused additional obstacles for export-import operations, especially with ECMEA countries. The enterprises which consider themselves independent now, and free from State control, sometimes choose to ignore central export plans (orders) when they consider them unprofitable. So there is sometimes a profound contradiction between State and enterprise interests, and there are no means as yet to cope with this problem. The existing system of distribution of foreign currency revenues — the so-called retention scheme — makes exports to ECMEA unprofitable for enterprises. Hence the 'non-fulfilment' of the plan of centralized deliveries to the ECMEA, and the extremely low level of activity in the 'free' sector of trade, especially in exports of manufactured goods.

The reform of the external trade system in the Soviet Union started in 1986. The main aspects of the reform were to decentralize trading rights and to introduce incentives for exports. As these measures failed and recent trade performance was poor, the authorities tried to reverse the reforms, which only increased the confusion. The constantly changing system of external trade regulations provided contradictory signals for enterprises and increased the transaction costs of their export-import operations.

The decentralization of trading rights, permitting any firm or enterprise to engage in foreign trade, was accompanied by a tougher licensing policy and by the introduction of quotas. At present more than 70% of exports are subject to licences; this covers almost all raw materials and energy products, most semi-manufactured goods, foodstuffs and consumer durables. About 6% of imports require licences: this covers some medicines, herbicides, printed materials, tape and video recorders, etc. What is more, licences and quotas are used for all imports from Hungary, the former East Germany and Czechoslovakia (except for medicines and food). The mechanism of licensing and quotas does not work smoothly yet and sometimes there are delays with the allocation of quotas; therefore the producers do not know them in advance or for the current period.

The sophisticated system of differentiated foreign currency coefficients (DVKs) providing a linkage between world prices and domestic prices was abolished and a common commercial exchange rate for the rouble — more depreciated — was established at the end of 1990.

Another export incentive was the introduction of a foreign exchange retention scheme, so that a part (a quota) of foreign currency earnings could be used by the enterprises to self-finance their imports of intermediate and investment goods, as well as of consumer goods for their employees. The rules regulating the retention rates were changed too and the rates for 1991 are given in Table 4.

But the stimulating effect of the depreciation of the rouble, and of retained foreign exchange, was undermined by the introduction of new rules and regulations.

From the beginning of 1991 export and import taxes (other than duties) were introduced. The export taxes cover mainly raw materials, pulp and paper, metal and chemical products. They are paid by exporters in roubles and the rates are fixed as a percentage of the (contract) value of the commodity, converted into roubles at the commercial rate. The basic rates are: for iron and steel products, 50%; for oil, 40%; for non-ferrous metals and oil products, 35%; for ores, 30%; etc. The lowest rates were introduced for timber (10%) and for coal (5%).[1]

Furthermore, the stimulative effect of the depreciation of the rouble was almost eliminated by rising domestic prices. The index of wholesale prices of industrial output rose 122% in June 1991 (year-on-year basis); of fertilizers, 82%; oil products, 117%; vehicles, 149%; and timber, 122%. The partially liberalized contract prices and especially the prices at the new commodity exchanges (in fact auctions) are even higher.

Besides, retentions of foreign currency decreased because of the special measures introduced to raise funds to cope with

[1] It was declared that the rates were needed for levelling external and domestic prices, but certainly there were budget considerations as well.

the sharply increased foreign debt service obligations: the mandatory sale to the State of as much as 40% of total export proceeds in foreign currency at the commercial exchange rate (a kind of a tax, in fact), so that retention quotas were reduced by 40% (see Table 4). For enterprises which export to ECMEA countries the incentive effect of foreign currency retention was still lower because their retentions in 'accounting dollars' from trade with ECMEA could be used only in the country of destination of their exports. As a result some enterprises refused to send their goods and commodities to ECMEA unless they were paid in convertible currencies.

Table 4

Principal retention quotas effective in 1991

(%)

Commodity	Retention quota	Retention quota after '40% tax'
Oil	60	36
Gas	20	12
Chemicals and plastics	25	15
Iron, steel and non-ferrous metals	30	18
Oil products	35	21
Stone, plaster, etc. products, glass	40	24
Hides and skins	45	27
Manufactured goods, divers	50	30
Footwear, textiles, etc.	55	33
Machinery and transport equipment, instruments, etc.	70	42

In sum, the export taxes, the transportation and insurance costs paid from now on by the enterprises themselves and the lower rate of foreign currency retention caused a considerable drop in the profitability of exports.

External debt service considerations also led the authorities to prohibit barter trade at the end of 1990. Although barter transactions with ECMEA countries accounted for less than 2% of Soviet exports, it did provide a small-scale, but still important, basis for trade with ECMEA outside the sphere of governmental regulation.[1]

The extremely poor performance of external trade, especially with the ECMEA countries, made the central USSR authorities change the regulations. In April 1991 State export contracts were declared to be of top priority, taking precedence over other contracts. Enterprises refusing export contracts were to pay fines. Incentives for trade with ECMEA were also created: the 40% of foreign currency received for export to the CMEA, sold previously to the State for external debt service, could now be used to buy goods there. There were also some tax incentives for those enterprises which delivered commodities and goods to the CMEA under State orders (to repay the debts, for centralized State loans, etc.).

In the summer of 1991 barter trade with ECMEA countries in finished manufactured products was permitted to State enterprises. With Bulgaria and Poland this also applied to raw materials, but only from inventories exceeding a certain norm. In September State enterprises were freed from export taxes on barter transactions, as well as from import taxes on foodstuffs and garments. Barter trade in primary commodities remained officially banned.

2.3. Domestic demand — changing pattern

There was also a decline in Soviet demand for ECMEA goods because of the contraction of output, and especially investment. In 1991 total investment was projected to drop by 60 to 70% in real terms, and industrial output by 7,2%. [5] Traditionally the Soviet Union bought mostly manufactured products — capital goods, intermediate materials and parts, processed food and consumer durables. The share of imports in total domestic consumption in the late 1980s was very high, and well above 'safety levels' in rolling mills and equipment for the textile industry (about 40%), food-processing equipment, machinery for the chemical industry (about 25%), trams (30%) etc., although it was already decreasing because of a reorientation towards Western goods. Imports of parts and components for the car industry are very substantial too; they account for as much as a third to a half of total demand for these goods.

But the main reasons for the decline in imports are the lack of hard currency and the accumulated trade surplus in ECMEA countries, which are to be repaid by exports of 'hard' commodities. There is a very narrow basis for imports in the framework of governmental agreements, and a still narrower one for independent purchases. Finished goods were almost excluded from indicative lists — capital goods were to be imported mainly for the oil and gas industries (to support exports) while consumer goods were reduced to 10% of their volume in 1990. However, even these bare necessities might not be provided because of a higher-than-expected decline in exports and miscalculated oil-price movements.

[1] Barter trade, which doubled in 1991, is mostly conducted with the permission of republic or regional authorities, often to the detriment of centralized deliveries.

This resulted in extremely limited room for manœuvre for central trade authorities, and to arrears in payments. Moreover, sometimes the trade organizations of Bulgaria, Hungary, Czechoslovakia and Poland refused to grant commercial credit and insisted on cash payment. Even the government contracts within the framework of the indicative lists were not fulfilled, the most striking example being non-payment for agreed deliveries of medicines from Hungary: although a minimum of USD 450 million worth of medicines was included in the indicative list, less than 2% of this was imported during the first quarter of 1991.

The non-fulfilment of the centralized payment plan was caused not only by lack of liquid resources but also by constant changes in priorities. The rapid deterioration of the domestic economic performance constantly created new 'emergencies' calling for new imports. The agreed lists of industrial materials and components proved to be insufficient, but imports from ECMEA countries could be increased only on a cash basis for they would not provide credits. So the purchases were made in the rest of the world, to the extent that new loans were obtained.

The hope that enterprises would acquire the necessary industrial inputs and capital goods themselves by self-financing in foreign currency proved to be vain. With the retention system there was constant confusion as to who must pay for what between central authorities, republics and enterprises. The retention scheme was not very efficient as an export incentive; as a method of fostering imports of industrial supplies in 1991 it proved to be disastrous.

Firstly, in spite of strict regulations regarding the expenditure of foreign currency (mainly for production needs), those enterprises which had it managed to spend a large part on consumer goods for their employees, and on attracting domestic suppliers.[1] At the same time, there were constant requests by enterprises and ministries to central authorities to provide centralized resources to buy industrial supplies from ECMEA countries — they regarded this not as their own task but rather as a government concern.

Secondly, the amount of retained currency is often insufficient to provide for the desired quantities of industrial inputs and capital goods, and the enterprises' ability to use credits is restricted by the reluctance of ECMEA firms and by the Vneshtorgbank, which no longer guarantees non-centralized loans.

But the most dangerous thing is that with less and less hard currency available centrally a lot of enterprises, mostly in light industry and in the food industry, as well as in transport (especially public) and in other public utilities, are increasingly deprived of supplies from ECMEA countries. They do not have their own foreign currency resources, since they do not export, and their needs were usually regarded as minor when the indicative lists were completed.[2] But exactly these industries were the main customers for ECMEA capital goods. The commodity composition of Soviet imports from ECMEA in 1988 (the year is chosen because it is rather 'normal') is presented in Table 5.

The opportunities for direct barter trade are evidently limited in this case, even with barter partially permitted now. So 'independent' trade is hindered by the lack of hard currency or of 'hard commodities' for barter transactions of those who would like to import from ECMEA countries, and by the discrepancy between the commodities demanded by enterprises which have hard currency and those goods on offer within ECMEA.[3]

The abolition of non-market retention schemes would perhaps help to increase imports of some goods from ECMEA countries by reallocating currency resources to those sectors which used to buy ECMEA goods. But this would require either a new (and successful) *coup d'état*, or internal convertibility and price liberalization, both of which are highly improbable in the short term. But both of them seem to be more effective than the present system, especially after the abandoning of the '40%' rule in trade with ECMEA countries.

2.4. External demand and supply factors

The main reasons for the decline in Soviet exports of primary commodities are on the supply side. But for manufactured goods exports and imports, the main cause of the decline in trade volumes is demand. In indicative lists for Soviet exports their share is small in comparison with 1990. Machinery and transport equipment normally account for more than a half of total exports of manufactured goods (see Table 6), and

[1] The current ratio of domestic to foreign prices makes consumer goods imports more profitable; and they are tradable for industrial supplies in the domestic market.

[2] The lack of industrial supplies from abroad caused a half of the 10% output decline in the light and food industries. But as there is yet no unemployment problem (even with a 10% output drop, employment has not contracted) for government to solve, their poor performance is still compensated by increasing imports of finished consumer goods.

[3] Sometimes enterprises and regions, while proposing hard commodities for barter trade with ECMEA, ask for Western goods (or cash in convertible currency) as a part of the repayment.

Table 5

Commodity composition of Soviet imports from ECMEA countries in 1988

(in million roubles)

	Bulgaria	Hungary	Poland	Romania	Czechoslovakia	Total
Total imports	6 873,10	4 943,20	7 109,30	2 431,20	6 817,30	28 174,10
Industrial supplies	24,80	39,32	940,40	197,70	697,40	1 899,62
Machinery and equipment, total	3 784,03	2 486,65	3 358,10	1 186,00	3 931,80	14 746,58
Heavy machinery	1 197,77	195,22	963,50	572,70	801,70	3 730,88
Equipment for extractive and fuel industries	:	0,65	211,60	428,80	76,20	717,25
Machinery for light and food industries, etc.	118,62	148,00	136,10	11,00	563,00	976,72
Machinery for chemical and timber industries	15,17	20,48	113,10	39,00	139,30	327,50
Laboratory and medical equipment	56,20	191,50	186,10	:	97,10	530,90
Data-processing machinery and parts	1 137,74	:	166,45	:	:	1 304,19
Agricultural machinery	178,04	116,00	96,90	77,60	181,50	650,04
Transport equipment	139,35	1 009,09	647,80	291,90	1 170,30	3 258,44
Chemical products	62,61	115,00	101,18	62,30	173,00	514,09
Food etc.	1 012,99	708,74	42,50	135,70	24,10	1 924,03
Manufactured consumer goods	530,60	389,90	487,60	492,30	1 035,90	2 936,30
Medicines	227,63	275,60	482,90	5,10	71,20	1 062,43

Figures do not add to the totals because some goods in the totals have not been classified.

(%)

	Bulgaria	Hungary	Poland	Romania	Czechoslovakia	Total
Total imports	100,0	100,0	100,0	100,0	100,0	100,0
Industrial supplies	0,4	0,8	13,2	8,1	10,2	6,7
Machinery and equipment, total	55,1	50,3	47,2	48,8	57,7	52,3
Heavy machinery	17,4	3,9	13,6	23,6	11,8	13,2
Equipment for extractive and fuel industries	:	0,0	3,0	17,6	1,1	2,5
Machinery for light and food industries, etc.	1,7	3,0	1,9	0,5	8,3	3,5
Machinery for chemical and timber industries	0,2	0,4	1,6	1,6	2,0	1,2
Laboratory and medical equipment	0,8	3,9	2,6	:	1,4	1,9
Data-processing machinery and parts	16,6	:	2,3	:	:	4,6
Agricultural machinery	2,6	2,3	1,4	3,2	2,7	2,3
Transport equipment	2,0	20,4	9,1	12,0	17,2	11,6
Chemical products	0,9	2,3	1,4	2,6	2,5	1,8
Food etc.	14,7	14,3	0,6	5,6	0,4	6,8
Manufactured consumer goods	7,7	7,9	6,9	20,2	15,2	10,4
Medicines	3,3	5,6	6,8	0,2	1,0	3,8

Source: Vnešnie ekonomi eskie svázi SSSR v 1988g

Table 6

Commodity composition of Soviet non-energy exports to ECMEA countries in 1988

(in million roubles)

	Bulgaria	Hungary	Poland	Romania	Czechoslovakia	Total
Total exports	3 511,90	1 868,50	3 200,40	1 188,10	2 837,50	12 606,40
Industrial supplies	376,20	294,00	748,40	409,60	501,20	2 329,40
Machinery and equipment, total	1 512,20	657,90	913,30	376,70	844,20	4 304,30
Heavy machinery	738,90	164,90	133,30	103,60	361,70	1 502,40
Equipment for extractive and fuel industries	73,60	14,30	32,50	35,60	25,50	181,50
Machinery for light and food industries, etc.	48,60	8,30	41,50	37,20	18,00	153,60
Machinery for chemical and timber industries	61,90	10,40	13,90	39,40	10,00	135,60
Laboratory and medical equipment	34,10	10,50	23,00	8,50	17,80	93,90
Data-processing machinery and parts	1,54	7,50	8,30	:	45,80	63,14
Agricultural machinery	248,90	73,70	111,70	7,30	59,40	501,00
Transport equipment	333,90	290,70	232,60	64,70	214,70	1 136,60
Chemical products	63,50	522,50	157,90	61,80	168,70	974,40
Food etc.		29,40	66,60	19,60	44,80	160,40
Manufactured consumer goods	107,40	95,70	281,50	32,70	121,90	639,20
Medicines	14,00	10,50	19,20	3,90	6,60	54,20

Figures do not add to the totals because some goods in the totals have not been classified.

(%)

	Bulgaria	Hungary	Poland	Romania	Czechoslovakia	Total
Total exports	100,0	100,0	100,0	100,0	100,0	100,0
Industrial supplies	10,7	15,7	23,4	34,5	17,7	18,5
Machinery and equipment, total	43,1	35,2	28,5	31,7	29,8	34,1
Heavy machinery	21,0	8,8	4,2	8,7	12,7	11,9
Equipment for extractive and fuel industries	2,1	0,8	1,0	3,0	0,9	1,4
Machinery for light and food industries, etc.	1,4	0,4	1,3	3,1	0,6	1,2
Machinery for chemical and timber industries	1,8	0,6	0,4	3,3	0,4	1,1
Laboratory and medical equipment	1,0	0,6	0,7	0,7	0,6	0,7
Data-processing machinery and parts	0,0	0,4	0,3	:	1,6	0,5
Agricultural machinery	7,1	3,9	3,5	0,6	2,1	4,0
Transport equipment	9,5	15,6	7,3	5,4	7,6	9,0
Chemical products	1,8	28,0	4,9	5,2	5,9	7,7
Food etc.		1,6	2,1	1,6	1,6	1,3
Manufactured consumer goods	3,1	5,1	8,8	2,8	4,3	5,1
Medicines	0,4	0,6	0,6	0,3	0,2	0,4

Source: Vnešnie ekonomi eskie svâzi SSSR v 1988g

this category is extremely sensitive to the declines in final consumption which took place in all ECMEA countries.

Moreover, about one-sixth of total capital goods exports are based on technical assistance agreements, primarily for heavy industry. The ECMEA countries turned down these and other similar contracts, not only because of lack of hard currency, but also because of their aspiration to restructure their domestic economies. The liquidity problems of ECMEA led them to prefer credit-based purchase in Western countries, if available; the high quality of Western goods is not the only reason for reorientation of import demand. As regards exports of Soviet consumer durables[1] previously bought by ECMEA countries, the decline is due to their poor quality.

Lastly, trade in military goods and components traditionally accounted for some 15% of total Soviet exports to ECMEA. The collapse of the Warsaw Pact and the conversion of the defence industry (in Czechoslovakia, for example) surely led to a fall in demand in this sector.

The supply-side constraints for exported goods in ECMEA countries seem to have been less important than in the USSR. The main problem was that of contradiction of interests of the central authorities, so that there was a necessity sometimes to establish special incentives.

In addition, prospective exporters are reluctant to conclude contracts with Soviet customers without the guarantees of the Vneshtorgbank, as not all of the 1990 deliveries have yet been paid for.

2.5. Prospects

In addition to the measures mentioned above to promote trade with the ECMEA area, some bilateral measures were taken as well. These are proposals to include a clause in the agreements on trade and economic relations concerning the possibility of payment in national currencies outside the indicative lists (June 1991), the establishment of bilateral institutions of different kinds (bilateral trade boards, joint banks and firms for trade intermediation, etc.). The important feature in mending things are direct agreements with republics concerning large-scale barter contracts.[2]

But there are still restrictions on the Soviet supply side. For example, total oil production is projected to reach only 520 million tonnes, with only 56 million available for export (109 in 1990). If trade is to be balanced, ECMEA export volume has to rise without further price changes by about a third, to roughly a half of the 1990 volume (1991-92 was used as a benchmark here). With restrictions on Soviet supplies of energy and other primary commodities, the only way to further trade promotion would be to increase Soviet exports of manufactured goods — which in turn would permit Soviet importers to buy more ECMEA manufactured goods.

With the currently low share of manufactured goods in Soviet exports (about one-fifth) another rise of 20% in imports from ECMEA would require a doubling in the volume of Soviet manufactured exports. To increase Soviet exports more than that (and accordingly, to increase ECMEA exports by more than another 20%) seems highly improbable in view of not only the present poor state of the Soviet economy, but also of the reduced propensity of ECMEA countries to buy Soviet manufactured goods.

To make things worse, total Soviet exports to ECMEA need to exceed total imports to repay the existing debt. It reduces the prospects for large increases in ECMEA exports to the USSR even further, regardless of financing issues.

So with luck it might increase to 60 to 70% of its previous volume when the first shock of transition is overcome, and provided the financing problems can be partially solved.[3]

It will be more and more difficult to find exportable goods, since Soviet hard commodities are much more likely to be traded for consumer goods, especially since the republics are gaining power over external trade issues.

Further price adjustments are likely to provide incentives for importers, but they may prove to be out of the question for exporters. To increase the present ECMEA manufactured exports to the Soviet Union by making their prices more competitive they have to be heavily subsidized, but it would be a temporary relief only. Modernizing export sectors of ECMEA appears to be a better use of scarce resources. Inter-industry trade, especially in semi-manufactured goods, parts and accessories, would require more profound measures, such as direct investments.

All in all, it would be wiser to seek not just short-term but at least medium-term solutions — Western aid included — to improve the situation in USSR-ECMEA trade. But it is extremely difficult now to make any further projections because of the uncertain and rapidly changing political situation in the Soviet Union.

[1] Television and radio sets, refrigerators, sewing-machines, etc.

[2] In August an agreement was concluded between Russia and Hungary concerning exports of about USD 600 million worth of energy and wood products, fertilizers and tractors in exchange for Hungarian buses, meat, butter, medicines, etc.

[3] By use of payments in national currencies or more likely by establishing a common currency in the ECMEA area [7] and/or by introducing domestic convertibility in the USSR.

Annex A

Indicative list for trade with Hungary

	Quantum	Value (in million USD)
Soviet exports		
Wires (tonnes)	500	
Oil refinery equipment		0,80
Equipment for the chemical industry and spare parts		8,30
Tractors, trucks and spare parts		53
'RAF' buses, units	150	
Parts for autobuses		10
Passenger cars, units	23 000	
Coal (1 000 tonnes)	150	
Oil (1 000 tonnes)	1 000	
Gas (million m^3)	5 190	
Electricity (billion kWh)	10,40	
Iron ore etc. in iron equivalent (1 000 tonnes)	1 000	
Asbestos (1 000 tonnes)	30	
Iron and steel (1 000 tonnes)	640	
Tin-plate (1 000 tonnes)	7	
Special flat cold-rolled steel (1 000 tonnes)	1	
Non-ferrous metals (1 000 tonnes)	128,3	
Methanol (1 000 tonnes)	70	
Potash fertilizer (K_2O equivalent) (1 000 tonnes)	100	
Synthetic rubber (1 000 tonnes)	32,80	
Timber and saw-timber (1 000 tonnes)	700	
Plywood (1 000 m^3)	5	
Cellulose (1 000 tonnes)	39	
Cardboard (1 000 tonnes)	20	
Staple fibre (1 000 tonnes)	10	
Sodium chloride (1 000 tonnes)	150	
Soviet imports		
Nuclear power station equipment		4,20
Control panels for cranes		10,30
Parts for looms		13
Parts for construction machinery		26,80
Condensers		3,30
Telecommunications apparatus		47,40
Equipment for medicines manufacture		6,70
Accessories for painting equipment		21,50
Measuring instruments		8,30
Medical instruments and parts		106
Data-processing machines and parts		47,30
'Icarus' buses and parts		477
Parts and accessories for vehicles		145
Ship equipment and spare parts		2,20
Special equipment and spare parts		50
Alumina (1 000 tonnes)	600	
Polymer resin (1 000 tonnes)	1,50	
Paints, varnish, etc. (1 000 tonnes)	2	
Photographic paper and chemicals		3,20
Hoses		25
Linoleum (1 000 m^2)	1 600	
Non-woven fabric (million m)	2,20	
Tinned baby food (1 000 tonnes)	10	
Medicines		450
Goods by orders of oil industry enterprises		63

Source: 'Vnesnââ torgovlâ', No 1-2, pp. 64-65.

References

[1] 'Известия', 16.1.1991.

[2] 'Внешняя торговля', No 3, 1991, p. 11.

[3] Гринберг, Р., Лигай, К. От 'братства' к партнерству. "Экономические науки", No 4, 1991, p. 86.

[4] *European Economy*, No 45, December 1990, pp. 156-160.

[5] Kenen, Peter B. 'Transitional arrangements for trade and payments among the CMEA countries', IMF staff papers, Vol. 38, No 2, June, pp. 235-267.

[6] Мазанов, Г. Бывшие партнеры по СЭВ: и без валюты, и без товаров. 'Финансовый вестник', No 7, September 1991. Гаврилов, В. На перепутье двух систем, 'ФИНВЕСТ', No 4, August 1991.

[7] 'Экономика и жизнь', No 31, July 1991, p. 2.

Foreign trade liberalization and redeployment in the former USSR

The Soviet economy at world prices[1]

Gérard Duchêne

Claudia Senik-Leygonie

Contents

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Tables

Graph

1. Introduction

Like most East European countries on the brink of transition toward a market economy, the former Soviet Union has been characterized both by a high degree of isolation and by a distorted price structure. These two features were closely related and stemmed from the attempt to escape the influence of market laws and price signals. On the one hand, soft budget constraints, a complex system of subsidies often channelled through prices and direct resource allocation by State agencies have deprived prices of their functions. On the other hand, the inconvertibility of the national currency has precluded any external pressure on domestic relative prices and transactions.

The opening of the economy to foreign markets and the freeing of prices are widely perceived as necessary reform measures They should give the possibility of exploiting national comparative advantage, and of reducing the monopoly power of Ministries and large corporations. At the same time the sudden removal of the protection granted so far through fixed prices (implicit tariffs) may have very costly consequences in terms of bankruptcies and redundancies, since many industries might prove to be loss-making at world prices. Since October 1991, the freeing of prices in a closed-economy framework and without any restrictive monetary policy has resulted in the development of hyperinflation. Whatever the period considered, any economic assessment of the former Soviet Union is quite difficult, since rouble values and prices convey little information. Adopting the US dollar as a standard of measure is thus a useful device in the assessment of the economy of the former USSR.

The first purpose of this contribution is to shed some light on the issue of the potential competitiveness of Soviet industries on the world market. It aims at indicating the directions of industrial restructuring that would spontaneously follow the liberalization of prices, transactions and foreign trade. The ranking of industries according to their potential 'to extract' value-added or profit under world market conditions constitutes basic information for public authorities and private investors. The results of the study can indeed be used to design economic policies aimed at reducing transition costs such as unemployment and output falls, to elaborate a sectoral approach to the privatization process, and to give some preliminary information about the value of the assets which will be subject to privatization in the near future. To achieve these various aims, it is necessary to eliminate the biases introduced by arbitrary domestic pricing.

Starting from the hypothesis of a liberalization of prices and of foreign trade, Mac Kinnon (1991) has suggested that during their transition to the market, some industries of the relatively closed Eastern economies might generate negative value-added under conditions of international competition. Empirical studies have so far yielded ambiguous results concerning the Mac Kinnon conjecture. A first study by Duchêne and Senik-Leygonie (1991a) on the case of the USSR (relying on a 20-industries input-output table) did not show negative value-added, although several industries showed unprofitability at world prices. Another study by Hughes and Hare (1991), using more disaggregated data (100-industries level) on Czechoslovakia, Hungary and Poland, revealed several negative value-added industries. In the present contribution, the availability of more detailed data on the Soviet economy does lead to confirming the negative value-added phenomenon for this country.

The second purpose of this study is to present a macroeconomic assessment of the Soviet economy: what would be the size and the structure of GDP at world prices? What would be the average wage rate in US dollars? This in turn raises the problem of the exchange rate of the rouble.

The issue of the dollar value of Soviet GDP and of the implicit exchange rate of the rouble has been treated so far mainly in terms of purchasing power parity by Schroeder and Edwards (1985) and Soviet specialists (Vestnik Statistiki, 1990), following the well-known scheme initiated by the United Nations International Comparison Project (see Heston and Summers, 1988) for purposes of standards of living comparisons. Subsequent discussions and the experience of economies in transition (Nordhaus, 1991), however, showed that these studies did not allow for the treatment of pervasive shortages of goods combined with a monetary overhang, which are typical features of pre-transition socialist economies.

In Section 2, we discuss price formation in economies in transition, allowing for the distinction between tradable and non-tradable industries. We then set out the basic methodology for assessing the competitiveness of industries as well as some macroeconomic indicators (GDP, wage rate). We then show that the determination of the exchange rate is a separate issue from the assessment of real variables. Section 3 comments on the data collected in order to apply the model to the Soviet case. Section 4 presents the results. Section 5 analyses these results in order to shed some light on the possible strategies of transition to a market system.

2. The model

We provide a simple representation of a Communist economy comprising k industries, each of which produces a homogeneous good. The production functions are assumed

to be of the Leontieff type, and are represented by input-output technical coefficients, which are supposed to remain stable in the short run, including the periods immediately preceding and following a hypothetical overnight liberalization of prices and transactions.

To assess the competitiveness of the industries in the post-transition period, i.e. the vector of profits per unit of output in an open economy, shadow prices essentially based on world prices are substituted for the distorted domestic prices. The problem which immediately arises, however, is the absence of international prices for some goods or factors. At what level should, for instance, labour inputs be priced?

The first subsection presents two polar cases of price formation. One describes the pre-transition 'socialist' monopolistic pricing method; the other corresponds to a determination of all prices by international competition. We propose, in a second subsection, to combine these two approaches by a partition of the economy into tradable and non-tradable goods, assuming that these categories correspond to the two aforementioned pricing rules. In a third subsection, we show different possibilities for the determination of the exchange rate.

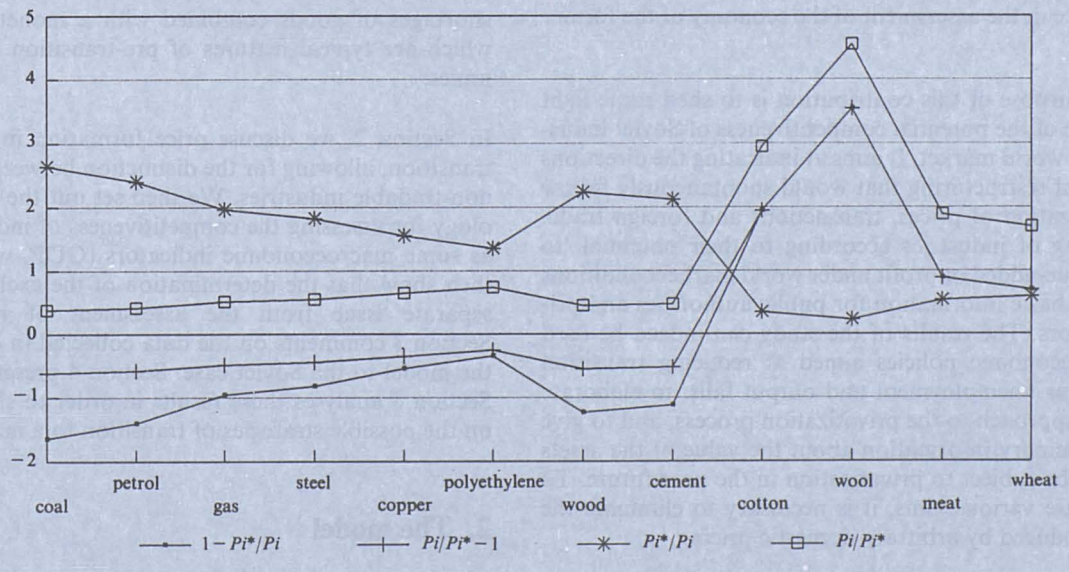
2.1. Models with a unique pricing rule

The traditional socialist pricing practice followed the so-called Cost-Plus method. Domestic prices were fixed in a monopolistic way, by applying differentiated mark-ups m to the total production costs of the various industries. Fixing the set of mark-ups m (which could be positive or negative) and the wage rate w (in domestic currency, say roubles) determines the prices which thus differ from world relative prices. The domestic pricing equation thus becomes:

$$[p] = \{[p].[a] + w.[L]\}.[1 + m] \qquad (1)$$

where the row vector [p] stands for domestic prices, [a] is the square matrix of technical coefficients of order k, the row vector [L], also of k dimension, represents the unit labour costs, $[1 + m]$ is a diagonal matrix containing the mark-up rates m, and w is the unit wage rate in domestic currency. This practice, which is not very different from the monopolistic pricing used in many cases by Western firms, has been extended by the socialist planners to all products, including raw materials and standardized goods. Such extensive centralized pricing has created a wide gap between domestic and world relative prices (see Graph 1). It is clear in these conditions that the domestic currency could not be made convertible.

Graph 1: **World to Soviet prices gap** (1990)



*Pi** stands world prices
Pi stands for internal prices
Source: Goskomstat, unpublished statistics.

Graph 1 illustrates the divergence between the relative Soviet and foreign prices. Internal prices are represented by the variable *Pi*, world prices by *Pi**. When the domestic price of a good *Pi* is higher than its world equivalent *Pi**, the ratio appears above the horizontal axis with an ordinate of $(Pi - Pi^*)/Pi^*$. When it is lower, it appears beneath the horizontal axis with an ordinate of $(Pi^* - Pi)/Pi$. We have chosen to use different expressions of the ordinates of the points so as to have symmetrical representations of the price gap whatever its sign. The gap in the price structures shown by the graph is of course independent of the level of the exchange rate. Graph 1 shows that the internal price of meat, for instance, is 88% higher than the world price of meat (at the official exchange rate $(Pi - Pi^*)/Pi^* = 0{,}88$), whereas the world price of oil, is higher by 140% than the domestic price for this commodity (at the official exchange rate $(Pi^* - Pi)/Pi = 1{,}4$).

Let us now turn to the opposite, post-transition case of completely free foreign trade, which implies a radical change in pricing behaviour. If the currency were made convertible, domestic goods would be put in competition with foreign goods. If all goods were traded and did not enjoy sufficient quality differentiation to escape price competition, their prices would adjust to international relative prices and would thus be exogenously given (in foreign currency), determining the value-added and profit rates of the various domestic activities. The economy would then be depicted, in international prices, by the simplified equation:

$$[p^*] = [p^*].[a] + w^*.[L] + [M] \tag{2}$$

which immediately solves in:

$$[M] = [p^*].[I - a] - w^*.[L] \tag{3}$$

where [M] is the row vector of profit per unit of output in each industry, [p*] is the row vector of international prices, and w^* is the international value of the wage rate. It is now equally possible to express the prices [p*] in foreign currency or in roubles. Two possibilities then arise to determine the value of w^*: one can either consider that labour is a tradable factor and that its price is determined on the world market,[1] or alternatively assume that labour is a fixed non-traded factor. In this last case, its international value can be approximated by the world value of the basket of consumption goods bought by wage-earners,

$$w^* = [p^*].[c] \tag{4}$$

where [c] is the column vector representing the consumption goods bought by one unit of labour.

Equation (3) then becomes:

$$[M] = [p^*].\{I - [a] - [c].[L]\} \tag{5}$$

2.2. A two-channel pricing model

Actually not all goods are tradable. Although services cannot be considered a monopolistic activity, they are generally not subjected to foreign competition even in an open economy. We assume that the prices of non-tradable goods stem from monopolistic behaviour such as described in equation (1) whereas the prices of traded goods are fixed by the international market. We then obtain a combination of the two previous models.

In the following model, the exogenous variables are the international prices of tradable goods and the mark-up rates on non-tradable goods which are here discretionary variables. The endogenous variables are the prices of non-traded products and the value-added of tradable sectors at world prices, which break down into profits and wages. The economy is then described by a system of equations, expressed in international prices:

$$[p_t^*] = [p_t^*].[a_{tt}] + [p_n].[a_{nt}] + w^*.[L_t] + [M_t] \tag{6}$$

$$[p_n] = \{[p_t^*].[a_{tn}] + [p_n].[a_{nt}] + w^*.[L_n]\}.[1 + m_n] \tag{7}$$

$$w^* = [p_t^*].[c_t] + [p_n].[c_n] \tag{8}$$

where the subscripts t and n stand respectively for traded and non-traded goods.

The system made up of equations (6 – 8) solves the following way: equation (9) gives the prices of non-tradable goods, equation (10) shows the margins of tradable sectors, equation (11) gives the wage rate. All these results are expressed in foreign currency, say in dollars, and they depend only on the technical coefficients of production, on the international prices of tradable goods and on the mark-up rates of non-tradable industries.

$$[p_n] = [p_t^*].[a_{tn}] + c_t L_n].[H] \tag{9}$$

$$[M_t] = [p_t^*].\{I - [a_{tt} + c_t L_t] - [a_{tn} + c_t L_n].[H].[a_{nt} + c_n L_t]\} \tag{10}$$

$$w^* = [p_t^*].\{[c_t] + [a_{tn} + c_t L_n][H][c_n]\}$$

$$\text{where [H] is: } \{[1 + m_n] - 1 - [a_{nn} + c_n L_n]\} - 1 \tag{11}$$

[1] At the time of German unification, it was indeed considered that East German labour had to be priced at about 60% of the Western standard, a level which was assumed sufficient to restrain labour mobility from the East to the West, but which did not reflect the comparative productivity of Eastern and Western labour.

The set of $[m_n]$, which appears as a control variable, determines all other variables, which are also directly linked to the set of international prices. One possibility — among others — is to consider the mark-up rates of non-tradable sectors as equal to the average rate of profit in the economy. This is the solution adopted in the detailed model used for calculation and presented in the Annex. In fact, these mark-up rates should result from the demand behaviour of households and enterprises, and the adopted solution is a mere approximation.

Let us stress that the model is based on three main assumptions: that prices react instantaneously to trade liberalization, that the USSR is a price taker on the world market, and that production techniques are rigid in the short term. It is likely that, in reality, prices react with various lags to the freeing of transactions: in particular, prices of imported and exportable goods should react more quickly than prices of domestic substitutes for imports, and prices of non-tradable services — particularly public utilities — might adjust still more slowly. In the present study, all these changes — which could last some months — are assumed to occur instantaneously. During the adjustment period, there could be some changes in the level of activity of the industries, which is also taken as given in the model, even if it is doubtful that the technologies would evolve much.

2.3. The issue of the exchange rate

Equations (9)-(11) are expressed entirely in a foreign currency (for instance in US dollars). Converting them into roubles using any exchange rate e (such that USD $1 = e$ roubles) neither modifies the value-added and profit rates per unit of output, nor changes the relative prices of the various goods and factors. Fixing the exchange rate simply determines the level of domestic prices.

In a previous study, Duchêne and Senik-Leygonie (1991b) determined a possible exchange rate through a (modified) purchasing power parity restricted to consumption goods. The exchange rate was defined as the ratio of the flow of consumption expressed in current roubles to the equivalent aggregate expressed in dollars, a device which allowed the nominal wage rate and the price index of consumer goods to be kept constant, before and after the transition. This led to an expression of the exchange rate e_1 as:

$$e_1 = [p] \cdot [C_{tn}] / \{[p_t^*] \cdot [C_t] + [p_n] \cdot [C_n]\} \quad (12)$$

where [p] is the initial pre-transition price vector expressed in domestic currency, as defined in equation (1), $[C_{t,n}]$, $[C_t]$ and $[C_n]$ are the consumption vectors of respectively all tradable and non-tradable goods. Notice that this exchange rate differs from the PPP value because it accounts for the factor cost of non-tradable goods instead of pricing them at their supposed international value: the service of a school teacher, for instance — although approximately the same in the Soviet Union and in the United States — will be priced at a relatively lower value in the first country, reflecting the fact that the Soviet school teacher consumes much less than his American colleague. In principle, we should have $e_1 > e_{ppp}$, a feature analysed by Balassa (see Asselain, 1986).

However, this correction for the 'Balassa effect' in exchange rates does not take into account the purchasing power lying in the monetary or financial assets already accumulated by the economic agents. If a part of these assets is not voluntarily held before transition (which is a consequence of fixed prices, rationing, and insufficient extent of parallel markets), the freeing of prices and international trade would transform them into an active demand, pushing prices upward. The exchange rate which would result under such conditions would be higher than e_1.

Define the money demand before the transition as A_d, such that:

$$A_d = ([p] \cdot [C_{t,n}]) / v \quad (13)$$

where v is the velocity of money desired by the households. The matching of the money supply A_s with the demand A_d would require an adjustment of the price level [p]. But in conditions of fixed prices and rationing, [p] cannot move, so that all adjustments takes place through v: the velocity of money typically will be at a level v' lower than v, such that $v' = ([p] \cdot [C_{t,n}]) / A_s$. If the money supply grows faster than real transactions, v' will fall and the households will accumulate an overhang $A_s - A_d(v)$.

In post-transition conditions, the domestic currency which is willingly held by the residents of the country is:

$$A_d = \{[P_t] \cdot [C_t] + [P_n] \cdot [C_n]\} / v \quad (14)$$

where $[P_t]$ and $[P_n]$ are the vectors of domestic prices in roubles (respectively of tradable and non-tradable goods) after the transition, such that $[P_t] = e_2 \cdot [p_t^*]$ and $[P_n] = e_2 \cdot [p_n]$.

The desired money balances can be written as:

$$A_d = e_2 \cdot \{[p_t^*] \cdot [C_t] + [p_n] \cdot [C_n]\} / v \quad (15)$$

and the equilibrium condition $A_d = A_s$ then leads to:

$$e_2 = e_1 \cdot v / v' \quad (16)$$

The ratio v/v' is greater than one, so that $e_2 > e_1$. In conditions when money supply rises permanently faster than real transactions, although e_1 is constant (fixed prices), e_2 rises.

This ratio can be interpreted as an indicator of the excess liquidity in the economy and e_2 appears as the exchange rate which wipes out all the excess balances. Setting the convertibility of the rouble at a fixed exchange rate implies making a choice concerning the relative value of the real money balances and the flow of real income. Either nominal money balances are granted a high purchasing power by the setting of the exchange rate at a low level, or these balances are wiped out by the one time price rise deriving from the adoption of a high exchange rate.

In the first case, maintaining the average price level could have been accomplished only with an adequate policy of high real interest rates or sale of State property, in order to transform the (revalued) money balances into longer term savings. This policy proved unfeasible in 1991.

In the second case, expectations of higher prices influence the desired velocity of money: the cost of keeping roubles rises with the prospect of the freeing of prices. Before transition to completely free prices takes place, and if dollars (or foreign currencies) are considered a store of value, the exchange rate could be pushed to levels higher than implied by the ratio between existing free prices and corresponding international prices (Meyendorff, 1991). After the total freeing of prices, the expectation of greater budget deficits and of an accelerating money supply might raise anew the desired velocity of money. In these hyperinflationary conditions, the link between (free) domestic prices and international prices through the exchange rate also disappears, even if there is free international trade, for all goods which are not considered to be a store of value.

