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The  
Economy of the  
**USSR**

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International Monetary Fund

The World Bank

Organisation for Economic  
Co-operation and Development

European Bank for  
Reconstruction and Development

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# *The Economy of the USSR*

## *Summary and Recommendations*

**International Monetary Fund  
The World Bank  
Organisation for Economic Co-operation and Development  
European Bank for Reconstruction and Development**

**The World Bank  
Washington, D.C.**

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# *The Economy of the USSR*

## **I. Introduction**

At the Houston Economic Summit in July 1990, the Heads of State and Government of the seven major industrial democracies and the President of the Commission of the European Communities requested that by the end of the year the IMF, the World Bank, the OECD and the designated president of the EBRD, in close consultation with the Commission of the European Communities, undertake a detailed study of the Soviet economy, make recommendations for its reform, and establish the criteria under which Western economic assistance could effectively support such reforms. Our main findings and recommendations are summarized in this study; a series of background papers, pulling together the substantial amount of material that has been collected and which underpins our views, will be issued shortly.

Members of the four organizations met with a wide variety of civilian interlocutors at both the union and republican levels, and were received with much courtesy and helpfulness. The staffs of the Ministry of Foreign Affairs and the State Foreign Economic Commission of the Council of Ministers organized most of the discussions. The Gosbank, Goskomobrazovaniye, Goskomstat, Goskomtrud, Goskomtsen, Gosplan, Ministry of Finance, Ministry of Foreign Economic Relations, the State Commission for Economic Reform of the Council of Ministers, Vneshekonombank and many other organizations and individuals provided, at an already exceptionally busy time, unstinting assistance. The

authorities discussed the various reform proposals that have been tabled in recent months and their implications; they also released much information that had hitherto been unavailable outside the USSR, but have not provided information on gold and foreign exchange reserves.

As requested by the Heads of State and Government, we have maintained close contact with the Commission of the European Communities throughout the course of this study. Information has been exchanged on a regular basis; a number of joint meetings were held in Moscow; and meetings were also held in Brussels, Paris and Washington.

## **II. Summary**

The deceleration of economic growth, evident from at least the early 1970s, has recently turned into a fall in output and employment, accompanied by evident and growing imbalances. The old planning system has broken down but has not been dismantled; meanwhile, the structures vital to the functioning of a market have yet to be put in place. This will require an early and effective clarification of the division of responsibilities between the union and the republics.

Three points are worth stressing. First, there is no example of a successful modern centrally planned economy. Second, attempts to enhance performance under the old system have proved to be counterproductive: central control was reduced but market signals and discipline were not established. And, third, the revolutionary opening up

of public debate has cast doubts on earlier achievements while exposing the extent of the economic deterioration and creating uncertainty.

Ideally, a path of gradual reform could be laid out which would minimize economic disturbance and lead to an early harvesting of the fruits of increased economic efficiency. But we know of no such path, the more particularly given the difficult starting conditions. Indeed we doubt that a return to central control is a viable option, and would urge the authorities to move rapidly to give substance to their commitment to a market economy. This involves addressing simultaneously issues of stabilization and structural reform.

In our view, the restoration of financial stability will require a very sharp reduction in the deficit of the general government—the equivalent of the state budget—from its 1990 level of some 8 percent of GDP; the absorption of excess money holdings; a strong hold on credit creation; and movement towards positive real interest rates. In the short run this should be supported by an incomes policy which would set both a floor for social reasons and a ceiling on the growth of incomes. Given the weaknesses in other control instruments, incomes policy seems indispensable at least for the transition.

Financial stabilization by itself does nothing to establish a market. It must be accompanied by rapid and comprehensive price liberalization, which is clearly the appropriate response to shortages (though a few prices for key industrial inputs might be adjusted progressively to world levels, perhaps over three years after an initial sharp adjustment). At the same time there should be rapid progress towards trade liberalization. Rents and prices of a few essential consumer goods may also need to continue to be subsidized to a limited extent in the near term. This would provide an effective safety net to the population, a significant part of which is estimated to be below the poverty line. A rationalization of the price structure would be facilitated by a broadening of the parallel market for foreign exchange, and within, say, a year, the unification of the exchange market for current account transactions.

But stabilization and price reform together will only set the scene for a meaningful supply response if they also are accompanied by the establishment of private ownership rights and the elimination of the panoply of controls which currently prevent competition and discourage the efficient use of resources. Smaller firms should be privatized quickly and directly; ownership reform in larger

enterprises would generally begin with their commercialization;<sup>1</sup> all of this in the context of the imposition of a hard budget constraint on enterprises remaining under state ownership and accompanied by an opening up to foreign trade.

The authorities face an enormous task, involving reforms of the legal, financial and trade systems and also of vital sectors of the economy, especially agriculture, distribution, energy and manufacturing. These changes cannot be made in a matter of weeks. But the imperative is to make sufficient progress at the beginning so that reform is seen as an irreversible break with the past and the process gains an unstoppable momentum. The necessary economic reform program cannot be implemented without an initial decline in output and employment, but delays in implementation would lead to an even larger and longer decline. It is therefore essential that a safety net be in place at the start of the program.

The rest of the world can help the reform process. Technical assistance, in which the private sector could play a substantial role, could be provided over a wide area and would be of great value in preparing for the introduction of markets. There is also a case for humanitarian assistance, provided that the distributional problems can be solved, as well as for well defined programs in the environment and energy areas. General balance of payments assistance or project assistance may be useful when a comprehensive program of systemic reforms has begun to be implemented, leading to a closer integration of the economy of the USSR into the world economy.

### III. The Current State of the Economy of the USSR<sup>2</sup>

#### 1. *The traditional system*

The system of central planning established in the USSR in the late 1920s and early 1930s remained fundamentally unchanged for the next 50 years. It had been developed to facilitate accelerated industrialization based mainly on the rapid mobilization of capital, labor and material inputs, with lesser emphasis on their efficient use. This approach implied the need to raise substantially the share of investment, to increase labor force participation rates and to redirect factors of production from agriculture to industry. Meanwhile the development of consumer goods production was neglected. Virtually the entire capital stock was nationalized and agriculture collectivized; pri-



vate ownership of the means of production was outlawed; and activities not in accordance with the plan could be considered economic crimes carrying stiff penalties.

Through the Five-Year Plans, and in particular the annual plans, the State Planning Committee (Gosplan), along with other agencies and branch ministries, directed the physical allocation of resources, structural change, and the pace of economic growth. Prices played little role in the allocation of resources. Producer prices tended to be fixed by the authorities for long periods, while retail prices generally were kept stable, with low prices for staples being a matter of social policy. As a result, there were sporadic, and in some cases chronic, shortages of specific goods.

Insulation of the domestic price structure from world prices was achieved through a system of variable taxes and subsidies on foreign trade—so-called price equalization—which relegated the official exchange rate to an accounting role. Foreign trade was carried out by non-competing state-owned foreign trade organizations. The aggregate foreign trade plan was an integral part of the overall national economic plan, with export levels determined on the basis of the imports required to meet output targets in priority sectors. The insulation of the economy meant not only that gains from trade were forgone, but also that the transfer of technology from abroad was impeded.

Financial policies were passive, in the sense of being geared to provide the state-owned enterprises with the financial means to fulfill physical plan targets. Monetary and fiscal policies had no active, independent role to play. The monolithic banking system—consisting of the state bank (Gosbank) and several state-owned specialized banks—granted credit to enterprises to support the plan, accepted deposits from enterprises and households, and issued currency. The deposits of enterprises were not freely usable, as control was exercised through branch ministries and different funds were earmarked for specific purposes. Interest rates were kept low, and played virtually no role in allocating financial resources. Similarly, fiscal policy was subordinate to the plan and state enterprises effectively faced soft budget constraints. Nevertheless, until the 1980s, conservative fiscal management and administrative controls over enterprise spending prevented serious macroeconomic imbalances.

In the 1930s and again in the early post-World War II period, this system and the so-called extensive growth strategy produced rapid growth. But

by the late 1960s and 1970s, the limits of continued rapid mobilization of capital and labor had been reached. At the same time, rigidities in the system hindered the increases in productivity needed to sustain rising output. As a result, the rate of economic growth began a secular decline. This slowdown is reflected even in official statistics—widely acknowledged to have exaggerated growth—which show the annual average growth rate of net material product (NMP) falling from almost 8 percent in the second half of the 1960s to a little over 3 percent in the first half of the 1980s. However, as the world's second largest exporter of oil, the USSR was a major beneficiary of the oil price shocks of 1973-74 and 1979-80. The resulting enormous terms of trade gains cushioned and to some degree masked the growing limitations of the extensive growth strategy and the shortcomings of the existing economic system.

Periodic piecemeal reforms—intended largely to improve the functioning of the existing system rather than to change it fundamentally—were unsuccessful in halting the underlying decline. In the early 1980s, the leadership began to adopt a more critical view of the existing system, and to consider the implications of major economic reform.

## 2. *Economic developments under perestroika*

A. THE 1985-87 "CAMPAIGNS." Beginning in 1985 several major initiatives were introduced to revive economic growth and to deal with the main weaknesses of the economy. While these came to be encompassed under the broad heading of *perestroika*, or "restructuring," the initiatives undertaken in the 1985-87 period were more in the nature of traditional "campaigns" than reforms of the economic system. These campaign themes focused on the retooling and modernization of industry (largely through a step-up in the rate of investment); heightened emphasis on quality control; the policy of *glasnost* and other measures designed to unleash human initiative and make the bureaucracy more accountable; and the anti-alcohol campaign.