All this shows that the nominal exchange rate need not provide a meaningful measure of the ratio between domestic and international prices, as long as monetary stabilization has not been achieved. For this reason it is more reliable to assess the Soviet economy directly in dollars.

3. The database

The model has been applied to the Soviet economy using two kinds of data: input-output tables and coefficients of conversion of domestic into international prices for each product.

3.1. Input-output data

The cost structure, or the pattern of inter-industrial links of the Soviet economy, is studied through an input-output table with 22 branches, as well as through a 110-branches table (90 of which are tradable). They refer to the year 1987 and are expressed in producer prices (wholesale prices). They have been corrected to suppress the multiple biases caused by taxes and subsidies which discriminate between the different users of the same products. As a result all the rows of the tables are homogeneous in terms of prices.

A series of transformations has been carried out to make the small table comparable to Western practice. Soviet statistics traditionally consider the greatest part of services (services to the population and government services) as non-productive. In the original data, these are therefore excluded from the central matrix of intermediate consumption. They appear only as 'consumption by non-material branches' or 'other expenditure' in final demand. We re-introduced seven ('non-productive') service sectors in the central matrix, two of which were re-aggregated with the already existing ones (passenger transport and communications between households). Thus, five lines have been added. In order to correct the Soviet practice which consists in not considering as costs the use of 'non-productive' services by 'productive branches', although in certain cases there is clearly a consumption of such inputs, we have filled up some of the five additional lines in the central quadrant: this is of particular importance in the case of 'science' (R&D) services, which weighs heavily in the costs of the machine-building industry in the reconstructed table.

The military services sector, which in the reconstructed table appears as a part of the first quadrant, has been built essentially on the basis of the column 'other expenditure' (in the second quadrant of the Soviet format). To match Western practice, a column of government expenditure has been created and included in the final demand quadrant. Government consumes only administrative and military services: the production of the education-health-culture branch is entirely allocated to household consumption (except the part used, for instance, by the military service sector).

As a result of these transformations, in the 20-industries input-output table, there are 11 traded sectors: agriculture and forestry, oil and gas, coal and other fuels, ferrous metals, non-ferrous metals, chemical industry, machine building and metal working, timber and wood and paper, light industry, food industry, other industries,[1] and 11 non-traded ones:

[1] 'Other industries' include: handicrafts, precious stones, musical instruments, jewellery, dry-cleaning, toys, animal feeds, water-supply and others.

construction, electrical power, building materials and glass, transport and communication, trade and distribution, other branches,[1] housing and usual services, research and development, education and health and culture, administration, military services.

The 110 branches input-output table could not be modified the same way, due to lack of information. Some of the results obtained with the reduced size model have then been transferred directly to the detailed table, in order to assess the competitiveness at the level of smaller industries. But the measure of costs and value-added is not the same in both tables: namely, costs of 'non-productive' services are considered part of the value-added (and profits) in the 100-industries level table, and these indicators are thus overvalued.

3.2. Conversion of prices

In order to convert the interindustry flows of the input-output table to world prices, we have used the so-called coefficients of efficiency of foreign trade which represent the ratio of the price at which a Soviet good was actually bought or sold on the world market to its internal official price. The coefficients convert rouble values directly in valuta roubles. The valuta rouble being an accounting unit anchored to the dollar by a fixed exchange rate, the coefficients could be transformed so as to convert rouble values directly into dollars, simply by being multiplied by the official exchange rate of the valuta rouble against the dollar (USD 1,580 per valuta rouble in 1987). Using these conversion coefficients based on foreign trade rather than relying on the average prices of the goods on the world market allows us to reflect as much as possible the specific features of Soviet products, such as quality and reliability.

In most cases, we have chosen to compare the internal and foreign prices of goods that are produced inside the Soviet Union and sold abroad so that the coefficients most often relate to exports (they are the 'coefficients of efficiency of exports' which used to be calculated by the Soviet Ministry for Foreign Trade). Imported goods rarely have domestic substitutes (except cereals and other foodstuffs in short supply). For certain products from the agriculture sector, food industry and light industry import coefficients have been used.

To allow for the fact that a given industry delivers different inputs to each of the other branches, we have used a complete matrix of conversion coefficients of the same size as the disaggregated input-output table appearing in the detailed model in Annex 1.

It was also necessary to take into account the difference between the product mix of the trade flows of an industry and the commodity composition of its output. The coefficients corresponding to each flow of the matrix have thus first been computed using a very detailed nomenclature of products (six-digit disaggregation of foreign trade statistics). These product coefficients have then been aggregated according to the input-output table nomenclature, following the composition of the deliveries of each industry to the others.

The issue of price distortions inside the former CMEA has been addressed by applying Western conversion coefficients to these trade flows. Some of the coefficients are shown in Table 1: they convert the Soviet data directly from (internal) roubles into dollars.

One can question the comparability of Soviet and Western goods: quality, reliability, technical specifications, compliance with official standards, after-sales service, etc. are certainly not in favour of Soviet manufactured goods, and these characteristics, although taken into account in the repricing, cannot always be compensated by a low price. One can, however, assume that, at least during a transitional period, the internal market will be large enough to absorb the domestic products; the price competitiveness will be a sufficiently convincing argument for residents if not for foreign consumers. Existing and potential markets for standard Soviet manufactured goods in less developed countries should not be forgotten either.

Table 1

Some examples of conversion coefficients from internal (roubles) into world prices (US dollars)

Tradable sectors	Exports	Private consumption	Total output
Agriculture	0,729	0,857	1,229
Oil and gas	2,890	1,826	2,813
Coal and other fuels	1,153	1,246	1,271
Ferrous metals	1,742	1,557	1,992
Non-ferrous metals	2,620	N.A.	2,381
Chemical industry	0,971	1,012	0,962
Machine building and metal working	2,605	0,723	1,822
Timber wood and paper	0,968	0,576	0,799
Light industry	0,604	0,749	0,599
Food industry	0,707	0,790	0,782
Other industries	1,424	0,936	0,936

N.A. = not applicable.

[1] 'Other branches' include: printing, film studios, metal scrapping, fishing, hunting, etc.

4. Results

Some indicators of performance of the various industries in conditions of an open economy will be presented first: these results depend only on the cost structure of each industry. A second series of results concerns macroeconomic indicators reflecting the structure and degree of development of the pre-transition Soviet Union: these depend on the level of activity of each industry; they are entirely expressed in US dollars.

4.1. The competitiveness of Soviet industries

The liberalization of prices would modify the value-added and profit margins of the various Soviet industries. These indicators, calculated at world prices, reflect the static comparative advantage of Soviet industries, and are also the closest approximation of their potential viability on a domestic market with free prices. Table 2 shows the profit margins and value-added of the various sectors. The mark-up rates for non-tradable industries (defined here as the ratio of profits — including amortization — to the total production of the branch) has been chosen so as to be equal to the average profit rate of the tradable industries, and therefore to the average margin rate in the whole economy (0,28).

Value-added at world prices

The model has been applied first to the 20-industries input-output table, including the reconstituted non-productive service sectors, in order to determine the vector of prices for non-tradable activities, the equilibrium wage rate, and other macroeconomic indicators. The conversion factor for wages

Table 2

Sectoral profit margins and value-added

Branches	Margin rates in current rouble prices[3]	Margins rates at world prices[3]	Value-added at world prices (USD billion)	Value-added at world prices per unit of output	Value-added at current rouble prices per unit of output
Tradable					
Agriculture	−5,2	17,4	108,6	49,8	48,2
Oil and gas	46,3	51,1	64,3	51,8	48,9
Coal and other fuel	5,7	23,3	9,1	42,9	39,1
Ferrous metals	26,6	49,6	52,6	52,7	35,0
Non-ferrous metals	27,9	48,0	38,2	50,5	36,0
Chemical industry	23,3	16,0	12,6	22,9	32,2
Machine building and metal working	21,4	37,1	208,0	44,7	39,9
Timber wood and paper	24,5	13,5	10,3	31,9	44,2
Light industry	18,5	23,8	25,1	35,0	27,5
Food industry	13,3	−34,4	−31,7	−28,9	19,1
Other industries	17,9	16,3	7,3	26,7	30,8
Non-tradable					
Electricity	39,9	27,8[1]	12,5	32,2	46,9
Construction	20,6	27,8[1]	83,3	50,7	54,3
Construction material and glass	25,2	27,8[1]	15,9	40,9	44,7
Transport and communication	53,2	27,8[1]	37,6	63,5	83,1
Trade and distribution	46,6	27,8[1]	22,1	76,9	83,3
Housing and services	−63,4	27,8[1]	11,8	67,9	41,4
Health and education	14,6	0,0[2]	27,8	65,8	74,0
Science	14,6	27,8[1]	20,8	55,7	59,6
Civilian administration	42,8	0,0[2]	4,4	55,2	72,1
Military services	5,7	0,0[2]	9,7	6,9	21,9
Other branches	33,8	27,8[1]	3,6	67,3	74,5
Total	20,1	25,0	755,0	40,1	44,9

[1] By construction.
[2] By assumption.
[3] Profits in % of output.

and the average profit rate have then been used when dealing with the 110 industries table in order to obtain more detailed results. Among the 90 tradable industries, 20 generate negative value-added at world prices (see Table 7). They represent 10% of the total output and 3,7% of the labour force (12% of the output and 8% of employment of tradable branches). In absolute figures negative value-added industries represent 5 million people. Those industries, although scattered among nearly all sectors, are mostly present in the food, light, chemical and machine-building industries. They are shown in Table 7.

Profits at world prices

The model shows that 29 of the 90 tradable branches are loss-making. They represent 13% of total output and 6,4% of total employment, i.e. 9 million people (17% of the output and 15% of employment of tradable branches). Their complete list is shown in Table 7.

Out of the 32 branches of the machine-building and metal working sector one is non-tradable (repair of 'machinery and equipment') and only nine are really profitable: the extremely well-performing aeronautics and weaponry, cable products, tractors and agricultural machinery, communal services 'machinery and equipment', mining 'machinery and equipment', hoisting and transporting 'machinery and equipment', railway machinery, automobile, shipbuilding. These nine branches make the machine-building and metal working industry appear as profitable once aggregated.

Within light industry most branches are loss-making, especially cotton, flax, wool, leather, fur and footwear, and other light industries. The profits of two branches, hosiery-knitwear and sewn goods, overcompensate, however, the losses of the rest of the industry which thus seems profitable.

Concerning the food industry, sugar, fats, fruits and vegetables, other food products, meat products, dairy products and flour milling products make the branch loss-making as a whole, despite the fact that confectionery, perfumes, alcoholic beverages, wines, tobacco and fish appear rather profitable.

The industries with the highest value-added and profits at world prices are oil extraction, gas, coke products, optical materials, ferrous and non-ferrous metals, mineral chemistry products, tyre industry products, cable products, tractors and agricultural machinery, communal services 'machinery and equipment', other 'machinery and equipment' products, alcohol liquors and vodka.

An interesting result of the model is that competitiveness at the industry level appears quite robust to variations in real wages. Reducing real wages by 30% for instance (as happened in Poland in 1990) has no noticeable effect on the profitability of the various industries (most non-profitable industries remain non-profitable). This result is self-evident for negative value-added industries. For other non-profitable industries, it seems to be due to the fact that only a few of them are on the edge of profitability.

Comparative advantages

The results are in conformity with the Hecksher-Ohlin principle of specialization: the most profitable branches exploit the comparative advantage of the Soviet Union in natural resources. Their share of GDP is high in comparison with Western standards. This conclusion must be qualified, however. The contrast between the oil-extracting and oil-refining activities is striking: in spite of the exceptional endowment in this resource, the primary processing of oil shows a negative value-added as well as the basic chemical and organic synthetic products industries.

There also tends to be an opposition between labour intensity, or the share of wages in value-added, and the performance of the industries at world prices as shown by correlations calculated on the basis of the figures in Table 7. Similar results, revealing an inverse Leontieff paradox, were already established in Duchêne and Senik-Leygonie (1991b) on a more aggregate scale.

The competitiveness of some of the branches of the machine-building sector is certainly due partly to a technological advantage, and partly to the high priority enjoyed by the military-industrial sector where the best technology, the most qualified employees and the highest wages are concentrated. But the electronic sector, which is mainly military, is highly loss-making. In conclusion, the immediate welfare gain that the Soviet Union could receive from increased participation in international trade would not derive from a radical reorientation of the industrial structure, but essentially from the concentration of resources in those industries which are already the most developed today.

4.2. Size and structure of the Soviet economy

In international prices, in 1987, Soviet GDP amounted to USD 754 billion,[1] which is inferior to the GDP of France, FF 5 336 billion or USD 887,8 billion. GDP per head is around USD 2 700 and indicates a level of development about equal to that of Portugal or of Venezuela which can

[1] US dollars of 1987.

be classified as countries of average level of development. This judgment must be qualified, however. Because the specific structure of the economy leads to different conclusions depending on the indicator chosen, it is indeed not straightforward how to assess the level of development of the former USSR relative to other countries. As shown by the following figures, results depend on whether one uses GDP per head, consumption per head or the share of different activities in GDP.

The structure of demand, shown in Table 3, reveals an important and unusual feature of the Soviet economy: the weakness of the share of private consumption and of labour income by comparison with investment and public consumption. Total household consumption represents 37,7% of GDP (including 5,3% of non-market education and health). In OECD countries, it usually ranges between 65 and 75% of GDP.[1] Gross investment (including inventory changes) represents 42,3% of GDP, one of the highest percentages in the world as shown by Heston and Summers (1988). In OECD countries, the order of magnitude of this aggregate is of about 20% of GDP (including inventory change). Lastly, total defence expenditures amount to USD 141 billion, 18,7% of GDP.

Table 3

Structure of final demand
Shares in GDP (%) in producer prices

	At current prices	At world prices
Private consumption	55,4	37,7
Government consumption[1]	14,6	19,8
of which defence	11,6	18,7
Gross investment	37,4	42,3
Exports	6,4	11,5
Imports	−13,8	−11,3
Total	100,0	100,0

Structure of revenue
(Shares in GDP, in %)

	At current prices	At world prices
Wages	55,3	37,6
State revenue[2]	44,7	62,4
Total	100,0	100,0

[1] Education and health (5,3% of GDP at world prices) have been included in private consumption so that the government consumption aggregate contains only defence and administration. In Table 4 wages should thus be understood as including a tax financing non-market expenditure benefiting households.
[2] Including amortization.

[1] *Source:* OECD, 'Purchasing power parity and real expenditures', 1985.

Total household consumption (market and non-market) amounts to USD 284 billion i.e. about USD 1 000 per capita. It represents 10,4% of the consumption per capita in France. The average wage rate is equal to USD 169, which is about 15% of the West European standards. The hourly wage rate (about USD 1) is in line with the norm prevailing in certain developing and East European countries in transition (USD 1 in Poland and USD 0,73 in Morocco in the middle of 1991).

Table 4 reveals the output structure of the Soviet economy. Agriculture represents 14,4% of GDP at world prices instead of 12% at internal prices. Oil and gas account for 8,5% instead of 3% of GDP, machine-building and metal working for 27,6% instead of 14,8%. Light and food industries are even smaller than they seemed to be at rouble prices: 3,3 and −4% of GDP instead of 4,8 and 3,9%. This structure is specific of the socialist model of development. The share

Table 4

Shares of the various sectors in GDP, at current and world prices
(value-added of the branch divided by the total value-added of the economy)

Branches	Shares in GDP at initial prices	Shares in GDP at new prices
Tradable		
Agriculture	12,4	14,4
Oil and gas	3,1	8,5
Coal and other fuel	0,9	1,2
Ferrous metallurgy	2,5	7,0
Non-ferrous metallurgy	1,7	5,1
Chemical industry	2,7	1,7
Machine building and metal working	14,8	27,6
Timber, wood and paper	2,6	1,4
Light industry	4,8	3,3
Food industry	3,9	−4,2
Other industries	1,3	1,0
Non-tradable		
Electricity	2,2	1,7
Construction	11,8	11,1
Construction material and glass	2,3	2,1
Transport and communication	11,5	5,0
Trade and distribution	6,0	2,9
Housing and services	0,5	1,6
Health and education	6,8	3,7
Science	2,7	2,8
Civilian administration	2,1	0,6
Military services	2,5	1,3
Other branches	0,8	0,5
Total	100,0	100,0

of agriculture is about the same as in countries at an intermediate level of development such as Argentina (13%) whereas the machinery sector is relatively developed, which is usually a feature of more advanced economies.

Our results differ in magnitude from the PPP, CIA and official estimates. The direct implementation of the PPP method leads to an estimate of GDP per capita of USD 7 000, a level equivalent to that of Portugal also recalculated using PPP (Nordhaus, 1991). Our ranking of the USSR in comparison with other countries, in terms of GDP per head, is thus close to that provided by the PPP approach, in spite of the wide gap in the absolute figures calculated by the two methods. Applying the official exchange rate to the official value of GDP (R 825 billion) leads to a GDP per head of USD 4 600. Using for the same computation the black market rate of 1987 would have shown a GDP per capita of USD 216. Using the CIA estimate of GDP, GDP per head would be of USD 4 800 at the official rouble to dollar rate, and USD 225 using the black market rate[1] (Nordhaus, 1991).

5. Consequences for the transition policy

The results shown in Section 4 reveal the short-term viability of the Soviet industries, and their chances to adapt to international competition. To this extent, they shed light on the potential consequences of a sudden opening of the economy. Some industries, like the food industry and many branches of light industry are clearly threatened by the perspective of a brutal liberalization of trade and prices. Other branches like the extractive, metal and machine-building industries, on the other hand, are potential 'value extractors' at world prices.

There is clearly a trade-off between economic efficiency and political considerations. Closing the loss-making industries and allocating new investment to the most efficient ones would amount to an immediate gain in welfare since it would suppress the negative value-added of some industries and increase the value generated by the most profitable ones. On the other hand, such a restructuring would imply large, at least temporary, labour lay-offs and output falls, the cost of which would risk destabilizing an already fragile political situation. It is not clear whether the gains from a strategy of one-off liberalization and opening of the economy would more than offset the costs implied by such a 'shock' therapy. In particular, the most labour-intensive industries are often the least competitive ones, as shown in Tables 5 and 6, which suggest that restructuring without a safety net would result in substantial unemployment.

There is also an economic policy ambiguity in the fact that a rapid transformation is necessary to create adequate expectations and strengthen the credibility of the new market laws and rules, but that a strong recession due to the disruption of all traditional economic links could preclude the continuation of the reform programme. Even though there is a need for the reforms to reach a 'critical mass', the brutal contraction of a large share of national economic activity would risk slowing the development of new productive units, and undermining the credibility of the government in charge of the shock therapy programme. It thus seems that after macroeconomic measures such as stabilization, price and trade reforms are undertaken and once fundamental market legislation is adopted, it is very important to adopt a sectoral approach to the transition. The results of the present study can be used to design economic policy measures in order to soften the aforementioned costs of transition. They can serve as an instrument for a sector-by-sector approach to liberalization and privatization.

Privatization

As concerns privatization, for instance, it is clear that the protected sector, i.e. trade, distribution and other services, can be privatized rapidly, since it should be profitable even at world prices, and is technically relatively easy to transfer to private hands. In economies in transition this sector is typically included in so-called small privatization, which was indeed envisaged as one of the earlier measures of the reform programmes in the USSR. Small privatization could be beneficial in many ways. It could trigger the process of take-over of the public property by private entrepreneurs by strengthening their confidence in the prospect of profits. It could also partly absorb, by stimulating the development of the still extremely small service sector, a part of the human resources laid off by the sectors in recession. Agriculture also seems to be profitable at world prices, which suggests that it could usefully be included in the first steps of a privatization programme.

The 'large' privatization of State industrial enterprises should obviously be more differentiated. The most competitive branches like the extractive and metal industries can be transferred to private hands through a distribution mechanism such as the one adopted in Poland or in Czechoslovakia. There could, however, be many drawbacks in including the loss-making branches such as the light and food industries

[1] R 13,5 per dollar in 1989.

Table 5

Employment and viability of industries

Branches	Employment by branch (thousands)	Employment in % of total employment	Margins (profit in % of output) at world prices	Value-added (in % of output) at world prices
Tradable sectors				
Agriculture	26 344,8	18,8	17,4	49,8
Oil and gas	327,1	0,2	51,1	51,8
Coal and other fuel	13 212,8	0,9	23,3	42,9
Ferrous metallurgy	1 337,5	1,0	49,6	52,7
Non-ferrous metallurgy	687,5	0,5	48,0	50,5
Chemical industry	1 943,3	1,4	16,0	22,9
Machine building and metal working	17 722,3	12,7	37,1	44,7
Timber, wood and paper	2 829,9	2,0	13,5	31,9
Light industry	4 957,9	3,5	23,8	35,0
Food industry	3 127,0	2,2	−34,4	−28,9
Other industries	1 682,5	1,2	16,3	26,7
Non-tradable sectors				
Electricity power	853,0	0,6	27,8[1]	32,2
Construction	14 482,9	10,3	27,8[1]	50,7
Building material and glass	2 532,8	1,8	27,8[1]	40,9
Transport and communication	10 104,8	7,2	27,8[1]	63,5
Trade and distribution	10 853,9	7,7	27,8[1]	76,9
Housing and services	5 048,6	3,6	27,8[1]	67,9
Health and education	20 247,1	14,5	0,0[2]	65,8
Science	5 369,5	3,8	27,8[1]	55,7
Civilian administration	2 594,9	1,9	0,0[2]	55,2
Military services	4 924,2	3,5	0,0[2]	6,9
Other branches	788,3	0,6	27,8[1]	67,3

[1] By construction.
[2] By assumption.

in the privatization programme without special attention. This could indeed have a discouraging effect on private investors who would lose confidence in the value of the assets transferred and in the privatization process in general. It would seem wiser to put a State or a private agency in charge of the transfer of the loss-making firms. This agency could adopt a case-by-case approach and set conditions for the transfer of the firms to private investors, as is done by the 'Treuhandanstalt' in Germany, in order to avoid asset stripping.

The present study makes a contribution to the privatization process by giving indications on the value of the capital of the firms. There are indeed no financial assets the price of which could be used to value firms. Total capital consists of buildings, equipment and land, the value of which is biased by price distortions, and does not correspond to the concept of capital used in the West. A better approximation of this value would be the discounted flow of expected future profits. The sectoral yearly profits at world prices can constitute a substitute to such an indicator. They are shown in Table 7.

External protection

The gap between rouble prices and international prices could be considered as an implicit tariff protecting the domestic goods. We call 'protected' those industries in which prices are higher within the country than on external markets. In this view, it is possible to calculate the effective rate of protection (ERP) of these industries, which is defined as the surplus of value-added that derives from an existing tariff structure and equal, under certain assumptions, to the dom-

Table 6

Protection and foreign trade

Branches	Effective rate of protection in %	Trade balance
Agriculture and forestry	−13,7	−
Oil and gas	−63,3	++
Coal and other fuels	−21,5	+
Ferrous metals	−63,5	0
Non-ferrous metals	−67,2	+
Chemical industry	+59,7	−
Machine building and metal working	−46,3	−−
Timber, wood and paper	+90,1	+
Light industry	+43,6	−−
Food industry	192,5[1]	−−
Other industries	+35,3	0

[1] The value-added of this branch is negative. In the table, we have shown the absolute value of the ERP indicator which is more relevant.

ERP = (va − va*)/va* = value-added at domestic prices including distortions, minus value-added at world prices (without distortion), divided by value-added at world prices. For the construction of the table, in order to obtain comparable data, we have used value-added in percentage of GDP.

estic resource cost (DRC, or value-added at domestic prices divided by value-added at world prices) minus one. The sectors with the highest ERP thus also have the highest DRC and can be considered as the least profitable from the point of view of the entire economy's utility, after those with negative value-added at world prices, and thus DRC.

At new prices the margins of formerly protected branches of light industry, such as the food and processing industries, deteriorate. This result is also valid for light industry as a whole but this does not appear at the aggregate level because of the two greatest branches, hosiery and sewn goods, which are profitable and were not protected. As a rule, the final output of the protected industries is far more protected than their inputs, so that their rate of effective protection is high. Symmetrically, branches with low levels of protection like extractive and heavy industries become more profitable. The effective protection granted to the various aggregate sectors is shown in Table 6.

Why did the Soviet authorities protect branches that they did not intend to develop? There are two possible answers to this question. First, it is common knowledge that the traditional Soviet foreign trade policy was 'minimalist'. It consisted of importing only goods that the USSR needed but could not produce itself (including equipment), and in exporting only the quantities necessary to cover the import cost. The autarkic choice made by the Soviet Union implied the need to keep as many industries as possible in operation domestically. The authorities chose to assign high prices to the output of potentially loss-making industries so as to cover their high production costs (instead of granting them direct transfers of funds). This was the case, for instance, for the manufacturing, processing and light industries. The protection structure was the price the authorities chose to pay for the incomplete specialization of the economy.

Foreign trade activities may also have been used by the Soviet authorities as part of their policy of internal redistribution. In this view, trade tariffs were not meant to protect the sectors that are affected by distortion (import tax or export subsidy) or to penalize the sectors which pay the equivalent of export taxes. Their purpose would have been to create some revenue for the State to be allocated to priority sectors and agents. The State could buy the exported good at a low domestic price, export it, use the currency earned to import goods, and resell those at higher domestic prices, obtaining, as a final result, a gain in roubles which it could allocate to the priority sector. In other words, external trade flows have counterparts in roubles which entered and modified the total budget constraint of the State, in roubles, allowing for the subsidization of the priority sectors, like heavy industry, defence industry, or bureaucracy. The price distortions ensuing from implicit tariffs constitute an element of this process of 'draining' the resources of one sector in order to allocate them to another one. Foreign trade, in this hypothesis, would be a 'detour' used to intensify the reallocation of resources from the productive sectors (energy, raw materials) to the privileged ones.

Price and trade liberalization will put an end to these redistribution flows, penalizing the protected and the priority sectors, to the benefit of the 'value-extracting' ones. Here again transition costs have to be considered. To avoid massive bankruptcies in the weakest sectors, for instance, a set of explicit and progressively decreasing trade tariffs could be established replacing the implicit protection constituted by the former price gaps.

6. Conclusion

This paper suggests that an important part of the economy is inefficient and uncompetitive at world prices. Most branches of the light and food industries, for instance, should either receive less investment and be replaced by imports, or undergo a heavy modernization investment programme. The immediate static comparative advantage of the USSR lies in the natural resource-intensive industries such as extractive branches, metallurgy and a few machine-building activities. It is thus mostly related to factor endowments, except for the military branches where the Soviet economy seems to

have developed a technological comparative advantage. The lack of openness of the economy and past policy to develop all sectors domestically have prevented the full exploitation of such factor endowment advantages, although the most profitable industries are already the most developed.

Changes in the attitude toward foreign trade could generate welfare gains, deriving from specialization and concentration of domestic output in competitive industries. The risk of creating unemployment implies that the government has to make a trade-off between the speed of restructuring and the social costs of this process. Labour lay-offs and output falls could be partly offset by the development of the service sector, which at present is very small.

Natural resources are unevenly distributed on the former Soviet Union's territory. In the current context of dissolution of the Union, it is interesting to measure the comparative advantages of each particular former republic and the costs and benefits of trade liberalization from its point of view. This will also allow the assessment of the relative interdependence of the republics. This project constitutes the next stage of our study.

Table 7

The competitiveness of the Soviet traded industries

	Value-added at world prices in million USD	Profit at world prices in million USD	Value-added at world prices per employee in thousand USD	Profit per employee in thousand USD	Number of employees in thousands	Value-added per unit of output at world prices	Value-added per unit of output at domestic prices
Electric and thermal power	15 692	14 138	18,4	16,6	853,0	38,9	47,7
Oil extraction	59 970	59 548	440,3	437,2	136,2	94,6	86,0
Oil refining	−4 305	−4 528	−28,1	−29,5	153,4	−9,2	16,6
Gas	10 801	10 702	288,0	285,4	37,5	77,3	75,9
Coal	8 619	4 845	7,0	3,9	1 233,6	42,6	69,9
Ferrous ores	2 040	1 520	9,5	7,0	215,9	46,4	62,5
Ferrous metals	47 345	45 478	56,6	54,3	837,1	57,0	31,8
Coke products	3 788	3 693	60,7	59,2	62,4	50,9	19,9
Optical materials	1 111	1 001	17,3	15,6	64,3	70,6	48,5
Industrial metal products	−1 573	−1 846	−10,0	−11,7	157,8	−47,1	40,1
Non-ferrous ores	4 593	3 905	21,9	18,6	210,0	61,7	63,4
Non-ferrous metals	34 535	33 288	72,3	69,7	477,5	50,6	33,0
Mineral chemistry products	1 749	1 577	25,6	23,1	68,3	73,3	64,6
Basic chemistry products	−106	−1 062	−0,2	−2,2	490,7	−0,8	47,3
Synthetic fibres	785	482	4,6	2,9	168,8	26,4	44,3
Synthetic resins and plastics	564	379	5,8	3,9	97,0	18,2	40,7
Plastic, fibre glass items	−272	−716	−1,0	−2,7	269,1	−12,2	34,3
Paints and lacquers	1 879	1 767	27,9	26,2	67,3	38,4	24,0
Synthetic dye products	147	92	4,7	3,0	31,2	21,1	42,5
Synthetic rubber	342	264	7,5	5,8	45,4	16,7	30,2
Basic organic synthetic products	34	−168	0,3	−1,3	127,8	0,9	35,7
Tyre industry products	4 396	4 168	38,0	36,0	115,8	59,4	27,5
Rubber and asbestos products	2 937	2 552	12,9	11,2	227,3	52,8	35,6
Other chemical and petrochemical products	782	595	6,9	5,3	112,5	25,8	40,5
Energy and power M&E[1]	845	390	3,1	1,4	274,9	18,6	48,2
Metallurgical M&E[1]	110	−7	1,7	−0,1	63,4	11,2	49,7
Mining M&E[1]	1 636	1 339	9,9	8,1	165,8	40,6	43,7
Railway M&E[1]	2 242	1 858	11,5	9,5	195,0	35,4	36,9
Hoisting and transporting M&E[1]	1 081	823	7,7	5,8	141,2	27,6	37,7
Electro-technical industry	4 257	2 585	4,6	2,8	929,1	26,8	44,4
Cable products	755	602	8,1	6,4	93,5	14,6	24,0
Pumps and chemical M&E[1]	659	−163	1,4	−0,4	461,2	7,8	45,8
Machine tools	−99	−597	−0,4	−2,2	269,6	−3,2	50,3
Forging and pressing M&E[1]	−338	−458	−4,9	−6,7	68,4	−49,9	48,8
Casting M&E[1]	47	7	2,3	0,3	20,8	20,2	56,2
Tools and dies	−132	−421	−0,0	−2,8	153,0	−8,2	53,0
Industrial artificial abrasives	81	16	2,3	0,5	34,4	11,6	40,8

Table 7 *(continued)*

	Value-added at world prices in million USD	Profit at world prices in million USD	Value-added at world prices per employee in thousand USD	Profit per employee in thousand USD	Number of employees in thousands	Value-added per unit of output at world prices	Value-added per unit of output at domestic prices
Precision instruments	3 341	1 105	2,7	0,9	1 251,1	32,9	51,3
Automobile	13 465	11 311	12,4	10,4	1 087,6	33,4	38,1
Bearings	−736	−1 024	−4,7	−6,6	155,5	−105,4	55,2
Tractors, agricultural machinery	15 361	13 465	14,4	12,6	1 068,9	38,4	42,0
Construction M&E[1]	816	328	3,1	1,2	263,5	11,5	36,6
Communal services M&E[1]	643	566	15,0	13,2	42,8	43,5	35,1
Light industry M&E[1]	365	163	3,2	1,4	112,9	26,0	51,5
Food industry M&E[1]	120	−72	1,1	−0,7	104,7	7,7	45,2
Trade and restoration equipment	295	184	4,9	3,0	60,6	29,4	41,5
Printing M&E[1]	54	24	3,3	1,5	16,3	40,0	60,6
Consumer durables	−1 172	−1 484	−6,7	−8,5	173,7	−83,6	38,4
Sanitary engineering products	−1 247	−1 527	−8,4	−10,2	149,1	−114,4	40,4
Shipbuilding	2 961	2 084	6,9	4,8	430,0	36,5	43,5
Radio and electronics	455	−42 286	0,2	−1,9	2 200,0	2,9	47,6
Other M&E products	155 712	148 617	45,4	43,3	3 427,7	72,2	44,5
Metal structures	634	217	2,8	1,0	223,5	12,2	39,0
Metal wares	−3 263	−4 456	−4,8	−6,5	685,1	−54,8	42,1
Logging	3 986	2 153	4,8	2,6	824,2	51,5	59,2
Sawmills and lumber products	2 473	489	2,2	0,4	1 112,4	23,2	37,1
Plywood and panelling	225	147	5,4	3,5	42,0	37,8	39,9
Furniture	521	−486	0,9	−0,8	574,4	12,1	42,3
Paper and pulp	4 075	3 564	15,6	13,6	261,6	46,6	41,4
Wood chemistry products	−190	−215	−12,4	−14,0	15,3	−105,9	34,8
Cement	700	521	7,3	5,5	95,3	27,3	45,8
Polymer construction materials	263	234	16,1	14,3	16,3	42,9	32,6
Glass and porcelain	1 443	960	4,9	3,2	296,2	51,5	56,0
Cotton materials	1 007	−127	1,5	−0,2	677,4	7,0	18,8
Flax materials	120	−99	0,9	−0,7	134,1	6,1	20,1
Wool materials	−897	−1 447	−2,7	−4,3	337,2	−13,5	10,9
Silk materials	889	529	4,4	2,6	201,9	20,4	20,2
Hosiery and knitwear	4 513	3 702	8,2	6,7	549,5	63,6	33,3
Other textile industry	440	128	2,1	0,6	208,0	20,4	29,8
Sewn goods	19 080	16 350	9,5	8,2	2 000,0	72,9	28,0
Leather, fur, shoe and other light	949	−395	1,1	−0,5	849,8	9,6	29,8
Sugar	−4 202	−4 476	−22,9	−24,4	183,2	−76,9	17,5
Confections	1 992	1 680	10,4	8,8	191,6	33,5	21,7
Fats and industrial soaps	−653	−761	−9,0	−10,5	72,5	−28,3	13,6
Perfumes and cosmetics	553	517	23,5	22,0	23,5	34,2	20,3
Alcohols liquors and vodka	782	711	13,3	12,1	58,7	37,0	23,6
Wines and cognac	715	584	7,2	5,9	99,2	11,9	10,3
Fruits and vegetables	−1 956	−2 352	−6,9	−8,3	284,5	−151,1	29,8
Tobacco products	148	86	3,6	2,1	40,9	8,7	10,4
Other food products	−1 859	−2 235	−7,4	−8,8	252,6	−63,4	24,0
Meat products	−22 770	−23 557	−51,4	−53,2	442,6	−72,8	11,0
Dairy products	−9 732	−10 431	−24,6	−26,3	396,2	−50,8	18,4
Fishing and fish products	2 153	879	5,4	2,2	400,1	27,4	54,8
Microbiology industry products	629	515	9,8	8,0	64,3	34,1	46,7
Flour-milling products	−1 661	−1 866	−11,4	−12,8	145,5	−14,5	8,7
Pharmaceutical industry	1 321	1 125	10,8	9,2	122,1	37,6	33,6
Medical technical equipment	498	416	9,8	8,2	50,8	59,3	56,5
Other industry products	5 480	3 422	4,0	2,5	1 367,4	40,7	47,5
Agriculture	108 246	45 367	4,2	1,8	25 894,8	49,6	53,0
Other branches (food industry)	5 514	3 939	10,2	7,3	540,0	77,2	16,4

Source: Authors' calculation.

[1] M&E: machinery and equipment.

Annex

The complete model formulation (in US dollars)

Full cost equations (1) and (2):

Traded sectors:

$$1.[d_{tt}].[A_{tt}]+[\mathbf{d_n}].[A_{nt}]+[d_i].[I_t]+[\mathbf{s^*}.W_t] +[\pi_t]=[d_t].[X_t] \quad (1)$$

Non-traded sectors:

$$1.[d_{tn}].[A_{tn}]+[\mathbf{d_n}].[A_{nn}]+[d_i].[I_n]+[\mathbf{s^*}.W_n]= [\mathbf{dn}].[X_n].[1-\mathbf{M}] \quad (2)$$

Definition of the conversion rate of rouble wages in US dollars s^*:

$$s^*=([d_t].[C_t]+[\mathbf{d_n}].[C_n]+[d_i].[C_i])/ (1.C_t+1.C_n+1.C_i) \quad (3)$$

Definition of the profit margin of non-tradable sectors:

$$M = \frac{\sum_{t=1}^{m} \Pi_t}{\sum_{t=1}^{m} d_t X_t} \quad (4)$$

where $[A_{ij}]$ represents the matrix of input-output flows and is partitioned into traded and non-traded sectors, index t standing for the traded sector and index *n* for the non-traded one. These data are expressed in roubles.

Identically, the matrix of intermediate imports is partitioned into traded and non-traded sectors, I_t, I_n. These data are expressed in roubles.

$[W_t]$ and $[W_n]$ are the row vectors of total wages in roubles in the traded and non-traded industries.

$[\pi_t]$ is the profit vector of the tradable branches, expressed in dollars.

$[X_t]$ and $[X_n]$ are the diagonal matrices of output, expressed in roubles.

$[C]$ is the column vector of private consumption, and $[C_t]$ $[C_n]$ $[C_i]$ are respectively the column vectors of private consumption of traded, non-traded and imported goods, all of them expressed in roubles.

$[1-M]$ is the diagonal matrix containing the profit rates M for non-tradable industries; all M identical for the non-tradable industries, except non-market ones for which M is zero.

$[d_{tt}]$ and $[d_{tn}]$ are the matrices of conversion coefficients into dollar prices for traded goods,

$[d_n]$ is the row vector of conversion coefficients for non-traded goods,

$[d_t]$ is the row vector of conversion coefficients for traded goods,

$[d_i]$ is the row vector of conversion coefficients for imported goods,

all these conversion coefficients are expressed in dollars per rouble.

1 is the unit vector.

All unknown variables are in bold characters. They are expressed in dollars.

Bibliography

Aglietta, M., 'La convertibilité du rouble. Fondements théoriques et conclusions pratiques', La grande transformation des économies à L'Est, Irses Colloquium, Paris, June 1990.

Asselain, J. C. 'Taux de change et parité du pouvoir d'achat: évolutions récentes dans les pays du CAEM', *Revue d'études comparatives Est Ouest,* Vol. XVII, No 1, 1986, pp. 43-68.

Duchêne, G. and Senik-Leygonie, C. 'L'économie soviétique en libre-échange', *Les relations communauté européenne Europe de l'Est,* CEDECE, Economica, 1991(a).

Duchêne, G. and Senik-Leygonie, C. 'Rentabilité, taux de change et spécialisation internationale', *La grande transition, économie de l'après-communisme,* G. Duchêne and R. Tartarin (eds), pp. 161-192, Editions Cujas, Paris, 1991(b).

Frankel, J. A. 'The collapse of the purchasing power parity during the 1970s', *European Economic Journal,* Vol. 16, February 1981.

Gallik, D., Heinemeier, M., Kostinsky, G. et al. 'Construction of a 1977 input-output table', CIR Staff Papers, January 1984.

Heston, A. and Summers, R. 'A new set of international comparisons of real products and price levels estimates for 130 countries, 1950-1985', *Review of Income and Wealth,* Series 34, March 1988.

Hughes, G. and Hare, P. 'The international competitiveness of industries in Czechoslovakia, Hungary and Poland', CEPR working paper, 1991.

Mac Kinnon, R. 'Liberalizing foreign trade in a socialist economy: the problem of negative value-added', Mimeo, October 1991.

Meyendorff, A. 'The black market for foreign currency in the USSR', Berkeley-Duke occasional papers on the second economy in the USSR, Paper No 32, December 1991, Wefa Group.

Nordhaus, W. 'Soviet economic reform: the longest road', Brooking papers on economic activity, No 1, 1991.

OECD, Department of Economics and Statistics, 'Purchasing power parities and real expenditures', 1985.

Schroeder, G. and Edwards, I. 'Consumption in the USSR: an international comparison', Joint Economic Committee, US Congress, Washington, DC, GPO, 1981.

United Nations Statistical Commission and Economic Commission for Europe, 'International comparison of gross domestic product in Europe 1985. Report on the European comparison programme', Conference of European Statisticians, Statistical Standards and Studies No 41, New York, 1988.

Part 3

The inter-republic dimension

Unions and republics

Vladimir Maschits[1]

Contents

[1] At the time of writing this article (October 1991), Vladimir Maschits was Deputy Director of the Institute of Economic Policy, Moscow. He had participated in inter-republic negotiations on the project for an economic treaty. He was appointed, in November 1991, Russian Minister for Inter-republic Economic Relations.

1. Introduction

In the autumn of 1990, the hope of preserving the Soviet Union had not been abandoned. In spite of the 'parade of sovereignties' of the republics some chance remained for the conclusion of an economic union agreement, which could have had a considerable impact upon the preparatory process for the new Union Treaty.

A concept for the economic union was initially suggested in the '500 days' programme of September 1990. In the preparation of this programme, a compromise had eventually been reached with the representatives of all the Union republics (excluding Estonia), and it paved the way for an effective renovation of the USSR at the expense of a certain diminution of the power of the central authorities. This was used as a pretext to accuse the authors of the programme of seeking to disrupt the USSR. The critics did not notice (or rather did not want to notice) that for the sake of preservation of territorial integrity of the State (both in economic and in political terms) it was impossible not to assume a certain degree of decentralization, which necessarily means a certain weakening of the central power. Measures which could have been taken in a painless way and by mutual consent just two or three years before were never implemented because of obstinacy on the part of the Union authorities.