While some met with initial success, they did not in the aggregate address the underlying systemic problems. Indeed, over this three-year period, economic conditions actually deteriorated. Officially measured growth of net material product (NMP) averaged some 2 percent in 1986-87, below the average rate reported for the first half of the 1980s (Table 1). Allowing for hidden inflation

**Table 1 USSR: Output and Expenditure**  
(annual average growth in percent; comparable prices <sup>1</sup>)

	1976-80	1981-85	1986-89	1986	1987	1988	1989	1990 (official estimate)
NMP	4.3	3.2	2.7	2.3	1.6	4.4	2.5	-4.0
of which:								
Industry <sup>2</sup>	5.1	3.9	4.2	5.5	4.6	6.3	0.4	—
Agriculture	-0.2	1.0	2.4	7.1	-1.4	2.5	1.7	—
Construction	3.1	3.2	6.6	12.1	5.5	7.6	1.6	—
Transport and communications	3.8	2.9	0.8	4.2	0.3	5.8	-6.5	—
Private consumption	4.2	2.9	3.4	1.9	2.7	3.9	5.3	3.0
Net fixed investment	2.6	-1.7	-1.1	4.9	5.7	-7.4	-6.7	-20.0

1. This is similar, though not identical, to the Western concept of constant prices. As noted in the report, it is widely believed that official Soviet statistics underrecord inflation, and hence overestimate real growth in both output and expenditures.

2. Excluding turnover taxes.

Source: Data provided by the Soviet authorities.

(price increases not included in the official price index because they are supposedly offset by quality improvements), output may well have stagnated. Economic difficulties were aggravated by the sharp decline in world oil prices in 1986, which adversely affected both export earnings and the budget. The authorities reacted to these adverse events by boosting export volumes to the convertible currency area and by slashing imports.

Fiscal performance, already weakened by the declining value of foreign trade, further deteriorated as a result of a stagnation in receipts from the turnover tax and increases in subsidies. Hence, the fiscal deficit rose from around 2.5 percent of GDP in 1985 to more than 8.5 percent of GDP by 1987 (Chart 1). Correspondingly, monetary growth accelerated; but since much of this was held in enterprise deposits, which were not freely usable, the immediate impact on demand was largely suppressed (Appendix Table I and Chart 2).

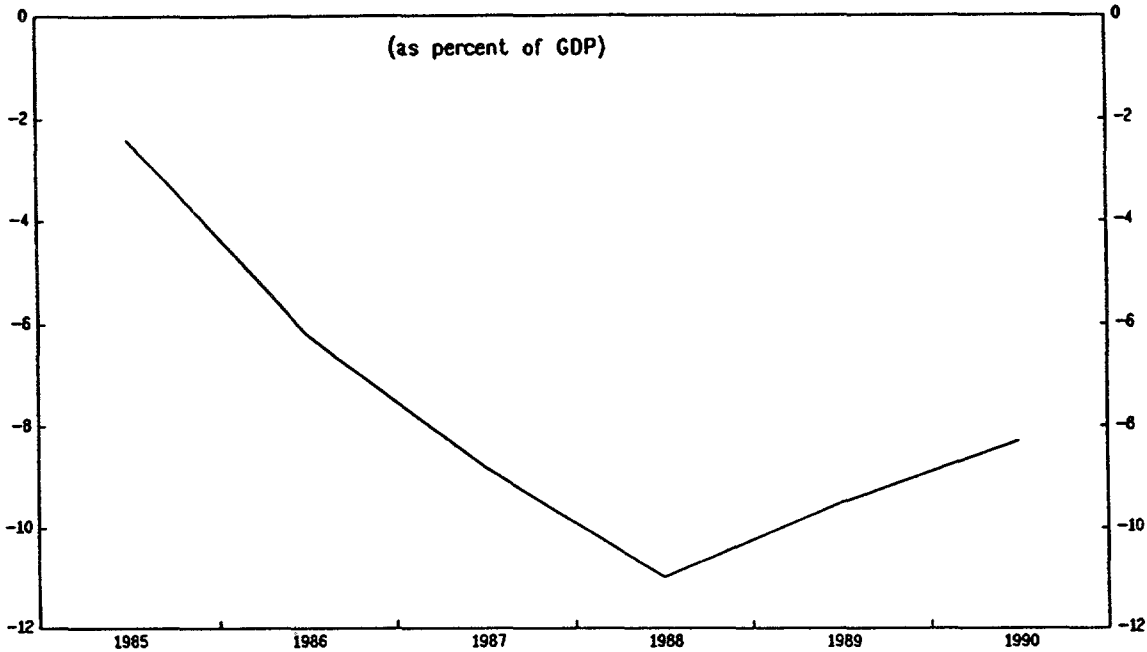
**B. THE 1987-88 REFORMS AND THEIR EFFECTS.** Campaigns to modernize the economy and instill a new sense of discipline gave way in 1987-88 to a more pronounced emphasis on reform of the system itself. The centerpiece of this new effort was the Law on State Enterprises which replaced traditional mandatory output targets for enterprises with so-called state orders (namely centrally directed orders to firms to deliver specified quantities of goods). The law also permitted firms some latitude to negotiate with each other, and granted them greater autonomy in the allocation of their internally generated funds, in particular, in the payment of wages and bonuses.

Another major reform step undertaken in this period involved the decentralization of foreign trade, with the share carried out by entities other than the traditional state-trading organizations reportedly rising substantially by 1989. Other reforms in the external sector included the introduction of a foreign exchange retention scheme, a system of differentiated exchange coefficients, and foreign currency auctions with limited transactions. As these measures were introduced in a piecemeal fashion, they had the opposite of their intended effect. Imports from the convertible currency area grew strongly following the decentralization of foreign trade and financing and manufactured exports scarcely changed (Appendix Table II).

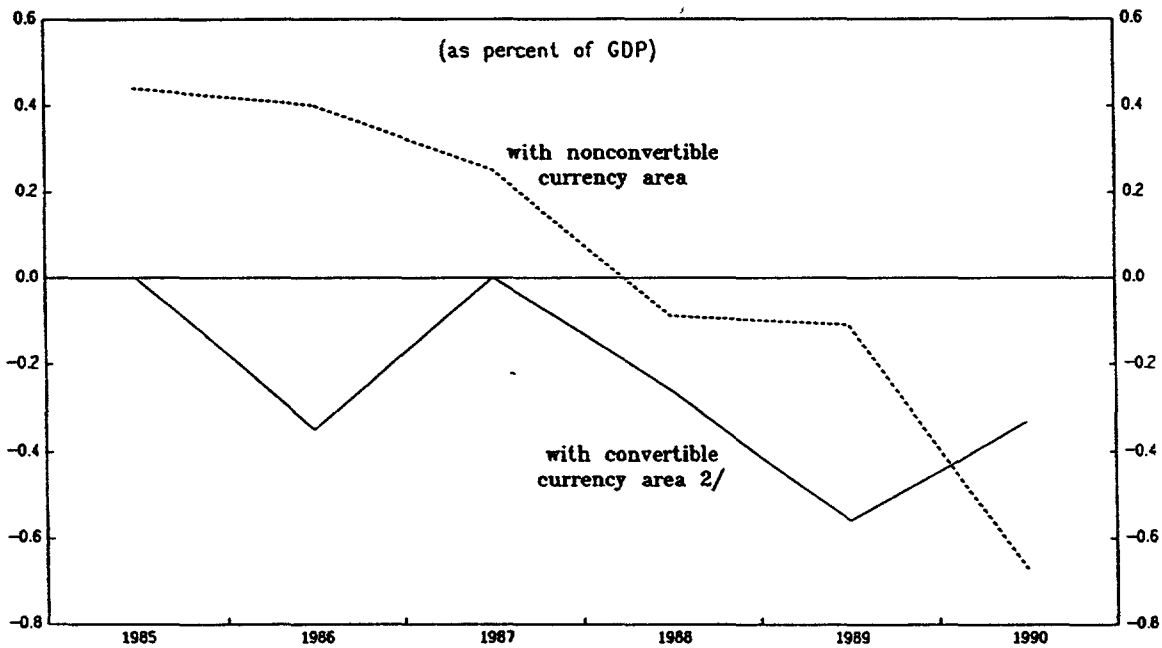
Increased enterprise autonomy was severely circumscribed by the system of state orders, which covered most of industrial output in 1988 and 1989. Some dismantling of the traditional planning system began, but the inflexible and distorted official price system was left essentially intact, as was the role of the state distribution agency (Gossnab) in allocating most material inputs. From 1988, enterprises were allowed to negotiate "contract" prices for so-called new products, but these were still subject to official surveillance and, in any event, covered only a fraction of enterprise production. Encouragement of private economic activity was limited to small numbers of joint ventures with foreign participation and a grudging acceptance, beginning in 1988, of so-called cooperatives, which were, however, subject to various restrictions and sporadic campaigns of harassment. Although a two-tier

Chart 1  
USSR  
FISCAL AND EXTERNAL IMBALANCES

*a. State Budget Balance 1/*



*b. Trade Balance*



Source: Ministry of Finance, Goskomstat and staff calculations.

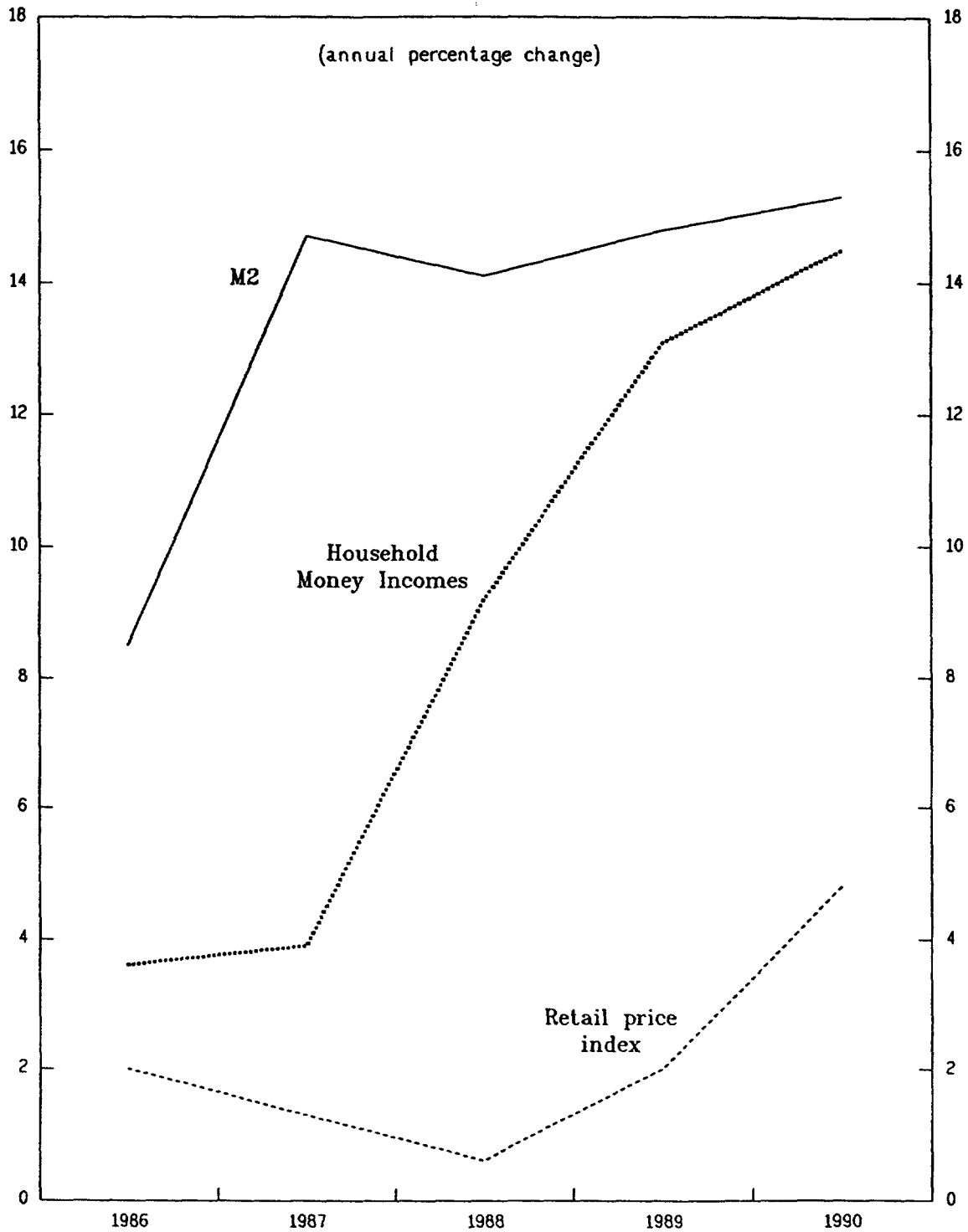
1/ Including extrabudgetary agricultural price support.

2/ Excluding gold.

Chart 2

USSR

MONEY, INCOMES AND PRICES



Source: Goskomstat.

banking system was created in 1988, the central bank (Gosbank) was given neither the independence nor the instruments to combat inflation. Administrative controls over financial flows were relaxed but not replaced by market mechanisms for credit allocation or new instruments of macroeconomic management. Interest rates on both deposits and credits remained low and fixed; although bank credit to enterprises declined during this period, enterprise liquidity rose, boosted by higher retained profits. Lack of discipline in wage settlements grew, and successive attempts to rein in the growth of wages through the taxation of "excess" wage increases were unsuccessful, as these schemes were undercut by exemptions and lax enforcement. To the extent that firms had wider scope for making production and investment decisions, they did so in an environment of distorted and rigid prices. Arguably, a serious mistake was made by loosening trade, wage and financial controls on enterprises whilst failing to harden their budget constraints or to liberalize prices.

There was a second sharp terms of trade loss in 1988. As in 1986, it resulted in a further deterioration of the fiscal balance, which was aggravated by a decline in profit remittances from enterprises, as well as by a rapid increase of consumer subsidies both inside and outside the budget. The deficit widened, reaching 11 percent of GDP in 1988. The fiscal deficits were almost exclusively financed by credit extended by Gosbank. As a result, and despite the contraction of credit to the enterprise sector, broad money growth averaged 14-15 percent annually in 1987-90. Enterprises, in their efforts to dispose of surplus liquidity, accumulated excess inventories and launched new investment projects that merely added to the large stock of unfinished construction.

The mounting domestic imbalances, combined with the deterioration in the terms of trade and lack of control over import growth, led from 1988 onward to a sharp deterioration in the external accounts. The balance of trade with CMEA countries worsened, as the effect of past declines in oil prices continued to bring down the five-year moving average oil price used in CMEA trade. The trade surplus in convertible currencies also dropped sharply in 1988, and disappeared altogether in 1989. Consequently, the gross external debt in convertible currencies of the USSR built up rapidly to US\$54 billion by the end of 1989, with most of the increase concentrated in short-term debt (Appendix Table II).<sup>3</sup> However, the external

debt and debt service ratios continued to be below those of most other Eastern European countries (Chart 3).

The uneven degree of liberalization involved in the reforms and their bias towards financial laxity was accompanied, as the decade ended, by a host of special factors that aggravated shortages. Oil and coal production, which had been maintained by high rates of generally low-yielding investment in the 1980s, began to fall in 1989, and the decline continued into 1990. Bottlenecks became a serious problem in the railroad network. Agriculture continued to be a drag on growth, and suffered from serious storage and distributional problems. An important side effect of *glasnost* was an increasing display of ethnic consciousness. By the end of the decade, instances of open conflict between nationalities were leading to disruptions in output and transport. Under *glasnost*, public concern with severe environmental problems increased. Well-publicized cases such as Chernobyl led to the formation of environmental pressure groups sometimes associated with nationalist movements. These groups forced plants to close and blocked new developments, thereby adding to the economic dislocation.

Throughout this period, the measured growth rate of the capital stock continued to decline; net fixed investment (excluding unfinished construction) fell from 14 percent of NMP in 1988 to 11 percent of NMP in 1990. The growth of the labor force also continued to decelerate, reflecting a persistent slowing in the rate of growth of the population of working age in most republics, and a particularly large fall in labor participation rates in the republics of Central Asia where population growth remained strong and from which migration to other areas of the USSR was limited.

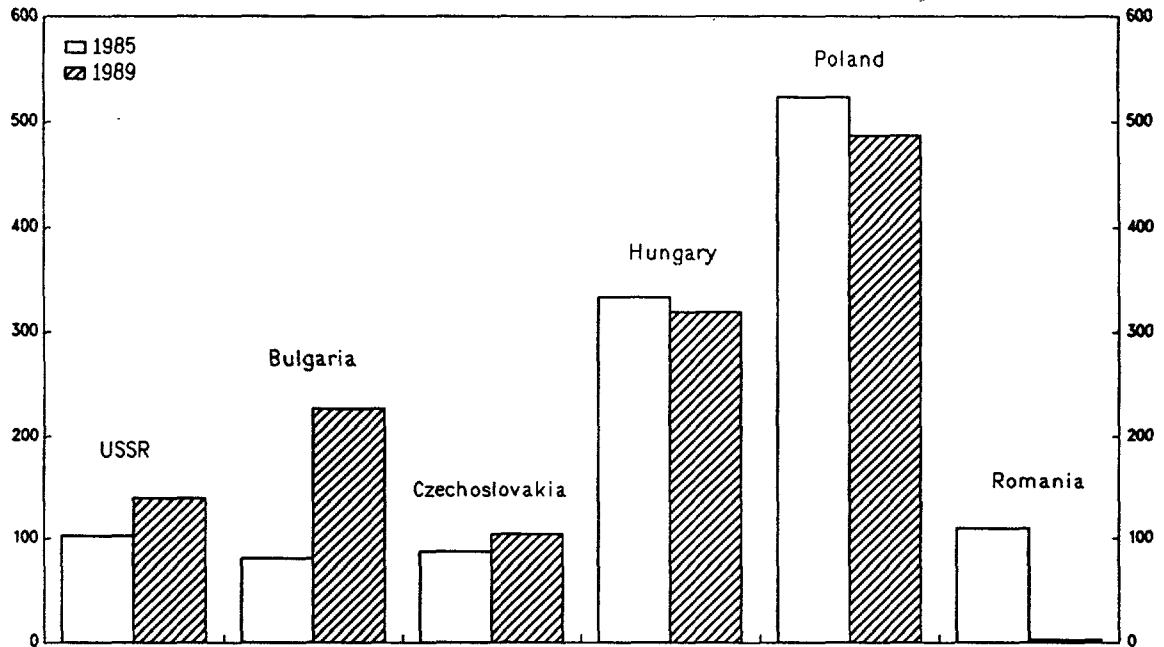
The military burden on the economy remained significant; the actual level of military spending has long been a matter of debate, and it is widely believed that its share in national income rose in the 1980s. Since 1987, however, the authorities have announced that they aim to freeze and then reduce defense outlays. The budget for 1990 shows a level of defense spending equivalent to around 7 percent of GDP, although this figure is calculated on a narrower basis than the U.N. definition of defense expenditures. If expenditures for internal security and for all budgeted research and development (in particular the space program) are added to defense expenditures, the figure would rise to over 9 percent. Some have argued that, allowing for the fact that prices of