A 'strong centre' was unwilling to share its power with 'strong republics' while cherishing the hope of keeping them in a renovated federation. As a result, the idea was turned down as well as the programme itself. This gave impetus to the process of self-determination. The wars of legislation, banks and budgets broke out.

A second qualitative shift occurred after the tragic events in Vilnius in January 1991. Having resorted to force, the centre completely discredited itself and the split became inevitable. A shift in republic attitudes was apparent in the refusal of six of them to conduct the Union referendum of March 1991 on their territories, the publication of a draft of the Treaty of Union without the signatures of the leaders of those republics, and unequivocal pro-independence results of opinion polls and referendums held in the republics. A long divorce procedure could not be avoided.

Convinced of the strength of purpose of republics bent on self-determination (up to secession), the centre changed its strategy. It attempted to sacrifice a part of the territory in exchange for the preservation of its own power in a renovated federation, and demonstrated this power in the streets of Moscow on 28 March. Afterwards a hard time began for the centre when it had to conduct a struggle on two fronts. On the external front it had to retain its control in the republics intending to secede from the Union. Internally the fight was on for power in a renovated, somewhat smaller, federation.The compromises agreed on in Novo-Ogarevo[1] did not suit the conservatives. As a result, instead of signing the Union Treaty on 20 August, they made up their minds to try to change the course of events by staging a *coup d'état*. The days of the *putsch* of 19 to 21 August became a watershed, and the situation in the country changed radically. The old centre completely discredited itself and practically ceased to exist. The republic authorities consistently blocked attempts at its rebirth. The compromises achieved in Novo-Ogarevo had become senseless. A new process had been initiated based on the multilateral settlement of inter-republic relations. The discrepancy between their inherent common interests and the contradictions accumulated over a long period add a dramatic tension to this process.

A dear price has now to be paid for the delay in resolving urgent problems. The blood of innocent people has been shed, and regrettably the number of victims has increased. All those events occur against the background of a sharp deterioration in the state of the economy, which aggravates the situation. This aggravation is not the only reason for intensified ethnic conflicts, although such an explanation is quite popular. The reality is much more complicated. In the remainder of this paper, we discuss the relative roles of national or ethnic factors, political factors, and economic factors. The last section briefly addresses inter-republic co-operation in the framework of an economic treaty.

2. National (ethnic) factors

An economy plays a significant role in the life of people, but they cannot be reduced to pure economic motives. This is apparent in a situation where the economy functions properly. National values, cultural and labour traditions, religion and mother tongue are so important for an individual, feeling his identity with a certain Eden, that for the sake of its preservation or rebirth he is prepared to ignore economic rationality and sacrifice the evident benefits of cooperation.

Thus, a stormy upsurge of national movements has been quite natural, as well as the victory they gained in free democratic elections. It is also understandable that national-

[1] In the spring and the summer of 1991, republic leaders had several meetings with President Gorbachev in a dacha in Novo-Ogarevo with the aim of preparing a new Union Treaty. A draft had been finalized and was supposed to be signed on 20 August 1991.

ism and its ideology lie in the foundation of their policies. Without going into the discussion of the positive and negative aspects of this process, we shall examine its implications.

As a rule, nationalism comes into existence when, as in the Soviet case, the territorial boundaries of the nation (in its ethnic sense) and the State do not coincide. The political objective of nationalism is to obtain such a coincidence, an identity of the political and the ethnic 'unit', its sovereign statehood. Nationalism is a political reality which we cannot ignore, whether we like it or not.

'National feeling' remains dormant only in two situations: it is either satisfied, or driven inside. In the Soviet Union, there was no satisfaction, for a multitude of reasons, and seemingly it never existed. It was not a pure matter of chance that after the Revolution, not only the RSFSR appeared on the map of the former Russian Empire, but also a number of national units which were not destined to become full-scale national States. The Empire had been restored. Since that time, life continued within the framework of a unitary State which did not reckon with ethnic values — not only with abstract values but with the destinies of whole nations. Their national feelings were repressed.

As *perestroika* awakened people, national feelings demanded instant satisfaction. The feelings which had been frozen for 70 years melted and poured down into the space of a country in a stormy stream. Almost immediately, this stream came across certain important Soviet realities which, on the one hand, contributed to the growth of nationalism, but, on the other, constituted very significant obstacles to the formation of fully-fledged nation-States:

(i) As a result of continued migration (voluntary as well as obligatory), a significant part of the population lives out of the limits of its 'national homeland'. Whole nations have been completely deprived of it.

(ii) The internal boundaries within the USSR are of an administrative rather than State origin. They are largely arbitrary.

(iii) An imperial hierarchy of nations has been created, which assigns 'ranks' to respective national and territorial units.

These realities impede solving the 'national problem' through struggles for achieving the integrity of the 'national homeland' and the implied territorial conflicts, as suggested by 'separatists'.

Nationalism cannot be impartial. On the one hand, it is oversensitive to the impediments on its way to self-determination, which are imposed by the centre, or to the interference of the centre in its internal affairs. This causes an unequivocally negative reaction in cases when pressure is applied, and blood is shed through the fault of the centre whenever this occurs — in Tbilisi, Baku or Vilnius. On the other hand, nationalism makes its claim on the whole territory, treated as 'national' or 'historical' homeland, simultaneously preventing the self-determination of other nations living off the limits of their 'proper' (according to nationalistic viewpoint) territory. Any attempt by these smaller nations to preserve or establish their own statehood (or to 'reunify' with their own people in an administrative fashion) is considered by nationalists as an infringement upon the integrity of their 'national homeland'. In that respect nationalism is inconsistent. It gravitates towards imperial philosophy.

The basic contradiction of nationalism can be described in the following way. On the one hand, it is ready for heroic feats for the sake of its own self-determination; but simultaneously it easily commits crimes against others contending for self-determination on the territory which it considers to be its own. For the one group self-determination is being treated as possible and even necessary, but for the other as unacceptable. In satisfying its own interests, nationalism cannot but encroach upon the interests of other, neighbouring nationalisms. The latter is unwilling to reconcile with it as well. As a result, 'a diamond tries to cut a diamond', and an ethnic conflict breaks out. While national movements developed, the number of conflicts with the centre, as well as inter- and intra-republic conflicts increased.

Almost all national movements in the USSR fell into this trap and apparently they will be entrapped in the same way again and again. Having started the struggle with the centre for its own self-determination, not one republic has managed not to hurt its neighbours or to refrain from engendering internal separatists. Separatists are also armed with nationalism if they have grounds for claiming that the same territory, or part of it, is their own 'national homeland'. If those 'separatists' belong to the neighbouring ethnos, they demand that it should grant them protection and in this case an ethnic intra-republic conflict grows into an inter-republic one. 'Mono-nationality' can therefore not be attained within the boundaries desirable for nationalism. But national feelings still demand satisfaction. It is very hard to reach an agreement, for in this case both sides should make the necessary concessions. National problems will strongly influence the political and economic transformation in the country, both in the short and the long term.

3. Political factors

The attempted *coup* radically changed the political situation in the country. Conservative forces experienced a crushing defeat. The activity of the Communist Party of the Soviet Union (CPSU) was suspended or banned in the majority of republics, and its ideology lost its attractiveness to the population. A serious reform of the KGB was undertaken.

Almost all Union republics declared their independence. The three Baltic republics became independent, and were recognized by the world community. This meant that the existence of the Soviet Union as a federal State was no longer on the agenda. The objective of transforming the State organization of the USSR into a renovated federation ceased to suit the republics. Prospects for a confederation are more realistic, though also under question.
A situation where the USSR still exists *de jure*, although *de facto* one may talk of its complete disintegration, should be resolved as soon as possible. In the mean time, the republics do not seem to be especially eager to speed up the process. The new Union Parliament will not assemble for quite some time, if at all. The only functioning body is the State Council of the USSR. The republics seek to sort out the problems of legal succession concerning the obligations and property of the old Union, and once those issues are resolved they are prepared to discuss the political treaty. But they are much more interested in their internal problems — in other words, republics are involved in the re-establishment of their own statehood.

A change in the role of Russia has also resulted from the *putsch*. The victory gained by democratic forces gives them a unique chance to speed up the process of social and political transformation.

This opportunity should be fully exploited. On the other hand, in an objective sense Russia is now opposed to other republics because of its dominating position in all spheres of social life.

Estonia, Latvia and Lithuania on the way to political independence

Transformation in the Baltic republics started in Estonia. The National Front and the concept of republic *khozraschyot* (economic independence) initially appeared there. Within a few months, these same political movements and documents appeared in Latvia and Lithuania. Thanks to the homogeneity of its population, Lithuania became the most radical of the three; Estonians were preoccupied with economic problems and Latvians were catching up with the leaders.

1987

First public discussions in Estonia, Latvia and Lithuania of the Molotov-Ribbentrop Pact, whose secret protocols organized the takeover of the Baltic republics by Stalin.

26 September

First newspaper article by C. Kallaste, T. Made, A. Saviaar and M. Titma on the subject of republic *khozraschyot*. It receives a sharp rebuke by the chairman of the State Planning Committee.

1988

April

Setting-up of the first initiative group of the National Front in Estonia.

June

Public preparation of the Estonia delegation to the XIXth Conference of the CPSU. Discussion of the joint platform: Union Treaty confederation instead of federation, imminence of alterations and amendments in the USSR constitution. In his speech, the First Secretary of the Estonian Communist Party mentions the idea of economic independence for the Baltic republics for the first time ever.

July

Setting-up of the Interfront in Estonia. Appeals to take away from Estonia the towns of Kohtla-Yarve and Sillamyae with a predominantly Russian population.

September

Publication of theses of the concept of republican *khozraschyot*.

1990

January

Declaration by the Supreme Soviet of Estonia on the territorial integrity of Estonia.

February

Estonia and Lithuania pass their declarations of independence.

11 March

An independent Lithuanian State is proclaimed.

25 March

Tanks are brought into Lithuania. The economic blockade begins.

29 March

Transitional period proclaimed in Estonia.

April

Threats to impose direct presidential rule on Latvia and Estonia.

5 May

Latvia passes its Declaration of Independence.

12 May

Setting-up of the Council of Baltic States. Conclusion of Treaties on Economic Cooperation between the three Baltic republics.

August

A treaty on cooperation between Estonia and Russia is concluded.

23 October

Promulgation of Law on the economic frontier of Estonia.

1991

January

Additional troop detachments are brought into Baltic republics. Casualties in Lithuania and Latvia.

Boris Yeltsin signs a statement on the illegal and anti-constitutional character of the application of military force against legally elected bodies.

10 February

Nation-wide opinion poll in Lithuania — 90,5% (out of the 88% of the population who participated in the poll) support the idea of independence for Lithuania.

3 March

Referendum in Latvia: with 87% participation, 73,7% support Latvian independence.

August

Independence of the Baltic States: recognized by Russia (B. Yeltsin) and the USSR (M. Gorbachev and the new State Council).

4. Economic factors

If we leave apart the military aspect, the most important factor uniting the republics is economic. All the parties recognize that republics' economic interdependence is substantial and stand ready to discuss economic issues. On the other hand, the economic interests of the republics vary significantly. This makes it difficult to reach agreement on some specific points.

Almost all aspects of economic life should be a matter for agreed settlement and a great deal of variation is envisaged for each individual field. Besides — and this is most unpleasant — the seriousness of treaties and agreements which would be concluded raises doubts whether and to what extent the parties are going to observe them. Eventually, things might turn out the same as in the case of the inter-republic economic agreement for 1991, whose reality immediately became obvious.

To grasp possible future developments, it is necessary to realize that by the autumn of 1991 the 'joint economic area' already no longer existed. The 'unitary' rouble had been reinforced everywhere with various coupons, ration cards and other money surrogates, and customs houses had begun to appear at the frontiers between the republics. The Union budget had collapsed, and inter-republic bilateral agreements on exchanging supplies were flourishing. This might be an indication that in 1991 a new model of inter-republic relations appeared spontaneously. This model was fairly close to that of the former CMEA.

In that respect, the issue of economic compatibility between the republics should be raised. Even if agreements are eventually reached, it is obvious that the speed of reform will be different in individual republics.

This would give rise to a number of new problems, resembling those that existed in relations between the USSR and India (though multiplied by 15).

In practice, republics have to make a difficult choice now — whether they should move to a model close to that of the European Community, or to a model resembling the former

CMEA. For the majority of them, the CMEA model is more natural (which can be explained by socio-psychological motives). Anyhow a choice should be made, otherwise we are bound to repeat the sad experience of Yugoslavia.

The analogies referred to here are necessarily simplified, because the problem of legal succession exists for the external obligations of the USSR as well as for the obligations of other countries to the USSR. Furthermore, it is necessary to settle the issues of property rights and the internal debt problem. The disintegration of the Austro-Hungarian Empire might offer a better analogy in that case.

Whichever model is eventually agreed on, the republics have to determine today their way out of the crisis. What would they prefer — a joint programme or separate ways?

In such a situation different positions have been expressed. Draft economic treaties have been prepared which differ in the terms of their implementation and in the 'flexibility' of the terms. Several documents were prepared in September 1991:

1. Treaty on Economic Union (G. Yavlinsky group)

2. Concept for the organization of economic collaboration among sovereign States (E. Saburov, A. Granberg).

3. Convention on establishment of an economic community (S. Shatalin group)

4. Treaty on setting up an inter-republic economic community (V. Vakhaniya group).[1]

At its meeting at the beginning of September, the State Council of the USSR decided to adopt as a basis the draft proposed by the Yavlinsky group. After hard work on consideration of this document with representatives of republics, an agreement in principle was reached in Alma-Ata on 1 October 1991. Its title was changed to *Treaty on Economic Community*. On 18 October 1991, it was signed in Moscow by the leaders of eight republics (with the exception of the Baltic States, which preferred to solve their economic problems by means of bilateral agreements while aiming to join the European Community, and that of four republics, which earlier had planned to sign the Treaty — Ukraine, Moldova, Georgia and Azerbaijan).

[1] All these drafts were published in the economic weekly *Economika i zhizn'*, 1991, September, No 39, pp. 4-11 (in Russian).

5. The Economic Treaty

The underlying idea of the Treaty, according to its authors, was to set up a framework for the conclusion of a number of more detailed agreements indicating the way out of crisis for all participating republics. This explains its short-term validity — the Treaty runs only for three years (in the draft a term of five years was envisaged).

But it contains solutions, which can in principle provide a basis for a new model of inter-republic economic relations. Voluntary participation and equality of rights, assumption of obligations and mutual responsibility as basic principles inspire some hopes for realism in the formation of a common market and in the cooperation of policies as a prerequisite to overcoming the crisis.

(i) The Treaty provides a vector for economic reform. Private property, freedom for entrepreneurial activities and competition are considered the bases for economic growth. Legal limitations on State interference in the economic activity of enterprises are recognized as necessary. Although it is quite obvious that the pace of privatization will differ in individual republics, the eventual aim of economic transformation is thus formulated in an unequivocal way.

(ii) Inter-republic negotiations on trade in goods and services will be delicate. Some republics envisage that the role of regulation would be especially active in this field.

(iii) Solving the problem of reforming the monetary and banking systems will also be complicated. An irresistible desire to introduce national currencies exists in practically all republics (one of the underlying reasons might be to reinforce their young statehood). Gosbank monetary policy does not suit the republics and, although a common rouble is still a reality, attitudes towards the possibility of stabilizing it can be characterized as sceptical.

The details of the Banking Union are not quite clear. If the republics try to introduce their national currencies, this Union would be reduced to a Bank for inter-republic settlements or a clearing house. However if the 'rouble zone' is maintained for a more or less lengthy period, the Banking Union will be necessary, since otherwise hyperinflation would be guaranteed. For the period of preservation of the rouble zone a common monetary system necessarily implies common monetary policy (for example, as regards interest rates, reserve requirements, and the exchange rate).

(iv) In the financial sphere, it is vital to reach some basic agreements. Community budget, tax unification, division and servicing of the internal debt, customs duties and the deficits of consolidated republic budgets should be agreed on.

(v) Finally, the problem of servicing the external debt of the USSR should be considered. In the Treaty, the idea of republics having consolidated responsibility for the economic obligations of the USSR was suggested. This would mean that an economic community became a legal successor of the USSR in this field and took upon itself the settlement of relations concerning the external debt with all the elements of the USSR not participating in the Economic Community. It is deemed necessary to conclude a special agreement which would determine the share of each element of the USSR in the total amount of debt repayment and in the total indebtedness of other countries to the USSR at a given date.

Economic transformation in the USSR is predetermined by the outcome of the negotiations on these specific issues. It is not yet clear whether an agreement will be reached on all the issues, but delay in the process of seeking compromise is fraught with danger. An aggravation in inter-republic economic relations would lead only to a further intensification of the crisis and, as a result, to possible disintegration of the Soviet Union.

The regional implications of the monetary crisis[1]

J. Sapir

Contents

[1] This text is the result of work undertaken in the framework of the CEMI-EHESS and of fruitful discussions with M. Aglietta, A. Brender and all the members of the Franco-Soviet seminar on monetary matters. Any errors and omissions are the sole responsibility of the author.

Tables

The economic area covering the territory of the former Soviet Union is now going through a twofold crisis of unprecedented gravity. At the very time when the inflationary process seems to be taking off into hyperinflation, the Union itself is disintegrating. This is a process whose repercussions may not stop with the 15 federal republics that made up the USSR. That is why the approach to the problem should be based on the rationale of regional dynamics. The demands for sovereignty emerging within the Russian SFSR itself show that the disintegration process may not stop at the boundaries of the republics.

The two crises are closely linked. Both are rooted in radical regional differences and in trends inherent in the Soviet system. It would be pointless to try to deal with them separately.

1. Regional differences

1.1. The dichotomy between north-west and south-east

The economic development of the USSR has led to profound regional disparities that affect both the real economy and monetary and financial factors. The salient feature is the distinction between the developed north-west on the one hand, and a south-east that could be tipped into the Third World on the other.[1] This dichotomy has deepened since the 1960s.

The definition of the north-west is not self-evident. Clearly, it includes the Baltic countries and Belarus; but there is some doubt about the inclusion of the Ukraine and the western part of the Russian SFSR. The vast economic and human units considered here are not internally homogeneous; more detailed regional studies are required. It is hoped that the necessary data will be available within the coming months, especially for Russia, but meanwhile, we must work with a fairly imprecise definition of the north-west.

(i) Growth centres certainly exist in Belarus and around Leningrad-St Petersburg. The share of Belarus in the industrial output of the Union rose from 2,5% in 1967 to 4,5% in 1987.[2] Over the same period, the shares of the Ukraine and the Russian SFSR declined slightly. In terms of industrial output per capita, Belarus, Estonia and Latvia do considerably better than the Ukraine and Lithuania.[3] From the point of view of quality of output, Belarus and the Baltic countries occupy a dominant position. Among the products identified by the Soviet nomenclature as subject to certification, the share of 'high-quality' products was 71,3% in Belarus, 58,7% in the Ukraine and 59% in the USSR in 1987.[4]

(ii) A detailed study of the Ukraine shows wide disparities. The proportion of industrial goods classified as 'high-quality' is very large — comparable to that for Belarus — in certain regions, such as the Carpathian part of the western Ukraine, with the regions of Ivano-Frankovsk, Ternopol, Chernovcy and Rovno, part of the coast (Odessa and Nikolajev, probably because of the defence industry) and a band that runs along the Dnieper and extends towards eastern Ukraine from Kiev to Kharkov through Cerkassy and Kirovograd. Other regions, however, are characterized by a very low proportion of high-quality goods, comparable to that of Central Asia. They are the regions of the east of the republic, the Donbass and the region of Zaporozje along with the Crimea, and the west, along a corridor from Lvov to the coast through Vinnica. In the Ukraine the dichotomy between regions producing high-quality and low-quality goods corresponds to that between regions producing equipment goods and consumer goods.

(iii) Social indicators accentuate the image of development of the north-west.[5]

The south-east corresponds to Central Asia, and part of Kazakhstan (the south) as far as Azerbaijan. The share of the four republics of Kyrgyzstan, Uzbekistan, Tadjikistan and Turkmenistan in industrial output was steady, from 1965 to 1987, at 4% of the total for the Union. If the whole of Kazakhstan is included, the figure rises to 7%; the inclusion of Azerbaijan brings it up to 8,4 to 8,8%. With the exception of Azerbaijan, all these republics are at the bottom of the table for quality of production indicators. The share of the south-east in agricultural output is, of course, large; but it is closely linked to the weight of Kazakhstan. Without the latter, the other four republics mentioned account for 8% of the Union's total output in 1987; with Kazakhstan, they account for 15%, a figure that rises to 16,9% if Azerbaijan is also included. Social indicators project a very clear image of underdevelopment.

The dominant polarity in the USSR did not involve a distinction between the centre and the periphery; the past 70 years of development have not eliminated the opposition that

1 See J. Sapir (1990a, p. 66) and J. Sapir (1991a, pp. 63-77).
2 See J. Sapir (1990a, pp. 7-9) and F. I. Kushnirsky (1983).
3 See J. Sapir (1990a, p. 10).
4 See NH 1987 (*Statistika* 1988, p. 91).
5 See J. Sapir (1990a) and V. M. Dobrovol'skaja (1990, pp. 150-166).

existed in 1914. The north-west/south-east axis presented above corresponds more closely to economic, social and demographic reality.

1.2. Complementarity and interdependence

As Tables 1 and 2 show, complementarity between the north-west and the south-east is apparent in trade cross-flows. However, the situation is much more complex than these statistics imply. For example, metallurgy is concentrated in the Russian SFSR, the Ukraine and Belarus; but within the Ukraine the industry specializes in preliminary processing and certain mechanical engineering branches (shipyards, rail transport equipment). Belarus on the other hand is a major producer of high-tech machinery and equipment. The increase in the output of machine-tools around Minsk is partly responsible for the growth of Belarus' share in the total from 1965 to 1987. Similarly, in the energy and chemicals branches, Azerbaijan's surpluses consist mainly of processed products. Oil extraction at Baku is now very low, and the chemicals industry centred around Baku and Sumgait is dependent on supplies of raw materials from the Russian SFSR.

The figures are not totally reliable. From the statistical point of view, it is clear that the structure of Soviet relative prices, which, of course, differs in several ways from the structure of world market prices, can substantially change the weight of each republic in the Union. Basically, it can be said that the relative weight of the raw materials producers is underestimated.

But that is certainly a feature of secondary importance in terms of the question of economic complementarity. The approach here should take account of dynamics. It should be borne in mind that the formation of demand at the level of firms depends on the expected degree of shortage, the priority enjoyed by the firm, and the complexity of the product considered. Shortages incite firms to hold large stocks, thus boosting demand beyond the level technically necessary; repeated shortages (which are an inverse function of the degree of priority) incite firms to change the combination of factor inputs (e.g. by substituting labour for capital), which considerably affects microeconomic management; and the existence of specific technical standards, produced by a technological culture that is itself a result of the adaptation of the economy to shortages, often gives rise to serious problems when attempts are made to substitute Western equipment for equipment of Soviet origin.

Table 1

Relative structure of each republic's exports[1]

	Energy and chemicals	Metals and electrical engineering	Light industry	Agriculture and others[2]
Russia	1,33	1,11	0,68	0,47
Ukraine	0,62	1,32	0,79	1,25
Belarus	0,94	1,04	1,05	0,53
Moldova	0,27	0,50	2,17	1,59
Lithuania	0,78	0,78	1,55	0,47
Latvia	0,70	0,75	1,50	1,57
Estonia	0,74	0,48	2,03	0,32
Armenia	0,51	0,63	2,01	0,13
Georgia	0,34	0,51	2,16	1,21
Azerbaijan	1,19	0,45	1,65	1,08
Kazakhstan	1,22	0,71	0,82	4,20
Tadjikistan	0,35	0,66	1,96	1,02
Turkmenistan	1,67	0,07	1,78	1,63
Uzbekistan	0,74	0,43	1,73	3,06
Kyrgyzstan	0,24	0,99	1,55	1,17

[1] Each branch's share in the republic's exports as a proportion of the corresponding share for the whole of the Union, i.e. taking this branch's share of Union exports as equal to 1,00.
[2] Agriculture and services linked to production.
Source: Lettre du CEPII (Paris), No 98, October 1991.

Table 2

Surpluses or deficits between republics

(%)

	Energy and chemicals		Metals and electrical engineering		Light industry		Agriculture and others[1]		Total	
	Surpluses	Deficits	Surpluses	Deficits	Surpluses	Deficits	Surpluses	Deficits	Surpluses	Deficits
Russia	+ 86,1		+ 49,5			− 86,2		− 95,5	+ 2,5	
Ukraine		− 38,9	+ 40,2		+ 5,0		+ 35,9		+ 35,1	
Belarus		− 4,7	+ 10,3		+ 23,1			− 0,8	+ 39,2	
Moldova		− 9,0		− 8,4	+ 13,2		+ 4,4			− 1,8
Lithuania		− 9,5		− 6,9	+ 8,8		+ 0,6			− 7,8
Latvia		− 4,7		− 5,5	+ 7,4		+ 3,4			− 1,1
Estonia		− 2,4		− 5,1	+ 4,9			− 0,9		− 3,2
Armenia		− 3,3		− 3,1	+ 4,0			− 2,5		− 3,2
Georgia		− 5,5		− 6,9	+ 13,3		+ 0,9		+ 2,8	
Azerbaijan	+ 7,2			− 3,0	+ 12,0		+ 4,0		+ 20,3	
Kazakhstan		− 8,1		− 29,1		− 13,8	+ 29,0			− 51,8
Tadjikistan		− 4,4		− 4,6	+ 1,0			− 0,4		− 9,7
Turkmenistan	+ 6,8			− 7,6	+ 1,2		+ 2,5			− 0,9
Uzbekistan		− 4,7		− 18,5	+ 3,8		+ 18,4			− 16,1
Kyrgyzstan		− 5,0		− 1,5	+ 2,2		+ 0,9			− 4,2
Total	100	− 100	100	− 100	100	− 100	100	− 100	100	− 100

[1] Agriculture and services linked to production.

Source: Lettre du CEPII (Paris), No 98, October 1991.

Various conclusions may be drawn from these observations. The demand for raw materials, the archetypal 'hard goods', will be affected mainly by changes in the global economic environment. Relaxation of the constraint produced by risks of shortage should lead in the short term, all other things being equal, to a reduction in this demand. Moreover, it is easier to change suppliers of raw materials, the currency of settlement clearly being a key factor from this point of view. For equipment goods, on the other hand, a change in suppliers is difficult in the short term.

To the extent that a flow of equipment from the north-west to the east, and a flow of raw materials in the opposite direction could be identified, the complementarity between the two areas is based on different sets of reasons for each one. Consumers of equipment goods are dependent on their suppliers because of standards. This situation can be modified in the medium term, but should be considered rigid in the short term. Consumers of raw materials, however, are sensitive to price. Substituting a Western producer for a Soviet producer means being prepared to pay a different relative price, and also making available adequate export resources to cover settlement in foreign currency. Although the short-term constraint is less rigid than in the former case, it is more likely to last into the medium term.

Account must also be taken of critical flows. The more highly developed the production system, the more catastrophic the possible consequences of failures of supply. Among such failures may be those affecting certain specific machines or parts. The degree of dependence of one republic on another may well be determined by critical flows that cannot be identified from aggregated data. The use of the ratio of imports to GDP may give misleading results and lead to erroneous conclusions in the case of an economy where technical integration is as close as in the former Soviet Union.

1.3. Geography of monetary disequilibria

As could be expected, the dichotomy between the north-west and the south-east is reflected in indicators of incomes and financial variables. Earned income (that of wage-earners

and kolkhoz workers) varies widely between the two areas. In 1985, per capita annual incomes ranged from R 1 350 in Estonia, about R 1 200 in the Russian SFSR and Latvia, and almost R 1 000 in Belarus and the Ukraine, to only R 700 in Uzbekistan, Kyrgyzstan and Azerbaijan, R 600 in Turkmenistan and R 516 in Tadjikistan.[1]

There may be very wide variations in conditions of supply because of priority given to certain regions and certain towns. Proximity to sources of production is another very important factor: once local authorities have been granted autonomy, they are in a position to hold back resources.

Estimates of disequilibria between regions (and of the monetary overhang) must take account of the various determinants not only of demand but also of supply. The use of the ratio of retail turnover (index of supply) to savings (index of demand) can give a first approximation of monetary pressures, although it does imply the assumption that savings are homogeneous in the different regions. Clearly if all savings are forced in one area, while they are spontaneous in another, the comparison between ratios is meaningless. Thus the ratio must be backed up by other indicators (Tables 3 and 4). Black market prices can be used to check on the estimate of the degree of disequilibrium. Bearing in mind that certain towns (especially Moscow) are given priority of supply, it is clear that monetary tensions were stronger in 1990 in the north-west than in the south-east.

It is difficult to monitor the changes that occurred in 1991. Almost R 83 billion were put into circulation during the first 10 months of the year. The Ukraine was the first republic to attempt to stabilize the monetary situation. The introduction of a system of ration coupons made it possible to contain the growth of liquidity. In Belarus, on the other hand, reactions to April's price rises were much stronger than elsewhere (strikes and demonstrations in Minsk). The government had to grant wage rises far in excess of those provided for in the system linking pay to prices. The refusal of Belarus to lend banknotes to Lithuania reflects the pressing needs of both republics. The stock of liquidity seems to have increased in the north-west, especially along the arc from Minsk to Murmansk. In the Russian SFSR, the expansion of cash in circulation seems to have been concentrated in the northern part of the country.

[1] See J. Sapir (1990a, p. 51).

Table 3

Indicator of monetary tension, 1989

Republic	A		B		A/B	
	Turnover of State and cooperative retail trade per inhabitant (Roubles)		Amount of savings bank deposit per inhabitant (Roubles)		Index of monetary tension	
		(ranking)		(ranking)		(ranking)
USSR	1 406		1 170		120,2	
RSFSR	1 548	(5)	1 296	(7)	119,4	(6)
Ukraine	1 326	(6)	1 431	(5)	92,7	(2)
Belarus	1 559	(4)	1 481	(3)	105,3	(5)
Uzbekistan	825	(13)	349	(14)	236,4	(15)
Kazakhstan	1 168	(10)	737	(10)	158,5	(10)
Georgia	1 218	(9)	1 265	(8)	96,3	(3)
Azerbaijan	814	(14)	421	(12)	193,3	(11)
Lithuania	1 803	(3)	1 855	(1)	97,2	(4)
Moldova	1 273	(7)	917	(9)	138,8	(7)
Latvia	2 055	(2)	1 340	(6)	153,3	(9)
Kyrgyzstan	963	(11)	458	(11)	210,3	(12)
Tadjikistan	730	(15)	324	(15)	225,3	(13)
Armenia	1 269	(7)	1 580	(2)	80,3	(1)
Turkmenistan	956	(12)	414	(13)	230,9	(14)
Estonia	2 164	(1)	1 453	(4)	148,9	(8)

Source: Narodnoe Khozjajstvo, 1989, pp. 92 and 103.

Table 4

Index of tension on the consumer goods market, 1990 (ratio of local black market price to average price for the USSR)

	A	B	C	D	E	F	G	Ranking
Moscow	0,95	—	1,02	1,15	0,76	1,04	0,98	12
Ashkhabad	0,92	—	0,71	0,78	1,18	—	0,90	13
Baku	0,79	—	0,77	0,77	0,90	1,21	0,89	14
Vilnius	0,93	—	1,32	1,34	1,24	1,87	1,34	3
Yerevan	1,22	2,06	0,90	0,71	0,61	0,96	1,08	9
Dushanbe	0,88	0,88	0,84	0,50	0,92	—	0,80	15
Kiev	1,06	1,23	0,96	1,43	0,87	1,59	1,19	8
Kishinev	1,35	0,83	1,54	1,05	1,77	—	1,31	4
Lvov	0,97	—	1,40	1,19	1,32	—	1,22	6
Minsk	—	—	1,27	0,51	1,27	—	1,02	10
Odessa	0,87	1,05	1,57	1,25	1,59	1,06	1,23	5
Riga	0,82	1,74	2,67	1,40	0,93	1,82	1,56	2
Tbilisi	0,42	4,05	1,80	1,01	0,68	—	1,59	1
Bishkek	0,74	—	1,11	0,93	1,23	—	1,00	11
Kharkov	1,09	—	0,98	1,43	1,31	—	1,20	7

The columns represent the following categories:
A: foodstuffs;
B: furniture;
C: domestic electrical equipment;
D: men's clothing;
E: women's clothing;
F: building materials;
G: average index.
In each category eight products were selected. The ratios represent the average for the category. Where the prices of fewer than three products were observed, no ratio is given.
Source: Ekonomika i zhizn', No 12, March 1991.

It is a reasonable contention that at the end of 1991 the north-west, and in particular Belarus, the Baltic countries and the northern regions of the western part of the Russian Federation, as well as part of Siberia, were experiencing considerable inflationary pressures. In the south-east, the pressure seems to have been less strong. This is understandable in the light of the labour market situation and the conditions of the formation of wages (Table 5).

Participation rates in the north-west, and especially in the RSFSR, are high, which reflects the development of industry and depressed demography. Labour shortages are frequent (and seem particularly acute in Belarus and the Baltic countries). In the south-east, on the other hand, it is probable that the high rate of agricultural employment is symptomatic of disguised unemployment. Such situations tend to affect the formation of wages: firms have always had a certain autonomy in this area, which has increased considerably since 1987-88. Other factors also need to be borne in mind, however: the calculation of the basic wage incorporates weighting coefficients for the different regions (1,5 to 2 for Siberia, 1,3 for Central Asia), and for the availability of work. These coefficients result in automatic offsetting to the benefit of the RSFSR and certain parts of the south-east. The labour shortage has certainly been a stronger factor in the dynamics of wages since 1989 (i.e. the moment when the system of monitoring firms collapsed) than previously. Not that it was without effect before; but competition between firms for labour resources could not be given free rein.

It is also worth noting that the development of cooperatives has led to the emergence of a sector where remuneration is very high, thus increasing the pressure on State-owned firms. Moreover, the present crisis is reflected in supply failures, which may incite firms to substitute labour for capital in an attempt to reduce their vulnerability; at the microeconomic level, this may mean an increased demand for labour in the face of limited supply. Without labour mobility (from the south-east to the north-west) and reform of the financial system, it is easy to understand why the most developed regions of the former USSR, which are also those where demography is weakest, are experiencing inflationary pressures stronger than those of the rest of the country.

Table 5

Indicators of the monetary situation by republic, 1989

(%)

Republic	A	B	C	D	E[1]
	Share of population	Share of GNP	Share of saving	Share of profits	Share of credits
RSFSR	51,3	57,5	56,8	52,9	54,7
Ukraine	17,9	18,6	22,0	19,5	12,4
Belarus	3,6	4,5	4,5	5,7	2,8
Uzbekistan	7,0	4,5	2,1	3,6	4,2
Kazakhstan	5,8	3,5	3,6	5,3	7,1
Georgia	1,9	1,7	2,0	1,4	2,1
Azerbaijan	2,5	1,55	0,9	1,4	1,8
Lithuania	1,3	1,4	2,0	1,9	1,2
Moldova	1,5	1,4	1,2	2,15	1,0
Latvia	0,9	1,3	1,1	1,7	0,8
Kyrgyzstan	1,5	0,9	0,6	0,9	1,0
Tadjikistan	1,8	0,9	0,5	0,8	0,7
Armenia	1,1	0,8	1,5	0,75	1,0
Turkmenistan	1,2	0,8	0,4	0,9	0,8
Estonia	0,5	0,7	0,7	1,0	0,4

[1] 7,8% of total credits are not broken down by republic. If these credits are linked to the activities of the military-industrial complex, they could primarily be apportioned to the RSFSR and Kazakhstan.

Sources: for A, C, D, E: *Narodnoe Khozjajstvo*, 1989, pp. 17, 89, 619, 628; for B: *Voprosy Ekonomiki*, No 4/1990, pp. 46-58, Table 7.

The distribution of monetary resources and uses highlights further differences and complementarities (Tables 6 and 7). The concentration of resources in the north-west and of uses in the south-east is striking, but hardly surprising, in view of the economic differences between these areas. In the framework of the former USSR, the financing of investment in the east and the south-east was based on creaming off investment resources from the north-west. Within the north-west, the Ukraine showed a positive balance of inter-republican trade. However, this was probably due in part to the low relative price of energy and hydrocarbons; the adjustment of prices to bring them closer to those of the world market should radically alter the situation, to the benefit of hydrocarbon producers, i.e. principally the Russian SFSR. The constraint on the north-west would then be to the advantage, not of the south-east (with the possible exception of Turkmenistan), but of Russia, whose situation in the former system was neutral.

It is thus fair to say that factors of regional differentiation existed and had a considerable impact before the acceleration of the crisis process in 1990. Some control could be kept over them as long as the unitary framework held together; but they were the symptoms of wide differences in the dynamics of economic and financial processes between the north-west and the south-east.

Table 6

Monetary indicators for the north-west and the south-east, 1989

(%)

	Area's share		Credits to the economy
	Saving of households	Profits of enterprises	
North-west (Ukraine, Belarus, Baltic States)	30,3	29,8	17,6
South-east excluding Kazakhstan	3,6	6,2	6,7
South-east including Kazakhstan	7,2	11,5	13,8
RSFSR	56,8	52,9	54,7

Source: Table 5.

Table 7

Apportionment by area of productive fixed capital and savings of households, 1989

(% of total)

	Savings	Fixed capital
North-west	30,3	21,8
South-east excluding Kazakhstan	3,6	5,7
South-east including Kazakhstan	7,2	11,6
RSFSR	56,8	61,8

Source: Table 5 and *Narodnoe Khozjajstvo*, 1989, p. 278.

2. Systemic deconcentration and monetary crisis

2.1. The realities of Soviet federalism

The historical choice of federalism by the Soviet Union was not without consequences. For authors like V. Aspaturain (1950), M. Fainsod (1965), F. C. Barghoorn and T. F. Remington (1986), federalism was merely a façade, while the system's approach in reality was unitary and centralizing. However, this traditional analysis raises more problems than it solves for the understanding of the real working of the system. The significance of the federal institutions as a potential focus for nationalistic attitudes, or the existence of powerful local interests with influence on the decision-making process, has been identified (T. Rakowska-Harmstone (1974), H. L. Biddulph (1983)). Even Remington has admitted (1986) that the federal structure could play an important part in organizing the flow of information, and that it thus contributed to the definition of the rules of the game. G. W. Breslauer (1982) showed that deconcentration, i.e. the delegation of authority to lower levels, was an alternative to decentralization, or recourse to market mechanisms, in the operation of the Soviet system. This deconcentration occurred around two axes: the reinforcement of the power of the major production ministries and the acquisition by the local authorities (at the level of the republic or the *oblast*) of *de facto*, if not *de jure*, powers. This had already been analysed by J. Hough (1968), who compared those in power locally to 'prefects'.

The 'prefect' model was an initial departure from the ideal bureaucratic model.[1] But as the local official's responsibility for economic matters developed during the 1960s and 1970s, he gradually changed into a lobbyist.[2] This happened because economic objectives became increasingly important in legitimizing the position of local officials in the eyes of both Moscow and their constituents. Their aim was to provide firms in their areas with the resources they needed, and to create a favourable climate of opinion so as to achieve the economic results that would consolidate their position in relation to the central authorities. This position enabled them to bring more pressure to bear in the resource allocation process, to the benefit of the constituency. The lobbyist model then gave way to the nationalist leader model.[3] This shift was largely due to the effects of the economic crisis that began to be apparent towards the end of the 1970s. Faced with increasing resource allocation problems, the regional authorities were trying to salvage some factors of legitimacy to keep control of their areas.

In fact, deconcentration is firmly rooted in the foundations of the Soviet-type economy. Far from being a deviation from the model, it is an essential product of the economic institutions.

In the Soviet economy as it functioned from the end of the 1920s, the conditions for the distribution of goods could not serve as objective indicators of the degree to which resource allocation was correct. Guaranteed sales, and the corollary of fixed prices, the loose budget constraint, the monobank system, mean that allocation must be managed by applying rules.[4] The issuing of such rules implies deconcentration, since they cannot be efficient unless they take at least partial account of local situations. Indeed, the increased complexity of the productive system that accompanied the industrialization and development process made deconcentration ever more necessary as the society and the economy were transformed. Another factor to consider is the existence of chronic shortages.[5] Shortage is not just a feature of consumer goods markets: it is a basic situation that introduces a new factor of uncertainty throughout the economy. The management of this uncertainty tends to concentrate on the flexibility of local organizations, and thus the role and responsibilities of local officials.