Chart 3

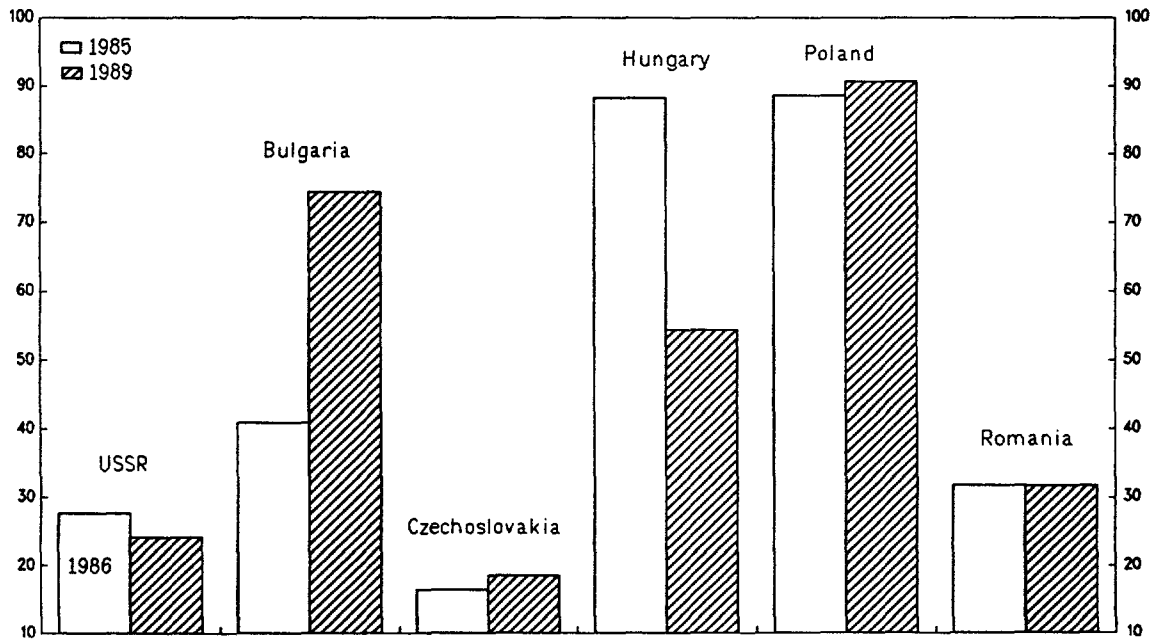
USSR

EXTERNAL DEBT AND DEBT SERVICE

*a. External Debt* (as percent of exports of goods and services)



*b. External Debt Service*



Source: Ministry of Finance, Vneshekonombank and national sources.

many defense goods may be substantially underpriced, the total defense burden might be twice as high. Although no official figures are available for arms exports, Western estimates suggest that they might have been US\$16-18 billion in recent years or about 15 percent of exports. The concentration of the highest quality labor and material inputs in the defense sector could well have seriously retarded the growth of the productivity in civilian production. Since 1987, however, the government has pursued an active policy of converting defense-related manufacturing to the production of civilian goods. Between 1988 and 1990 the production of civilian goods by the defense industry rose by 9 percent per annum, accounting for roughly 50 percent of the output of the defense industry at the end of that period. These results were, however, considerably below announced targets; and the quality of the output was reportedly low. No detailed assessment of these matters was made during the course of this study.

C. DEVELOPMENTS IN 1990. By 1990, the economy faced increasing problems. The policies embodied in *perestroika* had failed to halt the secular deterioration of performance, and official estimates suggest that NMP may have fallen by 4 percent in 1990. Most of the reduction in output was in industry, construction and transportation, while value added in agriculture as a whole—despite a near record grain harvest—was estimated to be roughly unchanged from a year earlier. The services sector continued to grow, however, leading the authorities to expect a somewhat smaller decline in GDP, of about 2 percent. Enterprise profits were expected to fall in 1990 after annual increases averaging well over 10 percent during 1986-88. Wages and salaries have increased by about 12 percent, while total household incomes rose by even more (in 1990, per capita GDP using the new commercial exchange rate was US\$1,780). For the first time in post-war history, overall employment in 1990 appears to have declined and “unemployment,” while not yet an officially accepted concept in the USSR, was informally estimated by officials at about 1.5 percent of the labor force.

In 1990, the authorities made efforts to tighten financial policies. The state budget had been the driving force behind money creation, and emphasis was therefore placed on fiscal measures, in particular on reducing state-financed investment and on developing alternatives to the financing of the

deficit through money creation. For 1990 as a whole, the deficit was officially projected to be broadly in line with the budget plan, implying a decline in the adjusted deficit to below 8 1/2 percent of GDP (Table 2). The plan to finance a larger share of the deficit by issuing government obligations to the nonbank public, however, was largely unsuccessful. Liquidity creation remained strong, as progress in cutting the budget deficit was offset to some extent by expanding credit to enterprises.

Both open and estimated repressed inflation<sup>4</sup> continued to accelerate in 1990. Retail prices are officially estimated to have risen 5 percent for the year as a whole and the underlying rate of inflation (that is, including an estimate of the repressed component) is officially projected at about 12 percent. As a result of rapid money growth, combined with largely unchanged administered prices in recent years, sizable amounts of excess liquidity have built up. Excess liquidity is now estimated at approximately rub 250 billion (or about one third of the stock of financial assets) for households and enterprises combined, with about two thirds of this total accounted for by household holdings of cash and deposits. This growing monetary overhang is the financial counterpart of the worsening shortages.

According to official estimates, which could be overstated because of hidden inflation, real consumption is thought to have increased in 1990 by about 3 percent, only slightly less than the average growth rate during 1986-89. Consumer goods imports continue to grow. However, supplies of particular products have contracted severely and shortages of basic consumer goods are a rapidly growing concern.

The continued decline in petroleum output and the fact that oil and other energy prices in CMEA trade had been fixed for the year as a whole meant that the USSR was unable to take full advantage of the sharp rise in world oil prices in the second half of 1990. Oil export volumes fell in 1990 by nearly 20 percent, with CMEA countries taking the brunt of the decline in deliveries. Trade with the nonconvertible area moved into a larger deficit on a transactions basis in 1990, largely due to the decline in oil exports. The current account deficit (excluding gold) in convertible currencies is estimated at almost US\$11 billion (Table 3). While receipts from gold exports amounted to nearly US\$4 billion, the capital account recorded a deficit of US\$7 billion because of a sharp decline in the availability of short-term financial credits and

**Table 2 USSR: Fiscal Developments**  
(percent of GDP)

	1985	1986	1987	1988	1989 (estimates)	1990 (plan)
State budget revenue	47.3	45.8	43.6	41.7	41.0	42.8
of which:						
From state enterprises	14.9	15.8	15.0	13.2	11.9	12.6
Turnover taxes	12.6	11.5	11.4	11.5	11.8	12.7
State budget expenditure	49.7	52.0	52.0	51.0	49.5	50.6
of which:						
Investment in the economy	8.2	8.3	8.7	8.7	7.2	4.4
Subsidies	8.9	9.4	9.3	10.1	10.6	11.8
Overall balance	-2.4	-6.2	-8.4	-9.2	-8.5	-7.9
Adjusted balance <sup>1</sup>	—	—	-8.8	-11.0	-9.5	-8.3

1. Includes cost of extrabudgetary agricultural price support, but excludes balance of centralized fund operations.  
Source: Data provided by the Soviet authorities and staff calculations.

because access to international capital markets was only possible when guaranteed by creditor country governments. The overall balance of payments deficit of US\$14 billion in convertible currencies was financed by a sharp drop in foreign exchange reserves and accumulation of arrears to foreign suppliers (more than US\$5 billion). Thus, despite the balance of payments deficit, gross external debt in convertible currencies is projected to decline slightly to some US\$52 billion at the end of 1990 while external reserves have fallen to some US\$5 billion, equivalent to less than two months

of convertible currency imports (Appendix Table II).

The traditional centrally planned system has largely collapsed, but has not been replaced by a functioning market system. The progressive breakdown is perhaps most visible at the retail level, with few goods to be found in state shops, barter becoming common and black markets and the dollarization of the economy spreading rapidly. Meanwhile, policy making in the republics has been characterized by growing autonomy. In a climate of deepening shortages, republics have

**Table 3 USSR: Balance of Payments, 1986-90**

	1986	1987	1988	1989	1990 (staff projections)
<i>(billions of U.S. dollars)</i>					
Convertible currencies					
Trade balance <sup>1</sup>	4.1	8.3	4.8	—	-5.7
Current account <sup>1</sup>	2.3	6.7	1.6	-3.8	-10.7
Gold sales	4.0	3.5	3.8	3.7	3.6
Capital account	-5.7	-12.5	-6.1	-3.6	-7.2
Overall balance	0.6	-2.3	-0.7	-3.7	-14.3
<i>(billions of rubles)</i>					
Nonconvertible currencies					
Trade balance	3.2	2.1	-0.8	-1.0	-6.7
Current account	2.9	1.6	-1.5	-4.1	-7.3
Capital account	-1.9	-3.3	0.5	-2.5	7.3
Overall balance	1.0	-1.7	-1.0	-6.6	—

1. Excluding gold.  
Source: Data provided by the Soviet authorities and staff estimates.



become increasingly unwilling to trade with each other except on a barter basis. By late autumn the formal rationing of a range of consumer staples, already quite widespread in some regions, was being introduced in both Moscow and Leningrad. There was mounting concern over the possibility of greatly increased internal migration by various ethnic groups fleeing regions regarded as politically unstable, but external migration was also thought to be a serious threat as people try to escape material deprivation.