The Soviet economic system therefore involves powerful tendencies towards the transfer of powers either towards vertical bodies (the ministries) or towards regional bodies. The combination of these tendencies with the choice of a

1 See A. Avtorkhanov (1966).

2 See M. R. Beissinger (1986) and J. C. Moses (1974, 1985).

3 See G. Hodnett (1978) and G. Gleason (1989).

4 See G. Roland (1989) and J. Sapir (1990b, 1991b).

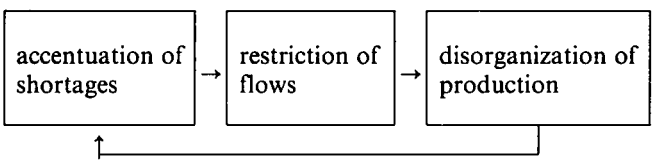
5 See G. Roland (1989, Chapter 4).

federal structure, which as we have seen could not be regarded as merely a façade, created a situation where the power of the central authorities was often questioned, even under Stalin.[1] The reaffirmation of the Party's authority was used as a factor of unification, and recourse to arbitrary decision-making tipped the balance of the implicit bargaining in favour of the central authorities.[2] The Party's authority, however, had been going through a crisis since the 1960s. Destalinization destroyed the legitimacy of charisma as a basis for authority, and despite numerous attempts, the regime did not succeed in replacing it with another. Arbitrary decisions were less in evidence, although still more frequent than any Western society would have tolerated. Total despotism would have been thoroughly destructive in an economy as complex as that of the USSR from the 1950s; but its disappearance none the less unbalanced the system. The process was widened and deepened by *glasnost* and the introduction of free elections. In particular the fact that electoral systems were more democratic at local level in 1990 than at the level of the Supreme Soviet affected the pace of change. The transfer of democratic legitimacy to republics and local structures confirmed the systemic tendency to deconcentration. It gave a decisive impulse to the process of fragmentation.

2.2. Disintegration and monetary crisis

The fragmentation process was also affected by the specific dynamism of the monetary crisis. The example of Germany in 1923 shows that a major hyperinflationary crisis can endanger the unity of a country. Local authorities seek to join with foreign monetary authorities to protect themselves from the effects of the disappearance of money.[3]

In the Soviet case, the fact that the first sign of the monetary crisis was an accentuation of shortages was reflected in the increased importance of local authorities. They attempted to solve the problem in the first instance by approaching the central authorities. As their efforts were in vain, and as confidence in the currency faded, they gradually introduced systems to control flows. Whenever these systems involved prohibitions on non-residents, local autarkies arose that eventually accentuated economic disorder. This led to the emergence of a cellular economy on the following pattern:



From many points of view the monetary crisis is endogenous to the fragmentation process it contributes to accelerating. The problem of the budget deficit leading to the injection of liquidity is due to a large extent to overshooting of expenditure, fuelled by welfare programmes and subsidies to firms, both items clearly susceptible to pressure from local authorities.[4] Similarly, the Chairman of the Gosbank, V. Gerashchenko complained in April 1990 that the Central Bank was not in a position to refuse immediate compliance with requests for liquidity from Finance Ministers in the republics.[5] Alas, this was not the only contribution of the local authorities to the monetary crisis. After gaining political legitimacy in the 1990 elections, many authorities decided that the republics should hold on to their own tax revenue. Thus when the entire economy was in crisis, the republics' budget revenue from profit taxes doubled, and much of the revenue accruing from turnover tax was also put to local use.[6] Despite the agreement reached early in 1991, the republics handed over only a fraction of the contribution provided for in the federal budget.[7] These behaviour patterns should be placed in the systemic and political context analysed above. Although the new local authorities enjoy much stronger democratic legitimacy than the centre, they are nevertheless very fragile politically. Most of the newly elected officials are old hands from the Soviet political system. Their own political legitimacy is incomparably weaker than that of politicians from the clandestine or marginally legal opposition parties of Central Europe (e.g. Walesa or Havel). They have no political party or movement organized to support them in a specific policy programme. Their popularity and their authority rest basically on the extent to which they are in conflict with the centre. In the circumstances, it is not surprising that they concentrate their policy on taking control of resources, and that they automatically accede to demands for increases in nominal incomes.

This shows how closely monetary matters are bound up with sovereignty. The collapse of the system of control over local authorities led to a monetary crisis that has itself gradually accentuated the fragmentation process. Clearly, the monetary crisis and the fragmentation of the Soviet Union are closely linked. It would be pointless to try to deal separately with the problems of monetary and financial stabilization on the one hand, and those of the emergence of new State authorities on the other.

1 See T. Dunmore (1980).
2 See J. Sapir (1990b, pp. 68-74).
3 See discussions with Professor G. Feldman (1992).
4 See V. K. Senchagov (1989, p. 64).
5 See V. Gerashchenko (1990, pp. 10-11).
6 See V. Panskov (1990, p. 5) and S. Alexashenko (1992).
7 See J. Rytov (1991, p. 6).

3. Costs and implications of disintegration

The question of the costs and implications of the disintegration of the former USSR must therefore be approached simultaneously from the commercial and monetary points of view, on the basis of a static and of a dynamic assessment.[1] It is important to bear in mind the differences between this process and the integration process now under way in the EC.

3.1. Commercial interdependence

The classic theoretical approach to the costs and benefits of integration/disintegration is based on the comparison (and trade-off) between trade creation and trade diversion.[2] But this approach assumes that between the country or countries concerned, on the one hand, and the other partners, on the other, there is perfect substitution of products and markets. There is no reason not to accept this assumption here in the long term; but in the short term (some three to five years) the assumption of perfect substitution raises numerous problems. The USSR and the other East European countries have developed productive systems characterized by special technical and quality standards. This has several implications.

(a) A Soviet purchaser of Soviet machinery and equipment cannot substitute a non-Soviet supplier for an unsatisfactory Soviet supplier without paying the price of converting existing equipment to the new standard.

(b) A seller of Soviet machinery and equipment cannot easily substitute a non-Soviet market for a Soviet market without:
   (i) paying the price for converting output to a new standard;
   (ii) accepting a major cut in prices received;
   (iii) investing considerable resources in setting up a distribution and after-sales service network on the new market.

(c) Raw materials and products are less affected by this situation than high value-added products.

The conditions are quite different from those prevailing (in the past and at present) in the European countries of the EC.[3] Integration by the former USSR is a short-term necessity, not the result of a long-term process of cooperation. For there is no doubt that the countries of the former USSR and the former members of Comecon have everything to gain from harmonizing their standards on world standards; but in the short term, they cannot pay the price of harmonization. Two remarks should be made.

Firstly, it is clear that in the short term it is advantageous to maintain links between suppliers and customers as they existed before 1991, the more so the smaller the share of exports of raw materials or products in the trade of the country concerned. The risk of breaking these links is twofold:

(i) the disorganization of a productive system either because of the shortage of vital parts or because of a sudden failure to sell output; this disorganization may be reflected, depending on the progress made with reform, in an increase in the subsidies that must be paid to firms, or in massive unemployment;

(ii) the breaking of traditional links may oblige these economies to specialize in the products that are immediately exportable, i.e. raw materials and products; opening up to the world market may then lead, not to positive effects of multilateralization of trade, but to regressive specialization in terms of division of labour and a loss of technological know-how.

But secondly, the preservation of links in the short term should not involve preserving the status quo. While these countries should not be faced with intolerable costs of adjustment, they must be encouraged to achieve gradual alignment on international standards. The mix of short-term and medium-term considerations will be the key to the success or failure of the transition. This naturally leads us to refer to the monetary aspects of disintegration.

3.2. The money question

Here again we should recall the classical analysis of the respective advantages and disadvantages of a national currency versus a common currency.[4]

The following arguments are usually mentioned in favour of a national currency:

(a) the possibility for the government to control the transfer of wealth through inflation and deflation;

(b) the absence of a nominal solvency constraint;

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1 The failure to deal with monetary matters is the main criticism to be made of the article by A. Mac Auley (1991, pp. 51-65).

2 See El-Agraa (1985).

3 See E. Nevin (1990).

4 See D. Cohen (1986, Chapter 6).

(c) the possibility of applying a flexible monetary policy to absorb external shocks.

The following points are usually made in favour of a joint currency:

(d) the existence of an automatic system of foreign exchange at fixed rates and without cost;

(e) the constitution of a grouping with a better international negotiating position.

In their present situation, point (e) is hardly relevant to the republics of the former USSR. Point (d), on the other hand, is vastly more important than it would be in other circumstances, specifically because of the interdependence of the economies. At the same time, the arguments in favour of national currencies, especially points (a) and (c), are particularly convincing in view of the differences between republics referred to above. In the end, an accurate assessment of the cost-benefit balance should be based on possible dynamics.

If each republic were to have its own currency very soon, the need for monetary cooperation would quickly be felt because of the necessity to maintain trade. Of all the republics, only Russia has the export capacity to enable it to stabilize its currency. If monetary cooperation was set up, it would take the form of a monetary system polarized on the Russian currency.[1] The relations between Russia and its main partners (Ukraine, Belarus, Kazakhstan) can then best be described in terms of the 'prisoner's dilemma'. The market shares of each of the three republics are too small for there to be a strong temptation to opt out; however, they are large enough to make retaliation feasible against Russia. This could produce an equilibrium situation akin to that of nuclear deterrence, guaranteeing the survival of monetary cooperation. If the comparison with deterrence is useful, its features should be considered. Basically, deterrence depends on the dynamics of strategic instability. The more vulnerable a system of strategic weapons, the more destabilizing it is; for in a crisis vulnerability is an incentive to strike first. In the case considered here, the 'weapon' of the three republics against Russia would be Russia's need to purchase their manufactures.

The crux of the matter is then how Russia is expected to react. For example, if the Ukrainian and Belarussian authorities think that the modernization of Russian industry will be a long process (taking at least 10 years), they will expect their negotiating power to remain strong in the medium term; by a process of the 'common knowledge' type ('they know that I know that they know ...'), which can lead to a stable equilibrium. However, if those authorities think, rightly or wrongly, that Russia will do all in its power to reduce its technical dependence over a much shorter period, they will conclude that their negotiating clout is soon to be eroded. The logical reaction will be to seek to maximize their advantage in the short term by revaluing their currencies.

This behaviour would inevitably encourage the Russian authorities to speed up measures to reduce dependence, thus confirming a posteriori the expectations of the Ukrainian or Belarussian authorities. The expectation of defection becomes, in this framework, a self-fulfilling prophecy. The same 'common knowledge' process that would stabilize negotiating relations in the case of certainty of prolonged dependence would destabilize it in the opposite situation. As it may be assumed that Russia and her neighbours view each other with the utmost circumspection, a stable compromise could probably only be achieved under the pressure of a strong exogenous constraint. But, to return to the deterrence metaphor, the prospect of a trade war, disastrous though it might be, cannot by any means be compared to the threat of nuclear war.

Suspicion of Russia combined with a falsely optimistic idea of how easily the Ukrainian and Belarussian economies can be integrated would most probably lead to unilateral defections. On the other hand, reliable assurances concerning trade relations between Russia and the two partners, and a more realistic assessment in Minsk and Kiev of the risks of a 'Lone Ranger' type strategy would contribute to stabilization. So it might still be thought that an even better solution would be to keep a single currency.

This, however, is not so, for political as well as for economic reasons. It would be hopeless to rely on economic arguments to talk republics out of their aspirations to sovereignty. They are on quite a different wavelength. Only an awareness of how economic constraints can limit sovereignty will change behaviour patterns in the end, The only possible subject for discussion is how to organize cooperation between sovereign States; but the principle of their sovereignty is certainly not a matter for debate.

There are also economic arguments at present against a single currency. It was seen above that having its own currency gave a country considerable scope for action. In view of the differences between situations in the various republics, there is no reason to do without such a tool for flexibility, provided of course that it is not used immoderately.

Moreover, in the unlikely case of a single currency surviving, the negotiation of internal relative prices could rapidly lead

[1] On the problem of the polarized monetary regime see M. Aglietta (1991, pp. 311-334).

to fragmentation. If the result was too favourable to Russia, the costs of transition would be passed on to the other republics, who would be forced into adjustments they could ill afford without a national currency. If, on the other hand, it was too favourable to the republics, the pressure on Russia to opt out would of course be very strong.

In fact, despite the static advantages of each option, neither cooperation between national currencies (in the framework of a regional monetary system) nor the solution of a joint currency would be likely to lead to dynamic stability. The importance of political factors, the fear of 'paying for the others', the probable fragility of the political authorities over a fairly long period, all complicate the attempt to devise a solution satisfactory from both the static and the dynamic point of view.

3.3. The *nth + 1* currency

One possibility might be found in what we could call the *nth + 1* currency.

The problem is both economic and political. The aim is to maintain trade relations between republics (which implies minimizing transaction costs) while at the same time permitting some openness towards the world economy as an incentive to modernization. There is thus a problem of convertibility to be approached in the knowledge that, firstly, some republics, but not all, can probably export enough products (especially hydrocarbons) to enable them to obtain foreign currency, and secondly, the trade balance of the area as a whole (former USSR) could well be in deficit.

The political problem resulting from the nature of relations between Russia and her neighbours must also be solved. It is based as much on the effects of memory, prejudice and suspicion as on objective factors (the Russian SFSR is incomparably larger and richer in natural resources than the neighbouring countries).

Rejecting the single currency solution as unrealistic, and recognizing that the instability of the authorities of the republics (with its risk of spiralling nationalism) would prevent the achievement of a stable compromise based on the rationale of deterrence, we conclude that only a more integrated system (and thus by definition a more complex one) is possible. The idea is based on avoiding a confrontation between Russia and her neighbours. The economic problems described above make a payments union appear an attractive proposition, but the problem of mediation arises. To make things easier, we suggest the creation of a 'supra-republican' currency: the *nth + 1* currency. This currency would be first and foremost a unit of account. It would be based on the establishment of a central bank open to all the republics and to Western partners. It would play a role in relation to the Western currencies identical to that of the dollar in relation to gold under the Bretton Woods system. The arrangements would thus incorporate flexibility at two levels: the par values of the currencies of the republics could be adjusted, in the framework of negotiated agreements, against the *nth + 1* currency; and the par value of the *nth + 1* currency against a basket of Western currencies could itself be adjusted. This would provide scope for autonomy of decision by the republics, enabling them to cope with widely different situations, while allowing for the possibility of a common policy for the entire area.[1]

If it is agreed that the main problem is to stabilize negotiating relations, then to the extent that this currency would not belong to any republic in particular, there is nothing to stop the introduction of a third party into the interplay between Russia and her partners.[2] Its task would be to balance the forces, e.g. by lending foreign exchange reserves to the least privileged republics to enable them to contribute their quota to the system. The presence of this third party would also be a political guarantee. As its withdrawal would lead to the collapse of the system, it could be used as an implicit threat if any of the parties tried to change the rules in its own favour. In view of present wariness of anything like a revival of the hated central powers, the presence of the third party would constitute assurance that there would be no return, by devious routes, to the former system.

The combination of the *nth + 1* currency and a payments union on the scale of the former USSR could provide all the theoretical advantages of a payments union without the drawbacks,[3] which include the size of the market on which the payments union is based (the main argument against this solution for Eastern Europe) and the problems arising because of the existence of a large, dominant country.

The advantages of the system are clear. Trade between republics would be sure to remain brisk, while the republics would have limited convertibility that would not lead them into an excessive demand for strong currencies. It is well known that the problem of reserves is crucial in the change-

[1] This is a very important point, as D. Cohen (1986) shows; the counterpart of the currency unit in a given country consists of internal transfers of labour and capital.

[2] The importance of external intervention to stabilize a cooperative game is demonstrated in C. A. Powell (1988, pp. 84-87) and T. Mitchell (1987).

[3] See P. Bofinger (1991, p. 13).

over to convertibility.[1] Outside the regions producing hydrocarbons and other raw materials, the short-term potential for foreign currency earnings is extremely limited. The proposed combination would make it possible to achieve the best possible compromise between protection and openness, by minimizing the shocks of the transition to convertibility, while introducing some of the advantages of openness. A payments union over the whole territory of the former USSR would overcome the limitations linked to the size problem referred to in connection with a payments union covering all the East European countries.[2] The efficiency of the system would even be enhanced if some of the former members of Comecon, especially those whose industry was most dependent on the Soviet 'market', could join the combination. Experience towards the end of 1991 seems to show that even a sharp cut in prices of manufactures will not be enough to enable substitute markets to be found in the face of effects related to standards and sales networks.

It should be clear that the suggested combination cannot be permanent. It would be justified during the period of modernization and re-equipment of the productive system, which might be very long. But it could also become an adaptable basis for development (through the adjustment of customs duties and par values, and a gradual change in the trade-off between protection and openness). It would thus enable monetary variables and trade to follow the economic transformation of the area. It could also be a special framework for global aid packages (of the Marshall Plan type), and would become an ideal instrument for achieving a custom-built link-up between Western Europe and the former area of Soviet domination, eventually leading to integration.

4. Cooperation, integration, transition

It has been explicitly or implicitly assumed in several parts of this paper that the reform of the economies and their transition to market economies would continue during the stage of close integration that has been described. However, if this process is the main objective, the question of integration or disintegration still needs to be considered.

At first sight, disintegration may be seen as favourable to the process of reform. By restoring institutional autonomy of decision to the local level, it may be imagined that it will lead to faster dismantling of the former system. Similarly, it might seem that it would be easier to apply monetary stabilization policies at the level of each republic separately. Such policies are clearly conditions *sine qua non* of transition. Consequently, attempts to maintain a high level of concertation and cooperation could appear to be counterproductive from the point of view of the transformation of the economies. Nevertheless it is far from clear that this superficial conclusion will be confirmed by a more detailed analysis.

The problem is not so much that of making decisions as that of maintaining them. The important thing is to ensure an irreversible process, despite foreseeable problems over the next few years.[3] Several remarks are called for here.

(i) Monetary stabilization will be achieved, in the final analysis, only if the need for Western currencies can be kept within reasonable limits,[4] and if the internal economic and social situation can also be stabilized. It would be vain to expect that in a situation of massive unemployment or paralysis of the productive system, the governments of the republics could limit the expansion of the money supply. Similarly, if there were a strong external trade constraint (a need to import energy and raw materials, and an inability to export), the capacity of governments durably to stabilize the monetary situation would be doubtful.

(ii) The dynamic process concerned here is the opposite one to that described above to analyse monetary slippage, but it may lead to the same result. As long as we were discussing the features of the Soviet-type economy *before* reform, the problem of labour shortages was clearly central. These shortages result from a systematic tendency to over-invest, low structural productivity (related to the inefficiency of the system of incentives because of obstacles to the fungibility of money, and to the disorganization generated by supply failures), and a depressed demographic situation in the north-west. There was ample evidence of inability to contain nominal wages in the north-western republics.[5] This was one of the mechanisms of monetary destabilization that helped to show why the situation was much more serious in the north-west than in the south-east. From a viewpoint taken *after* reform, it cannot be denied that governments must face the problem of closing down unprofitable firms. If they decide to do so, they will have to make a major contribution to compensating those whose jobs have disappeared (for only with adequate compensation will the USSR accept unemployment). If they decide not to close down such firms, out of fear of the social

[1] See R. Portes (1991).
[2] See P. Bofinger (1991, p.13).
[3] See the distinction between static and dynamic irreversibility in M. Aglietta (1991, pp. 311-334).
[4] See R. Portes (1991).
[5] See V. K. Senchagov (1989, pp. 11-13).

consequences, they will have to subsidize them. In either case, any sharp contraction in economic activity will lead to strong budgetary tensions that are potentially inflationary. In this situation, as before reform, the scene is set for monetary slippage. Moreover, the concentration of resources in the north-west and of jobs in the east and south-east of the former Soviet Union removes any logical basis for the argument in favour of separate stabilization.

It would therefore appear that while disintegration makes it easier to take important decisions, it makes it more difficult to maintain them. There is no doubt that the republic authorities have greater legitimacy for taking measures. Nor is there any doubt that they would find it almost impossible to maintain their position if they did not keep up the trade and monetary links referred to above. If reform from the centre failed, it is to be feared that localized reform will also fail. The most serious mistake that could be made would be to forget that the inhabitants of the former Soviet Union support the idea of a transition to a market economy only in so far as it improves their material well-being.

The multiplication of decision-making centres (15 if each republic represents a centre, even more if the disintegration process goes further) also raises two technical problems that should not be ignored: the first concerns the number of qualified managers for government departments. It seems unlikely that the Soviet Union could provide the human resources to staff 15 genuinely independent central banks, even disregarding the question of their reputation in contacts with the international financial market.[1] The second is the problem of the need to coordinate rules and regulations to avoid compartmentalization into *n* segmented and inefficient markets. The problem of rules is the more critical as these are countries where the market has been described and perceived as the antithesis of rules. Even the idea of prudential rules is far from having been accepted. The serious shortage of economic and legal specialists is a very strong argument in favour of keeping the number of decision-making centres small. Here again, there is a risk that the principle of transition will be endangered by the conditions for its application.

The options of close cooperation, or even integration, that we have mentioned are certainly those most likely to ensure irreversible transition, even if they are reflected in relatively slow decision-making in some cases.

The regional implications of the present monetary crisis thus highlight several contradictions.

(i) The need to maintain close integration, at least in the short term, is accompanied (and reinforced) by a tendency to ongoing disintegration that may not stop at the frontiers of the republics. In a sense, the outcome of a process of decomposition and recomposition that will certainly take years is really needed straight away. This means that any comparison with the process of the constitution of the EC is misleading.

(ii) Monetary stabilization appears to be the only means of preventing paralysis of the productive system; but the conditions of operation of the productive system are the only means of ensuring monetary stabilization.

(iii) The present divergence between the pace of progress on the political front (with the risk of extremist views gaining support) and the pace of economic change means that the optimal political conditions for ensuring transition are not optimal from the economic point of view.

These three contradictions illustrate perfectly the great difference between the European integration process and the Soviet situation. While they do not bode well for the adoption of optimal solutions, it is still to be hoped that the outlook for the less favourable options will appear grim enough to encourage the authorities in the different republics to avoid the worst by choosing cooperation. From this point of view, the extreme fluidity of the situation could even be an advantage. For lessons can be learned from dealing with a crisis; and if the learning process can be supported and strengthened from outside, it could help to develop viewpoints that would encourage cooperative solutions.

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[1] This problem has been dealt with primarily in the context of domestic monetary policy, but it would also arise for relations with foreign investors. See D. Kreps and R. Wilson (1982, pp. 253-279).

Bibliography

Aglietta, M. (1991), 'Stabilité dynamique et transformations des régimes monétaires internationaux', in R. Boyer, B. Chavance and O. Godard, (eds), *Les figures de l'irréversibilité en économie*, Éditions de l'École des hautes études en sciences sociales, Paris, pp. 311-334.

Aspaturian, V. (1950), 'The theory and practice of Soviet federalism', in *The Journal of Politics*, Vol. XII, No 1.

Avtorkhanov, A. (1966), *The Communist Party apparatus*, Henry Regnery Company, Chicago, Ill.

Barghoorn, F. C. and Remington, T. F. (1986), *Politics in the USSR*, Little, Brown and Co., Boston, Mass., 3rd ed.

Beissinger, M. R. (1986), 'In search of generations in Soviet politics', in *World Politics*, Vol. XXXVIII, No 2.

Biddulph, H. L. (1983), 'Local interest articulation at CPSU congresses', in *World Politics*, Vol. XXXVI, No 1.

Bofinger, P. (1991), 'Options for the payments and exchange-rate system in Eastern Europe', CEPR Discussion Paper No 545, London, p. 13 ff.

Breslauer, G. W. (1982), *Krushchev and Brezhnev as leaders: building authority in Soviet politics*, George Allen and Unwin, London-Boston.

Cohen, D. (1986), 'Imaginer la monnaie unique', in M. Aglietta (ed.), *L'Écu et la vieille dame*, CEPII-Economica, Paris, Chapter 6.

Dobrovol'skaja, V. M. (1990), 'Etnicheskaja differenciacija smertnosti', in A. G. Volkov, *Demograficheskie processy v SSSR*, Naukak, Moscow, pp. 150-166.

Dunmore, T. (1980), *The Stalinist command economy — The Soviet State apparatus and economic policy (1945-53)*, Macmillan, London.

El-Agraa, A. (1985), 'International economic integration', in D. Greenway (ed.), *Current issues in international trade: theory and policy*, Macmillan, London.

Fainsod, M. (1965), *How Russia is ruled*, Harvard University Press, Cambridge, Mass.

Feldman, G. (1992), Discussions with the Professor on his book about German monetary history from 1914 to 1924, to be published in the spring of 1992, University of California Press.

Gerashchenko, V. (1990), in *Ekonomika i zhizn'*, No 16, pp. 10-11.

Gleason, G. (1989a), *Federalism and nationalism: the struggle for Republican rights in the USSR*, Westview Press, Boulder, Co.

Gleason, G. (1989b), *Mobility and loyalty: USSR Obkom secretaries versus RSFSR secretaries'*, Hoover Institution, Working Papers in International Studies, No I-89-33, Stanford University, Stanford, Ca.

Hodnett, G. (1978), *Leadership in the Soviet national republics: a quantitative study of recruitment policy*, Mosaic Press, Oakville, Ontario.

Hough, J. (1968), *The Soviet prefects*, Harvard University Press, Cambridge, Mass.

Kreps, D. and Wilson, R. (1982), 'Reputation and imperfect information', in *Journal of economic theory*, Vol. 27, pp. 253-279.

Kushnirsky, F. I. (1983), *Multiregional econometric model of the Soviet Union*, Delphic Associates, Falls Church, Va.

Mac Auley, A. (1991), 'Costs and benefits of disintegration in the USSR', *MOST-Nomisma*, No 2, pp. 51-65.

Mitchell, T. (1987), 'Bargaining 2 x 2. Strictly ordinal game', paper presented at the annual meeting of the International Society for Political Psychology, San Francisco.

Moses, J. C. (1974), *Regional party leadership and policy-making*, Praeger, New York and 'Regionalism in Soviet politics' (1985), in *Soviet Studies*,Vol. XXXVII, No 2.

Nevin, E. (1990), *The economics of Europe*, Macmillan, London.

NH 1987 (1988), *Statistika*, Moscow, p. 91.

Panskov, V. (1990), 'Guerre des budgets', *Ekonomika i zhizn'*, No 16, p. 5, and Alexashenko (1992).

Portes, R. (1991), 'The transition to convertibility for Eastern Europe and the USSR', CEPR Discussion Paper No 500, London.

Powell, C. A. (1988), 'Problems and breakdowns of rationality in foreign policy and conflict analysis: a basic review of game theoretic concepts', in *Peace and change*, Vol. 13, pp. 84-87.

Rakowska-Harmstone, T. (1974), 'The dialectics of nationalism in the USSR', *Problems of Communism*, Vol. XXIII, No 3.

Remington, T. F. (1986), 'Federalism and segmented communication in the USSR', in *Publius*, No 15.

Roland, G. (1989), *Économie politique du système soviétique*, L'Harmattan, Paris.

Rytov, J. (1991), 'Sojuznye Respubliki: kto komy dolzhen?', in *Provitel'stvennyy Vestnik*, No 25, p. 6.

Sapir, J. (1990a), 'La répartition régionale du revenu national en Union soviétique', Working paper, CEMI-EHESS, Paris, March, 1990, and 'La dimension fédérale de la crise de l'Union soviétique', in *Économie prospective internationale*, No 46, second quarter 1991, pp. 63-77.

Sapir, J. (1990b), *L'économie mobilisée. Essai sur les économies de type soviétique*, La Découverte, Paris; and 'Le système économique soviétique; une relecture pour les années quatre-vingt-dix', in *Historiens et géographes*, No 333, September-October 1991, pp. 223-224.

Sapir, J. (1991) 'Stabilités et instabilités dans le développement de l'Union soviétique', in R. Boyer, B. Chavance and O. Godard (eds).

Senchagov, V. K. (1989), *Perestrojka finansovo-kreditnogo mehanizma hozjajstvovanija*, Moscow Znanie, series Nauka i tehnika upravlenija, No 8, pp. 11-13, 64.

Options for a new monetary framework for the area of the Soviet Union[1]

Peter Bofinger

Landeszentralbank in Baden-Württemberg and CEPR, Germany

Contents

[1] The opinions expressed are solely those of the author. I got valuable insights from discussions with Andrew Atkeson, Hans Flickenschild, Massimo Russo, Thomas Wolf and John Williamson. More so than usual, I absolve all the above from any responsibility for the views expressed in this paper. This version November 1991.

Tables

1. The options

After the splitting up of the Soviet Union into independent republics a completely new monetary order for the rouble currency area is required. The paper discusses the two polar options of a Soviet economic and monetary union (SEMU) with a single currency and a central bank system with a federative structure, and of a system with independent republic currencies with devolution of monetary responsibilities to the level of the republics.

In the present situation an analysis of these arrangements should be guided above all by two criteria: their contribution to restoring monetary stability and to preserving intra-trade relations, at least for an intermediate period. The first criterion is based on the trivial insight that the transition to a market economy cannot be achieved without a money which fulfils the functions of a means of exchange, store of value and unit of account. Thus any blueprint for a new monetary framework in the area of the Soviet Union has to provide for stringent control over the money supply. In more detail it has to be assessed in the light of the following two questions:

(i) What constraints does the monetary order impose on central bank financing of government deficits at the federal level and at the republic level? Which institution(s) are responsible for exercising such limits?

(ii) How can the monetary order cope with the problem of loss-making State-owned enterprises which are unevenly distributed among the republics? In other words, how can one design a monetary order for an economy where a genuine private sector does not exist?

The second criterion is related to the very high degree of division of labour among the republics. There is a risk that an uncoordinated transition to independent republic currencies could lead to undue monetary impediments to intra-Soviet trade, which would have a negative impact on growth and employment in all republics. A new monetary order for the area of the Soviet Union should, therefore, provide a mechanism which keeps such frictions as low as possible.

The paper does not focus on specific trade arrangements. It seems obvious that the models of the EEC common market or the EC internal market could serve as important starting points for any attempt to establish a market-oriented trade regime between the republics.

The idea of a parallel currency, which was recently put forward by Soros (1991), is discussed in the appendix.

2. A Soviet economic and monetary union

If a common currency is to be preserved for the area of the Soviet Union, the republics will have to agree to leave all monetary responsibilities at the federal level. This would have the direct implication that the extremely difficult task of monetary stabilization would be assigned to a central institution. The following options for the institutional set-up of a Soviet economic and monetary union (SEMU) differ in the degree of discretion which the monetary order allows to this central institution and in the composition of the members of this important decision-making body.

2.1. The draft treaty

The model of a monetary union was suggested by the draft treaty of the economic union. However, the Yavlinsky paper said almost nothing about the concrete framework of the envisaged 'banking union'. Above all, it left open the status of the members of the main decision-making body and whether they would be allowed to lend to the republic governments. However, as the draft treaty provided for limitations on deficits only in the framework of 'coordinated budget and tax policy' (Article 19),[1] it seems likely that no strict limitations on central bank financing of government deficits were envisaged. Thus, one has to expect that the draft treaty would preserve the 'worst imaginable monetary system' (Summers, quoted in Havrylyshyn and Williamson, 1991, p. 31), which presently allows each republic unlimited access to the printing press of the common central bank. Under such conditions, one should not rely on political 'agreements' to limit fiscal deficits in a federative framework. The discussion on 'binding rules' for fiscal policy in the context of a European economic and monetary union has shown how difficult it is to define such rules *ex ante*, to monitor them, and to find adequate sanctions.[2] Thus, without constraints on fiscal deficits that are embedded in the central bank's constitution, the draft treaty's attempt to run a federative central banking system for the Soviet Union is not likely to change the present incentive structure, which makes it advantageous for each republic to run as large a deficit as possible (Havrylyshyn and Williamson, 1991).

[1] Article 19 says: 'Member States of the economic union coordinate their budget and tax policies, which entails commonly agreed limits on deficits of consolidated State budgets, taking account of extra-budgetary funds, and the setting of limits on the growth of the domestic debt of member States of the economic union. In cases where the agreed results are exceeded by one or more member States of the economic union, the excess amount will become a debt obligation of the other members, in accordance with agreed rules'.

[2] According to the draft treaty, this complicated task seems to be assigned to the Inter-State Economic Committee, whose chairman is to be elected by the Heads of State of member States of the economic union.

It is questionable whether more stringency could be created if the members of the 'banking union's' board were granted a politically independent status. The federative structure of the system would provide policy-makers with some protection against pressure from individual republics. However, as long as the central bank has the discretion to provide credit to the government, one has to expect that any government would be tempted to nominate representatives from its own party and that all governments would cooperate in exerting pressure on the members of this institution. The situation of the central bank's board would become especially difficult if its policy were to threaten to cause the bankruptcy of a republic.[1]

The Yavlinsky draft is also not very specific on the question of whether a single currency should be preserved or whether it would be possible for the rouble to coexist with the currencies of the republics. Article 15 says: 'The introduction by member States of the economic union of national currencies is permitted, but only on conditions which exclude the possibility of damage to the monetary system of the economic union.' However, one has to admit that the draft for a European System of Central Banks also avoids clear statements on this issue. The traditional definition of a currency union, which dates back to the Werner Report presented in 1970, makes no distinction between a single currency and a system of national currencies with 'absolutely fixed exchange rates'. In fact, even the banknotes of the United States can be differentiated according to the specific Federal Reserve Bank which issues them. Thus, banknotes of the republics could coexist with rouble banknotes as long as there was common control over their issue and it was agreed that they would always be exchanged at an absolutely fixed exchange rate by the common central bank system.

2.2. SEMU according to the model of EMU

A higher degree of fiscal stringency could be achieved if a Soviet monetary union were designed as a Soviet System of Central Banks (SSCB) along the lines of the draft statute for a European System of Central banks (ESCB). Basing the discussion on this approach would also provide solutions to many other open issues, e.g. the distribution of seigniorage. In such a system, each republic would have its own central bank, which would be legally independent but subject to the decisions of the SSCB council. At the union level, an SSCB board would be installed, which would have to monitor policy implementation by the republic central banks.[2] The members of the board and the presidents of the republic central banks would constitute the SSCB council, which would be the supreme decision-making body.[3] The members of the council should be independent from all political direction.

Adopting the statutes of the ESCB for an SEMU would set very tight financial constraints for the union and the republic governments, as the draft statute of the ESCB completely excludes central bank financing of government deficits. The central bank could create money only via the purchase of foreign exchange or of bills issued by commercial banks or State-owned enterprises.

Under this framework, the republic governments could run deficits only if they could find private investors willing to buy their securities. In the discussion on EMU a major concern was that private markets would not exert enough discipline on member countries with an unsustainable fiscal position, which eventually would need to be bailed out by the rest of the Community. In the case of the Soviet Union the risk of such an externality seems not to be very high, at least for the foreseeable future. It is unlikely either that foreign investors would be very interested in buying a significant amount of bonds issued by one of the republics, or that the residents of one republic would be eager to invest their money in bonds of other republics. Compared with a prospective EMU, one would not have to fear a lack of discipline exerted by private markets. On the contrary, there is a risk that too rigid fiscal constraints could lead to the insolvency of some republics, which are not accustomed to living without unlimited access to central bank financing.

The situation in an SSCB would also be different from an ESCB because of the lack of a genuine private sector. In its credit policy, the SSCB would be confronted with the task of setting financial constraints for loss-making State-owned firms, which means that its policy would have not only global but also regional and structural implications. The easiest way out would be an accommodative policy stance, such as was adopted in the reforming countries of Central and Eastern Europe, allowing the survival of all loss-making firms by indirect central bank financing of the 'soft budget

[1] A more detailed discussion can be found in Havrylyshyn and Williamson (1991).

[2] In the case of the Soviet Union, it might be appropriate for the board to have the responsibility for specific operational tasks, above all foreign exchange market interventions. This would be different from the US Federal Reserve model, but similar to the Bundesbank model.

[3] In the draft statute for the ESCB no weighting of the votes is envisaged. In the case of the Soviet Union it seems unlikely that the Russian Republic would agree to be represented in the same way as a small republic.

constraint'. This approach would perpetuate inflation as well as microeconomic inefficiencies. Thus, a comprehensive stabilization effort of the central bank is not possible without a reduction of its real credit to the banking system. Such a policy would require that the central bank ration its refinancing credit. In the situation of the Soviet Union, where a money market is absent[1] and where one cannot trust in the market mechanism for the regional allocation of the monetary base,[2] the most difficult problem would be the determination of a criterion for the regional allocation of central bank liquidity.

It is obvious that any such criterion would be more or less arbitrary. Therefore, serious conflicts over the allocation of central refinancing credit to the commercial banks in the individual republics would be likely, especially as this policy could determine the speed of economic restructuring in the individual republics.[3] Further difficulties would arise from the simultaneous creation of strict financial constraints on the government sector, which would generate a strong tendency to transfer public deficits to the regional State-owned enterprises.

In sum, compared with the draft treaty, an SEMU based on the EMU model would have the advantage that it would considerably strengthen the central bank's position in the political process by excluding any discrimination in credit policy towards the government sector. A major problem of this approach is that immediate implementation of such a stringent constraint on the public sector could lead to the bankruptcy of some republics. In addition, the regional allocation of credit to the 'private' sector might become a very serious issue, leading to conflicts between the members of the central bank council.

2.3. SEMU as a currency board

The remaining degree of freedom could be eliminated if the SEMU were modelled as a currency board, which would mean that any expansion of the monetary base of the common monetary institution would have to be matched by an increase in its net foreign assets. If the currency board were designed in such a way that the central bank was not obliged to convert its banknotes into foreign exchange,[4] it would not be necessary for the outstanding money stock to have a 100% foreign-exchange backing. It would be sufficient that additional money could be issued only if the foreign-exchange reserves of the central bank were to rise by the same amount. A major attraction of currency boards is that a country still obtains seigniorage, because foreign-exchange reserves can be held in the form of interest-bearing assets.

In an SEMU designed as a currency board, the money supply and lending to the enterprise sector would be mainly determined by the current-account situation: enterprises with export earnings in convertible currencies are obliged to transfer them to the banking system, which can use these assets to obtain central bank liquidity. This money supply mechanism has the effect that the central bank has no discretion in its lending to the banking sector. Thus, the money supply process would be completely isolated from political considerations, which might eliminate the regional conflicts that seem likely in any other federative monetary system for the Soviet Union. On the other hand, the simultaneous introduction of very rigid constraints for public and 'private' borrowers, who are used to living with 'soft budget constraints', could lead to a massive contraction of the real economy without any leeway for discretionary measures.

This leads to a general problem which is associated with any restrictive monetary policy in a framework of economic transition, during which the economy is still characterized by massive microeconomic distortions. It is obvious that an absolutely strict limit on central bank credit to commercial banks would initiate a selection process between profitable and unprofitable enterprises, which the banking system would have to undertake. However, one has to ask whether the financial sector in these economies has a comparative advantage in identifying those enterprises which are the most competitive under market conditions. The following aspects seem relevant in this context: (1) Banks do not have the experience to assess the profitability of firms. (2) Because there are no provisions for bad debts, capital-asset ratios

1 The analogy with EMU would also require that the republics do not impose restrictions on private capital transactions across their borders. Even if such transactions do not seem very likely at the moment, one could imagine that SEMU could also be established with controls on capital movements.

2 Banks that do not operate under hard budget constraints might be willing to bid very high interest rates in order to obtain as much central bank liquidity as possible.

3 Enterprise losses have to be financed by commercial bank credits. Thus, the amount of commercial bank credit available determines the number of unprofitable enterprises that can be kept alive.

4 It would not be necessary for the central bank to be obliged to convert its banknotes into foreign exchange. This obligation, which characterizes traditional currency boards, would be difficult to implement in the situation of the Soviet Union. Such an option could induce private agents to switch all their bank deposits into banknotes and then into foreign exchange. Because of the low reputation of the national money and national monetary authorities in the Soviet Union, such a run could be prevented only if a 100% backing of the whole money stock were available. Given the relatively low stocks of foreign exchange of the Soviet Union, this would require an extreme devaluation of the rouble.

are low, and portfolios are highly concentrated on specific regions and sectors, banks would endanger their own survival if they let their big borrowers go bankrupt. (3) Firms have a debt structure which is determined by political decisions of the past, which means that present interest payments are not necessarily related to a firm's economic performance. (4) Firms have strong inter-enterprise credit relations, which could lead to the closing down of profitable firms, only because they have large outstanding credits to other firms.

These considerations would call for a more flexible approach in monetary policy, at least until the process of privatization has started and until the banking system is restructured.

2.4. SEMU managed by representatives of international institutions

The three options for an SEMU which have been discussed so far have either

(i) the disadvantage of providing too much discretion, which might lead to an erosion of the required financial constraints by strong political pressure or to serious conflicts over the regional impact of monetary policy, or

(ii) the disadvantage of being too rigid in a situation which might require some flexibility in order to cope with all kinds of economic uncertainties and ongoing microeconomic distortions.

This would call for an arrangement which allows some degree of flexibility to be preserved while at the same time safeguarding monetary policy from political interference as far as possible. A combination of these two features could only be obtained by modifying the EMU model in such a way that its supreme decision-making (central bank council) body included representatives of international institutions (IMF, World Bank, EC, OECD, EBRD), who were given a majority over the representatives from the republics.[1] This hypothetical arrangement, which would not necessarily require the complete prohibition of central-bank-financed government deficits (see the comparison of the four options in Table 1), would have several important advantages over the three other approaches:

(i) By reducing the influence of national politicians on monetary policy decisions, it would enhance the credibility of the central bank in general, which could contribute to reducing the costs in declining output that are associated with any stabilization programme. In addition, it would enhance the confidence of foreign investors and creditors.

(ii) It would allow the central bank council more flexibility in its lending to public authorities and to the 'private' sector, which might be required in situations with exogenous shocks.

(iii) It would provide a foreign scapegoat, which might be helpful for the republics in situations where unpopular decisions are unavoidable.

Of course, such a solution seems absolutely unrealistic. As the more realistic approaches are either too flexible or too rigid, there seems to be at the moment no economically viable alternative to a system of republic currencies. Thus, the economic analysis justifies the mainly politically determined preference for independent currencies.

2.5. Costs of abandoning a common currency area

As it seems not possible to maintain a common currency area in the Soviet Union, the transition process will be impaired by the difficulties which are involved in using a multitude of republic currencies for the huge amount of inter-republic trade.

The traditional argument against national ('republic') currencies is the reduction of transaction costs and information costs (in a static as well as in an intertemporal sense) which can be achieved by having a single currency. This presupposes, however, that the single currency is fulfilling the functions of a means of payment and of a standard of value (Gros and Steinherr 1991). As the rouble does not provide these functions in general and also not in trade among republics, the transition from the present monetary (dis)-order to a system of republic currencies would have no negative effects on economic efficiency in the Soviet Union. Thus, the costs of having republic currencies can be determined only if one assumes that it would be possible to establish an efficient common currency for the area of the Soviet Union.

Seen from this hypothetical benchmark, the introduction of separate currency areas creates exchange-rate uncertainty for transactions between the republics. Because of the high degree of political and economic instability, one has to

[1] A similar approach was suggested by Soros (1991) for the board of the ECU Bank.

Table 1

Options for a monetary union in the Soviet Union

	Central bank credit to the republics and the union	Provision of central bank liquidity to the banking system
Yavlinsky draft	discretion: decided by the board of the banking union; deficit limits will be set according to Article 19 of the treaty	discretion: decided by the board of the banking union
EMU-model	prohibited	discretion: purchase of bank bills or enterprise bills by the central bank
Currency board	prohibited	rule: refinancing credit prohibited; money supply only via purchase of foreign exchange
Internationally managed monetary union	discretion: decided by representatives of international organizations	

expect that the exchange rates between the republic currencies would not be very stable. In contrast to market economies this would have negative effects on the very intensive trade relations between the republics: at least for an intermediate period it would be relatively difficult for the enterprise managers to cope with foreign-exchange fluctuations. It would also take some time until the banking system would be in a position to provide the necessary hedging services. Of course, the degree of exchange-rate instability would also be determined by the exchange-rate arrangements of the individual countries and by their possible willingness to operate a system of fixed exchange rates within the area of the Soviet Union (Section 3.2). At present, the Russian Republic seems to favour a flexible exchange rate for the rouble.

In addition, a functioning monetary union would have the advantage that all transactions could be handled in the domestic currency. This would significantly reduce the aggregate reserve needs of the republics. The traditional indicator for assessing the reserve adequacy is the relation of reserves to imports. In the case of the Soviet Union, internal trade is about four times the size of external trade. To maintain the present relation of reserves to imports in a situation with separate currencies, the amount of aggregate reserves would have to increase fivefold. An additional increase in reserves would be required because of the reduced diversification, which is caused by the transition to a system with separate reserve holdings. While the former effect can be mitigated by a payments union (Section 3.3), the second could be influenced by the creation of a fixed exchange-rate system within the Soviet Union, which provided common facilities for intervention credit (section 3.2).

3. A system of republic currencies

3.1. The standard of reference

Breaking up the Soviet Union into republic currency areas would transfer all monetary policy responsibilities from the union level to the republics. In this case it would be necessary to create stringent financial constraints for the republic governments as well as for the loss-making enterprise sector. In principle, the main options mentioned above (politically independent system with or without prohibition of central bank lending to the government, currency board) are feasible. In contrast to a federative system, one would not have the problem of how to allocate the money supply among the regions. However, the board of a republic central bank, all of whose members were nominated by the same government, would be much more exposed to political pressure, even if this were excluded by the statutes. In a purely republic institution it might also be politically more difficult to give representatives from international institutions a say in monetary policy.

Therefore, the main characteristic of this approach is that fiscal stringency cannot be achieved by an external tying of the hands of the government. It has to be brought about by the determination of each republic government to stabilize its economy. However, the lack of outside constraints in a system with separate currencies does not necessarily mean that the prospects for a comprehensive stabilization effort in the area of the Soviet Union as a whole would be dimmer. The outcome depends, on the one hand, on the political strength of each republic government, and, on the other hand, on the effectiveness of the constraints that can be built into the statutes of a monetary union. The experience of Poland shows that individual governments are able to reduce their deficits substantially if this is required to make the national currency convertible. However, it does not indicate that they are really strong enough to close down large loss-making enterprises.

It is, therefore, important for any comparison between a monetary union in the Soviet Union and a system of independent currencies to specify in detail which concrete solution is regarded as the standard of reference. For instance, an ideal monetary union which was controlled by representatives of international organizations might lead to better outcomes than a multitude of republic central banks in republics with relatively weak governments. On the other hand, a monetary union without efficient constraints on lending to republic governments and to the enterprise sector might be a worse solution than a system with republic currencies where at least some of the governments were strongly committed to rapid macroeconomic stabilization.

3.2. The exchange-rate system

The effects of the transition to separate currency areas depend to some extent on the exchange-rate regimes that the republics adopt for their currencies.

Without a strong willingness to cooperate, most republics could be expected to follow the approach of Poland, Yugoslavia and Czechoslovakia, which pegged their national currency unilaterally at a fixed rate to a major international reserve currency.[1] Because of the high share of intra-Soviet trade, the republics could adopt any major international reserve currency as the anchor currency, as long as they all pegged to the same currency unit: such a common peg would automatically cover at least four-fifths of the republics' total foreign trade. For political reasons, the ecu might be especially attractive. Choosing an identical anchor for all republic currencies *vis-à-vis* the outside world would create a relatively homogeneous fixed-rate system within the area of the Soviet Union. Above all, it would avoid fluctuations between alternative anchor currencies (e.g. the dollar and the ecu) leading to undue exchange-rate fluctuations between the republic currencies. The implicit internal exchange-rate arrangement, which would be created by such an outside peg, would have the advantage that each republic had full responsibility for the external and internal stability of its currency. In this respect the internal exchange-rate system of the Soviet Union would become very similar to the international gold standard,

- where the commitment of each member country to keep the value of its currency stable in terms of gold simultaneously created a system of fixed parities between the currencies of all member countries, and
- where each member country had the sole responsibility for meeting its commitment to the gold convertibility of its currency.

A major problem of this approach is the dismal balance-of-payments situation of some republics, especially in the Baltic area. After corrections for subsidies and price distortions Lithuania's deficit amounts to 30% of its GNP, in Estonia this ratio is 23% (EC Commission 1990, p. 75). The deficits of the Central Asian republics are somewhat lower, but with values in the range of 10 to 20% still exceed by far the levels that independent States can sustain. If one assumes that such huge balance-of-payments disequilibria cannot be corrected overnight, a comprehensive system of regional transfers within the Soviet Union would be required even after its dissolution into independent currency areas. In this respect, the European Regional Development Fund of the EC might serve as a model. The question is whether the Russian Republic as the only major creditor would be willing to continue its subsidies after the transition to convertibility. If this is not the case, these republics will have to achieve the necessary internal adjustment before or simultaneously with the introduction of convertibility, which should not be impossible, at least for the Baltic republics with their high degree of industrialization, their good infrastructure and closeness to Europe, as well as the familiarity of their populations with market mechanisms.[2]

[1] This approach was recently suggested by the International Baltic Economic Commission (1991). Their proposal comprises the following features: creation of national currencies for the Baltic republics, a currency reform for rouble deposits and rouble notes and coins, creation of a two-tier banking system, creation of independent central banks, which are not entitled to buy government debt in the primary and secondary market, a fixed exchange rate *vis-à-vis* the ecu as the main nominal anchor of the reform programme, and a payments union between the three Baltic republics, which is also the main channel for payments' transactions between the Baltic republics and foreign countries, including the Soviet Union.

[2] For a ranking of the Soviet republics in terms of their economic strength see Deutsche Bank (1991). The Ukraine is assessed as the strongest republic, followed by the Baltic republics.

In order to reduce the high foreign-exchange reserve needs which are created by a system with separate reserve holdings, one might alternatively consider a fixed exchange-rate system along the lines of the exchange-rate mechanism of the EMS for the republics. The main difference between such an arrangement and a unilateral peg system is the availability of a pool of common reserves and intervention credits for countries with weak currencies: in the EMS, countries with strong currencies have to support weak currencies either by purchasing them with their own currencies or by providing intervention credits to the central bank with the weak currency. In the short term, such intervention credits (very short-term financing facility) are unlimited, but after a prescribed period (three to nine months) the country with the weak currency is responsible for settling the balances in its currency acquired by other central banks and has to repay its intervention credits in an outside currency or the currency of the creditor country. An important precondition for this approach is a certain degree of political stability and mutual confidence, in order to preclude some republics using the intervention credits to live beyond their means for a certain period of time. In the present situation, it would at least seem necessary to set quantitative limits on the availability of intervention credits.

3.3. The payments system between the republics

The rationale of a specific payments system between the republics is that it can contribute to a reduction in the republics' aggregate transactions demand for foreign-exchange reserves, which—as already mentioned—is enormously increased by the transition to a system of separate currencies.[1]

The model of the European Payments Union (Bofinger 1991a, Kenen 1991) would suggest that the republics maintain convertibility restrictions (also on current-account transactions) *vis-à-vis* the outside world, but make their currencies convertible for intra-trade relations. A monthly clearing of all bilateral balances would show the multilateral balances of each republic. While small cumulative deficits would require no hard currency settlement at all, the percentage of settlement that had to be made in convertible currencies would increase with the amount of the cumulative deficit. The flexibility of the arrangement could be increased by the provision of reserves from outside countries, which would allow a creditor country to receive a higher percentage of settlement in hard currency than the percentage of hard currency settlement which was required from the debtor.

In the case of the Soviet Union—as well as of Eastern Europe—the direct application of the EPU approach does not seem adequate during the period of economic transformation, as it would require the maintenance of current convertibility restrictions *vis-à-vis* the outside world. It is widely agreed in the present discussion (Portes 1991) that this would conserve the existing microeconomic inefficiencies, above all a high degree of monopolization. distorted relative prices and a lack of information about the profitability of enterprises under world market conditions. However, one might consider it as an intermediate solution until a comprehensive reform programme is designed.

However, another possibility would be to combine the arrangement of a regional payments union with a system of current-account convertibility without regional limitations. Such a synthesis would be facilitated by the fact that as long as capital-account convertibility is absent, all trade transactions have to be recorded by the central bank. Under such conditions, an importer who wishes to buy a product from an enterprise in another republic would not need foreign exchange. He would simply make his payment in the local currency to the central bank. The exporter in the other republic would obtain a payment from his republic central bank, also in his local currency. The balance between the two central banks would be settled in the monthly multilateral clearing. For the exporter the situation would be the same as if he had received payment in foreign exchange, because under current-account convertibility he would be obliged to repatriate all his foreign-exchange earnings. The main difference between this approach and the EPU model is that a republic with a permanent multilateral deficit would have no possibility to restrict its global trade with the other republics. Such restrictions would simply lead to increased imports from outside countries and also to a loss of foreign-exchange reserves.

The two alternative arrangements for a payments union could be implemented sequentially. The EPU solution could be adequate as an immediate solution, preventing a breakdown of intra-Soviet trade until a comprehensive reform programme, which includes current-account convertibility, can be designed. However, because of the large structural bilateral deficits of several republics (Table 2), one should not expect too much from such an agreement. If the present disequilibria could not be removed rapidly. calculations by

[1] This problem would be somewhat less acute if the republics were able to make their currencies convertible for residents in other republics. Under such a framework, the banks in each republic would be willing to hold working balances in the currencies of the other republics, which would reduce the reserve needs of the central bank. For the foreseeable future, such mutual private reserve holdings have to be excluded, which means that all current-account transactions will have to be financed through the central bank.

Gros (1991b) indicate that the quotas of an SPU would be exhausted within the first or second year of its existence. Thus, it would not be very useful to invest much effort in the construction of a scheme which ceased to have an economic impact after less than two years. The speed of this adjustment process is difficult to forecast, as the balance-of-payments situation of the republics will be determined above all by the stance of their monetary policy.

Table 2

Current-account deficits of the republics under world market prices

	USSR: Adjustments to trade balances of the republics, 1988[1]						
	Unadjusted balance (1)	Turnover tax (2)	Consumer subsidies (3)	Trade by visitors (4)	Adjusted balance (5) = [(1)+(2)+(3)+(4)]	World prices (6)	Balance adjusted for foreign prices (7) = [(1)+(6)]
				(In billions of roubles)			
USSR	−50,4	—	—	—	−50,4	52,3	1,9
RSFSR	−33,3	−3,4	−5,1	0,1	−41,7	64,1	30,8
Ukraine	−2,9	−1,2	1,6	−0,4	−2,9	—	−2,9
Belarus	2,1	−1,1	1,7	0,6	3,3	−4,2	−2,1
Estonia	−0,7	−0,1	0,2	0,3	−0,3	−0,6	−1,3
Latvia	−0,7	−0,2	0,4	0,5	—	−0,6	−1,3
Lithuania	−1,5	−0,4	0,8	0,5	−0,6	−2,2	−3,7
Moldova	−1,0	0,9	0,3	0,6	0,8	−1,6	−2,6
Georgia	−0,6	0,6	−0,3	−0,7	−1,0	−1,3	−1,9
Armenia	−1,1	0,2	−0,3	−0,2	−1,4	−0,3	−1,4
Azerbaijan	1,1	1,8	−0,4	−0,4	2,1	−1,6	−0,5
Kazakhstan	−7,3	0,2	1,0	−0,5	−6,6	0,7	−6,6
Turkmenistan	−0,3	0,5	0,1	−0,2	0,1	0,3	—
Uzbekistan	−1,8	1,5	—	−0,4	−0,8	−0,7	−2,5
Tadjikistan	−1,1	0,4	−0,1	0,2	−0,6	−0,1	−1,1
Kyrgyzstan	−1,1	0,3	0,1	—	0,7	−0,1	−1,0
				(As % of NMP)[2]			
USSR	−8,0	—	—	—	−8,0	8,3	0,3
RSFSR	−8,6	−0,9	−1,3	—	−10,8	16,6	8,0
Ukraine	−2,9	−1,2	1,6	−0,4	−2,9	—	−2,8
Belarus	7,9	−4,2	6,5	2,3	12,5	−16,0	−8,0
Estonia	−18,4	−2,5	4,9	7,4	−8,6	−14,8	−33,2
Latvia	−9,9	−2,8	5,7	7,1	0,1	−8,5	−18,4
Lithuania	−17,2	−4,5	9,0	5,6	−7,1	−24,3	−41,5
Moldova	−13,2	11,7	3,9	7,8	10,1	−20,2	−33,4
Georgia	−5,8	5,9	−2,9	−6,8	−9,7	−12,8	−18,6
Armenia	−19,2	3,5	−5,2	−3,5	−24,4	−4,8	−24.0
Azerbaijan	10,2	16,5	−3,7	−3,7	19,3	−14,7	−4,5
Kazakhstan	−27,0	0,7	3,7	−1,9	−24,4	2,6	−24,4
Turkmenistan	−6,0	10,6	2,1	−4,2	2,4	6,3	0,3
Uzbekistan	−8,9	7,2	0,0	−1,9	−3,6	−3,2	−12,1
Tadjikistan	−23,7	8,4	−2,1	4,2	−13,2	1,3	−22,4
Kyrgyzstan	−23,1	6,0	2,0	0,1	−15,0	2,2	−20,9

[1] Combined trade balance with other republics and in foreign trade.

[2] NMP = net material product.

Source: Vestnik statistiki, Nos 3 and 4, 1990.

Explanation of columns:

(1) Net trade balance in existing domestic prices.
(2) Change in trade balance if turnover tax were reallocated in proportion to labour expenditures incurred in production.
(3) Change in trade balance if consumer subsidies were charged to consuming republic.
(4) Change in trade balance if adjusted for sales and purchases by visitors to republic.
(6) Change in trade balance if revalued at world market prices.

Source: IMF *et al.* (1991).

4. Is the Soviet Union an optimum currency area?

The comparison between an SEMU and a system of republic currencies shows that the choice of an optimum currency area is much more complex than the traditional arguments suggest. Of course, there is a risk that some of the republics will be hit by an asymmetric real shock in the transformation process, which might call, at least in the short term, for nominal exchange-rate adjustments (Gros 1991a). However, this advantage of a system of independent currencies presupposes that nominal wages in the republics will be inflexible downwards, which is difficult to assess *ex ante*, especially in view of the sizeable degree of real wage flexibility that can presently be observed in some countries in Eastern Europe. For instance, it is hard to imagine that the acceptance of a real wage cut in the order of magnitude of 60%, which occurred in Bulgaria in 1991, can be explained only by the existence of money illusion.

The paper has shown that the decision between a monetary union and a system of independent currencies involves several important issues, which are not sufficiently addressed in the traditional literature on optimum currency areas:

(a) The credibility of monetary policy can be increased if it is transferred from the republic sphere to a politically independent institution at the federal level.

(b) The aggregate demand for foreign-exchange reserves can be reduced if the republics are willing to maintain a common currency for their internal trade transactions and a common pool of foreign assets.

(c) The costs of exchange-rate instability for the enterprise sector can be avoided if a common currency is maintained.

Of course all these advantages can be easily outweighed if the board of the common central bank system is not able to exert fiscal discipline on the republics and on State-owned enterprises. However, the only arrangement which would allow the operation of a monetary union for the area of the Soviet Union would be an internationally managed central bank system. As this outcome is very unrealistic, there is no alternative to a system with republic currencies, which is now increasingly favoured by the republics. The economic costs of this arrangement are substantial and can only very partially be compensated by the installation of a Soviet payments union.

Appendix: The rationale of a parallel currency

The proponents of a parallel currency for the Soviet Union (Shafei, 1990; Kazmin and Tsimailo, 1991; Soros, 1991) share the view that it will not be possible to create the internal fiscal discipline which is required for making the rouble convertible. Instead of devolving monetary responsibilities to the republics (or in addition to republic currencies (Soros)) these economists propose the introduction of a parallel currency which would circulate side by side with the rouble (or the new republic currencies). The main difference between the two currencies is that the rouble would remain inconvertible for ever, while the parallel currency would be designed as a stable and convertible currency from its very beginning. It is expected that all the advantages which are commonly attributed to the introduction of convertibility could be provided by the parallel currency alone. Soros proposes that the parallel currency should be issued under the aegis of an international institution.

To understand the rationale of this approach, it is useful to analyse its effects on the stock and flow disequilibria in the Soviet economy. From this perspective it is difficult to see any room for the issuance of an additional currency, as long as there exists a large monetary overhang and as long as the supply of the national currency constantly exceeds the growth of potential output. This also explains why it is so difficult to find a criterion for the amount of money which should be issued in the form of a parallel currency.

The only neutral way to issue the parallel currency would be by instituting a currency board, which would exchange the rouble against the parallel currency at a fixed exchange rate. However, as long as stock and flow disequilibria persist, the demand for the parallel currency would be infinite, which would be incompatible with the aim of maintaining its stability and convertibility.

Kasmin and Tsimailo propose to issue the parallel currency by granting credits to enterprises. Such credits should be given to enterprises producing consumer goods and export goods. But if the workers in these enterprises were paid in a 'hard' currency, while the rest of the population had to accept the inconvertible rouble, this would create enormous tensions among the population: at least in the introductory phase of the scheme the unlimited convertibility of the parallel currency into goods would necessarily aggravate the shortages for the rest of the population.

The same effect would be created by the Soros scheme, which proposes to offer every member of the population every month an amount of USD 10 to 15 as a lump-sum

payment. In addition, enterprises would be granted a lump-sum loan in the parallel currency.

The problems of the proposal can also be seen from another perspective. If one assumes that the government is able neither to control its deficit nor to reduce the monetary overhang, but that prices (expressed in the parallel currency or the rouble) will be market determined, the outcome will necessarily be a hyperinflation in terms of rouble prices. The only difference between this and a traditional hyperinflation is that the part of the population which worked for the export and consumer goods sector would be protected against its consequences. Again, the social tensions associated with this unjustified advantage of specific groups of the population would lead to insurmountable political problems.

References

Bofinger, Peter (1991a), 'A multilateral payments union for Eastern Europe', *Review Banca Nazionale del Lavoro*, No 176, March, pp. 69-88.

Bofinger, Peter (1991b), 'Options for the payments and exchange-rate system in Eastern Europe', *CEPR Discussion Paper Series*, No 545, London. Also published in *European Economy*, Special edition No 2, 1991.

Commission of the European Communities (1990), 'Stabilization, liberalization and devolution', *European Economy*, No 45.

Deutsche Bank (1991), *Soviet Union at the crossroads: Facts and figures on the Soviet republics*, Frankfurt am Main.

Gros, Daniel and Steinherr Alfred (1991), 'From centrally planned to market economies: issues for the transition—Problems, differences and familiarities in Central Europe and the Soviet Union', *CEPS Paper 51*, Brussels, April.

Gros, Daniel (1991a), 'Costs and benefits of economic and monetary union: an application to the Soviet Union', *International Economics Research Discussion Paper*, No 74, Katholieke Universiteit Leuven.

Gros, Daniel (1991b), 'A Soviet payments union?', mimeo.

Havrylyshyn, Oleh and Williamson, John (1991), 'From Soviet disunion to Eastern economic community', Institute for International Economics, *Policy analyses in international economics*, No 35, Washington DC.

International Baltic Economic Commission (1991), 'Monetary and fiscal issues and policy alternatives', Report of Working Group VI (Michele Fratianni, Lawrence S. Davidson and Juergen von Hagen), mimeo.

Kazmin, Andrei and Tsimailo, Andrei (1991), 'Toward the convertible rouble: the case for a parallel currency' in: *Currency convertibility in Eastern Europe*, edited by John Williamson, Washington DC.

Kenen, Peter B. (1991), 'Transitional arrangements for trade and payments among the CMEA countries', *IMF Staff Papers*, Washington DC.

Portes, Richard (1991), 'The path to reform in Central and Eastern Europe: an introduction', *CEPR Discussion Paper Series*, No 559, London. Also published in *European Economy*, Special edition No 2, 1991.

Shafei, Kuroch (1990), 'Der Weg in der Convertibilität für die Sowjetische Währung', *Osteuropa-Wirtschaft*, Vol. 35, December, pp. 327-51.

Soros, George (1991), 'USSR: See the future, make it work', *Wall Street Journal*, September 13, 1991.

Williamson, John (1991), 'The opening of Eastern Europe', Institute for International Economics, *Policy analyses in international economics*, No 31, Washington DC.

Part 4

Political economy and economic culture in the transformation process

The political economy of transition in the Soviet Union[1]

Gérard Roland

Université libre de Bruxelles and CEPR

Contents

[1] This version November 1991.

1. Introduction

The transition of centrally planned economies to market economies is a historically unprecedented case of large-scale change of economic institutions. This change is inseparable from the political process. It is quite clear in the former USSR where reform plans for stabilization, liberalization and privatization are linked to a constitutional reshaping of the links between Russia and the other republics. It is also true in other countries where national conflicts do not play such an important role but where the abolition of the one-party system appeared to be a precondition for consistent radical economic reform.

Quite a number of questions of a political economy nature are raised by the transition from a planned to a market economy:

(1) Which groups will benefit from the various transition measures and which groups will be disadvantaged?

(2) How will the potential opposition between different interest groups be reflected in the political decision-making process, given the existing economic institutions, and how will changes in the design of political institutions affect the way this opposition is reflected and influences the feasibility of given reform packages? In other words, what are the required institutional changes in the political decision-making process necessary to make the transition succeed?

(3) What can be said about the tactics of sequencing and the way they take into account the dynamic political constraints of the transition?

Section 1.1 surveys some results that can be derived from the recent literature on political economy and sketches the framework of the analysis that will be used. In Section 2, this framework is used to analyse the evolution of the transition process in the Soviet Union since 1985. In the framework of the political economy analysis, Section 3 seeks to define the necessary next steps of transition.

1.1. Some recent results from the literature on political economy

There is not much economic literature as yet addressing the specific political economy problem of the transition from a planned to a market economy. It is, however, useful to draw on some insights — derived from the recent literature on political economy — into related subjects.

1. A first important theme is that of conservative opposition, i.e. the extent to which particular groups who will be hurt by the transition process can block economic reform. This theme is developed by Fernandez and Rodrik (1990). In the context of trade reform, they show how the existence of transition costs and uncertainty concerning the way the gains and losses of reform are distributed in the population, may lead to a status quo bias. Trade reform implies a shift of labour from the import-competing to the export sector. It is assumed that shifting sectors implies a known investment cost, common to all, and an unknown transition cost, different across individuals. Even though the overall gain from trade reform is unambiguously positive, one might have cases where the expected individual transition cost is such that a majority will vote against the reform, whereas, if the individual transition costs were known, reform would enjoy a majority support. Moreover, as the opposite case might also occur (i.e. the reform voted *ex ante* by a majority might hurt a majority *ex post* when transition costs are known), the expectation of reform reversal can tend to narrow the vote in favour of reform compared to a situation where reform is expected to be sustained. Hence a status quo bias.

The combination of transition costs and uncertainty is also considered by Roland (1990a) as a potential danger to the success of the transition from a planned to a market economy. Two other elements are also present: failure of collective action and path-dependency. In the absence of established democratic institutions, changes desired by a majority might not come about because of the public-good character of collective action and the free-rider incentive associated with it. The perception of the reduced costs of participation in collective action might provide an explanation for the rapidity of the collapse of the communist regimes in Eastern Europe. Path-dependency might create an obstacle in a double sense. From a deterministic point of view, initial conditions of the transition might represent an obstacle to change to a more efficient system, as Pareto-improving but time-inconsistent transition measures can be rejected. From a stochastic point of view, unexpected events occurring during the transition period might create a lock-in effect towards an undesired and inefficient set of institutions, because of the network externalities associated with institutions.

2. Another important theme is that of the legitimacy of governments that have to govern the transition process. This concept is not easy to grasp analytically, but in so far as one may equate legitimacy with popular support, an easy way to understand legitimacy, especially in a democratic context, is to look at the probability of being re-elected, or more generally, the probability of remaining in power in the future.

This probability influences government policy, as shown by Alesina and Tabellini (1990). In a two-party framework,

where the two parties differ concerning the type of public good to be produced, it is shown that the level of public debt will be higher the lower the probability of re-election. Indeed, the current government tends less to internalize the future cost of issuing today's debt if it has a low probability of re-election. Even if it has not made a commitment to do so, a government with a 100% probability of being re-elected will balance the budget. The higher the degree of 'polarization' between the two parties, understood here as the extent of disagreement on the structure of public expenditure, the higher the deficit bias.[1] Transposed to the general problem of transition from a planned to a market economy, these results imply that governments with low legitimacy will tend to be 'soft' on budget cuts and will, in general, refrain from taking policy measures entailing short-term costs to them and yielding long-term benefits that are likely to be reaped by their successors.

Legitimacy and polarization are particularly important issues in the context of macroeconomic stabilization. Alesina and Drazen (1989) provide a framework to try to explain why stabilizations are delayed. The process leading to stabilization is modelled as a 'war of attrition' between two conflicting groups, each trying to impose the full costs of stabilization on the other group. Delaying stabilization is costly to each group but these costs differ and are not known by the other group. When these costs are known, stabilization occurs immediately. Otherwise, it will be delayed until it becomes advantageous for the weaker group to concede, because the cost of further delaying stabilization would become greater than the expected benefit from waiting. The more inegalitarian the distribution of income, the longer the delay because the perceived likelihood that the opponent group is weaker, and will thus give in first, is higher. However, the higher the monetization and the distortionary effects of budget deficits, the earlier the stabilization. A higher polarization in society also delays stabilization because its burden becomes more unequal. These results are highly relevant to the ex-Soviet case, where stabilization has become a key issue, and where there is great uncertainty concerning group-specific burdens of stabilization.

The implications of political instability, lack of legitimacy and polarization for the fiscal behaviour of governments and delays or failures to stabilize have been shown in the empirical work of Cukierman et al. (1990) on LDCs.

When a minimum amount of legitimacy allows governments to decide on the political agenda, i.e. the order in which measures are proposed as well as their content, political constraints nevertheless continue to exist, whether through the possibility of parliamentary refusal or through collective actions that lead to a major political crisis. This agenda-setter framework, developed by Romer and Rosenthal (1979), is used by Dewatripont and Roland (1990) to analyse the role of political constraints on industrial restructuring in the transition from a planned to a market economy. Economic reform is presented as a shift from overall low to high productivity. There is a heterogeneous workforce with three groups of individuals characterized by different levels of disutility of effort, and thus different levels of rent, unknown to the government. Economic efficiency requires a shift towards a high productivity level, with only those with the lowest disutility of effort keeping their jobs. The impact of political constraints on optimal reform paths is then analysed, as well as the effect of the relaxation of political constraints from a unanimity to a majority rule. Two main ingredients of the model, besides the existence of political constraints, are informational asymmetry and the absence of government precommitment. Among the results, it is shown that gradual reforms can be optimal, because there are cases where the efficiency loss implied by gradual redundancies is smaller than the budgetary cost of immediate reform, as gradualism allows a net gain in rent extraction through an incentive-compatible revelation of information. Another result is that under majority rule, a majority can vote for measures that hurt majority interests because the government can use the credible threat of future reform proposals adversely affecting a specific group to have that group vote a reform proposal that would hurt its interests less, whilst adversely affecting other groups. In other words, groups can be played off against each other. The agenda-setter framework is more directly normative in so far as it defines optimal reform paths taking into account the dynamic political constraints of transition. This framework can be used to address other dynamic problems than the problem of restructuring.

3. Another theme of political economy that is addressed in specific work related to the transition is that of speed. Lipton and Sachs (1990) analyse the transition programme in Poland and its implementation in 1990. Speed is important because the new democratic governments should use their legitimacy and popularity to implement rapidly measures that will anyhow hurt important parts of the population. This is especially true in the case of stabilization, where delay in decision-making only undermines support for the government and makes the subsequently required measures even more painful.

[1] Similar results are obtained by Persson and Svensson (1989). If a conservative government with low preference for public expenditures knows it will be replaced by a left-wing government with a higher preference for public expenditure, then it can constrain the latter to lower its expenditure level by running a deficit.

Roland (1991) also emphasizes the importance that speed can assume in the transition period. In view of the fundamental systemic changes implied by reform, a great number of economic agents are thoroughly uncertain about their net expected individual gains or losses from the transition. As a result, the attitudes of these 'uninformed' agents towards economic reform are liable to change through time. It is argued that it is precisely the behaviour of this group that politically constrains governments in the transition period. The strategic position of these types of agents for or against reform will be determined as a function of two elements: balance of power changes, and the cumulative individual welfare impact of past and present reform measures. All other things remaining equal, if uninformed agents observe a signal of balance of power changes, say in favour of reform, they will tend to support reform because mimicking others can be rational when you are uninformed. Balance of power changes thus have a (weak) self-enforcing property. On the other hand, if these agents are only able to assess their individual net expected gains or losses from the measures proposed on the current government agenda, their attitude towards reform at any moment in time will depend on the cumulative impact of past and present reform measures on their individual welfare. Indeed, as a rejection of reform implies a reversal of already adopted reform measures, current proposed measures will lead individuals to abandon the camp of reform only if their expected loss from current measures exceeds their cumulative benefit from past reform measures. Two conclusions are drawn from this analysis. First of all, a correct sequencing tactic for governments consists in first implementing measures that benefit a majority and hurt a minority, and then using this favourable balance of power change to implement measures that hurt more important interests. Conversely, wrong sequencing tactics will lead to conservative and populist backlash. Second, speed is also important since the self-enforcing character of balance of power change allows a government to capitalize on favourable balance of power shifts by quickly implementing measures that hurt more important interests. The failure to take advantage of such shifts can block reform if the implied welfare losses of the measures in prospect are large. Speed is thus important. Arguments for speed should not, however, neglect the importance of political constraints. On the contrary, they must be deduced from dynamic balance-of-power considerations.

This framework of sequencing tactics leads to the formulation of a four-phase sequencing: (1) democratization, (2) privatization, (3) liberalization, (4) restructuring. These are broad headings and should not be understood in a narrow sense. Democratization includes not only the establishment of democratic institutions, but also the institution of a stable and predictable legal framework for the market economy, as well as the setting-up of the necessary fiscal and monetary institutions, including an independent central bank. Privatization refers not only to the sale of State assets into private ownership, but more generally to the introduction and extension of the private sector in the economy, as well as the increase of its overall share in the economy. Liberalization concerns the freeing of prices as well as the introduction of a convertible exchange rate. Restructuring refers to the closing of loss-making enterprises, as well as a shift to a new structure of production of goods and services adapted to an open market economy.

These four phases should not be viewed as blocks that should be put one behind the other, but rather as an ordering of the start of the phases, each phase being continued and expanded when a new one is being started.

The political logic behind this sequencing order is that referred to above. These phases are presented in order of decreasing popularity and increasing political difficulty. Democratization increases the welfare of a great number and hurts only very few interests. Equally, the introduction of a private sector gives to consumers goods and services that the former planning system failed to provide. On the other hand, it adversely affects more interests than privatization and creates political tensions around the higher inequality in the distribution of income. Liberalization adversely affects many groups in the population as the real purchasing power of many will have to be reduced. Restructuring is certainly politically the most difficult phase, as workers will resist the closing down of their enterprises. In the 'shortage' economy (i.e. socialist economy) the guarantee of employment in the enterprise serves as the basic social security device. Moreover, the enterprise is also the main source of rent for many individuals.

There is also an economic logic to this sequencing. Restructuring cannot proceed on a large scale unless prices have been liberalized earlier on. Indeed, applying a rule of bankruptcy is not credible unless market-clearing prices have been established, giving information concerning enterprises without a future. Price liberalization may not lead to the expected supply response, unless there already exists a private sector with profit-maximizing entrepreneurs searching for profitable opportunities. Of course, the share of the private sector is necessarily limited in an economy where prices are not yet liberalized, and large-scale privatization of the economy can only be achieved after price liberalization. Our argument, however, only implies that there should be, prior to price liberalization, a significant private sector that will be one of the main constituencies for further reform. Similarly, a private sector cannot develop unless there exists a legal framework guaranteeing the protection of private ownership.

Note that, unlike other plans for sequencing, we have not included stabilization. Indeed, macroeconomic stabilization is only necessary for certain formerly planned economies, where macroeconomic disequilibrium is very great. Economic logic suggests, in that case, that stabilization should proceed together with price liberalization. The issue of stabilization as such in the early phase of transition is, however, not common to all formerly centrally planned economies.

In the following sections, we will use this four-phase sequencing order and its political economy framework of sequencing tactics to analyse the evolution of the situation in the USSR since *perestroika*. This framework will also be used to analyse prospects concerning the future measures necessary in the region constituted by the former Soviet Union.

From a methodological point of view, one is confronted with a difficulty when trying to analyse the political economy problems of the transition, especially because one faces a changing institutional framework. Indeed, in an unchanged institutional environment, one might define an appropriate measure of political constraints: the weight of different political parties and coalitions in parliament, votes in general elections, voting intentions, etc. However, in a situation where institutional change is endogenous and is itself at stake in the transformation process, it is very difficult to define a measure of political constraints, even though the empirical extent of these constraints is certainly a crucial factor determining the future of transition. Opinion surveys might prove very useful for assessing political constraints on certain policy measures, but the conclusions one may draw from such surveys are very often ambiguous. The way the questions are asked may influence the responses. Moreover, popular opposition to given measures, as revealed through opinion surveys, does not necessarily transform into a binding constraint on government action, unless overt organized action such as strikes and demonstrations, feeding into a political crisis, lead to government decisions being blocked.

2. The USSR since *perestroika*

2.1. Democratization

Perestroika indeed started with political change, and this was certainly the most striking achievement of Gorbachev's leadership, compared to the dismal economic performance. *Glasnost* and the early democratization was certainly a very important move for overcoming the failure of collective action referred to above.

In a first phase, there was widespread scepticism concerning the credibility of this democratization process. Moreover, fears were expressed concerning the irreversibility of the first democratic changes that were instituted. To understand the dynamics of the process of democratization, one must take a closer look at the functioning of Soviet political institutions.

When Gorbachev came to power in March 1985, this was done with the help of conservative factions inside the Politburo, and it was A. Gromyko who presented the new Soviet leader to the Central Committee. This Central Committee was still essentially Brezhnevian, having been elected by the 26th Party Congress of 1981. If we assume that Gorbachev had very reformist intentions from the beginning, then we must acknowledge the importance of political constraints, represented by the existing Central Committee and Politburo when he came to power. The first thing to do to broaden his power base inside the Party, was to have a new Central Committee elected. This is what happened at the 27th Party Congress in 1986 where 38% of the old Brezhnevian Central Committee was removed.[1] The new Central Committee still, however, had a very conservative profile, and Gorbachev was at pains in the subsequent years to have the most conservative elements removed.[2]

During his first two years in power, Gorbachev did not give any tangible and credible signs that he was willing to pursue a policy that would basically differ from that of Andropov. Two of his first moves as Secretary-General were the anti-alcohol campaign and the campaign against 'unearned incomes' *(netrudovye dokhody)*. It was only at the January 1987 plenum that the new policy orientation towards *glasnost* was clearly put forward. The most visible effect was the change in the media, where articles very critical of the regime and the economy began to be published.[3]

Glasnost started to unleash public freedom of speech, and crucial issues started to be debated publicly without fear.

[1] See Hough (1988) for more details on early personnel moves of Gorbachev.

[2] Of the 307 Central Committee members elected in February 1986, 303 were still there in February 1989. All were top officials in the army, government, etc.; 185 of them had reached pensionable age and 142 of them had worked for more than 10 years in central party bodies. *Argumenty i fakty*, 3.2.1990, p. 6.

[3] Shmelev's (1987) article in *Novyi mir* produced a great effect at that time on public opinion, by breaking many taboos, including the necessity of a huge private sector, of free issuing and sale of shares, the convertibility of the rouble, free trade zones and, last but not least, the necessity of a certain amount of unemployment in order to avoid inflationary tensions on the labour market. Similar articles would never have been published in the Brezhnev period. Moreover, their circulation as samizdat would certainly have led to repressive measures against their authors, as was the case in the 1970s and the early 1980s.

So-called 'non-formal' groups and organizations started to be established. People began to realize that they could organize.[1]

However, these new freedoms established by *glasnost* did not bring about a significant change in the political decision-making process, in the sense of the institution of pluralist political institutions. The monolithic structure of the Party remained the same, and conservative and reformist factions were not allowed to be formed inside the Party apparatus. Moreover, public opinion became increasingly conscious of the fact that there was absolutely no constitutional mechanism allowing the people to control the Party.

The impetus towards political change and the move towards a pluralist multi-party system started at the 19th Party conference in June 1988.[2] Initially, the measures adopted appeared very modest. First of all, a greater role in political decision-making was to be given to the Soviets through the People's Congress and the Supreme Soviet. The latter was to be transformed in order to perform the same functions as a modern parliament with full-time representatives. The second major decision of the 19th Party conference was to compel local and regional Party leaders to become candidates for the Soviet elections at the different levels. Non-Party candidates would be allowed, and the number of candidates would have to exceed the number of seats.[3] The idea of compelling Party leaders to face electoral tests was considered an indirect way of having people control the Communist Party. A hated Party bureaucrat would have to compete with other candidates, including non-Party candidates, and if he was not elected, then the Party would have to draw the conclusions. One realizes very easily that this is only a very indirect measure of democratic control over the Party. In the March 1989 election for the People's Congress, Solovyev, the Party leader from Leningrad, was not elected, as was the case for many Party leaders throughout the country.[4] The Leningrad Party leadership exercised some self-criticism, but decided not to retire. Gorbachev had to intervene personally in the Leningrad Party plenum to obtain their resignation.[5] Moreover, the admission of non-Party candidates and the requirement that the number of candidates be greater than the number of seats did not introduce multi-party political competition.

However inconsequent they were, these measures initiated an impetus for further political change. The election campaign of March 1989 revealed some genuine competition at different levels and in different places between conservative Party officials and reformist or radical candidates, whether belonging to the Party or not. For the first time in decades, this political competition aroused public curiosity and participation. However, the representation in the People's Congress did not accurately reflect the election outcome, since 750 of the 2 250 seats were reserved for Party officials and members of social organizations.[6]

The First Congress of People's deputies in June 1989 was directly transmitted on radio and television, in the spirit of *glasnost,* and the debates were very closely followed by the population. In Congress itself, the parliamentary logic started to unravel, and a polarization process started to develop with the emergence of a radical, a conservative, and a centrist tendency. Radicals began to organize by forming in September 1989 the 'Inter-regional group', counting 393 out of 2 250 deputies in the People's Congress.[7]

It appeared at this First Congress that the centre of gravity of political power in the Soviet Union was slowly shifting from the Congress and the Central Committee of the Communist Party to the Congress of People's deputies and to the Supreme Soviet. Nevertheless, it also appeared clearly at the July 1989 session of Congress that only a minority was in favour of radical economic reform, the conservative or moderate conservative tendency being still in the majority. As a consequence, even though political institutions started to shift towards more democracy, the political constraints to further economic reform appeared quite clearly in Congress. This led to a heated debate among intellectuals in the summer of 1989 concerning the importance of democracy in the sequencing of transition. Leading intellectuals like Migranian (1989) and Kliamkin (1989) advocated the need for strong presidential powers to go ahead with economic re-

1 Laws confirming these changes, however, came later in the process. The law on the press was adopted in June 1990 (*Izvestia*, 9.6.1990, pp. 1-3). The law on public associations, allowing non-violent parties was voted in May 1990 (*Izvestia*, 31.5.1990, pp. 1-4).