In the course of 1990, there has been a growing recognition of the need for a bolder, more comprehensive and market-oriented reform program to halt the unraveling of the economy. This sense of urgency is put forcefully in the presidential guidelines "for the stabilization of the economy and transition to a market economy," of October 19, 1990:

"The position of the economy continues to deteriorate. The volume of production is declining. Economic links are being broken. Separatism is on the increase. The consumer market is in dire straits. The budget deficit and the solvency of the government are now at critical levels. Antisocial behavior and crime are increasing. People are finding life more and more difficult and are losing their interest in work and their belief in the future. The economy is in very great danger. The old administrative system of management has been destroyed but the impetus to work under a market system is lacking. Energetic measures must be taken, with the consent of the public, to stabilize the situation and to accelerate progress towards a market economy."

### 3. *Union and republic relationships*

The union consists of 15 union republics which—according to the 1977 Constitution—have the right to secede and to enter into relations with foreign states. The second tier of government consists of 20 autonomous republics (16 of which are in the Russian republic); autonomous regions (*oblasts*), and districts (*okrugs*), all of which are directly responsible to their respective union republics. The third tier includes the towns and villages (*rayons*). Ethnic differences are immense. The USSR has more than 120 ethnic groups and one fifth of the total population of 288 million live outside their ethnic republics.

The size of the republics is very uneven. The Russian republic alone has 51 percent of the population; Ukraine and Belorussia together comprise another 22 percent (Appendix Table III). The three republics account for an even larger share of NMP (82 percent). By contrast, the three Baltic republics account for only 3 percent of the population and NMP. Despite the vast size of the country, the republics are highly dependent on trade with each other and, with the exception of the Russian republic, the share of NMP of each republic delivered to the other republics ranges from 31 to 67 percent of NMP; for the Russian republic, the share is only 18 percent (1988).

The republics are less dependent on foreign trade. Exports as a share of republican NMP are highest in the Russian republic (9 percent, when foreign trade is valued at domestic prices) and lowest in Armenia and Kirgizia (1 percent of NMP). The export of raw materials is heavily concentrated in a few republics. The Russian republic accounts for 73 percent of the export of oil and gas and Ukraine and Belorussia for another 10 percent. Foreign trade by republics valued at domestic prices gives a distorted picture because oil, gas and other raw materials are underpriced compared with other goods, measured on the basis of world market prices. If traded goods were valued at world market prices, the Russian Republic would have a large trade surplus with the rest of the world while virtually all the other republics would reportedly record a trade deficit.

Ethnic and political differences in the USSR were largely suppressed during most of the post-revolution period. However, during the last few years, the tensions have become more open and the calls for political and economic change stronger. By December 1990, all 15 union republics had declared either independence or sovereignty. The trend towards autonomy and increased barter trade between the republics has recently been reflected in the establishment of border controls on trade, particularly for necessities such as food products.

## IV. The Present Course of Reform

### 1. *The presidential guidelines*

During the first three quarters of 1990, no fewer than four alternative programs for transition to a market economy were presented to the Supreme Soviet. They differed in terms of the modalities,

timing and sequencing of the proposed reforms. In mid-October, in an attempt to secure broad consensus on a reform program, the President announced a framework for a reform program, "Guidelines for the stabilization of the economy and transition to a market economy", which were subsequently approved by the Supreme Soviet.

The presidential guidelines state that "there is no alternative to shifting to the market." While the ultimate goal is clear, the guidelines do not provide a detailed plan or timetable for the transition, partly because considerable freedom is envisaged for the republics to choose the specific modalities and timing of various reform measures. A broad sequence of four stages is outlined, however, with the first stage to be devoted mainly to stabilizing the economy and beginning commercialization and privatization of state enterprises. The second stage would emphasize the gradual liberalization of prices, introduction of a social safety net and the maintenance of tight financial policies. Further structural reforms, including those of the labor compensation system and the housing market, would be covered in the third stage, while financing constraints would be eased as markets stabilize. In the final stage, the preconditions would have been set for achieving the internal convertibility of the ruble so as to enable Soviet and foreign companies operating in the USSR to sell and buy freely foreign currencies at market rates. It is hoped that these four stages could be completed in 1 1/2 - 2 years. This transition presupposes an effective all-union market under which a stable sharing of power and responsibility will have been agreed between the union and the individual republics.

While bold in terms of their medium-term objectives, the guidelines—and the various specific measures that have been taken or announced thus far—suggest a relatively gradualist approach to the transition. A large share of output is to continue to be produced under state orders at least during the first stage, and enterprises have been instructed to maintain "stable supply links" through 1991. Both policies could be operated to retard the development of enterprise autonomy, managerial initiative, and the restructuring of the economy. In any event, there is serious doubt whether these policies will be realized in practice, given the widespread disruptions that have already occurred to traditional economic links and the continued spreading of shortages.

Price reform is also to proceed cautiously. Distortions in relative prices at the producer and

wholesale level will be reduced administratively at the beginning of 1991. Although some 40 percent of producer prices are to become subject to negotiation between enterprises, these prices will remain under the surveillance of the authorities to prevent profits from exceeding centrally-determined norms.

The picture is less clear for retail prices. Some 5 to 15 percent of these prices (mainly for "luxury goods") were to be liberalized before the end of 1990, with the pace of further liberalization in 1991 to be determined in the light of progress in stabilizing the financial situation and supply conditions. It is envisaged that in 1991 responsibility for consumer subsidies—and consequently the prices of subsidized commodities—will be partially shifted to the republics. By the end of 1992 price controls on consumer goods would be eliminated except for a narrow range of essential goods.

Although the guidelines call for legislation to establish private property rights and promote privatization of state property, they are vague as to methods. No specific time horizon is provided but the presidential document suggests that the privatization process—except possibly for the retail and services sectors and small industrial businesses—is likely to be stretched out over a long period. The virtues of competition are stressed, but the guidelines provide few detailed measures; and no mention is made of eliminating restrictions on the products which individual enterprises are permitted to produce, or the role import liberalization should play in promoting competition. Financial accountability of enterprises is emphasized, but the guidelines are silent on such issues as the criteria for the selection and evaluation of managers of state enterprises or the prospective role of workers' organizations in this process.

The presidential guidelines recognize that industrial restructuring will likely lead to job losses in many enterprises. Estimates by government agencies of the foreseeable increase in unemployment in 1991 range between 1 and 6 million or 1-4 percent of the labor force. The program calls for steps—e.g., the creation of a state employment service—to facilitate retraining and the early introduction of unemployment compensation, as well as a series of other measures, most of which are currently under consideration by the Supreme Soviet. The prospective role and instruments of incomes policy are set out only in general terms, but the authorities seem to envisage a revised

system for the taxation of wage increases deemed "excessive", as well as a policy of limited indexation.

The guidelines call for a major redirection of resources and investment towards industries producing consumer goods. Certain ongoing investment projects in non-priority sectors will, if possible, be converted to other uses or halted altogether, and unfinished construction will be sold off to the extent feasible. The restructuring effort is to be fostered by tightening budget constraints on enterprises, increases in interest rates on investment credits, and the closing of several hundred unviable firms. The program also envisages the creation of enterprise restructuring funds ("stabilization funds"); support would be conditional on the reorganization of enterprises, changes in management, and conversion to other activities. But again, little is said about the precise criteria for the distribution or duration of the proposed support. Although no details are given on military conversion plans, the authorities have indicated that the production of civilian goods by defense industries is targeted to increase by 30 percent over the period 1989-91.

The state budget deficit is to be contained to 2 1/2 to 3 percent of GDP, an amount thought to be financeable largely through borrowing from the nonbank public. A major policy effort would be needed to achieve this target, since the draft budget for 1991 suggests a substantially larger budget deficit (see section 2).

Measures are to be introduced to address both the "stock problem" of excess liquidity of households and enterprises—the monetary overhang—and the "flow problem" of overly rapid growth in the money supply. To absorb the overhang, the guidelines lay emphasis on sales of physical and financial assets. A rise in interest rates is required to increase the attractiveness of bank deposits; a first increase in these rates (up to 9 percent) was announced by Gosbank at the end of October. There are also suggestions that household deposits may be revalued to compensate for any loss of purchasing power entailed by large increases in retail prices. Given the volume of these deposits, such a move would carry heavy costs for either the budget or the banking system—in effect for the Government—and would make the elimination of the monetary overhang more difficult.

The guidelines refer also—without quantification—to measures to contain monetary growth in 1991 and beyond. These measures include the

planned elimination—except on a temporary basis under exceptional circumstances—of the financing of budget deficits by Gosbank, and a more active use of indirect means of monetary control, including reserve requirements, refinancing policies and the establishment of at least non-negative levels of real interest rates. Legislation has been recently approved by the Supreme Soviet to establish a full two-tier banking system, with a union reserve system.

While the guidelines are nearly silent on exchange rate policy (with the exception of brief references to the objective of eventually establishing ruble convertibility), important reforms have begun to be implemented. A new commercial exchange rate, three times the official rate, became effective on November 1, 1990. The commercial rate will be applied to the bulk of current account transactions, while a special rate (equivalent to ten times the official rate) will remain in effect for tourists and various non-commercial transactions. The commercial rate will be pegged to the same basket of currencies as the official rate.<sup>5</sup>

The authorities also intend to create a free exchange market (possibly by expanding the scope of the existing auction market) open to Soviet enterprises regardless of the extent of foreign ownership. The existing retention quotas for exporters will be raised and a joint union-republic foreign exchange fund will be established; it will be supplied with surrendered foreign earnings. It is unclear at this time whether the republics will agree to the sharing of foreign exchange in the proportions envisaged in the decree. There are also no clear indications regarding the extent to which the authorities envisage intervening in the free market; nor which institutions (e.g., the union and republican central banks or the Vneshekonombank) would be responsible for such interventions.

The guidelines envisage a further weakening of the state's monopoly on foreign trade, but the general impression is one of relatively slow progress in trade liberalization. Export quotas for the principal exports are likely to be maintained for some time. A new tariff schedule, in line with the harmonized system, has been prepared but it will continue to be supplemented by a range of import and export taxes, having in some instances quite high rates.

Liberalization of foreign investment is likely to proceed much faster. A recent decree allows full foreign ownership for the first time, and a draft

foreign investment law is under consideration which, *inter alia*, is intended to protect foreign investors against future adverse changes in legislation.

## 2. *Macroeconomic policies and outlook for 1991*

Prospects for the Soviet economy in 1991 are necessarily uncertain. Economic policy remains in a state of flux as the debate between the union and the republics over the direction, pace and management of reforms continues. On the external side, it is unclear whether the envisaged changes in CMEA trade and settlement will in whole or in part take place at the beginning of the year, and the price of oil in world market remains unpredictable.

It is assumed that a political agreement will be achieved in the near future ensuring a unified economic space, with a single currency, free interrepublican trade and clear and mutually accepted rules for the apportionment of revenues and expenditures among different levels of government. Should this not occur, there would be a risk of growing fiscal and financial indiscipline and increased open or repressed inflationary pressures.

It is further assumed that, in line with the presidential guidelines, efforts will focus in the near term on re-establishing traditional supply links, and that state orders will continue to account, on average, for a large share of production, as projected in the draft plan for 1991 currently under consideration in the Supreme Soviet. As industrial restructuring—including the conversion of military industries—is expected to continue to be guided primarily by (increasingly ineffective) administrative intervention, rather than by market mechanisms, it is questionable whether it will be as extensive as the authorities hope.

Policy intentions on prices remain unclear. As regards wholesale prices, it is assumed that they will increase on average by 50-60 percent, while those agricultural procurement prices not already increased in 1990 would rise, on average, by about 30 percent at the beginning of 1991. The debate on the reform of retail prices continues, with union authorities advocating relatively little liberalization and an administrative pass-through of many wholesale and procurement price increases to the retail level while others, in particular in certain republics, support rapid decontrol of most prices with the exception of a few subsidized commodi-

ties, which would be subject to rationing.

Price policy will have major implications for the budget outlook for 1991. The authorities have recently submitted a draft budget for 1991 to the Supreme Soviet. In contrast to previous years, this year only a draft union budget has been presented, since agreement could not be reached with some republics on their budgets. The document also contains, however, forecasts for the consolidated state budget, based on current information on the republican budgets. Accordingly, these forecasts are subject to great uncertainty.

The draft budget assumes the maintenance of retail prices of subsidized commodities at their present level and the decontrol of a sizable share of retail prices of commodities subject to the turnover tax, so as to avoid the loss of revenue that would result from the planned increases in wholesale prices. As a result, price subsidies would almost double in nominal terms in 1991, while revenue from the turnover tax would virtually stagnate and decline sharply in relation to GDP. Given these projected developments in two major items of the budget, together with an expected large increase in social benefits resulting from already enacted legislation, the deficit for the state budget (rub 59 billion) is projected to be almost double the level envisaged in the presidential guidelines.

But this target level for the deficit is only reached by relying heavily on a number of steps which involve little fundamental improvement in the public sector finances, specifically:

(a) the shifting to extrabudgetary funds (in particular to the stabilization funds) of large items of expenditures (notably most capital investment previously financed by the budget, transfers to less developed regions of the country, and support to restructuring programs for public enterprises); and

(b) a trebling (from 12 percent to 37 percent) of the payroll tax to finance a pension reform as well as some of the expenditures of the stabilization fund; the levying of a (one time) tax on the notional capital gains of enterprises on their "excess" stocks, resulting from the planned wholesale price increases; and the appropriation to the stabilization fund of 20 percent of enterprise depreciation charges;

There are also substantial increases in nominal terms (35 percent or more) for expenditures on research and development, health, education and welfare, and defense, but given the uncertainties

regarding prices, it cannot be judged whether or not any decline in real terms is expected. The budget would appear to imply strong increases in both the tax burden on enterprises—as revenues from taxes on the latter are projected to rise by over 70 percent—and net budgetary transfers to households. This is likely to boost consumer demand, while hardly fostering a positive supply response.

Moreover, there are serious risks that the overall deficit of the state budget will exceed the projected level, as certain revenues appear to be overestimated (especially those from profit taxes), while certain expenditures (in particular those for interest payments and unemployment benefits) may be underestimated, and there are as yet no provisions, such as limits on bank borrowing, to promote financial discipline at each level of government.

In these circumstances, it is difficult to foresee an adequate tightening of monetary policy. On the one hand, monetary financing of the budget may well exceed the already relatively high level of 1990, especially if interest rates on the government debt were to remain well below the underlying rate of inflation. On the other hand, enterprise demand for bank credit is likely to be boosted by the tax increases and by a recently proposed freeze of part of their bank deposits. Unless these demands are effectively resisted, the rate of monetary growth may well accelerate in 1991, thereby hindering the absorption of the monetary overhang.

A firm stance of monetary policy would be essential to secure wage moderation, especially in conditions of an even partial price liberalization. The authorities' intentions with respect to incomes policy remain unclear at the present time. In particular, it is uncertain to what extent the indexation mechanism envisaged in the presidential guidelines would be applied to increases in prices of nonessential goods which are to be liberalized. The response of wages to these price increases, in the absence of formal indexation mechanisms, would be significantly affected by the tightness of credit policy.

Given the wide range of persistent uncertainties regarding price, incomes and financial policies for 1991, it is impossible to predict with confidence the outlook for output and inflation. Nevertheless, it appears very likely that economic performance will worsen significantly on both counts next year. Depending on the extent of retail price

liberalization, and/or their administrative increases, the rate of recorded inflation could well rise to more than 40 percent. If inflationary pressures from adjustments in input costs, and especially from growing excess demand, were not allowed to be reflected in price increases, shortages and disruptions in internal trade would likely intensify. This could well accelerate the current rate of decline of output, leading to a fall in net material product of 5 percent or more.

In addition to the uncertainties relating to the outlook for oil prices, energy production and the reform of the CMEA system, the prospects for the balance of payments for 1991 will be significantly affected by developments in the domestic economy, by the growing decentralization of foreign trade and by the recent changes in the exchange rate and the exchange arrangements referred to in the previous section. On balance, it would appear that the introduction of the new commercial exchange rate for the ruble, coupled with the abolition of the differentiated foreign exchange coefficients, will not prevent a fall in Soviet manufacturing exports, particularly to the CMEA area. Imports will, of course, be primarily constrained by foreign exchange availability but also by the expected decline in investment demand. Alternative scenarios have been prepared, based on a range of assumptions regarding, in particular the price of crude oil (US\$20 or US\$26 per barrel) and the decline in the volume of oil exports (17 or 25 percent). In both scenarios, foreign financing gaps are calculated assuming a decline in the volume of imports of 7 percent (which, given the foreseeable sharp drop in imports of equipment, would be consistent with a modest growth of imports of food and consumer durables). Under those assumptions, the current account deficit vis-à-vis the traditional convertible currency area (excluding gold exports) would range between US\$10.1 billion and US\$14.7 billion (Table 4). In addition, the Soviet authorities will face in 1991 large amortizations of medium- and long-term debt (amounting to about US\$12 billion). Given the secured financing,<sup>6</sup> amounting to US\$17 billion, and assuming no further decline in interbank deposits, the financing gap in convertible currencies could range between US\$5.6 billion and US\$10.2 billion. But part of this gap will be filled by the prospective surplus vis-à-vis the CMEA area (estimated at between US\$9.9 billion and US\$6.6 billion under the two alternative scenarios) depending on the financing available to these

**Table 4 USSR: Balance of Payments Scenarios for 1991<sup>1</sup>**  
(billions of U.S. dollars)

	Of which:		
	Total	Convertible currency area	CMEA area
<b>Base scenario<sup>2</sup></b>			
Trade balance	5.4	-4.1	11.1
Services balance	-7.2	-6.0	-1.2
Current account			
balance (excl. gold)	-1.8	-10.1	9.9
Current account			
balance (incl. gold)	1.7	-6.5	9.9
Capital account, net	...	-11.0	...
Overall balance	...	-17.5	...
Arrears	-5.0	-5.0	—
Financing requirement <sup>4</sup>	...	22.5	...
of which:			
Identified financing	...	16.9	...
<b>Alternative scenario<sup>3</sup></b>			
Trade balance	-3.6	-8.7	7.8
Services balance	-7.2	-6.0	-1.2
Current account			
balance (excl. gold)	-10.9	-14.7	6.6
Current account			
balance (incl. gold)	-7.3	-11.1	6.6
Capital account, net	...	-11.0	...
Overall balance	...	-22.1	...
Arrears	-5.0	-5.0	—
Financing requirement <sup>4</sup>	...	27.1	...
of which:			
Identified financing	...	16.9	...