2 *Materialy XIX vsesoiuznoĭ konferentsii kommunisticheskoĭ partii sovetskogo soiuza, politizdat*, 1988.

3 This measure was initially received with some diffidence, because in the traditional dogmatic conception, the Party and the State were supposed to be separate. In reality, of course, this was never the case, and the State apparatus was always tightly controlled by the Party apparatus.

4 Twenty per cent Party secretaries at the provincial or republican level failed to get a majority vote. *Pravda*, 16.10.1989, p. 2.

5 *Pravda*, 13.7.1990, p. 1. Gorbachev did, however, manage to use the results of the elections to get rid of some conservative elements in the Central Committee. Between February and April 1989, the number of CC members fell from 303 to 251. *Argumenty i fakty*, 9.2.1990, p. 6.

6 For the official report on the elections to Congress, see *Izvestia*, 26.5.1989, pp. 2-4.

7 *Pravda*, 31.7.1989, p. 2.

form. Kliamkin argued very clearly in *Moskovskie novosti that Congress would not vote for the transition to the market whereas Migranian, in Novyi mir*, argued that all historically known transitions towards the market economy did not proceed under democratic conditions. The importance of conservative and moderate conservative forces in Congress was confirmed at the December 1989 session with the approval of the so-called Ryzhkov plan,[1] an emasculated version of the Abalkin plan that had been published earlier, in October, and advocated a moderate and gradual transition towards a market economy.[2] One feature of the Ryzhkov plan was its reliance on the conversion of the military industry to increase the supply of consumer goods. Increasing supply has always been the typical reflex of central planners reacting to shortages and these increases in supply were never effective in eliminating shortages, precisely because they were triggered through the central plans, i.e. one of the main shortage-creating mechanisms (see Roland, 1990b).

As it became clear that the Congress and the Supreme Soviet elected in 1989 would not support a consistent radical plan aimed at a market economy, the political composition of Congress reflected less and less the underlying balance of power within the population. Indeed, in the wake of the autumn 1989 revolutions in Eastern Europe, the process of radicalization started to accelerate among the public. The press of early 1990 was full of reports on country-wide protest movements, fuelled by local scandals and leading to the resignation of Party officials. This change in the political atmosphere among the public was reflected in the elections that took place at the levels of republics and local soviets.[3] One of the major episodes of this election was the election of the new Parliament of the RSFSR and the subsequent election of B. Yeltsin as the President of the Russian Republic.[4] These elections reflected a shift towards radicalism on the part of the public. Candidates of the 'Inter-regional group' obtained a majority in the new city soviets of Moscow and Leningrad.[5] Nearly all its candidates were elected deputies in the new Russian People's Congress. By contrast, one of the major surprises of this election was the defeat of slavophile right-wing Russian nationalists. In Moscow and Leningrad, the 'patriotic associations' did not even manage to have a single candidate elected to the Russian Parliament and complained that their defeat was the result of electoral fraud against them.[6] Gorbachev's failed attempt to block the election of B. Yeltsin by supporting Vlasov, the former head of the Council of Ministers of the Russian Republic, was also a sign that he was losing the political initiative.[7] A few weeks earlier, in February 1989, Gorbachev had succeeded in having the Central Committee accept the suppression of Article 6 of the Constitution stipulating the leading role of the Communist Party. Though this was a major success for democracy, it also was clear that this was not a political initiative of Gorbachev's but a result of a radical campaign with the notable participation of late academician A. Sakharov.

What we want to emphasize here is that the so-called rise of the Russian Republic in the political debate actually reflected less a conflict between centralized versus decentralized visions of government than a shift in the balance of power towards reform that had occurred between the elections of 1989 and 1990. In the Russian Parliament, there was a stronger base for a push towards more radical moves to a market economy. A similar phenomenon explains the emergence of non-communist local government in Moscow and Leningrad. We will come back later to the directly political dimension of nationalism, when discussing the problem of the dislocation of the Soviet Union.

This movement of radicalization among the public found its base outside the Communist Party. Losing more and more its former legitimacy and power base, the Party was increasingly

1 *Izvestia*, 21.12.1989.

2 *Ekonomicheskaïa gazeta*, No 43 (1989), pp. 4-7. The Abalkin plan represented a major advance in the reform concept compared to the 1987 reform, as it clearly defined the introduction of the market as a goal, and recognized the pluralism of different forms of property, though private property was not explicitly mentioned in the plan. The Abalkin plan appeared non-credible concerning stabilization, as it advocated a moderate prices and incomes policy in order to correct the macroeconomic imbalances that had developed in the economy since 1985. The Ryzhkov plan, however, only adopted the conservative parts of the Abalkin plan, delaying plans for more radical economic reform to the distant future.

3 Opinion surveys prior to the elections had shown a shift towards radicalism. A poll of 4 000 urban and rural residents conducted by the Academy of Social Sciences in the Donetsk province, the Tatar autonomous republic and the non-black-earth-zone of the Russian Republic showed that 40% of respondents believed that all Soviet local and district members should be replaced. *Izvestia*, 30.1.1990, p. 2.

4 Ninety-four per cent of the 1 059 deputies in the Russian People's Congress were elected for the first time. Compared to traditional Soviet institutions, the percentage of workers was very low: 5,6% of all deputies. Only six rank and file farmers were elected. *Pravda*, 17.5.1990, p. 1.

5 In the new Leningrad city soviet, only 20% of the elected deputies stood on the CPSU platform, i.e. the Gorbachev political line. *Pravda*, 12.4.1990, p. 1.

6 For more details, see *Izvestia*, 6.4.1990, pp. 1, 3.

7 In a first round of votes on 26 May, Yeltsin received 497 votes against 473 for Polozkov and 32 for Morokin. Morokin retired and Yeltsin got 503 votes against 458 for Polozkov. This was not enough to get a majority and on 29 May, a new election took place and Yeltsin got 535 votes against 467 for Vlasov and 11 for Tsoï. *Izvestia*, 29.5.1990, p. 1.

being perceived as a bastion of conservatism.[1] It was precisely inside the Party that the conservative reaction started taking place, with the first Congress of the Russian Communist Party taking place shortly after the decision on German reunification, which must have created problems between Gorbachev and the Army.[2] This rise of political conservatism inside the Russian Communist Party materialized through the election of I. Polozkov, a well-known conservative, as the leader of the Russian Party. This conservative backlash inside the Communist Party represented a threat to the Congress of the Soviet Communist Party. The Congress had been convened earlier than planned, when Gorbachev succeeded in suppressing the monopoly of the Communist Party, expressed in Articles 6 and 7 of the Constitution.[3] The expectation at that time was that the shift towards radicalism might succeed in transforming the Communist Party into a modern social democratic formation, eliminating the conservatives, an operation similar to the transformation of the Communist Party in Hungary. The conservative offensive at the Congress did not succeed in pushing through a conservative platform. It became clear, however, that, as a leader of the Communist Party, Gorbachev could at best restrain conservative party opposition at the price of slowing down the process of transition.

The increasingly defensive position of Gorbachev towards the conservative camp widened the political field available for the proponents of more radical constituencies. Taking advantage of (a) his position as Russian President in the more radical Russian Congress and (b) the increased discredit of the Communist Party, B. Yeltsin made the courageous and risky move of leaving the Party at the end of the Congress.

This new situation changed the form taken by the conflict between conservative and reformist forces.

On the one hand, Gorbachev's position towards the conservatives was greatly weakened because of his sharp decline in popularity, as shown for example in opinion polls,[4] while Yeltsin became the leader of the refomist forces and enjoyed considerable support from the public. On the other hand, these more radical forces lacked the infrastructure of a united political formation and of organized support inside the State administration, since Yeltsin's position as President of Russia was less a position of power than of opposition. In this political stalemate, in order to carry more weight in the bargaining with Yeltsin, Gorbachev had to seek the support of the apparatus and thus lean more in the direction of the moderate conservatives who were ready to accept his leadership but wanted restoration of administrative order.

This conservative backlash became increasingly clear with the rejection of the Shatalin plan. Despite the weaknesses of this plan, *inter alia* in terms of the credibility of its stabilization measures, it was the first economic plan advocating unambiguously large-scale privatization of the economy, and its rejection appeared clearly as a conservative victory.

This adverse change in the balance of power had cumulative effects, and the next months, until April 1991, can be viewed as a period of backlash with conservative agenda-making under Prime Minister Pavlov and the new team around Gorbachev, the perspective of a military *coup* being constantly possible.

The situation became partly unblocked when, after the failure of conservative stabilization measures,[5] an alliance was forged between Yeltsin and Gorbachev to elaborate a new Union Treaty that would considerably weaken the position of the Union *vis-à-vis* the republics. In reality, this was a major concession by Gorbachev to Yeltsin, since the latter had always opposed centrifugal movements in the reform process, but their alliance reinforced the position of the reformist camp, and allowed the latter to regain the initiative on the political agenda. The direct election of B. Yeltsin as

1 Opinion surveys held in June 1989 showed that one-third of the population and one-quarter of Party members doubted that the Party would be able to restructure. *Pravda*, 16.10.1989, p. 2.

2 At the Russian Congress, conservative army officials voiced very loudly their protest against the change in foreign policy. Particularly aggressive was a speech of General Makashov, troop commander of the Volga-Urals military district, who accused the Soviet leaders of disarming while the West was acting as if it was preparing an aggression against the Soviet Union. *Pravda*, 20.6.1990, p. 1. A reply to this speech was published in *Izvestia*, 20.6.1990, p. 1.

3 Initially planned for early 1991, a Central Committee plenum decision advanced it to October 1990. *Pravda*, 20.9.1989, p. 1. The March 1990 plenum then decided to advance it to June. *Pravda*, 12.3.1990, p. 1.

4 In 1989, opinion surveys still showed massive approval when Gorbachev was elected President of the Supreme Soviet. See *Pravda*, 26.6.1989, p. 3. An opinion poll conducted in July 1990 showed a decline in the popularity of Gorbachev as well as a clear loss of public confidence in the Party. Only 18% of the respondents were satisfied by Gorbachev's political report to the Congress; 64% agreed with the growing criticisms of Gorbachev, and 75% with the growing criticisms of the government. Only 25% thought that the 28th Congress would influence the future of the country. See *Moskovskie novosti*, No 30, 1990, for more details.

5 These were the February currency reform, i.e. the withdrawal of the R 500 banknotes, and the April administrative price increases. These measures were conservative because they were not accompanied by a price liberalization and were meant essentially to stabilize the financial situation in the context of continued central planning. The currency reform was not implemented as initially planned, because local authorities fully compensated all citizens turning in their banknotes, and the price reform had no noticeable dishoarding effect.

Russian President in June 1991, and his overwhelming success with more than 67% of the votes, proved a crucial success for democracy and a defeat for conservative forces who had previously attempted to oust Yeltsin from his post.

The decisive advance in the democratization process came with the failure of the conservative *putsch* in August that abruptly ended communist rule in a similar way as in the other post-socialist countries. This failed *putsch* represented a historical chance for the future.

The main advantage of the new situation was that it provided legitimacy to the new non-communist leaders in the different republics. As in Poland, exactly two years before, this major advance towards democracy entailed a dynamic change in the balance of power, allowing speed in the implementation of further transition measures.

In the case of the former Soviet Union, this positive aspect is somewhat overshadowed by negative aspects that could prove fatal. To recall, in the sequencing framework proposed in Section 1.1, one of the main advantages of the democratization process is that it provides a stable and predictable framework. Nothing is less true here. First of all, the democratic forces were not very united, and were not really ready to seize power. One may easily conjecture that the failure of the August *putsch* was more due to the extreme incompetence, division and fear of its organizers than to the organizational strength of the democratic resistance. Second, the numerous conflicts of authority between local and higher level organs makes the legal framework increasingly unclear. Third, the unbridled development of nationalist forces, after the generalized declarations of independence, provides ground for the most dangerous process of polarization, increasing the risk that continued economic crisis will degenerate into bloody ethnic conflicts.

2.2. Privatization

As argued in Section 1.1, the existence of a private sector of a minimum size constitutes a necessary step in transition before proceeding to more radical moves. A similar idea was expressed by academician Bogomolov on the eve of the June 1987 plenum.[1] Then, Bogomolov emphasized that those countries that were at that time the most advanced in economic reform (China and Hungary) had proceeded to decollectivize agriculture and to promote a private sector and small enterprises as well as calling upon foreign capital for joint ventures and foreign direct investment.

From that point of view, the introduction of the so-called 'cooperatives' constituted one of the few visible steps towards the introduction of a market economy. The decision to allow the establishment of cooperatives came nearly unnoticed when it was decided in November 1986. In a first stage, people were not allowed to leave their jobs in the State sector to work in cooperatives. The latter were only allowed as an activity for pensioners, the non-active part of the population and for workers after working hours. This restriction was, however, relaxed. In May 1988 a law on cooperatives was voted.

The most striking feature about the introduction of cooperatives was the rapid growth of this sector despite a very hostile political and social environment. In 1988, the Ministry of Finance decided on a prohibitive tax system for cooperatives, with marginal tax rates of 90% for incomes above R 1 500.[2] This measure was withdrawn, however, after public protest. But cooperatives rapidly became unpopular with the public. Complaints concerned high prices for relatively low quality, and the links of some cooperatives with the mafia and organized crime. There were also complaints that cooperatives bought consumer goods from the State sector to sell them at higher prices. Conservative politicians started blaming the cooperatives for the growing shortage of consumer goods in the economy.

Measures against the cooperatives were adopted at different periods. Important restrictions on cooperative activities were decided by the government in December 1988.[3] Price ceilings and prohibitive taxes were imposed in many cases on cooperatives, and examples abound of restrictions and prohibitions decided by local authorities between December 1988 and April 1990.

Despite these negative measures, the cooperative movement has not declined and is still growing. In June 1991, 12,4 million people were working in the cooperative and individual sector, i.e. 9,1% of the 135 million people employed in the Soviet economy.[4] In the Russian Republic, the corresponding figures were 4,8 million people, i.e. 6,7% of 71,9 million working people.[5]

Cooperatives, which are in most cases hiding private enterprises, thrive and start to create a new entrepreneurial class. The rapidity with which new entrepreneurs take business opportunities in a hostile and semi-legal environment is very striking and seems to refute the allegations according

1 *Ekonomicheskaïa gazeta*, No 26, 1987.

2 *Ogonèk*, No 29, 1988.
3 *Izvestia*, 31.12.1988, p. 2.
4 *Ekonomika i zhizn'*, No 30, 1991.
5 *Ekonomika i zhizn'*, No 31, 1991.

to which the Russian culture is viscerally incompatible with market institutions. The Moscow Commodity Exchange is gradually replacing the increasingly paralysed Gossnab State supply system, and private commercial banks are growing like mushrooms to finance these commodity exchange operations.[1]

Joint ventures have also developed. Allowed since early 1987, with legislation becoming increasingly favourable to Western investors, registration of joint ventures started to accelerate from May 1987 to July 1989, 680 joint ventures being created with a capitalization of R 2,1 billion.[2] The rhythm of registration then started to settle at an average of 285 per quarter. As yet, however, less than a quarter of joint ventures seem to be truly operational, most of them being small, under-capitalized and concentrated on supplying services rather than manufactured output. Employment in joint ventures remains small, below 200 000 people, or 0,2% of the workforce in the Soviet Union.[3]

Despite negative popular attitudes towards cooperatives, the overall attitude of the population towards private activity is changing rapidly in a positive direction. According to opinion surveys, in November 1989, 42% of the people still had a negative attitude towards private property against 31% in favour and 27% with no opinion. In December 1990, negative attitudes had nearly halved, to only 26%, against 44% in favour and 30% with no opinion.[4]

The biggest failure concerning the introduction of a private sector is agriculture. Where decollectivization proved to be a success story in China and in Hungary, measures such as the leasing of land *(arenda)* did not lead to a Chinese type of movement. On the contrary, the immobility of Russian peasants is particularly striking and is somehow reminiscent of the 1861 emancipation from serfdom, the 19th century *perestroika* when serfdom was formally abolished but the peasants did not perceive the possibility of acquiring private and family holdings. The April 1989 plenum of the Central Committee to advance reform in agriculture also proved a failure, as a messy compromise was decided: *arenda* was to be understood as leasing inside the *kolkhoz*, and it was not clear whether the peasants had the right to leave the *kolkhoz*. The appointment of Ligachev as the Politburo member responsible for agriculture clearly did not provide the peasants with a credible signal that irreversible changes were coming.[5]

The political changes since August 1991 should be used quickly to decollectivize and privatize the land, by sharing it among peasants, either directly or through some voucher scheme, and abolishing all restrictions on buying and selling land. The central authorities in the republics should send inspectors into the countryside to monitor the implementation of land privatization and help the peasants to fight against the local party *nomenklatura*, which still holds the reins of local power. New elections would probably be the best way to topple local despots, provided these elections are perceived by the farmers as a clear and credible signal for action in order to guarantee the regularity of the polls.

In order to be credible, privatization of the land must go together with the freedom of pricing and selling, i.e. with the establishment of a market for land.

2.3. Liberalization

The objective of freeing prices and of going over to wholesale trade for means of production was already present in the 1987 June plenum decisions on economic reform. Immediately, a conservative counter-offensive on prices was started, presenting *perestroika* as a trick to increase prices and to lower the purchasing power of the population.

Conservative economist M. Popov (1987) launched an attack on hidden inflation, presented as a consequence of the relaxation of plan discipline since the early reforms of the 1960s.[6] The right-wing populist *Nash sovremennik*, for example, published an article by B. Kulikov (1988) that found a clear echo in the public. It equated price liberalization with administrative price increases and called for public mobilization against price reform in the spirit of the mobilization against the diversion of the Siberian rivers.

This conservative campaign yielded results. G. Popov, the radical economist, reported in the press on the hostility of a majority of delegates to the 19th Party conference to any increases in retail prices and argued in his turn against price reform.[7] Shmelev (1989) and Latsis, and other radical economists noted in the beginning of 1989 that it would be politically impossible to get through any reform in retail prices, in view of public hostility and of the decreased possi-

[1] Given the great economic uncertainty, credit is limited to short-term loans to provide liquidity for commodity exchange operations. No long-term investment credit is being provided by the new private banks.
[2] *Plan Econ report*, 1.9.1989.
[3] *Ekonomika i zhizn'*, No 43, 1991.
[4] *Voprosy ekonomiki*, No 6, 1991, p. 112.
[5] See *Pravda*, 18.3.1989, pp. 1-2.
[6] According to this economist, not only should socialism defend stability of prices, but it should aim for their planned reduction, in proportion to increases in labour productivity. Imposing price decreases on enterprises should force enterprises to innovate and to reduce costs, as was the case in the 1930s and 1950s, according to Popov.
[7] *Ogoniok*, No 33, 1988.

bilities of compensation because of the increase in the budget deficit.[1]

In December 1988, price reform was delayed and measures were decided to strengthen price control.[2] The issue of price increases became a focal point of conservative opposition. At the March 1989 plenum, it was announced that no retail price changes would take place in the next two to three years.[3]

After the big bang of January 1990 in Poland, when most prices were liberalized overnight, many Soviet economists became enthusiastic for the Polish shock therapy. This enthusiasm may have been the source of a new move by the Ryzhkov government to proceed with price reforms.[4] The plan proposed, among other things, a 100% increase in retail prices for food with 70% social compensation. A threefold increase in the price of bread was to occur, starting from 1 July.[5] It was presented as a gradual strategy to introduce a market economy, because a Polish-type reform seemed politically impossible to implement in view of the much weaker popular support for the Soviet government.[6] The manœuvre of Ryzhkov, who announced in May price increases several months ahead of when they were to be implemented, seemed a clumsy move, as it created a hoarding panic in the population.[7] The Ryzhkov proposal was withdrawn in major part,[8] not because it was not radical enough, a 'shock without therapy' as stated by P. Bunich,[9] but mostly because of public opposition towards price increases.

The issue of price increases had become a focal point of conservative opposition against *perestroika*. Given this focus and given the poverty of large parts of the population, price liberalization had until recently been blocked by political constraints.

Events in 1991, however, sharply changed the balance of power in that respect. First of all, the conservative methods have been tried and failed. Conservative forces had for several years requested a Stalinist-type currency reform to 'confiscate' the revenues of the parallel economy. The currency reform of the conservative Pavlov government proved to be an organizational fiasco. Ironically, it was the same conservative government who decreed the April 1991 administrative price increases, precisely the focal point of previous conservative opposition. This shattered the last illusions of a possible return to former price stability under a return to authoritarian rule and destroyed the credibility of a conservative programme.[10] The defence of price controls appeared increasingly meaningless under the continued dislocation of the planning system, since accelerating inflation could not be stopped anyway. However, the increasing distortions arising from the remaining price controls argued for a quick move to price liberalization and macroeconomic stabilization. Finally, the implosion of communist rule gave the new leaders the needed legitimacy to go ahead with radical measures that were resisted by the conservative camp.

3. Assessment of the current situation and urgent issues

Within the framework of Section 1.1, how can we assess the transition path in the Soviet Union since 1985?

First, where do we stand, according to this framework? As seen in Section 2, the first two steps of the four-phase sequencing, democratization and privatization, have been initiated. The next step ahead is price liberalization, which we think is now politically possible and desirable. We will come back to the political economic conditions of its implementation. As was the case in Poland in 1990, it is yet too soon to start with the fourth phase, that of restructuring. We will discuss below the consequences of this limitation, *inter alia* the probability of success of stabilization programmes.

Second, what lessons can be drawn from the last five years with respect to this framework? The events do not seem to have refuted the political economy view of sequencing. The

1 Interview of O. Latsis in *Literaturnaïa gazeta*, 25.1.1989. The aggressive tone of the interviewer was very characteristic of public attitudes. *Literaturnaïa gazeta*, then not yet in the hands of the slavophiles, boasted of having campaigned throughout 1988 against any retail price increase.

2 *Pravda*, 6.1.1990, p. 1.

3 *Pravda*, 13.3.1989, p. 2.

4 See for example the interview of A. Orlov, a well-known economist and government official, expressing positive views on the Polish shock therapy. *Izvestia*, 3.4.1990, p. 1.

5 *Pravda*, 25.5.1990, pp. 1-4.

6 Remarks made by L. Abalkin. *Izvestia*, 10.4.1990.

7 *Izvestia*, 26.5.1990, pp. 1-2.

8 The Supreme Soviet adopted a resolution on a move towards a market economy (*Izvestia*, 14.6.1990, p. 2) but rejected the proposed price increases. *Izvestia*, 15.6.1990, p. 1, 3.

9 *Izvestia*, 26.5.1990.

10 The day of the *putsch*, there was a rumour in Moscow that the 'putschists' decreed a two-thirds reduction in prices.

main forces of resistance to the August *putsch* were those that were to lose from the elimination of democracy and the private sector. The democratic intelligentsia and associations of businessmen, brokers and commodity exchange employees proved particularly active in defending the White House. Constituencies had thus been created that had not existed a few years earlier, and these forces proved effective enough, in front of a divided and incompetent 'putschist' alliance. A return to the past is now totally excluded. Irreversible moves have been achieved, and this is a major merit of *perestroika*. The most difficult steps (price liberalization, and especially restructuring) are, however, clearly ahead.

Third, how can one understand the failure of Gorbachev's reform strategy, despite the irreversibility that has been achieved?

Gorbachev's strategy was one of gradual and pacific transition towards democracy and towards the market economy, inside the bounds of the Soviet Union. Starting the transition process from his position as leader of the Communist Party, he was inevitably led to oppose all processes undermining this position. Which politician would push forward a programme which he knew would lead to his losing power? His strategy was thus necessarily biased towards compromise and gradual moves. By definition, when you are 'above', you can only reform from above.

A first factor undermining his position was the emergence of centrifugal forces in the republics. Since the beginning, he had been aware that a disintegration of the power of the Union was bound to lead to nationalist conflicts. No territorial division could settle ethnic conflicts, given the existence of sizeable ethnic minorities all over the Soviet territory. Hence the need for a strong centralized power to bring about and to implement the transition towards a market economy. If feasible, such a pacific strategy is clearly more desirable. *Ex post*, one also understands why forms of Russian 'containment' were necessary to obtain relative peace inside the Union, through the absence of specifically Russian institutions, the absence of a Russian Party, special subsidies from Russia to the republics, etc. The disintegration of the Soviet Union thus constitutes a clear failure of this strategy.

A second factor was the development of democratic and radical forces outside and against the Party. In the first years of *glasnost*, Gorbachev could play these forces against the conservatives inside the Party, to push forward the agenda of reform. When these forces, however, unconstrained by the need to assume power inside the Communist Party, started gathering strength and popularity and challenged his position as leader of the reform camp, his position became increasingly more uncomfortable, especially since he did not succeed in isolating conservative forces inside the Party fast enough, compared to the political momentum among the population. This also constituted a failure for Gorbachev and left a political vacuum that was taken over by Yeltsin.

The strategy of Yeltsin tended to support all nationalist movements inside the republics and all conflicts with the centre, so as to weaken the position of Gorbachev and to strengthen the power of the opposition. Starting from a position of opposition, it was in his interest to coalesce in the Soviet Congress with all opposition forces, including those that were pursuing independence. The pro-republic alliance between Russia and the other republics was set up for political reasons. The inter-regional group regrouping radicals from Russia and politicians from the other republics who sought independence on autonomy had the aim of constituting a parliamentary group in Congress able to weigh more in the political decision-making process. It seemed evident, however, that if such an alliance came to power, thus instituting a looser confederal structure, then, in the case of conflicts in non-Russian republics touching upon Russian interests, Russia would impose its interests and had the military and economic weapons to do so. With the breakdown of the Soviet Union after the failed *putsch*, and especially after the declaration of independence in the Ukraine, it was clear that this asymmetry between Russia and the other republics would dominate their bilateral relationships, bringing conflicting national interests into direct confrontation, without any indirect mediation of a federative structure, based on principles other than nationalism.

Was Gorbachev's strategy necessarily doomed to fail? Despite the evidence, it is not sure that a pacific and gradual transition could not have succeeded. As argued above, there does not seem to have been a major sequencing error. Gorbachev's failure is rather best explained as a speed failure. He failed to use the momentum created by the progress in democratization and in the growth of private activity to pass the Rubicon of price liberalization. As shown above, conservative opposition was too strong to enable such a decision to be taken. This could have been dealt with if the economy had continued along its Brezhnevian path of relative macroeconomic equilibrium with stagnating growth. After all, in China and Hungary, the gradual development of a private sector allowed the build-up of constituencies and prepared these economies to cope much better with the requirements of a private market economy, once the necessary political changes occurred or occur. However, the contrary happened in the Soviet Union, and Gorbachev is responsible for huge macroeconomic mismanagement, for which the Soviet people rightly blame him.

The causes of this growing disequilibrium are known. They were the early *uskorenie* or acceleration campaign, increasing investment expenditure with the aim of modernizing the economy and the machine-building sector. All sorts of social expenditure was significantly increased. The early move towards decentralization of economic management resulted in the removal of wage controls, leading, in a situation of labour shortage compounded by enterprise soft budget constraints, to wage increases well above productivity growth. On the other hand, this decentralization also resulted in a loss of tax revenues, as enterprises payed less tax than before. All these inflationary measures led to an increase in overall shortages, as prices remained more or less frozen. Prices in cooperatives being more or less the only free prices in the economy, the inflationary measures led to a high price differential with the State sector, thereby increasing the political tensions on the issue of cooperatives.

The higher the inflationary disequilibrium, the more urgent it became to introduce the price mechanism. Indeed, the loss of control over macroeconomic equilibrium reinforced the dislocation of the command system itself. In the absence of market-clearing prices, shortages tend to create important horizontal conflicts, blocking resource allocation decisions (Roland, 1990b). These conflicts were traditionally settled in the last resort by the planning authorities. They, however, became too weak to play this mediating role any longer. The only legitimate authorities to emerge were local and republic ones, who disputed the allocative decisions of the centre and protested by stopping delivery of planned output or by reducing these deliveries, thereby making shortages even more acute and reinforcing this implosive mechanism. This tendency towards local protectionism and towards an implosion of exchanges and of production has highly deleterious effects on the economy and tends to exacerbate horizontal conflicts between republics, regions, etc. Gorbachev's macroeconomic policies thus led to the necessity either to accelerate a decision on price liberalization or to strengthen State controls. Being unable to proceed with either, he let the situation deteriorate, which necessarily led to increased polarization between conservative and reformist forces, increased nationalist polarization, eventually undermining his own position, and losing all the popular support he had gained with *glasnost*.

One is, however, entitled to doubt whether macroeconomic loss of control and disintegration of the Soviet Union were inevitable at all. Arguing counterfactually is never easy, and actual events tend to appear inevitable, with the logic of hindsight. Nevertheless, the above reasoning tends to show that early macroeconomic mismanagement such as *uskorenie* was not an 'endogenous' result of *perestroika*, but a plain policy error. Even though the emergence of nationalist pressures was, to a large extent, inevitable, it was and is still reinforced by macroeconomic mismanagement. Moreover, in line with the agenda-setter hypothesis of Section 1.1, keeping control over the political agenda is crucial in circumstances of such great transformations, and speed failures lead precisely to loss of agenda control. Applied to the nationalist issue, this implies two things. First of all, early initiatives for constitutional reform could have been a way of keeping the initiative. Second, if there had not been a speed failure, the flow of transition measures and economic change would have been impressive enough to keep the nationalist issue partially off the political agenda. In politics as in war, keeping the initiative yields strategic advantages.

Now that the Soviet Union has disintegrated and that communist rule has been eliminated, what are the urgent issues, what are the political constraints, and what role should the West play in the new situation?

The biggest risk facing the former Soviet Union in the near future is the repetition of the CMEA implosion, leading to a breakdown of trade and to a catastrophic depression.

3.1. Price liberalization and macroeconomic stabilization

The disintegration of the Union makes price liberalization even more urgent than ever. The introduction of free market prices lifts all suspicions and accusations concerning who is subsidizing whom. Quarrels on the terms of trade otherwise lead very quickly to a retention of exports on both sides. As the experience with the breakdown of the CMEA in 1991 showed, price liberalization is a necessary, though not sufficient, condition for avoiding trade disruption and autarkic implosion. A sustainable international payments mechanism is needed.

We assume that all independent republics will want to establish their own currency. However anachronistic it may seem to West Europeans, the establishment of national currencies will enjoy popular support, as they will represent a symbol of the break with the communist past in Russia and of the new sovereignty in the other republics. The establishment of national currencies can be a good point of departure for establishing macroeconomic stability.

Even in a favourable political environment, price liberalization and macroeconomic stabilization must go together with social measures that prevent significant segments of the population falling below the poverty level. Different scenarios try to cope with the problem of the monetary overhang. In the appendix, we briefly review them.

The next question is how to maintain macroeconomic stability. The first priority is to achieve balanced budgets. This is not sufficient, however, and the experience of Poland and Yugoslavia gives ground for some scepticism concerning the possibility of keeping inflation at a low level, even when budgets are formally balanced. The big difficulty is how to keep monetary policy under control when capital markets are not developed and as long as the phase of restructuring has not been initiated. Indeed, as shown by the experience of Poland and Yugoslavia, one of the main inflation-creating mechanisms is spontaneous inter-enterprise credit. When a tight monetary policy is applied, and enterprises are refused access to credit, they simply stop paying their suppliers, thereby generating a chain of virtual bankruptcies, which amounts, however, to wild credit formation, as deliveries continue to take place, and nobody insists on having their debts repaid. In that context, higher interest rates lead only to higher prices, as credit demand is not curbed. The only way to stop this uncontrolled creation of money is to implement bankruptcy rules. However, not only is this politically difficult in the absence of a capital market, since the enforced exits will not be compensated by appropriate entries, but the chain of inter-enterprise credit threatens to turn a local bankruptcy into generalized bankruptcies and bank crashes. Incomes policies are thus certainly needed to compensate for the difficulty of implementing tight monetary policies. However, one must acknowledge the possibility that, even though inflationary expectations must be broken through appropriate stabilization measures, the 'natural' rate of inflation might remain high, in the absence of higher exit and entry rates in the economy, which will take a certain amount of time. In other words, as long as the enforcement of bankruptcies in obsolete industries is subject to political constraints, subsidies, in an open fiscal form or in an indirect form through uncontrolled credit, will have to keep these enterprises alive, thereby representing a serious obstacle to breaking inflation. Only when the final stage of transition has been completed, i.e. that of restructuring, will full stabilization be achievable.

Note also that, even in a context of free prices, the subsidizing of loss-making industries introduces a distortion in relative prices.

Note finally that, even when political constraints are less pregnant, immediate and full bankruptcies of obsolete industries may not be optimal, since a too heavy decline in output reduces the value of enterprises that are candidates for privatization, in a situation where macroeconomic information is one of the only indicators from which to estimate this value.

In any event, there is a low probability that, even when hyperinflation is broken, inflation may be brought below two-digit levels. Moreover, there are chances that the inflation rate will differ across republics. It is thus of extreme importance to examine what exchange-rate regime will prevail between the newly established national currencies. A repetition of the CMEA disaster of 1991 would represent the biggest imaginable negative output shock, given the interdependence and specialization that has prevailed for so long. We will not discuss here what the exchange-rate regime should be, but raise a few questions concerning the relationships between the republics in the future.

3.2. The future economic relations between the republics

Is the disintegration of the Soviet Union going to lead to a looser confederation of States, that might resemble in any way the European Community?

Though the idea of a new confederation of States giving itself institutions similar to those of the EEC, based on the subsidiarity concept, might seem very tempting, one should note at least three differences between European unification and the prospects for such a new Soviet confederation.

First of all, compared to the EEC, the Soviet Union finds itself in a process of disintegration, not of integration. The continued conflict between republics and nationalities will tend to divide and not to unite them. The disadvantages of conflict and sovereignty have not yet been experienced. As a consequence, the costs associated with national sovereignty in a disintegrated Union tend to be underestimated while the benefits of independence tend to be overestimated. Even when the costs of disintegration are clearly perceived, it is not clear at all why the process of disintegration should stop. Given the non-cooperative nature of conflictual relations between republics, and in so far as they have the structure of a prisoners' dilemma, it is not clear why disintegration should stop unless some sort of mechanism is put in place that creates confidence and institutes more cooperative attitudes.

Second, compared to the EEC, the costs of blocked decisions are greater. Indeed, as often happens in the EEC, decisions may be blocked or delayed because no consensual agreement on a given decision can be reached. This is partly a consequence of the loose confederal institutions requiring such a consensual agreement, on a symmetric basis between the partners. However, when decisions are blocked or delayed, no major economic catastrophe ensues inside the EEC. The former Soviet Union on the contrary finds itself in the middle of the process of the transition towards a market economy. Here the costs of blocked decisions are greater because,

institutionally, the economy is in a highly unstable situation between two opposed economic systems.

Third, compared to the EEC, blocked decisions in a new confederal Union are unlikely to appear, because of the asymmetry between the partners, and the dominance of Russia. Therefore, the republic governments will be highly suspicious of any form of coordination, whereas the absence of coordination might lead to disastrous results.

Let us give just one example. Imagine that an EMS-type system is built between the different republics with fixed exchange rates and bilateral agreements to revise the parities. Assume that Russia has a higher inflation rate than Ukraine, thus more than offsetting Russia's current account surplus with Ukraine. Assume, moreover, that Russia is unwilling to devalue *vis-à-vis* the Ukrainian currency. Russia will run a current account deficit *vis-à-vis* Ukraine, but this means increased exports from Ukraine to Russia. This might not be welcome to a public opinion facing a harsh transition in Ukraine. Moreover, Russia could later default on its debt *vis-à-vis* Ukraine. Monetary cooperation on a free basis is therefore not very likely. In the case of floating exchange rates, the different parties would probably have an incentive either to appreciate or to depreciate their currency, depending on their policy objectives. In the absence of cooperation, 'beggar thy neighbour' exchange-rate policies are highly likely, exacerbating nationalist conflicts.

This is just an example of a more general phenomenon. The different republics will all have heavy transition costs to bear and each republic's share in the overall transition cost is not easily identifiable. There will therefore be, precisely as in the Alesina-Drazen model, a big temptation to shift parts of one's own transition costs onto other republics, thereby leading to dangerous and sustained stalemate and prolonged delay in the implementation of reform programmes.

4. Conclusion

Cooperation between the former republics is unlikely and absence of cooperation will probably lead to disastrous economic results. This conclusion is rather dismal, even though the argument was sketched very roughly. There is, however, a way out if Western help for transition creates the necessary incentives for cooperation. Help should be at the same time generous and heavily conditional. In our view, this is perhaps the only way to create long-term commitment to the institutional stability that is so necessary for the success of the transition period. Without going into any detail, we will sketch here the basic elements needed to help create credible commitment to reform.

The West should not insist on any particular institutional agreement among the republics, but it should insist that any feasible agreement accepted by the parties, be it concerning trade, exchange-rate regimes, fiscal cooperation, etc. should remain stable, otherwise all Western help should be withdrawn.

Transition programmes should be drawn up in collaboration with the international organizations, and a consensus should be reached on the given policy. An international consensus on reform would give it a necessary dose of legitimacy. Any deviation from its implementation would lead to the withdrawal of help.

The West should insist that stabilization packages include far-reaching disarmament and cuts in military spending, and offer large amounts of assistance for every dollar's-worth less in the military budget.

It should offer all the technical assistance in legal, political, accounting, financial matters, etc., on the condition of reaching an international consensus on reform.

It should offer sizeable credit lines for international payment mechanisms between the former republics and the CMEA countries, which would be conditional on the continuation of domestic policy packages.

Western governments should offer special guarantees to private multinational banks wishing to establish themselves on domestic credit markets and to extend their operations to the new domestic private sector.

Politically, special help should be devoted to Russia. Cruel and bloody as they are, existing civil wars between conflicting ethnic groups threaten global world peace less than do fascist dictatorship or ethnic chaos involving Russia. Privileged ties with the West, generous conditional help, the encouragement of trade and investment would link Russia to the West and create expectations of peace, growth and welfare in the whole region. On the contrary, it would be illusory to think that a prosperous central Europe could develop with civil wars raging at its eastern frontier.

The European Community has a privileged role to play in meeting this new challenge. The attitude towards assistance to the former Soviet Union will be a test of the ability of the Community countries to cooperate in the definition of assistance packages.

Appendix: Scenarios for dealing with the monetary overhang

A.1. A Polish-type scenario

The first possibility is that of a Polish-type liberalization, using nominal wages as an anchor in order to use the reduction in real wages as an anti-inflationary device. Under a Polish-type scenario, there would be temporary high price increases, unmatched by an equivalent rise in nominal income. Although Polish-type stabilization would reduce purchasing power, and especially real consumption, it would allow richer parts of the population, endowed with savings, to smooth their intertemporal consumption pattern. For those parts of the population, the real shock of stabilization would be less great, though the price increases would be equivalent to confiscation of large parts of their savings. However, the poorest parts would be hurt in real terms and would face a reduction in their real consumption level. Given the great poverty of large parts of the Soviet population, this scenario has evident dangers. One must, however, note here that a full and immediate liberalization is less dangerous than a half-way Pavlov-type stabilization with administrative price increases without market-clearing prices. Indeed, in the former case, the immediate vanishing of queues somehow mitigates the negative effects of the price increases, whereas in the latter case, we have both queues and higher prices.

A.2. Liberalization with limited indexation

It might, however, be possible to cushion a Polish-type stabilization through some forms of compensation. One such form might be an indexation of incomes limited to the lowest incomes. Indexation would have to be very limited so as to reduce its inflationary effects. There is, however, one problem with indexation: as there is always some lag between the observed price increases and the income indexation, indexation might prove to be a very poor tool for protecting real incomes, especially if rapid inflationary processes are unleashed.

A.3. Liberalization with limited rationing

Given the uncertainties of indexation, it might be wiser to guarantee to the poorest parts of the population a minimum consumption level in kind. This is the idea underlying the egalitarian rationing schemes set up or proposed by economists like G. Popov[1] or V. Makarov, head of TSEMI (1989, 1990). Citizens would receive coupons guaranteeing them a minimum amount of basic foodstuffs and commodities. Apart from this minimum consumption basket, all prices would be liberalized. A major advantage of this type of scheme is its egalitarian character that might buy popular acceptance of price liberalization.

Rationing schemes through coupons are, however, in general allocatively inefficient. Some efficiency should therefore be obtained by introducing a limited transferability of these coupons, as proposed by these economists.[2]

A more serious disadvantage of this type of rationing scheme is that it needs a huge bureaucracy in order to manage this system of distribution. Centralized monitoring is indeed necessary to ensure that the given goods are produced and distributed as planned. The danger is that this might lead to tendencies to recentralize and give back more power to the bureaucracy, leading to a restoration of some form of traditional central planning. This danger might not be so great if rationing concerns only a small part of GNP. This is however not the case in the former USSR where providing a minimum consumption level to all citizens through rationing would need the mobilization of a majority of the resources available for consumption.

Besides the great danger of restoration of central planning, it might also be politically very divisive. The extent of what should be rationed would certainly be liable to great political debate, and this debate would be unnecessarily divisive, as the goals of efficiency and distributional justice would appear directly antagonistic. An extension of rationing would appear as egalitarian but inefficient, whereas a reduction of the extent of rationing would appear as promoting efficiency but as inegalitarian.

A.4. A German-style currency reform

A fourth scenario for stabilization would be the implementation of a currency reform similar to the German currency reform of 1948. This could be implemented at the same time as the introduction of national currencies. One variant of such a currency reform would be to freeze all savings of the population for a certain time, for example two years, and to ask people to hand over all their rouble cash balances to be converted into the new strong national currency. Such a currency reform would have several advantages. It would be rapid, as the overnight creation of a shortage of money would rapidly bring goods back onto the shelves. There

[1] In his electoral campaigns since 1989, Popov has argued that rationing is preferable to market-clearing price increases. See for example *Moskovskie novosti*, No 4, 1989, p. 13.

[2] See the interview with G. Popov in *Izvestia*, 28.6.1990, p. 3.

would be a general behaviour of dishoarding, and the flight from money would cease immediately, giving rise to a less pathological demand for money behaviour. It would immediately solve the stock dimension of the monetary overhang. Another advantage of a currency reform is that it would allow price liberalization to proceed in a non-inflationary context. A currency reform might also gain some popular support. Indeed, it would be egalitarian, as all citizens would receive an equal limited amount of the new roubles. On the other hand, it might appear partly as a blow against the mafia, since, provided there are effective controls, part of the illegal money would not be handed over. The extent to which the mafia would be hurt by such a currency reform would of course be necessarily limited as the part of its wealth held in money holdings is limited.

A disadvantage of a currency reform is its predatory character. To be effective, it must necessarily present itself as confiscatory of parts of the cash holdings of the population. Moreover, the confiscatory measures would hurt more the richer parts of the population, i.e. the capitalists of tomorrow, and this might have a discouraging effect. A measure that might be considered concerning frozen parts of savings is the indexation of the nominal interest rate on savings deposits. Pavlov, however, made a try at a predatory currency reform in a conservative context and it would be politically unwise for the new governments to do something similar, even in a context of price liberalization, unless it were associated with the creation of a new national currency.

A.5. Emergency imports

An alternative measure that is often proposed to cushion the adverse effects of price liberalization is a resort to emergency imports, financed either through an increasing external deficit or, partly at least, through transfers from the international community.

We will just note here two drawbacks related to the issue of emergency imports. First of all, the Soviet economy is in such a state of disorganization, especially the transport and distribution network, that these imports might simply be wasted and not even reach the consumers who need them. These are the dismal lessons to be drawn from the increased import of consumer goods since the miners' strike of 1989.

Another potential drawback of emergency imports is that it might have adverse incentive effects on domestic producers, especially if these imports compete with domestic products. Under price liberalization, a large and rapid supply of foreign goods on the Soviet market would tend to depress relative prices for domestic substitutes, thereby reducing the incentive for local producers to increase supply.

A.6. Stabilization through privatization

Another alternative for getting rid of the monetary overhang is the massive sale of State assets: land, apartments, enterprises, etc.

One should note here that privatization serves essentially the goal of economic efficiency. It is perhaps not the best instrument to deal with the macroeconomic problem of stabilization. As privatization might serve the goal of stabilization only through the sale of State assets, i.e. not through give-away schemes,[1] this brings to the forefront the tricky issue of valuation: how is it possible to give a meaningful value to assets before liberalization? Partial give-away schemes for housing and land might prove very popular, and might therefore be introduced together with harsher measures in order to extract the necessary popular acceptance for the latter.

A.7. Parallel currency schemes

Another proposal for stabilization is the introduction of a parallel currency, as advocated by N. Petrakov (1989) or Belkin et al. (1988). This idea replicates somehow the currency reform of 1923-24 when the sovznak rouble was gradually replaced by the Chervonetz rouble. This proposal is in a certain sense close to the proposal of a coupon scheme in that the old rouble would be used in the State sector and in those segments of the economy that still work according to the logic of central planning, whereas the directly convertible new currency would be used in all market transactions.

A major criticism of the parallel currency scheme is that it would not be stable, and most probably, as in the Chervonetz episode, would rapidly end in the hyperinflationary demise of the old rouble.

A.8. High real interest rates for savings and fiscal orthodoxy

One might argue, in view of all the proposals for getting rid of the monetary overhang, that there is no need for special policy measures to cope with the monetary overhang, and that appropriate changes in expectations and fiscal and monetary incentives might be sufficient to get rid of that part of savings which is forced. The sale of financial assets,

[1] One can argue that give-away schemes are fiscally equivalent to privatization through sales, since future taxes can compensate for the current loss in sale proceeds. This might be intertemporally true, but stabilization requires current credible measures bringing about a drastic change in expectations formation.

for example State bonds, at real interest rates that are high enough, possibly indexed, does divert part of intended consumption spending.

In the Soviet case, the following dimensions should, however, be considered. It is not certain that even indexed bonds issued by the State would reduce money demand significantly. First of all, even though indexed bonds may signal the commitment of the State to protect savings from inflation, it does not eliminate the possibility of default of State debt. Second, the decision to save depends partly on uncertainty concerning future income. Workers expecting to be unemployed in the future would save to smooth their expected intertemporal income stream, as is observed in the former GDR. However, as long as unemployment does not appear as a credible prospect, and if workers expect that they will keep their guaranteed jobs in the State sector, then the precautionary motive for saving becomes weaker. Third, accumulated frustration of consumers would most certainly lead to huge spending sprees in response to increased availability of consumer goods. Given this accumulated frustration, and given the extremely low credibility any government will be likely to face, monetary and fiscal management does not seem to be sufficient to tackle the problem of the monetary overhang.

This lack of credibility implies that only immediate measures are effective, such as a currency reform or a Polish-type stabilization.

References

Alesina, A. and Drazen, A. (1989) 'Why are stabilizations delayed?', mimeo.

Alesina, A. and Tabellini, G. (1990) 'A positive theory of fiscal deficits and government debt', *Review of Economic Studies*, Vol. 57, No 3, pp. 403-414.

Belkin, V., Medvedev, P. and Nit, I. (1988) 'sfera obrashcheniia: puti radikal'noï reformy', *Kommunist*, No 14, pp. 35-39.

Chiesa, G. (1990) 'The 28th Congress of the CPSU', *Problems of Communism*, July-August , pp. 24-38.

Cukierman, A., Edwards, S. and Tabellini, G. (1990) 'Seignioriage and political instability', working paper.

Dewatripont, M. and Roland, G. (1990) 'Economic reform and dynamic poltical constraints', CEME Working Paper No 9004, Université libre de Bruxelles.

Fernandez, R. and Rodrik, D. (1990) 'Why is trade reform so unpopular?', CEPR Discussion Paper No 391.

Hough, J. (1988) 'Opening up the Soviet economy', Brookings Institution, Washington, DC.

Kliamkin, I. (1989) 'Chto nas zhdet vperèdi', *Moskovskie novosti*, No 27, pp. 12-13.

Kulikov, B. (1988) 'Kak zhe vesti dom', *Nash sovremennik*, No 7.

Lipton, D. and Sachs, J. (1990) 'Creating a market economy in Eastern Europe: the case of Poland', *Brookings papers on economic activity*, Vol. 1, pp. 75-145.

Makarov, V. (1989) 'Dvurynochnost' ekonomiki SSSR v perekhodnom periode', paper presented at the EEC seminar 'Economic Reform in the Soviet Union', 21 to 22 November 1989.

Makarov, V. (1990) 'Impact of a parallel currency on the development of markets and the rate of inflation in the Soviet Union', paper presented at the 6th World Congress of the Econometric Society in Barcelona.

Migranian, A. (1989) 'Dolgii put' k evropeïskomu domu', *Novyi mir*, No 7, pp. 166-184.

Persson, T. and Svensson, L. (1989) 'Why a stubborn conservative would run a deficit: policy with time-inconsistent preferences', *Quarterly Journal of Economics*, Vol. 104, No 2, pp. 325-346.

Petrakov, N. (1989) 'Aktual'nye problemy formirovanii rynka v SSSR', paper presented at the EEC seminar 'Economic Reform in the Soviet Union', 21 to 22 November 1989.

Popov, M. (1987) 'Ekonomicheskii kontrol'', *Planovoe khoziaistvo*, No 7.

Roland, G. (1989) *Économie politique du système soviétique*, L'Harmattan, Paris.

Roland, G. (1990a) 'Gorbachev and the common European home: the convergence debate revived?', *Kyklos*, Vol. 43, No 3, pp. 385-409.

Roland, G. (1990b) 'Introducing the market in a shortage economy: the vertical integration issue', *Recherches économiques de Louvain*, Vol. 56, No 2, pp. 221-238.

Roland, G. (1991) 'Political economy of sequencing tactics in the transition period', in Csaba, L. (ed.) *Systemic change and transformation in Eastern Europe*, Dartmouth.

Romer, T. and Rosenthal, H. (1979) 'Bureaucrats versus voters: on the political economy of resource allocation by direct democracy', *Quarterly Journal of Economics*, No 93, pp. 563-587.

Shmelev, N. (1987) 'Avansy i dolgi', *Novyi mir*, No 6.

Shmelev, N. (1989) 'Libo sila, libo rubl'', *Znamiia*, No 1.

Transition to a market economy and the problems of changing the economic culture[1]

Jaroslav Kuzminov

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Contents

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Graphs

Introduction

Nowadays Soviet economists have discovered that, according to the main indicators used to determine levels of development, their country is not only far from competing with the West but stands on the same footing as the countries of the Third World. The conditions for transition to a market economy cannot be ensured only by appropriate stabilization and liberalization processes. They also comprise economic restructuring, through importing of investment and technology, as well as accompanying changes in the mode of life and major institutions.

This does not mean transforming the economic area which constituted the Soviet Union into an area where theoretical concepts of transition economics can be applied, but relates to a statement made by one of its founders:

'If evaluation of investment projects should take into consideration changes in the mode of life and major institutions, it may turn out that some projects will seem more profitable not only because of their physical effectiveness, [but] mainly because of their influence on decision-making, on the interests of politicians and businessmen, on attitudes towards labour, on formation, amendment, the destruction of customs, traditions and inspirations of employees and employers... .

As a conclusion it may be summed up that if additional and persistent measures are not present on a wide scope as yet, investments may fail; despite increases in production, the capital index, as well as the impact of investments on other projects and undertakings and frequently on the actions taken by businessmen and the State, may grow endlessly and become negative in relation to the additional capital expenses.'[1]

Without any doubt, in the Soviet Union (or the new formations which have sprung up in its place) the mode of life and economic institutions cannot be considered to be well-adapted to the development of a market economy. Besides, the Soviet Union is rather specific, which makes it difficult to transfer the experience in influencing the mode of life and economic institutions that has been accumulated and successfully applied in South-East Asia and other regions. If at the beginning the 'classical' model of an underdeveloped economy was characterized by such features as immobility, the prevalence of agriculture, and commune consciousness and values — in a word, illustrations to K. Polanyi's works — the Soviet economy was characterized by regular introduction of innovations, the prevalence of industry and a rather high educational level. As for consciousness and values, they present a real 'cocktail' of levelling tendencies, power relations, dependence of the feudal kind and concepts of a distorted market.

The aim of the present article is to provide the reader with a systematized picture of Soviet traditions and institutions which hinder the execution of market reforms, and to suggest how they can be adapted to the requirements of a modern economy. To meet this purpose, a category of economic culture is introduced which in an aggregated form expresses the state of 'non-material factor' in the economy.

The analysis presented here is a very first attempt. It contains a number of important limitations. First, there is the shortage of statistical and sociological data. Data are used as illustrations in the general context presented by my analytical position.[2] Second, there are a lot of questions which I could only mention (for example, region-specific and generational problems or contents of theoretical economic culture).

The concept of economic culture

Economic culture (EC) represents a combination of institutionalized methods of activity by which concrete societies, groups and individuals adapt themselves to the economic conditions of their existence. Economic culture consists of behaviour stereotypes and economic knowledge (in its value and instrumental aspects).[3]

Levels (subjects) of EC

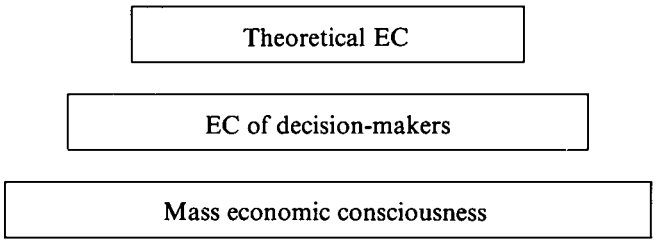
Mass economic consciousness (consumer and labour motivations); culture of decision-makers in the State, public and private (enterprise) structures; theoretical culture (re-

[1] Myrdal G. Asian, Drama. *An inquiry into the poverty of nations*, New York, 1968, Supplement II, p. 6.

[2] The results of sociological polls on the basis of the VTSIOM centre of sociological research, AON, and the Bureau of Sociological Research of GosKomStat were used. In the cases with no reference to the sources the reader deals with my own estimates, checked by at least two other experts.

[3] There are many definitions of culture. For example, culture 'as a whole consists of knowledge, religion, art, moral norms, regulations, customs and any other abilities and habits acquired by a man as a member of society' (Tailor, E. *Primeval culture*, 1939, p. 1); culture is 'a common and accepted mode of thinking and acting' (Young, K. *Introductory sociology*, New York, 1934, p. xiii); Merrill defines culture as something socially acquired (as opposed to biologically inherited) in a person's behaviour, such as something which can be learned (Merrill, F. *Society and culture*, New Jersey, 1962, pp. 25-46).
In defining economic culture, I am inclined not to use broad definitions which include material elements in culture. It would be difficult to differentiate between the EC sphere and the sphere of material objects traditionally included in the subject of economic science.

searchers and teachers). In each society of the 20th century EC can be structured as a pyramid.



A further subdivision can be made by distinguishing within theoretical EC the culture of researchers and the culture of teachers (this is significant for the USSR, where these two spheres are largely separated); within the culture of decision-makers there are: (a) the EC of managers, (b) the EC of State bureaucrats, and (c) the EC of economist-executives. It is possible to place economic journalists and analysts in the same level of EC. Mass economic culture may be classified into industrial and consumer, etc.

A useful model of understanding specific roles of different levels of EC has been proposed by J. Pearce. It uses the analogy of economic agents as car drivers.

'Most people are able to drive a car quite competently without knowing how the internal combustion engine works. They find out what makes the car go forwards/backwards, right/left, faster/slower, and the rest is learning by doing.

Only a small minority of people need to know about the engine, but even many of them require mainly skill-specific training (people who work in car factories, car mechanics), rather than theoretical knowledge, which is required only by a tiny minority (engine designers).

When large numbers of people drive around in cars, some rules are necessary to minimize the risk of traffic jams and accidents.

Again, only a small number of people are needed who understand the theory underlying the rules (transport planners); a rather larger number is needed to ensure that the rules are observed (policemen, traffic wardens); and for the great majority, it is sufficient that they know what the rules are and that they regard them as fair and in their general interest'.[1]

J. Pearce's model is elegant, but it describes only one side of EC, i.e. instrumental skills and knowledge. The picture would be incomplete without the other side, the values. This 'hidden side of the moon' usually isn't analysed in the framework of an economics approach. Indeed we need to turn to specific sociological methods to keep the data and understand the present state and tendencies of values determining human behaviour in the economy.

The situation could be presented as follows: the greater the competence in instrumental skills and knowledge the less the importance of 'pure values' in the EC of a particular cohort of economic agents. So, the values on the lowest level (i.e. mass economic consciousness) have maximum influence on that group's economic behaviour, those on the next level have less, and the values on the 'academic level' have least. But it isn't so. Economic values in any conditions have very strong links with people's instrumental means in the real economy. The values level arises as a separate problem of EC when a gap appears (i) between the traditional values and the new economic institutions and personal roles in the economy or (ii) between required and existing levels of the instrumental skills. In any case there is a problem of transition.

A similar dilemma in the present theory of culture is the problem of excessiveness (of adaptive potential) in EC.[2] To concentrate on our specific subject, we may assert that the EC of societies with a high level of education and a market economy possesses a greater potential for adapting to changing conditions at each level. The EC of societies with a low level of general education and a pre-market or anti-market economy is less abundant and hence not equal to a complete change in regime.[3] The experience of *perestroika*, despite the high level of general education in the USSR, has demonstrated the failure of 'autoreforming' efforts of Soviet society, let alone the Soviet economy. Shortfalls in EC should be compensated by building it up from imported elements which in an economic sense means direct investment in EC.

[1] J. Pearce's letter to the author, 20 November 1991.

[2] The concept of culture excessiveness can be found in Markaryan's works; 'Culture should always be excessive to carry out efficiently its adaptive functions. In other words, it should be permanently capable not only of meeting minimal demands of the environmental conditions, but of bearing a necessary potential to achieve an adaptive effect in new, sometimes sharply changing conditions.' (Markaryan, E. S. 'Correlation between formation and local historical types of culture', *Ethnographic research of culture development*, Moscow, 1985, p. 19).

[3] This rule was corroborated by modern theory of growth which maintained that only developing countries with a sufficient level of education could cut the distance between them and developed ones.

1. The state of economic culture and the difficulties in adapting it to the market economy

1.1. Soviet economic culture: three historical layers

Does Soviet economic culture exist as some positive entity? Or are the former republics of the Union similar to each other only in the following negative feature: absence of the institutions, knowledge and values necessary for a market economy? The answer to this question is of more than purely academic interest. It entails (i) the necessary presence of culture in creating a new economic community and (ii) possibilities for working out some common policy to develop EC (together with Western help) for the whole Soviet sphere.

The Soviet Union existed for 73 years (the Baltic republics for 50 years); but the regions included in it had belonged to the Russian Empire long before 1917. Central Asia underwent the least 'russification' (since the late 19th century); the Baltic States had constituted part of Russia since the 18th century but they had preserved an important cultural autonomy.

State and community tradition. For a thousand years Russia didn't know the State based on the rule of law and civil society. Any authority (whose legitimacy was based on power or charisma) meant more than any law in the people's everyday life.

In the 19th century Russia was still a feudal country with the hypertrophic role of the State. Such features of the national tradition as, on the one hand, egalitarianism, aspirations to conduct economic activities within a group, a habit to provide gratuitous help and, on the other hand, passivity and looking to the Supreme Power during economic difficulties, have roots of non-Marxist origin.

State-communist tradition. Marxism strengthened those very archaic features of the national character, dressing them up with an image of modern values. Meanwhile the State-communist tradition in mass psychology expressed approval of technological and social innovations, high social mobility and improvements in living standards. The conflict between the people's social demands generated by the communist system and its inability to satisfy those demands within a centrally planned economy led first to *perestroika* and then to the complete bankruptcy of the system.

National market tradition. The second economy has increasingly entered into the functioning of the main economic units (enterprises and family undertakings) during the past 10 years, giving rise to a specific distorted market[1] and a corresponding EC layer. The latter included both value and instrumental elements. The instrumental elements are: business initiative, an ability to collect and use local economic information (mainly through personal contacts and informal channels), rational behaviour. The negative aspects are: weak development of business ethics, lack of legal basis for deals, identification of 'personal profit' with 'income of the firm'.

1.2. Regional particularities

It is possible to distinguish three metanational (regional) types of Soviet economic culture: Slavonic, Baltic and Muslim. The qualitative differences between the types appear only on the 'first level' of the pyramid, that is in the sphere of mass economic consciousness. The differences in the economic culture of decision-makers and in their theoretical economic culture have a quantitative character and are considered in the present article.

The Slavonic type (Russia, Ukraine, Belarus and northern Kazakhstan, along with Moldova and the agrarian population of the Caucasian Christian republics) is characterized by a high level of general education which is rarely used for economic activities. Traditional values frequently approve of innovations and personal success but individual personal adaptation mainly goes on within a group. Also, the level of professional and labour ethics is not enough.

The Baltic type (Baltic republics) is the closest to Europe. It is characterized by widely spread individualistic values and respect for private property.[2] A high level of general education is combined with good professional qualifications;

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[1] See, for example, Panagaria, A. 'The parallel market in centrally planned economies: a dynamic analysis', *Journal of comparative economics*, 14, pp. 353-371 (1990); Ericson, R. 'On the allocative role of the second Soviet economy' in Desai, P., id: *Marxism, central planning and the Soviet economy*, Cambridge, 1983, pp. 110-132; O'Hearn, D. 'The consumer second economy: size and its effects', *Soviet studies*, 32, pp. 218-234 (April 1980).

[2] At the end of 1990 the positive attitude to the values of a market economy and private ownership was displayed by a 1,5 to 2 times larger number of Estonian respondents than the number of respondents in Russia and the Ukraine. 16% of Estonian and 10% of Ukrainian respondents consider wealth to be connected with hard work, 31% and 16% respectively with talent, 28% and 12% respectively with enterprise. 44% of Estonians and 24% to 25% of Russians and Ukrainians displayed a positive attitude to the processes of asset differentiation. The example of the difference in instrumental knowledge is illustrated by the following fact: to the question about the attitude towards purchasing stocks, 13% of those polled in Russia, 14% in the Ukraine, and only 6% in Estonia answered 'I don't know what it means'. The Estonians are also characterized by the more rational views on risks and profits connected with the purchasing of stocks. See Obshestvennoe Mnenie V Tsifrakh. *Informational Bulletin*, Issue 10 'The attitude of the population to economic reform', Part III, pp. 12, 13 and 18. VTSIOM, Informational Agency data, Moscow, 1991.

here labour and professional ethics are developed more than anywhere else in the USSR. This type of EC is almost completely free of traces of the State-communist tradition.

The Muslim type (Central Asia, the agricultural regions of Azerbaijan and southern Kazakhstan) is characterized by conserved community values and archaic forms of individual economic adaptation. As a rule, a person does not imagine himself outside a certain community or a tribal group and is afraid to leave it. The norms of economic behaviour presuppose authoritarian management. Social and technological innovations may be introduced from outside but opposition (presence of internal fundamental values) is not strong enough to reject them.[1] An important feature of the Muslim type is a very low level of instrumental skills for market activities.

1.3. Methods intended to change the Soviet economic culture

(a) Institutional change is essential to changes in EC. This includes:
   (i) a legal and regulatory framework for economic activity, to ensure the necessary change in public and decision-makers' behaviour;
   (ii) a system of information and communication which has two components: the institutional one and the technological one;[2]
   (iii) economic and financial institutions.

   Law reforms and setting up new economic institutions must, however, be implemented against the background of the existing EC of the people and decision-makers. Then, the efforts of the changing EC itself must be synchronized with that process.

(b) In the context of values, the main problem lies in putting forward an ideology capable of uniting society around the values of economic freedom and private property. Nevertheless, the absence of middle-class people (the people possessing property enabling them to choose between own business initiative and a job as an employee) presents the main difficulty. It will take 10 years to form such a middle class under favourable conditions.

(c) The problem on the instrumental level (lack of positive knowledge, skills, institutions) lies in an inability to overcome this lack on our own without substantial international aid.

EC can be formed effectively only from the top to the bottom. I mean that it is the top of EC, its 'ebony tower', personified by the academic society of researchers and teachers, that is to be changed in the first place. In the Soviet society their number may run to thousands, even tens of thousands. Naturally it is easier to modify the top than the foundation of the pyramid; it might even be completely changed.

If attention is not paid to the state of theoretical EC, its present representatives (to be more exact, those of them who adapt less to changes and remain in academic society) may hurt the process of transition in two ways:

(i) the conservative group of academics will become the ideological centre of consolidation of anti-market tendencies in society. This is especially dangerous for provincial regions where the only economic experts are teachers of political economy and planning;

(ii) the radical but half-educated academics are already assuming the role of experts in the regions and even in the centre. The result is the low quality of the political and economic decisions that have been adopted.

The 'second level' (decision-makers and economists with practical experience) will constitute several million people. It is impossible to discuss seriously any controlled training of this layer by whatever means. We may consider only some indirect influence (supply of information, help in setting up main market institutions) and selective support provided to a limited number of firms chosen as exemplary.

Practically the entire population (more precisely its economically active part) forms the 'pyramid foundation'. In fact, this is the most inert part of the system. Unlike the 'upper levels' EC, where instrumental skills and knowledge constitute a main share, traditional values and aspirations play the most significant role in mass EC. The situation may tempt us into exerting massive ideological influence aimed to bring home market values to mass consciousness. But there are some hidden factors that, if not considered, may make a complete fiasco of this policy. On the one hand, mass consciousness is largely inert: it is impossible to eliminate traditional values by talking people out of them. People (several generations) will have to be convinced by practical experience of the feasibility and justice of market values. On the other hand, nowadays the Soviet population feels allergic to any ideology: their positive attitude towards the market

[1] Personality has been formed under the influence of feudal public institutions which were intended to preserve fixed social economic relations. Bringing up was based on community psychology whereby each person comprehended himself as a part of 'we'. The community both protected and punished; it regulated all sides of the life. During the years of socialist development a farmer's psychology restricted by the community was not significantly transformed. A farmer comprehending the significance of his own self did not emerge (Lychagina, N. I., Chamkin, A.S. (1989) 'Influence of oriental traditions on economic activities'. *Sociological Research*, No 4, p. 14).

[2] I will not analyse the wide problem of the Soviet technological culture here; it does, however, constrain future changes in the Soviet area, including our subject.

economy is strongly influenced by the total bankruptcy of the planned system and by information about the well-being of the people living in the countries with a market economy. Broad propagation of market values will inevitably proceed at the same time as the living conditions of major population groups deteriorate as a result of stabilization. It may result in the positive attitude towards the market economy changing to the opposite one.

1.4. The necessity to invest in economic culture

I presume that investments allocated to reform institutional and spiritual structures of a society *(Ic)* will make up not more than a few per cent of production investments *(Ip)* and stabilizing human aid *(Ih)* (in the framework of 'investments in reforms'):

$$Ic = k\,(Ip + Ih), \text{ where } k < 0{,}05 \qquad (1)$$

Such an evaluation is based on the following grounds:

(i) a significant part of changes in economic culture, as a variable dependent on the changes in economic institutions and relations, will take place automatically. For example, appearance of a market instead of State-guaranteed sales makes manufacturers adapt themselves to its requirements resulting in working out corresponding skills;

(ii) *Ic* in an aggregated form possesses the effect of a multiplier: limited investments into certain key areas of economic culture may result in a chain reaction of changes on a wide scope. For example, preparation of a 'critical mass' of researchers and teachers with a world level of education and organization of their promotion to independent positions in the academic society will lead to the creation of self-generating scientific schools in some four to six years.

The present moment may be characterized by a sharp reduction in the volume of free material and financial resources which are available for the Union Government (republic and regional governments are in an analogous, if not worse, situation). Investment activity slows down. That is why Western aid and Western investment acquire greater significance in the total volume of expenses in the USSR. They may result in a more significant effect in case of their correct distribution.

To achieve a multiplied effect from *Ic* it is necessary to determine correctly the targets for investment and to set attainable aims. Meanwhile it is impossible to prefer any level of the pyramid, but policy should consider their mutual influence.

2. The problems of setting up a legal framework and economic institutions

As was said before, the reason for the consequent change of mass economic insight and EC of the second stage is the creation of a legal framework and market institutions. It is important to ensure an appropriate framework for creating and organizing the activity of newly founded market institutions: stock exchange, banks, insurance companies, auditing companies. The main purpose is to ensure equal opportunities for any company or individual to enter the market and to start business activity in a market economy.

In other words, the legal system and institutions must secure 'fair play' in the emerging market.

2.1. Essential features

The essential features of the new legal and regulatory framework are:

(i) Clearness, i.e. easiness to understand and apply by any economic agent. This is the problem of the educational level of people on the one side, and the qualification of experts and providing information on the other.

(ii) Commanding general respect. This is a real problem for the Soviet area (save the Baltic countries). Today we do not have the necessary background in the mass consciousness to be easy in the mind about future observance of the laws and rules. The new standards of public behaviour based on respect for the rule of law and the usual standards of economic ethics could not form in a short period; so, the Soviet countries perforce will provide the necessary respect for the laws by their citizens on the basis of power. I do not think that we could avoid a return to the same type of strong, even strict, regimes in most of the former USSR. But the strong order (i.e. based on some kind of fear rather than on conscious keeping to laws and public standards) may be founded either on law or on fear. Support from the world community will be of the utmost importance.

(iii) Having single meaning. Until the end of 1991 the prolonged 'war of laws' was causing the situation of 'alternative sources of power'. Today (December 1991) the historic 'Union-republics' match is over because Gorbachev's government has disappeared. But the permanent changes of laws and norms go on, especially at the local level. The Moscow government presents the most odious examples in the sphere of privatization. Instability in

the laws and norms currently in force produces the atmosphere of uncertainty in the Soviet economy. Meanwhile, the efforts to spread the foundations of market EC are suffocating in this atmosphere.

In my opinion the specific negative features in the Soviet area are produced by two factors:

(a) the process of disintegration, compounded by the multinational character of the USSR;

(b) the low level of political culture of Soviet intelligentsia founded on traditions of confrontation but not compromise.

2.2. Inequality of opportunity

Nowadays, the economy is characterized by an inequality of opportunity of its agents; this is due only to institutional factors.

First, State enterprises are initially not equal because of the absence of freedom in decision-making on rationalizing the shares of factors of production and on using the workforce more effectively. Legislation and institutional standards in the hiring of employees in fact grant the worker his job, and it does not depend on whether he makes a positive contribution. At the same time the liberalized sector of the economy is able to ignore existing labour law using civil law arguments.

Second, a large number of potential entrepreneurs (who are employees today) do not take up opportunities because they lack access to information, to production factors, to markets and to the system of credits for small businesses.

At present there appear two extremes in setting up market institutions:

(1) The creation of market institutions from 'above', through the efforts made by the Government of the USSR and the republics, goes on with great difficulty and with distortion of two kinds. On the one hand, an attempt is made to adapt newly created market institutions to the command economy distribution system existing on the macro level, which raises doubt about the future competence of the new structures set up by the State (these may be called 'semi-market'). On the other hand, these structures provide shelter to the bureaucrats of the ministries and other organizations of the existing command economy system. That leads to inefficiency of the 'semi-market' institutions from the standpoint of their unjustifiably huge staff and the inadequate level of qualifications of those staff.

(2) Nowadays similar institutions are frequently created from 'below', when local governments support private initiative. Meanwhile, priority of personal interests, so natural for private initiative, sometimes distorts the character of the new structures' functioning by giving rise to their own commercial orientation. For example, most of the stock and commodity markets that have appeared during the last one and a half years were established not by brokers' offices but by the local authorities, non-trade organizations and private persons. They are interested in dividends as 'owners of an organized market' and not in getting the trade profit as agents of bargaining. Dividends are coming from commissions derived from bargaining. For example, Rosyiskaya Tovarno-Sirievaya Birga (Russian commodity and raw material market) during June to November 1991 received R 200 million from auction selling of brokers' working places. The average price of a broker's working place was R 8,1 million. The rate of selling of broker places on other stock markets in 1991 was also very high, fluctuating from 3 to 5 to 10 to 20 times their face value (Moscow commodity market, Tyumen and Kaliningrad stock-commodity markets, Surgut commodity and raw material market).[1] The tendency to maximize profits, characteristic of private structures, frequently makes the new market institutions inaccessible to the masses of candidate consumers, who, for example, have not accumulated enough capital to purchase a place at the stock exchange.[2] In its turn, the 'monopoly of the rich' establishes contacts with local governments.

Apparently it will be impossible to avoid any impact of these factors on the market institutions' activity.

2.3. A common system of economic information

To ensure effective functioning of the economy both on the macro level and on the micro level it is vital to reconstruct the common system of economic information, destroyed in the course of the devolution of power from the Union structures to the republic ones. It should cover the whole economic area of the former USSR or at least the rouble zone. Such a system can be created both from 'below' (com-

[1] Yakovlev, A. 'RTSB — 200 million roubles for "selling the air", *MN business* No 0/1, December 1991, p. 2.

[2] The tendency gives rise to actions undertaken by the businessmen of the 'second wave' against the businessmen of the 'first wave' who have monopolized commanding positions.

mercial information) and from 'above' (State and inter-State statistics, the system of legal information). No effort should be spared to provide the majority of organizations and population with a necessary minimum of economic information on the part of the State, so as to ensure propitious conditions for them to join the market. The availability of information should be guaranteed (a certain minimum should be distributed free of charge or for some token payment, but the main volume of commercially significant information should be distributed at prices sufficient to cover costs), as well as, and more importantly, its quality.[1]

Some possible practical measures are listed below:

(i) to conclude inter-republic agreements on the standards of economic information and its obligatory provision on a non-commercial basis;

(ii) inside the republics — to oblige all organizations to supply necessary information to the State statistics office (protection of commercial interests provided);

(iii) to issue State certificates for commercial activity based on distribution of economic information;

(iv) if necessary, to subsidize producers and consumers of economic information.

All the problems stated require technical assistance on the part of international economic institutions.

3. Modification of mass economic consciousness

3.1. Slavonic and Baltic types of mass economic culture

Positive features:

(i) A fairly high level of general education, though specialized education is unsatisfactory in some places:

(ii) Relatively high labour mobility, which has acquired a centrifugal character common to the rest of the USSR. Citizens migrate in pursuit of a higher standard of living: a village — a small town — a large city — the capital. If shortages begin to disappear, this type of migration may be replaced by horizontal migration to regions with a high demand for labour.

A stable feature of the Slavonic mass EC (unlike the Baltic one, where this feature occurs very rarely) is the 'spontaneous collectivism' — the tendency to join a certain group or a larger structure (corporation), out of fear of acting alone. To a certain extent it results from community traditions, but to a greater extent it is the legacy of unguaranteed property and civil rights which were very traditional in Russia and in the USSR. Under such conditions a person strives to obtain stable protection from a strong group or structure.[2] This particularity has both a value and an instrumental significance.

For example, many private businessmen prefer to act under the label of a cooperative; 1990 and 1991 witnessed a strong tendency to set up numerous unions and associations of businessmen and private owners; the informal 'supporting structures' of the new businesses are much more significant than the visible ones and often include representatives of local government.

The present level of mass consciousness is characterized by levelling stereotypes, by hostile attitudes towards others' economic success, together with a strong emphasis on State (enterprise) obligations to any employee, with no reference to their positive contribution. These stereotypes are being gradually destroyed but are unlikely to disappear in the coming five to seven years. We may call those phenomena, related to a particular 'inertia' of the human mind, 'irrational expectations' (unlike 15 to 20 years ago when most expectations were quite rational). Here an especially significant role is played by levelling dependent stereotypes which are widespread among employees of State enterprises and organizations. They may seriously hinder commercialization of State enterprises (especially in the light of preserved 'rights of a working collective' in the process of privatization).

Another peculiarity of mass economic consciousness is too high a level of social (consumer) expectations (irrational

[1] The lack of economic information has become a characteristic phenomenon of the Soviet economy starting from the *perestroika* period. On the one hand, the requirements for databases for economic decisions have changed drastically. The State statistics fell behind those requirements because of its inertia. On the other hand, information distribution has become the first commercialized sphere of the Soviet economy (like other 'new' products, information was restricted to a lesser extent). Commercialized information was contaminated at once by the two traditional diseases of the 'Soviet market of the first generation': low quality and inaccessibility because of price.

[2] On the specific character of Soviet corporate structures and their role in the economy, see Kuzminov, Y. I. and Soukhomlinova, O. O. 'The civil society: political and economic factors of the formation', *Social Sciences*, No 5, Moscow, 1990.

expectations) on the one hand, and discontent at the low level of wages, together with poor job satisfaction on the other.[1] It is characteristic of the Slavonic republics and is weakly developed in the Central Asian republics.

3.2. The Muslim type of mass economic culture

On the level of values a significant role is played by the requirement, characteristic of the Muslim culture, which is to obey unquestioningly superiors both in age and in position and to observe scrupulously standards of behaviour accepted in the community in everything concerning choice of occupation and acquisition of social status.[2] The phenomenon of irrational expectations is practically non-existent but, in my opinion, the dynamic potential of the society is lower than in the regions with unsatisfied economic expectations. According to available estimates there were 2 million unemployed in 1989, or 13% of the region's workforce.[3]

The instrumental aspect of mass EC is characterized by a low level of education of the majority of the population (in the rural areas general secondary education has a token character). Fast penetration of necessary instrumental skills (knowledge of the fundamentals of economics, an ability to evaluate data and take rational decisions) should not be expected.

Without qualitative changes in the mode of life and in the general culture of the population the transition to a market economy in these regions will give birth to a type of 'marginal' person well known in Third World countries.[4] With regard to EC the phenomenon of marginality is determined only in one sense: a person is mastering new instrumental roles (an employee, a businessman) in the market economic system; but the values (the mode of life outside his job, the system of social ties and obligations) remain traditional and are preserved.

3.3. Changes in mass consciousness

These changes occur extremely unevenly: 'Communist values' may disappear, but people's behaviour is still determined by levelling and dependent stereotypes. People adapt gradually to the market economy (they start to react positively to such abstract notions and words as 'market', 'private property', 'business initiative'), but the old psychology and values do not disappear.[5]

People react positively to the 'abstract market economy', to the promised outcome. Simultaneously they react negatively to the present situation (far from being perfect as regards the necessary level of services available and social justice).

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1 A similar situation was described earlier as a marginal type of labour alienation in the socialist economy, See Kuzminov, Y. I., Nabioulina, E. S., Radaev, Vad. V., Soubbotina, T. P. 'Labour alienation: history and modern times', *Economica*, Moscow, 1989.

2 According to Lychagina and Chamkin, in the agricultural regions of Central Asia 'a person often presumes in his actions the priority of assessment and actions of the surrounding people, orients himself on the traditions even if they contradict his personal interests and his personal profit. According to the special investigation, in many cases not only a farmers' community but any other modern small group (relations, neighbours, friends, colleagues) is guided by certain patterns of behaviour based on the traditional norms. Let's take school graduates as an example. It would have seemed more rational and attractive for them to move to the regions of new settlements (for example, to the Karshin and Dzhizak steppe), to the cities where new industrial plants are being constructed. It would have provided them with a perspective to receive an interesting and substantial job, to be promoted, to live separately from their parents at a new place. But social environment ... leaving their native *kishlak* (village) for a city or other region is considered to be a violation of ancient traditions and is condemned for this reason'. (Lychagina, Chamkin, op. cit., p. 15). The phenomenon of excessive labour force in Central Asia can be explained mainly by the level of mass EC. It should be taken into consideration in decision-making concerning investment.

3 Morozova, G. 'Trudoizbitochna li srednyaya aziyaa?' (The problems of abundance of workforce in Central Asia), *Sociological research* 1989, No 6.

4 Park defined a marginal person as a person belonging to a certain culture but made to live up to new social roles existing in the framework of a different culture. (Park, R. *Race and culture*, London, 1964, pp. 354-356).

5 In December 1990, according to data from VTSIOM, only 16% of respondents fully supported the transition of the Soviet Union to a market economy (*Obshestvennoye mneniye v tsifrakh*, Issue 11, (Attitude of the population to economic reform), Part IV, Moscow, 1991); 57% supported the idea of privatization of small shops, factories and cafes and 70% privatization of farm land (Part II, p. 9). A positive attitude to private enterprises was displayed by 43% of respondents and a negative attitude by 26% (p. 12); In this respect there is an interesting comparative sociological investigation of the attitude towards the free market and market values which was conducted in New York in May 1990 (Shiller, R., Boycko, M. and Korobov, V. 'Popular attitude towards free markets: the Soviet Union and the United States compared', *American Economic Review*, June 1991, pp. 385-400). According to its results there is no crucial difference between the values of the Soviet and American respondents. As a rule, the former differ in their more restrained attitude towards market values. It goes without saying that the significance of the conducted investigation was limited by the choice of respondents exclusively in Moscow. The provincial population is less positive in its attitude towards modern economic values. But according to the results of some other investigations these 'market expectations' are based on an abstract imagination of 'market', which is the totality of positive characteristics — the image of 'rich countries' influencing respondents. At the same time a great number of respondents are not prepared for possible negative consequences of the transition to a market economy. See Zaslavskay, T. 'The real optimism is based on realism', *Researches in sociology*, 1989, No 6; Radaev, V. 'Adaptation to current socioeconomic changes in changing work and income opportunities', European Coordinating Centre for Research and Documentation in Social Sciences, Vienna, 1991.

The sphere of practical skills and knowledge remains untouched and there is scant 'instrumental' adaptation to a market economy. In the long run, many people reject the values of a market economy because they feel helpless to cope with it.

At the end of 1990 the answers of respondents to the question: 'Why are you not willing to become the owner of an enterprise, a firm or a farm?' were distributed as shown in the table below (as percentages).

Groups of answers (i), (ii) and (iii) could be related to instrumental and institutional factors; those answers explain most of the passivity of respondents. Groups of answers (iv) and (v), which are less important, relate to constraints stemming from the State or community values.

It is interesting to mention the very low differentiation in the answers of representatives of high- and low-educated groups of the population; the reason for the passivity seems to be the weakness of institutions and the lack of special skills and knowledge necessary to undertake activity in market conditions.

That is why failure to intervene to develop mass economic consciousness may result in a permanent political threat to the development of a market economy.

In the battle of ideas about the market economy in this country, those who support the transition cannot rely on improving living standards — the economic crisis is too deep. In fact, during the first years (the most dangerous years in a political sense) the creation of a sound economy will impose costs rather than confer benefits. Justice may serve as the only argument, but it should be ensured.