1. The balance of payments is broken down by the traditional convertible currency area, CMEA area (excl. the former German Democratic Republic) and countries with which the USSR had bilateral payments agreements in 1990 (which is not shown separately), although a large part of trade with the latter two areas will also be conducted in convertible currencies in 1991.

2. The base scenario assumes a 17 percent volume decline in the exports of crude oil and oil products compared with 1990 and an oil price of US\$26 per barrel.

3. The low export scenario assumes a 25 percent volume decline in the exports of crude oil and oil products compared with 1990 and an oil price of US\$20 per barrel.

4. Official foreign exchange reserves and gold reserves have in this presentation been projected to remain unchanged.

Source: Staff projections.

countries and on the disposition of their accumulated claims in transferable rubles on the USSR.

## V. Alternative Approaches to Reform

### 1. The essential requirements for successful reform

The transformation of the Soviet economy is bound to be extraordinarily complex and will take many years to complete. At its heart lie three closely related elements: macroeconomic stabilization,

price reform in an environment of increased domestic and external competition, and ownership reform. The speed and sequence in which they and the necessary accompanying legal and other measures are introduced will determine the costs of the initial adjustments, and the speed with which the benefits of reform come through.

Attempts to restructure the economy coincide with a major decentralization of political authority and responsibility. Many aspects of the economic reform depend upon prior, essentially political, decisions: property can hardly be commercialized and privatized until ownership is clarified, and rights to private property fully protected; fiscal reform cannot be planned until the taxing authority and expenditure responsibilities of the different levels of government are defined; the effects of price decontrol depend on how the prices of major inputs, such as energy, will be set in a more decentralized USSR. Hence, there is an urgent need for a new Union Treaty to determine the allocation of powers and responsibilities or, at least, for formal agreement between the union and the republics on the most pressing issues.

The USSR's movement toward greater political decentralization and regional independence is consistent with continuing economic interdependence. Economic integration among sovereign states in other parts of the world has been increasing, as the benefits of wider markets for goods and factors of production are sought. The erection of intra-regional barriers to economic transactions should be avoided and where they already exist, they should be dismantled. This study assumes that the republics will maintain an all-union market, involving an absence of trade barriers between republics; a common currency and exchange rate, and therefore a common monetary policy; a common external tariff; and an agreed division of responsibilities for taxation and expenditures at different levels of government.

The key recommendations for systemic reforms in this study take into account the special characteristics of the USSR. These include important differences with other centrally planned economies in transition, namely the closed nature of its economy and its particularly distorted relative prices, a complete lack of experience with private ownership, little exposure to a market system, and unresolved constitutional questions. But the USSR is in a better position than several other economies in terms of rich natural endowment and smaller external indebtedness.

Difficult and complex policy decisions have to

be made and implemented in each of the key interrelated areas of reform. Macroeconomic stabilization, for example, requires that the budget deficit be reduced to a level that can be sustained without recourse to the inflationary creation of money. The reform effort also requires the imposition and maintenance of a tight credit policy and a rise in interest rates to control the potential inflationary consequences of price liberalization and to ensure the imposition of a hard budget constraint on enterprises, which will then be forced to respond to the market signals. Markets cannot begin to develop until prices are free to move in response to shifts in demand and supply, both domestic and external. The exchange rate, another key price, needs also to be moved to market clearing levels. Price decontrol is essential to ending the shortages that increasingly afflict the economy. In present circumstances the switch to market clearing prices should be seen as a short-term measure to bring an end to the economic disruption resulting from increased hoarding, barter, the black market, dollarization and the restrictions on the free internal movement of goods. Indeed, the planned administrative increases in producer prices are unlikely to have the desired incentive effect unless market clearing prices restore the role of the ruble as a valued medium of exchange. With price subsidies now amounting to more than 10 percent of GDP, price reform is essential also to the attainment of macroeconomic balance. In turn, macroeconomic stability is necessary for the success of price reform.

Enterprises must be able to make decisions with the guidance of price signals. This will require financial autonomy, with owners and managers taking responsibility for the full range of business decisions and for the financial benefits and costs of those decisions. Experience shows that this is most likely to happen when assets are privately owned. Private ownership also creates opportunities for individuals and reduces political interference in managerial decisions. In the case of larger enterprises, where privatization is complex and likely to move slowly, ownership reform should begin with prompt commercialization. Ownership reform is therefore essential for the full success of price reform. In addition, the sale of state assets may contribute to macroeconomic balance, though not too much weight should be attached to the prospects of early, large-scale receipts from privatization.

Steps should be taken to create and maintain competitive markets. If the transition to a market

economy is going to succeed, existing barriers to competition, including monopolies, must be broken down, and new enterprises and products encouraged. This will entail a dismantling of state orders and of branch ministries. Competitive pressures can also be enhanced by the maintenance of a common economic space, and by trade liberalization.

Many additional measures are needed to support policy actions in the three key areas. The initial phase of the transition will involve considerable dislocation, and a shift to market prices will hurt those with low incomes. A social safety net, including an unemployment compensation program, will therefore be needed to protect the most vulnerable from short-term adverse consequences of the reform process; over the longer term a comprehensive system similar to that of other market economies will have to be developed. These safety nets will need to be designed in ways that are compatible with the requirements of the budget.

In the early stages of the transition, stabilization policy should be combined with an incomes policy that guides wage developments and provides both a floor and a cap on wage increases. It may also be necessary for a short period to shield enterprises somewhat from the dislocations caused by rapid changes in the prices of a few key inputs, especially energy, and in a few sectors from intense competition of international markets. It is nonetheless essential to move as rapidly as possible to a transparent and decentralized trade and exchange rate system, in order to hasten the integration of the USSR into the world economy.

A market economy is underpinned by a legal and institutional infrastructure, with private property rights at its foundation. While it will take time to complete the necessary reform of the legal system, security of private property must be assured from the outset in order to encourage private initiative. Even though the privatization of larger state enterprises is likely to be protracted, rapid privatization of small enterprises and commercialization of larger enterprises will show commitment to this course.

These steps represent a large initial undertaking, but would still leave a vast amount of work unfinished. Completion of the legal infrastructure to provide for competition and combat monopoly, the creation of a market system for banking and finance, the demonopolization and restructuring of many enterprises, the reconstruction of the transport and communication infrastruc-



ture, the development of a system of labor relations, the process of privatization of state enterprises and collective farms, and the addressing of serious environmental problems, are just some of the major economic tasks that lie before the Soviet government and people in the years ahead. And of course, since the economy evolves over time, the process of reform is never finished, neither in an economy going through radical change as in the USSR, nor in established market economies.

The remainder of the study examines reform issues as they affect the major policy areas and sectors of the economy. The reforms described will all have to be made during the transition to a market economy. No unique schedule of reform can be prescribed, nor is it likely that any predetermined schedule could be followed with any precision. Nonetheless, two broad alternative approaches to sequencing can be distinguished—a conservative approach, and a more radical approach which we recommend.

## 2. *Conservative versus radical approaches*

In the conservative approach, reform starts with some tightening of fiscal policy, while structural reforms proceed on a slow track. In the initial stage, prices are adjusted, but remain to a large extent administratively controlled. Macroeconomic stabilization would be attained gradually with price decontrol taking place over a period of two to three years. The radical scenario, by contrast, begins with a strong macroeconomic stabilization program, designed to reduce the budget deficit rapidly to or below the level of 2 to 3 percent of GDP, accompanied by immediate decontrol of most prices and the start of privatization of small-scale enterprises.

Given the changes in economic behavior and the structure of the economy implied by these scenarios, it is not possible to quantify their effects with any confidence. But a comparison in general terms, that draws on worldwide experience of stabilization and reform programs, may help to illustrate the tradeoffs involved.

Despite the stronger stabilization measures assumed in the radical program, the price level would be likely to rise immediately by more than under the conservative program. Output could fall sharply as nonviable production was cut, and unemployment would rise. But since investment would be curtailed initially and inventories run down, and with some availability of external assistance, aggregate consumption levels might be

broadly maintained. A recovery from the reduced level of output should be able to get under way within two years or so. If financial policies were kept tight, inflation would by then be under control, and the conditions for a much more efficient allocation of resources, guided by market prices, put in place. A period of catching up with Western standards of efficiency could begin, during which growth in productivity and output would likely exceed that of most mature market economies. Unemployment would be expected to decline as the initial labor shakeout gave way to a strong recovery in employment. Further strong growth of output and rising living standards could be expected for the remainder of the decade and beyond, and there would be a good possibility of significant financial flows from abroad.