3.4. The existing threat

The specific feature of market formation in the USSR during the period of *perestroika,* which created possibilities of establishing free prices, receiving unregulated profits only for a limited sector of the economy (cooperatives since 1987, joint ventures later), while the economic position of State enterprises remained unchanged, has led to unprecedented differences in incomes and standards of living. The source of this tendency was a perverted gradualism of the Soviet Government's reform plans since 1987. The aim was to avoid a sharp, socially unacceptable adjustment of real wages and output. But the coexistence of planned and market sectors in the economy caused abnormal speculation by new private

Total	Age			Education			
	under 24	24-54	over 55	higher	advanced	ordinary	9 classes
	(i) I've got no money for that and I don't know where to get it						
34	20	37	37	33	34	33	34
	(ii) I've got no skills, knowledge or abilities						
24	20	24	26	20	23	24	25
	(iii) There are too many troubles with creating an enterprise (seeking accommodation, problem of registration, land leasing)						
18	15	20	15	18	18	19	16
	(iv) I'm not sure that the State would not close the enterprise or farm						
18	13	21	14	20	20	20	13
	(v) I'm afraid that people around me would misunderstand						
4	3	4	5	2	3	4	5
	(vi) I've got other reasons						
9	3	7	18	7	5	5	15

Source: Produced on the basis of VTSIOM (Part. II, p. 17).

enterprises, on the one side, and the stagnation and fall of output and real wages in the old sectors, on the other. Today there is a clear division between those who have access to hard currency, with a monthly income of up to R 2 000, which enables them to improve their standard of living, and those who have a monthly income in the range of R 200 to 1 000, which is falling behind the increase in the cost of living.

The new businessmen are not interested in getting involved in manufacturing basic consumer goods and developing retail trade in such goods because of the very low effective demand.[1]

Mass consciousness is beginning to react negatively to the commercial structures and business initiative existing in the USSR: (a) most citizens as consumers derive no benefit from the activity of the new structures because those on relatively low incomes and without access to hard currency still face shortages; (b) against the background of shortages of basic consumer goods and growing absolute impoverishment, conspicuous consumption by those employed in the free sectors causes great irritation; economic success appears to be random: access to the highly profitable sector does not depend on achieving a high professional level, nor on working diligently, and high profits are also haphazard. There is no positive image of a businessman as a hard worker, but there is an image of a businessman (and his dependants) as 'playboys'.

We may face the danger of a dual social-economic structure of society with an isolated sphere of leisure, shops, way of life and, moreover, with entry apparently barred to the rest of society. It is worth remembering that a similar situation occurred in the 1920s during the 'new economic policy' period, and in the long run it brought about social tension which became one of the leading forces causing the closing down of private and commercial structures and the transition to a command economy.

Development of natural property differences into those of class and caste may obliterate the positive image of a market economy that resulted from the destruction of State socialism.[2] The risk will be intensified if conditions of impoverishment cause access to education to become the monopoly of the rich and powerful.

'The development of capitalism in Russia' 100 years after Lenin may create real classes forgotten in the West — isolated groups of people differentiated by lifestyle and property level. The possibility exists of a second upsurge of Bolshevism in a society where egalitarianism has been deeply embedded.

[1] For seven months in 1991 money spent on foodstuffs increased to 70% for consumers with an average income and 85% for consumers with a low income. The tendency towards 'absolute impoverishment' of the first stage of consumers (and they constitute, by the author's accounts, rhe overwhelming mass of employees — not less than 90%) cuts the perspectives for productional structures oriented towards that market. Note: the share of the family budget given over to foodstuffs in the USSR in 1988 amounted to 32,2% in the State sector, and to 35,4% in the collective-farm sector (*Narodnoye Khosyaistvo v SSSR*, 1988, pp. 90 and 92). According to the data of VTSIOM, only 10% of families spend less than half their income on foodstuffs (*Ogonyok*, No 5, 1990).

[2] Some objective results of this process are described by G. Roland: 'A higher polarization in society ... delays stabilization because its burden becomes more unequal. These are highly relevant to the Soviet case, where stabilization has become a key issue, and where there is great uncertainty concerning group-specific burdens of stabilization' (Roland, G. 'Report to the EEC on the political economy of the transition period in the Soviet Union', November 1990, p. 4).

Particularities of employment in the new sectors and the emerging types of EC

The market sector consists of two sharply contrasting subsections:

Subsection A

Private enterprises, joint-stock companies, small enterprises, cooperatives
Good and improving standard of living
Employees of young and middle age
Business ethics (low level)
Tendency to maximize cash profit and to consume conspicuously
Lack of information, but a tendency to seek it, willing to take commercial risks and inclined to innovate
Average and high professional level
Fast promotion

Subsection B

Individual labour activities, farmers, cooperatives
Poor and deteriorating standard of living
Old- and middle-aged employees
Labour ethics (average level)
Tendency to ensure a standard consumption budget
No information, tendency to avoid commercial risk and serious innovations
Average and high professional level
Slow promotion or no promotion at all

4. Decision-makers in the economy

In Soviet society decision-makers are divided into two main groups: managers of State enterprises and 'new businessmen' (representing the private and cooperative sectors).

4.1. State enterprise managers

As a rule, the official duties, status and even salary of State enterprise managers are severely regulated. Even though formal restrictions have been abolished, they continue to be regulated by inertia.

EC is characterized by the following features:

(i) a low level both of skill-specific training for managerial and business activity and of basic economic knowledge (the majority of State enterprise general managers and general managers' deputies have received an engineer's education);

(ii) a lack of competence in special economic problems, resulting in their wish to pass the functions of performing technical and economic calculations, preparing contracts, regulating internal staff relations to economists and legal advisers of the lowest level. As a consequence preparing decisions and making decisions are separated;

(iii) a defensive attitude towards innovations in the economic sphere, because they are aware of their own incompetence.[1]

Under these conditions the phenomenon of 'private property in the work place' and the aspiration to maximize personal income leads to management decisions that are irrational from the standpoint of the enterprises' interests:[2] for example, intensive international negotiations (especially on the part of the 'second echelon' managers) are accompanied by frequent business trips abroad, payment of per diem expenses and receipt of gifts (sometimes equivalent to several months' salary).

The traditional type of State enterprise managers' economic behaviour corresponds to the conditions of the command economy based on shortage and cannot be changed overnight. For example, it might be expressed in the hoarding of natural resources (stocks of raw materials and equipment exceeding any standard, excessive facilities, excessive labour force). As a result, the behaviour of State enterprise leaders in a market economy is usually irrational. Thus, if traditional outlets (provided by a branch ministry) are no longer available, a typical decision may be to reduce output, rather than to seek new outlets. According to IEP 'most of the leaders are not likely to increase their production prices, and they avoid selling in commodity exchanges, auctions, etc. because they are frightened of acquiring the reputation of profiteer'.[3]

It should be expected that most State enterprise managers will retain their positions in the forthcoming round of privatization.

4.2. New businessmen

The roles of an owner and a manager are largely identical, and this makes for an undistorted system of priorities.

At the same time negative features of the Soviet market tradition are strongly expressed in the economic behaviour of the new businessmen: lower business ethics, lack of information, a tendency to conspicuous consumption, low confidence in State institutions, legal norms and obligations, resulting in their own negligence. The so-called 'two hump' function is characteristic of the investment policies executed by the majority of the new structures: priority is given to short-term projects for their quick pay-off or to grandiose long-term projects where merely participating creates a prestigious image or may be explained by an inability to control investments rationally.

As one can judge by the diagrams below, which are based on sociological research by S. V. Malakhov (Institute of Economic Policy), the investment priorities of new Soviet businessmen do not coincide with the priorities of Western businessmen. This presents obstacles to setting up business cooperation.

Loan capital is alien to the new business structures not only because of the underdevelopment of lending institutions, but also because of their low confidence in the new businessmen. Nevertheless, it cannot be denied that poor access to information and lack of instrumental skills are also serious impediments.

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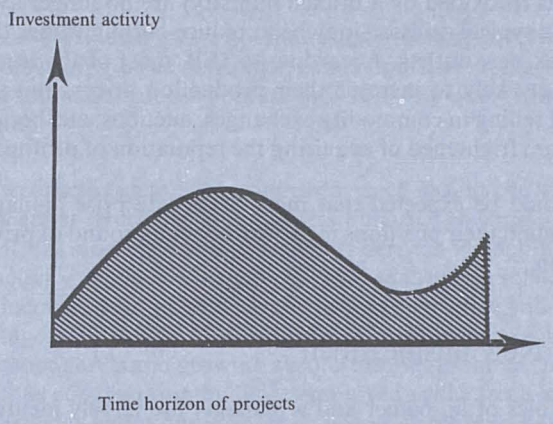
1 According to the results received during sociological research conducted by Ryvkina's group in 1987 only 15-20% of managers in the agriculture sphere were prepared (felt competent) for the new economic condition (Ryvkina, R. V. et al. *Managing cadres of agricultural industrial complex: orientation and behaviour, readiness for perestroika.* Reprint, Novosibirsk, 1987, pp. 32-39). Due to some expertise, the level of managers' competence in industrial and financial branches is twice as high (30-40%). I consider the data on 1987-88 to be most exemplary because evaluation of the latest sociological research has to make allowance for respondents overestimating their competence due to two reasons: (1) fear of being fired in the near future and (2) token economic education having spread in 1989-91 in the form of numerous commercial schools and courses.

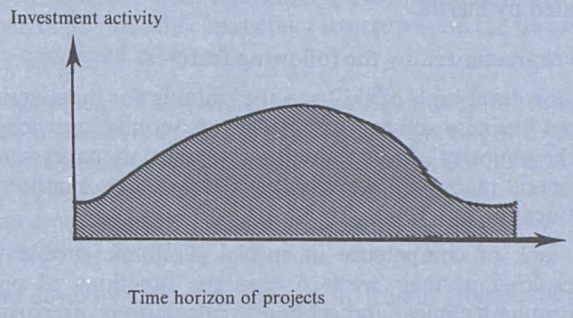
2 See Kuzminov, Y. I. 'Is staunchness to disasters to be developed?', *Socialist Industry*, December 1989.

3 IEP, p. 94.

GRAPH 1: **Distribution of investment activities among new Soviet businessmen**



GRAPH 2: **Distribution of investment activities among Western businessmen**



As a rule, business, managerial and economic education is absent. In the mean time the need for general and specialized economic knowledge, methods of analysing information and decision-making procedures is huge and it will grow along with the development of competition.

4.3. Business and management schools

The last few years saw a real boom in various business and management schools run on a commercial basis. In Moscow alone there are more than 50. As a rule their effectiveness is low because they offer a very short period of retraining and because of the low standard of teaching. Lecturers lack any special training and are selected at random, basically through personal contacts. Training curricula are not geared to equipping students with concrete practical skills. When Western methods are used they are not adapted to the current state of the Soviet economy.

5. Economic culture of State administration

5.1. 'Politicians'

The upper layers (ministers, managers of republic and regional bodies) have a contradictory EC:

(i) they proclaim the values of neoliberals, declaring their intention to manage the economy through exclusively indirect methods;

(ii) in their practical decisions, however, they tend to use tested administrative methods. For example, instead of liquidated branch industries, which are totally monopolistic, they set up 'corporations'. The initiative to set up corporations by those who used to be ministers is easily explained by their aspiration to keep commanding (administrative) positions, and these projects receive consent because they help to retain the customary methods

of control at the macro level. Regional leaders act as the 'engines' of the process of progressive decline of the old economic unanimity: since they are able to get less and less from the centre (Union or republic), their activity aims more and more at keeping a monopoly over the resources that they have on the regional level.

With regard to the instrumental aspects of EC, the process of devolution has resulted in an unbelievably low level of qualification in the administration of republics and large regions, as well as of the advisers and consultants involved. This can be explained by two factors:

(a) A sharp change of personnel in the highest levels of administration (the new wave of democrats and nationalists replaced the party-State establishment) has resulted in it being staffed by people with no practical experience in managing the economy at this level. That experience played the main stabilizing role in the management of the economy in the past, preventing risky decision-making.

(b) The Soviet Union has long had only a very thin layer of experts in international economic relations and with experience of Western economics. It is concentrated in Moscow. The uncompromising quest for economic sovereignty brought international economic policy (trade balance, hard currency market, etc.) within the scope of the republics, but the majority of them simply do not have experts in this field.[1]

5.2. 'Bureaucrats'

Bureaucrats are characterized by low efficiency even in the framework of the existing administrative system of control.

The main reason is lack of office equipment and hardware, low qualifications (more precisely, lack of specialized qualifications and of provision for these specialities in the education system), unsatisfactory information support and the poor opinion which the public has of them.

Under the conditions of transition to a market economy the existing negative factors are compounded by new ones. There are no specialists capable of executing control through indirect means, respecting property rights. There is no concrete conception of public interest within the system of a market economy which is to be defended by State officials. There is no specialization in social work.

The Soviet bureaucratic environment is characterized by 'bureaucratism', a weak sense of responsibility, low social prestige and low self-esteem. The State employees' salaries do not ensure their material independence and aspiration to hold their office. Nowadays, clerks regard their workplaces as temporary and seek to prepare for a move into commercial activities by establishing contacts, providing services. Those clerks who have no opportunities to move try 'to gather honey' in their workplace. This factor impacts extremely negatively on the formation of a civilized market economy.

6. Economists with practical experience of a lower level

In 1990 in the USSR there were more than 3.8 million people with a university or college education in economics. The majority operate not as managers or other decision-makers but as administrators and advisers.

In 1990 0,9 million of these people worked in enterprises and almost 3 million in other State organizations and bodies.

The majority of these specialists are employed to carry out routine, tedious work. Only a small proportion are engaged in analysis and forecasting activity (as a rule, the latter is performed by the head of the economics department; the results of analyses and prognoses are not discussed within the department but reported straight to the enterprise manager).

(a) The lack or inefficiency of computer-aided data-processing means that economists have to perform time-consuming mechanical reporting. In the course of time this results in the loss of some of their skills.

(b) According to the results of the Perm research in 1989, 35,3% of economists' jobs were performed by people without specialist education.[2]

[1] According to witnesses, when preparing the agreement on the economic community the high representatives of some republics, tired of discussing the details of the future federal allocative system, suggested discussing first the main details.

[2] According to a sociological research survey conducted at enterprises in the Perm region, 81,2% of the enterprises' economists 'admitted that they did not have the slightest notion how the complete self-financing principle would be implemented at their enterprises' and 10% of the respondents expressed the wish to find a simpler job. (Antipiev, A. G. 'An economist in the manufacturing process', *Organization and economics of a manufacturing process*, No 8, 1990, pp. 8-10).

(c) The system for retraining specialists is totally inadequate. Retraining courses are provided for 25 to 40% of specialists during a five-year period and are inefficient; the study of other enterprises' experience is sporadic; enterprise managers do not monitor economists' efforts to retrain themselves.

As a result, the majority of functioning economists are hardly adapting to the market system. They continue in their posts thanks to inertia and to the extreme shortage of economists.

Nevertheless, along with the main mass of semi-qualified employees there exists a limited layer (not more than 10%) of highly qualified economists with practical experience who readily handle information in their branch and are inclined to perform analyses.

The main way to change the situation is to sift out the least qualified economists of the current corps by introducing computer programs into economic calculations, by developing and adapting these programs, and by implementing modern office operating principles and standards of economic information.

Centres for retraining and re-educating should be set up for the following specialities: (a) accountancy and analysis of economic activity, (b) marketing, (c) labour markets and wage determination, (d) legal aspects of economic activity, (e) methods of handling foreign economic information.

Economists should be extensively redeployed: the least qualified economists should be dismissed and replaced by more qualified economists from the dissolving vertical control structures. In the end, in the main regions independent consulting firms will spring up and will gradually attract well-qualified personnel. Furthermore, there should be a radically new approach to education and retraining of specialists in economics. Since there exists a significant and well-paid demand for highly experienced specialists in economics, they could be trained on a commercial basis. Western partners may provide methodological help to the vital economic universities.

7. Economic journalism

The economic journalists are not directly involved in economic decision-making or in advising on or implementing it. However, they play a key role in the process of economic decision-making and in determining its acceptance by society. Three main functions of economic journalism can be emphasized:

(i) influencing the values of mass economic understanding and also using existing values to generate support for, or opposition to, economic policy decisions;

(ii) reflecting the interests of social groups and the social climate as a whole. The mass media are not only taking sociological polls and taking part in the activities of political movements, but are an important indicator of current interests and moods;

(iii) translating economic decisions, the results of scientific research and economic information to the level of understanding of the population at large.

Economic journalists can be regarded as the nervous system of the 'EC body'.

Nowadays in the USSR economic journalism is developing quickly and reaching a rather professional level. From 1985 to 1990 the mass media contributed to the process of reforms and maybe even acted as the main instrument of reforms in EC itself.

Three types of economic journalism can be distinguished:

(i) specialized mass economic and business media;

(ii) general mass media with qualified economic journalists on their staff. It is a serious problem that no conservative newspaper can be placed in this cohort;

(iii) media without enough qualified journalists which try to exploit the sensational side of economic events rather than to analyse them and provide explanations for their readers.

The main negative features in Soviet economic journalism today are:

(i) the lack of objective information, leading to wordy discussions and fantasizing in economic articles;

(ii) inadequate economic education, leading to difficulties in drawing on international experience and poor interpretation of events and prospects;

(iii) scant motivation to educate readers;

(iv) 'pro-market propaganda' is very monotonous and has negative effects on mass consciousness. Over-enthusiastic reports on the affluence of the new capitalists irritate people.

Well-qualified economic journalists tend to focus on macroeconomic issues, whereas most people's interest in the economy relates to microeconomic problems and events. The economic journalists could attract more attention if they related their analyses to microeconomic concerns.

It would be useful to bring into economic journalism more people trained in modern Western economics and in economic history. Also important is to establish appropriate channels of communication between journalists and government departments, including a regular supply of data, briefings, and so on.

8. Economic and social science

The theoretical EC is formed and supported by the scientific community and the education system. It includes the following groups of subjects: general and applied economic science; economic and civil laws; main branches of sociology and social psychology. We shall consider only the first group, mainly because of its central position and also because of the limited number of specialists representing 'related' social sciences in the USSR.

In the late 1980s there were 110 000 economists in the USSR, representing 7,6% of the total number of people with scientific qualifications in this country. They include: (i) employees of the research institutes under the USSR Academy of Science and the Union and republic governments; (ii) employees of branch economic institutes which used to belong to the ministries and are independent now; (iii) researchers in universities; (iv) researchers in economic laboratories based in major organizations.

The current situation is one of crisis in scientific society resulting from the transition from orthodox Marxist theory with purely ideological content to Western economic theory. The depth of the crisis differs as between theory and applied economics.

8.1. Theory

Theory is represented by the abovementioned groups (i) and (ii). The scientific community numbers approximately 10 000 people, of whom not more than 15% are theoreticians, while the rest perform teaching (in colleges) and secondary (research institutes) roles.

In the domain of general theory the division between Soviet science and world economic science is profound. In the USSR during the past 70 years, general theory was mainly understood as political economy.[1]

Soviet political economy, based on an assortment of 'holy' texts by Marx, Engels, and Lenin, 'programme' decisions of the Communist Party and supplements with comments on them by political economists, had only the veneer of a scientific theory. On the one hand, it lacked any standard database and its relationship with reality was only token (the facts were used only as illustrations, and available official statistics comprised several distorted indices). On the other hand, from the very beginning, the groups who held power set purely ideological tasks. Political economists had to prove the advantages of socialism as compared with capitalism, and to justify economic policy which they played no part in designing. That is why it is meaningless to discuss the crisis of political economy as a scientific theory: in fact, we are witnessing the crisis of a scientific community that has realized that the body of theory which united them for such a long time is not theory at all.

During the first years of *perestroika* (until 1989) the Soviet Government and society as a whole did not realize the complete bankruptcy of their economic science: on the contrary, they laid great hopes on it. The scientific community had only to try and explain the actual realities applying the available Marxist theoretical apparatus. That led to laughable and fruitless attempts to create, for example, a theory of market, useful only when applied exclusively on the basis of the labour theory of prices. It invented not only a wooden bicycle, but a wooden bicycle with square wheels.

The current state of economic science is a reaction to the preceding scholastic philosophizing: the majority of Soviet researchers use neither the old nor the new (Western) theoretical apparatus in the form of abstract general laws and categories, let alone attempt to systematize them. But since a theory cannot exist without an apparatus the notions borrowed from 'everyday life' are put forward as categories: as a rule, the forms of the existing economic mechanism (cost, profitability, total output, etc.) and the most general notions of categories developed by world economic practice

[1] The only exception was the SOEF school — System of Optimal Economy Functioning, set up in the 1960s under the Central Economic and Mathematical Institute of the USSR Academy of Science. SOEF differed from the official political economy not only in applying econometrics and the theory of limited usefulness (which in its turn presupposed application of statistical data), but in the first place in its pragmatic tendencies. Unfortunately, on the level of meta-economic conceptions, SOEF theoreticians (Fedorenko, Shatalin, Petrakovà) had in common with the political economy the paradigm of the centrally planned command economy.

(goods, market, capital, profit, interest). However, the latter are taken outside their definitions, outside the concrete context developed by the efforts of many scientific schools — so to speak on an approximate level. In fact, the scientific community finds itself on a pre-theoretical level of forthcoming economic analysis, having receded to the times of the mercantilists and William Petty.

This makes communication with the world economic community difficult: most Soviet research reports submitted to international conferences and seminars attract some interest only as the initial generalization of new empirical material. Theoretical concepts are barely indicated.

The crisis of the academic community is evident in the sharp decline of interest in publishing in academic publications. Even the leading journals feel the 'shortage of papers'. The interest (of authors and readers) has switched to current publications (mainly of a pragmatic or establishing character) in weekly and daily newspapers. Three or four years ago the chance to publish in any academic publication, of which there are very few, was considered an opportunity not to be missed.

Institutional problems

(i) Most scientific researchers are concentrated in major research institutes, which function very ineffectively. They have weak ties with the world scientific community. The salaries of scientific workers are on the whole very low (they probably have a symbolic character), and they are determined according to the post and length of service.

(ii) There are barriers to communication. There are no associations of researchers or they are of a spurious character, being a comfortable place for the unknown administrator (e.g. the All-Union Economic Community). The scientific community has almost no opportunity to influence the organizational structures and financing of their work; they can only join in discussions in the mass media or appeal to the leadership. It is clear that those methods are not satisfactory because they do not provide concrete results or legitimize decisions.

(iii) Nowadays only two groups of scientists are involved in intensive international contacts: administrators and young researchers, oriented to MA or Ph.D degrees. But there is no scientific exchange (if we understand this as contacts between researchers aimed at discussions or the joint working-out of concepts).

(iv) Weak ties with universities and economic colleges. The Soviet Union is characterized by the 'Prussian' system of science organization, which separates research from teaching. Despite the efforts undertaken over the last 10 years to establish contacts between academic science and places of higher education, not more than 10% of the USSR Academy of Science staff give lectures in colleges.

Infrastructure of research

(i) Absence of an adequate statistical and sociological base to perform theoretical analyses. Transition to empirical research is hindered in most research organizations by the lack of databases and the inefficient handling of data-processing and applied tools.

(ii) Basic research is extraordinarily badly equipped.[1]

(iii) A very poor database (the shortage of hard currency cut off the volume of scientific literature purchased abroad while the shortage of paper and the unsatisfactory state of the polygraphic base practically stopped the publishing of scientific literature).

Personnel problems

(i) A low percentage of English-speaking economists in the academic community. According to my accounts not more than 10% of colleagues often use foreign scientific literature in their work and not more than 5% try to write in English.[2]

(ii) Mass departure of qualified specialists to the commercial sector (there are two types of migration: apparent migration and hidden migration, where a scientist is legally on the staff of some scientific institute while the main part of his working time is spent working on commercial structures) and an intention to emigrate. The main reason for this crisis lies in the very low salaries paid, especially in fundamental sciences.

(iii) Inadequate knowledge or complete ignorance of international economic science. In the USSR Academy of Science the share of scientific researchers at least familiar with the basic level of world economic theory within their own speciality make up not more than 15 to 20%.

[1] For example, the USSR Academy of Science, where the author of the present article works and which is staffed with 400 people, has only 13 personal computers, none of which can be used for carrying out standard calculating programs and none of which is provided with E-mail.

[2] Knowledge of English is now one of the main initial requirements to the scientific workers expecting to take part in the world market for academic economists. According to experts this problem is also crucial for Western Europe, 'An English-speaking economist who works to acquire fluency in a continental European language soon discovers that this brings virtually no academic reward except the goodwill of one's colleagues, unless one wishes actually to study the relevant economy. Aside the country-specific applied research, the best economists publish in English, because anything published only in another language will vanish. The professional discipline of economics is international, the international language is now English, and anyone who remains aloof from that discourse will not progress within it, nor aid its progress.' (Portes, R. 'Economics in Europe', *European Economic Review 31* (1987) p. 1335).

The share is tending to decrease due to the mass escape of specialists from scientific domains.

(iv) The system of training and State certification of researchers in higher-education establishments (postgraduates in scientific research institutes and universities) is of a formal character. There is almost no control over the work of postgraduates, and their acceptance into the academic community depends on chance. The requirements in the submitted topics differ because of the level of Council, but the awarded degrees are harmonized at State level and they are formally awarded not by the university of the research institute but by the bureaucratic structure — the Supreme Certification Commission of the USSR.

8.2. Applied economic science

In general, applied economics is better placed than theoretical economics, both with respect to financing and with respect to attracting and keeping specialists. Even before *perestroika*, 'applied' scientists discovered ways of earning extra money by setting up small groups specializing in tasks undertaken for organizations and enterprises. They have accumulated significant experience of microeconomic research under the conditions of constantly changing economic mechanisms.

Soviet applied science has been commercialized, both on the level of new research groups and traditional institutes. Self-financing groups and temporary working groups gave rise to a great number of private firms providing consultancy and information services.

There is also a tendency to deviate from theory and an inability and unwillingness to use and adapt Western applied economics to Soviet conditions. The favoured position of many groups on the market results, as a rule, not from the quality of their research but from their privileged access to fresh economic information. State clerks participate in the operation of many similar groups selling a specific type of know-how — many of these documents being unavailable to the rest.

8.3. Perspectives

The resources available to the Soviet Union and the republics are quite limited. Besides, the existing system of financing and organizing science (large institutes with a permanent staff and a traditional employment system which keeps on poorly qualified employees who lack the motivation to seek promotion) impedes effective renovation.

On the other hand, there is a real danger that the Soviet Union will be left without a fundamental science in three to four years (that is, the existing scientific community will have broken down) but with applied economics relegated to commercial consulting firms.

To ward off this danger it will be necessary to promote the integration of Soviet economic science with the world economic community; to update prevailing concepts and retrain scientific staff; to improve the information basis of research; to set up an infrastructure to support fundamental sciences in the USSR; and to encourage specialists to remain in the USSR rather than emigrate.

Also important will be the creation of a new nucleus of the academic community which is educated to international standards, is able to compete with the world scientific community and is rewarded commensurately with the quality of its research.

Problems of paradigm

Not all parts of the Soviet academic community have accepted the recent transformation of the leading theoretical paradigm. Among the various points of view are:

(a) *Conservative*. The main argument is 'What can Western economics contribute to the analysis of our own economic realities save some well-known conclusions?' This group of academics does not have any familiarity with Western economics and continues trying to work within the framework of the Marxian paradigm. The present accumulation of real 'class contradictions' in the Soviet area creates some new possibilities for prolonging the life of the Soviet political economy approach, but its irrelevance to economic events other than social revolutions will cut its influence in the long term.

(b) *Synthetic*. Those who hold this opinion acknowledge the bankruptcy of Soviet political economy and admit the inevitability (necessity) of a fundamental renewal of the paradigm on the basis of world economic theory, but lay stress on parallel borrowing from two sources:

  (i) positive trends (traditions) of Russian and early Soviet economic thought;

  (ii) sociology, social philosophy, social psychology and history (i.e. crucial extension of subject of economic theory). Supporters of this point of view are distinguished by their broad culture. Maybe they are the best representatives of the Soviet economic theory tradition: more historical than mathematical.

(c) *Colonial.* This strand of opinion is characterized by nihilistic attitudes to domestic economic science and the academic community: 'An abnormal economy had an abnormal science; both must be forgotten as soon as possible'. The way out is seen in borrowing the Western theoretical paradigm as a whole (as a rule without distinguishing different approaches within it). Most of those in this group are economists with a good mathematical background. Many of them are now engaged in elaborating government economic policy as macroeconomic experts. The only weakness in their position is their insufficient grounding in Western economic theory.

The fundamental precondition for the restoration of the Soviet academic community is to learn existing Western science. We must understand and try to apply elaborate approaches before creating something new. But it is not a rule for all Soviet academics to become educated only in the framework of world economics; more fruitful for a number of our colleagues may be retraining and specialization as sociologists, economic historians, political scientists and researchers in public policy, industrial relations and social science and administration (but the last discipline does not exist in the Soviet area yet). In any case we need a period of learning.

Institutional problems

(a) It is necessary that the State, local governments and enterprises provide a certain level of investment in fundamental (partially applied) science, but it is also necessary to end the existing dependence on the State, to transform ineffective administrative organizations into modern scientific research institutes. This will entail organizing scientific research, as in the rest of the world, in universities where research activities interact with teaching and simultaneously select future researchers,[1] and in inter-university research centres employing specialists on a contract basis. Linking of research with teaching is more than making the transition to a naturally self-regenerating form of academic community. Under Soviet conditions it is the main means of changing the existing situation; the effect of small groups of economists educated in the West may be multiplied, if those groups start to regenerate themselves by teaching.

(b) The financing of research institutes should be based on a system of grants. However, since the whole situation in the Soviet scientific community is unfavourable, grants should be awarded according to international criteria with an obligatory participation of Western scientists. It is important to prevent interest groups in the present academic community from monopolizing financial resources. It also requires that a great amount of financing be provided to science, in the first instance to fundamental science.

(c) It would be important and desirable to create international research groups and centres. Joint research activities will quickly raise the level of theoretical EC in the republics of the former USSR.

Selecting, retaining and retraining specialists

Theoretical EC can be quickly renovated if there is a radical renovation of the scientific community. Of the 1 500 to 2 000 people concerned, the critical mass of 'Western-thinking' researchers may make up some 300 to 500 people. Such a number of researchers can be trained in the West during a maximum period of three to four years. But the task is to ensure their return to this country and to science and teaching and not to commercial structures. For this it will be indispensable to ensure a necessary level of basic salary for scientific researchers on behalf of the State.

9. Economic education

9.1. Specialist education

During the period from 1963 to 1990 the number of technical college students studying economic subjects increased 2,2 times and the number of university students 3 times.[2] Their education was, however, invariably of low quality.

(a) Economics teaching

Standard courses for students studying economics invariably included a detailed study of Karl Marx's *Das Kapital* and several works of later Marxist political economy (imperialism and socialism). In fact, there is no historical and economic learning: the history of economic analysis and economic history are taught very formally. Teaching does not employ micro and macro models, and students are not taught to use economic information.[3]

[1] Meanwhile, some of the existing scientific research institutes could be transformed into universities. For example, it would be possible to set up a University of Economics based on the Economics Department of the USSR Academy of Science.

[2] According to the official data of the USSR State Statistical Committee.

[3] With the exception of students trained in the specialities of 'economic cybernetics' (econometrics) and 'national economy planning' in the leading colleges of Moscow, St Petersburg and Novosibirsk.

During the past two years a number of colleges have undertaken drastic efforts to restructure economics courses, replacing the traditional political economy with Western economics. They seem to have failed for the following reasons: (i) most lecturers have not adapted to Western economics; (ii) as a rule, courses in economics have not been adapted, or only to a limited extent (on the basis of Samuelson and Nordhaus); (iii) students have few opportunies to get acquainted with educational material because of the shortage of textbooks.

(b) Applied economics teaching

This has a normative character. The present courses use narrow methods and introduce the subject by merely describing economic mechanisms without even trying to define comparative effectiveness of different forms and institutions of economic organization. This is evident from any textbook: *Industry economics, Finance and credits,* etc.

Students have to learn by heart the existing forms of the economic mechanisms (including the predetermined reporting by enterprises, the main economic and technical indices, etc.). Since the existing textbooks become out of date in two to three years, students are being taught the obsolete norms of yesterday, which, moreover, no longer exist. Little attention is devoted to the dynamic aspects of manufacturing development, to the concrete ratio of its factors and case studies. Furthermore, students are not taught the theory and practice of taking management decisions.

9.2. General economic education[1]

The Soviet educational system teaches only 'political economy', which is no more than a scholastic Marxist version of economic theory, in senior forms of secondary schools, in universities and in colleges. 'Political economy' courses traditionally have been ideologically oriented. The teaching staff has been trained accordingly: most jobs (especially in colleges) are held by people without any specialized education, for example, retired army political officers. University graduates employed by the departments of political economy have no opportunities to conduct scientific research.

It has become clear in the course of the past few years that 'political economy is dead'. Yet, even in a situation where ideological aspirations have changed totally, the existing teaching corps is able only to repeat the prevailing slogans. Students do not need to be assured of the advantages of the market economy and private property: they should get access to knowledge with some instrumental significance. Such requirements cannot be satisfied by the present teaching corps.

In effect, general economic education hardly exists even in universities, let alone colleges and secondary schools. The traditional economic education is mostly staffed by weak and dogmatic thinkers. The system of economic education continues to generate people who are ill-prepared to work in a market economy, whereas it should be giving a lead to reform developments in other spheres of life. It is characteristic for all sectors of economic education as well as for science that there is a tendency for the most qualified staff to transfer to commercial institutes.

To change this situation it will be necessary over the course of the next five years to reform radically the teaching of general economics. It will be important to involve people from the West not only in teaching but also in planning courses, advising in teaching methods and designing examinations. Distance learning, of the sort developed by the Open University in the United Kingdom and already applied to management teaching in the Soviet Union, could make a major contribution. At the same time a new generation of good-quality Soviet teachers should be trained. Provision of Western textbooks, particularly those that apply economic theory to issues that arise in the context of the transition to a market economy, would also be essential.

10. Assistance in transforming economic culture

Many international institutions, and in particular the European Community, are developing programmes of technical assistance. The great advantage of these programmes is the significant financial resources that they contribute in hard currency and the access they provide to Western know-how. Their drawbacks are the somewhat cumbersome procedures for taking and implementing decisions (though this applies to most intergovernmental initiatives) and their relatively short time horizon. In view of these characteristics, technical assistance should be directed to areas requiring a mass effect over a short period of time. Suitable tasks would be to organize the retraining of Soviet specialists in the West or to transform the specialized publications and information base of existing economics institutes in the Soviet Union. Initiatives along these lines would have a significant and lasting impact.

[1] The economic education of students studying other subjects.

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Eastern Europe and the USSR

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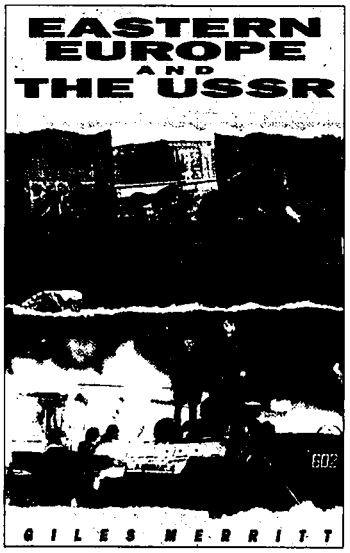

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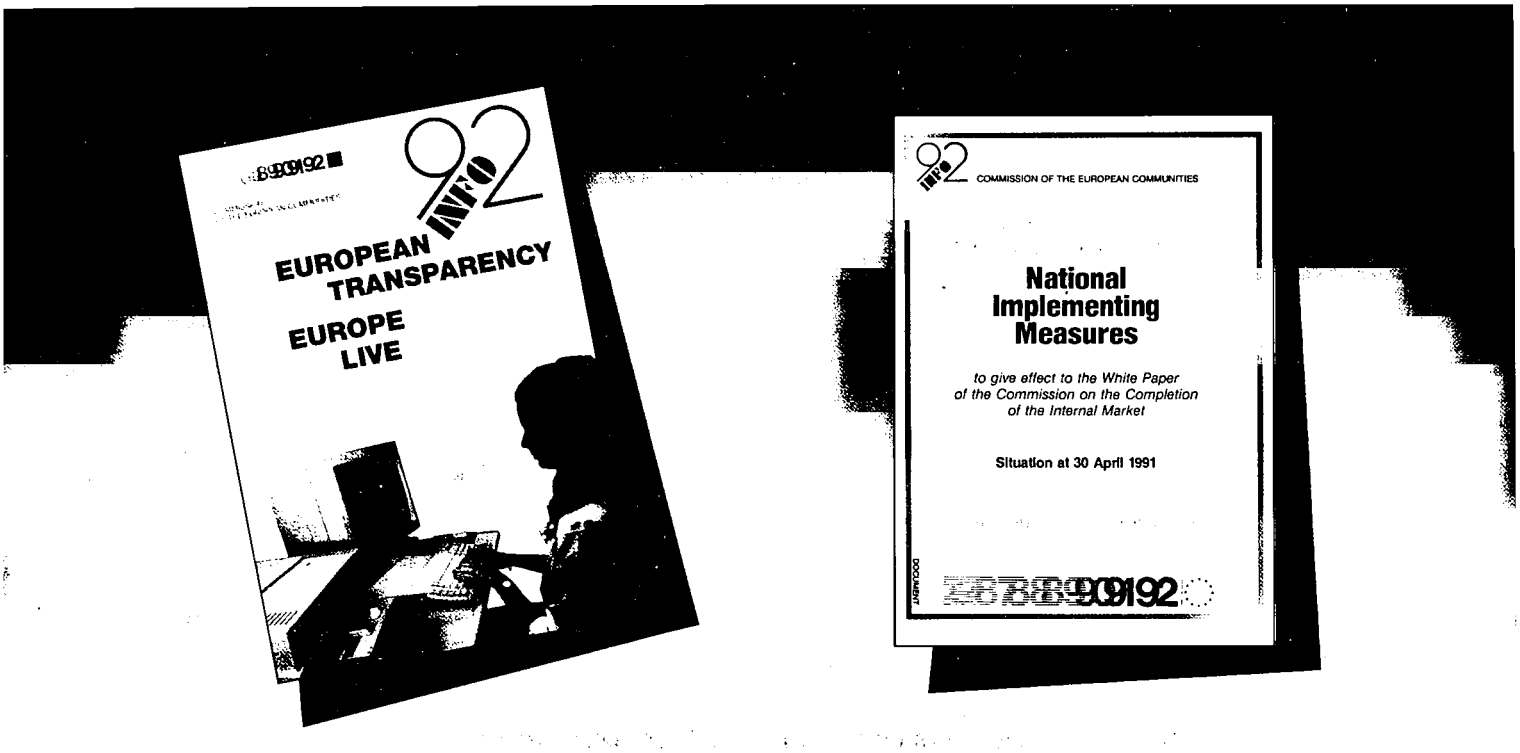

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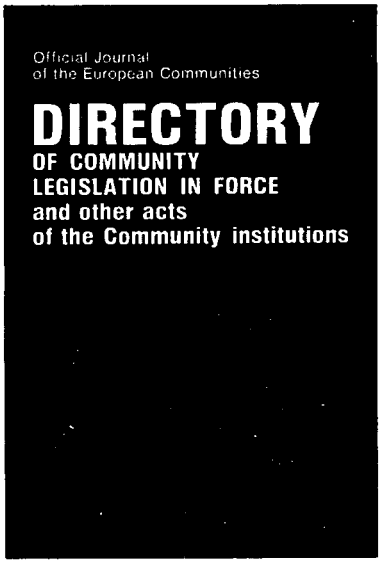

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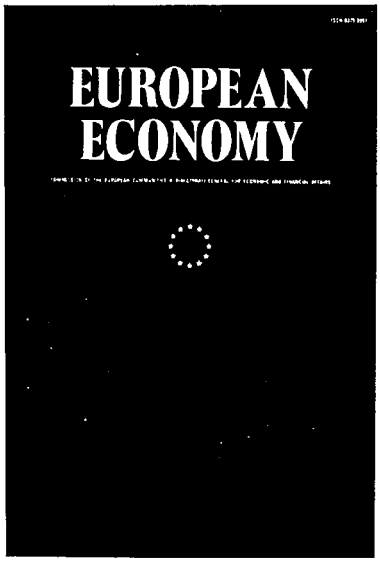

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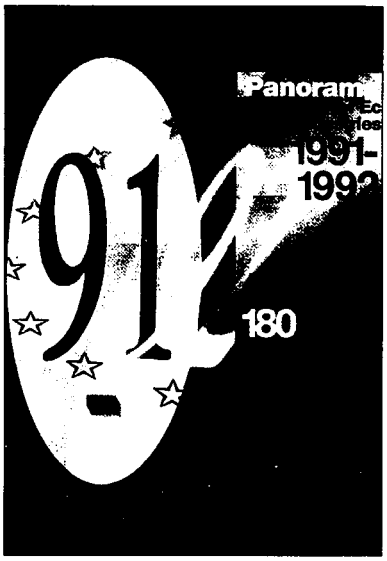

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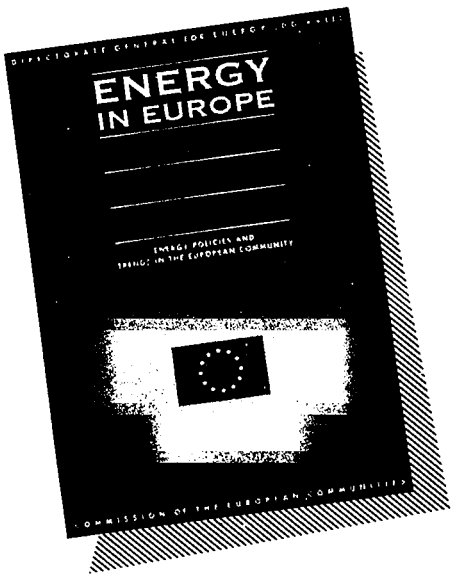

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