The prospect of a sharp fall in output and rapid increase in prices in the early stages of a radical reform is daunting. The key question is whether hesitancy, of the kind implied by the conservative scenario, could mitigate the initial loss of output and still permit the transition to an operational market economy with sustained growth. In our judgment, the conservative approach would almost certainly fail on both counts. There are two possibilities. In the first case, suppose policymakers succeed in combining a partial tightening of financial policies and some hardening of enterprise budget constraints with the maintenance of administered prices on most goods. The absence of fully-functioning markets would require that significant resources continue to be allocated primarily through administrative controls and the use of state orders, and the central allocation of inputs. At best, however, this would delay the inevitable elimination of wasteful and unwanted production and the shedding of excess labor. Given the prevalence of distortions, the surge in productivity that market-determined prices and enterprise initiative could deliver would not be forthcoming, output would still fall and inflation increase substantially. Lack of confidence could become self-fulfilling as disappointing results discredit the goal of a market economy, and lead to a loss of policy direction and collapse of the strategy at a fairly early stage.

Worse still would be a situation in which the authorities, in addition to holding back on structural reforms, failed to implement sufficiently rigorous fiscal and monetary policies. This seems particularly likely in the conservative scenario, in which the warning signs from rising inflation would be suppressed by price controls. The result



would be growing macroeconomic imbalances, increasingly severe shortages and rising black market prices. The liberalization and restructuring of the economy could not proceed under these conditions, and as action was promised but not delivered, the commitment even to the ultimate objectives would quickly lose credibility.

In short, the chances of staying with a conservative strategy through the medium term are slim. The best that would have been achieved in the meantime is the postponement of both the costs and the benefits of restructuring. In the worst case, the costs themselves would have risen, as the administered supply system broke down, and financial imbalances continued to mount. The result may lie somewhere between these two outcomes, though in our view it would probably be nearer that of the worst case.

In advocating the more radical approach we are well aware of the concerns of those who recommend caution. We are also aware that even the so-called conservative approach would until very recently have been considered to be extremely radical. There are three main concerns about the radical approach. First, it might impose unnecessary hardships on consumers, particularly the more vulnerable groups. For that reason, we recommend programs that will mitigate the adverse effects of the transition on consumers. We also recommend that controls be kept temporarily on the prices of public utilities and housing rents. Second, price decontrol in the face of macroeconomic imbalances, extreme concentration of economic power and supply shortages and inelasticities could lead to a serious wage inflation spiral and large monopoly profits. Therefore, macroeconomic stabilization must accompany price decontrol, all this in a climate of increased domestic and external competitiveness.

Finally, there is a concern that undue burdens could be placed on enterprises that would be viable if given time to adjust. We therefore recommend cushioning the impact of the transition to world market prices for a selected group of goods. Following a significant initial adjustment, the balance of the change to a world market price would be phased in over a two to three year period. This could be done through border taxes which would give temporary protection beyond that provided by the general tariff and which would be reduced over time, and on the export side through declining export taxes on a few basic inputs, particularly energy. In addition, the proposed union and republican stabilization funds

might provide technical and financial assistance to firms that were prepared to undertake well-designed restructuring programs and which showed promise of being viable after the restructuring. And finally, procedures, including bankruptcy, are envisaged that would facilitate the reorganization of otherwise viable firms through the write down of excessive past debts. These cushions should help reduce the losses in employment and output that will inevitably accompany the restructuring program. However, they must be managed with care if they are not to compromise the longer term objective of restructuring enterprises to participate in a competitive market economy.

## **VI. Main Elements of a Recommended Strategy**

### *1. Macroeconomic policies*

All the reform plans emphasize the need for restrictive fiscal and monetary policies, supported by an effective incomes policy, in the early phases of transition to a market economy. Stabilization measures, involving steps to absorb excess liquidity, substantially reduce the budget deficit and moderate credit expansion are essential to contain inflationary pressures in the wake of price liberalization. A firm incomes policy would help moderate the response of wages to price increases, and lessen the risks of an inflationary spiral. On the external front, the achievement of a sustainable balance of payments position, within a context of a progressive opening of the economy to foreign competition, requires the early establishment of a realistic level of the exchange rate, as well as a careful management of the external debt.

Short run stabilization needs to be complemented by a determined beginning of structural reform in the fiscal, monetary and external areas, as well as systemic reforms, affecting, for instance, ownership arrangements, enterprise management, prices and the labor market. The successful pursuit of these reforms would be instrumental in promoting sustainable growth with domestic and external balance over the medium term.

A. FISCAL ADJUSTMENT IN THE SHORT RUN. The target for the state budget deficit in 1991 set out in the presidential guidelines (2 1/2 - 3 percent of GDP) would appear broadly in line with the requirements of short run stabilization since, provided it were accompanied by an appropriate interest rate

policy, it would require little resort to monetary financing. But the draft budget for 1991 envisages a deficit substantially higher than the presidential target, and, moreover, even this higher deficit risks being exceeded by a sizable margin, in the absence of further corrective measures. This is regrettable. Substantial efforts would need to be made to secure an outcome for the state budget closely in line with the presidential program target. We would recommend the following steps. (1) Existing turnover taxes, which are variable wedges between wholesale and retail prices, should be quickly replaced with fixed rate ad valorem taxes, implying a full pass-through to the retail level of any increase in wholesale prices of taxed commodities. In the process, it would be most desirable to improve the turnover tax further by streamlining its rate structure and broadening its base, inter alia to include imports, and to complement it with excise duties on, for example, alcohol, petroleum products, tobacco and luxury goods. In addition to yielding additional revenue in the short run, these reforms would lay the foundation for the introduction of a VAT within two or three years. (2) Price subsidies, which are projected to nearly double in 1991, should instead be significantly reduced from their 1990 level, for example by limiting the quantity of subsidized commodities. (3) The proposed levies on enterprise depreciation charges and inventory revaluation could be replaced with a uniform mandatory dividend payout (a percentage of after-tax profits) for state enterprises. (4) Existing tax preferences and exemptions should be further reduced. (5) Sharper cutbacks should be made in lower priority expenditures, including subsidies to loss-making enterprises, defense outlays (which, even at the probably understated level of about 7 percent of GDP, absorb a higher share of resources than in most countries), and expenditures on personnel and administration. (6) Adequate financing should be secured for the proposed new unemployment compensation scheme.

B. STRUCTURAL FISCAL REFORMS. The evolution of government finances over the next few years will both reflect and influence the overall reform process in the economy. An early definition of the respective revenue raising powers and spending responsibilities of the union and subnational governments, in particular the republics, is essential. As reforms proceed, the tax system will need to be changed further, and a restructuring of

expenditures will also be needed, to reflect shifting priorities at national and subnational levels. The tax administration will require extensive reorganization and an overhaul of procedures to adapt it to a market economy. Substantial reforms of the budgetary process, which to date has been tied closely to the plan, will also be required.

(1) *Intergovernmental fiscal relations.* A new framework of intergovernmental fiscal relations is expected to be included in the Union Treaty. But there are still important disagreements on the main features of that framework. One view is that the primary authority in budgetary matters should remain at the union level, with clearly defined revenue and expenditure responsibilities for subnational governments; the other is that the republics should be given virtual sovereignty over fiscal matters, with a limited set of spending responsibilities given to the union, and financed through negotiated upward transfers of revenue from the republics.

These issues will not be decided on economic grounds alone. Nevertheless, economic arguments and the evidence from other countries suggest that a system of upward revenue sharing would have many disadvantages. It would severely limit the use of the union budget as an instrument of macroeconomic management; and, depending on the limits that can effectively be placed on the budget deficits of republican governments and their financing, it might weaken budgetary discipline at all levels of government. A system which gave each level of government autonomous and well-defined revenue-raising powers would seem to strike a more reasonable balance between macroeconomic management considerations and the rights of subnational authorities, though such a system would also have to include limits on the ability of each level of government to run deficits. The revenue sharing formula could assign different tax bases to different levels of government, or make use of arrangements for tax sharing or tax overlapping that are used in other countries.

Given the wide economic, social and demographic differences among republics, there are likely to be significant differences in the level and composition of taxation and public expenditures among subnational governments. The scope of such differences would, however, be circumscribed by the effective enforcement of an all-union market with free movement of goods and factors of production. Differences in taxing ca-

pacities will require some continued redistribution of resources through the union budget.

(2) *Tax policy and administration.* There have been several changes in the traditional revenue system during the reform process. The recent reform of enterprise taxation, which has replaced most transfers from state enterprises to the budget with a company profit tax levied at a basic rate of 45 percent, is a significant step towards more transparent, predictable and neutral taxation of enterprises. As such, it is more consistent with a system of private ownership of enterprises. However, serious deficiencies remain in the definition of the profits tax base. In particular, the treatment of depreciation and deductions for wages and interest costs needs to be reconsidered, as do the envisaged confiscatory tax rate for "excess profits" and the granting of tax preferences to certain categories of enterprises.

The reform of the individual income tax has increased the progressiveness of its rate structure but has not touched its basically schedular nature, with tax rates differing according to the nature of the income. The top marginal rate of 60 percent will deter taxpayer compliance, and the multiplicity of brackets will complicate administration. Over time, the tax base should be widened to cover other income categories (such as interest receipts), which are likely to grow rapidly in a market-type economy. The replacement of different schedules for various types of incomes with a global personal income tax will probably need to wait for a substantial strengthening of tax administration. Given the price increases expected in 1991, it will soon be necessary to make appropriate adjustments for inflation in both personal and enterprise income taxes.

The reforms of the turnover tax discussed in the previous section, leading to an eventual shift to a VAT and complementary excises, would help establish a broad and neutral revenue base, which would keep adequate pace with the growth of the economy. Taxation of foreign trade will need to be reconsidered as the trade and exchange system is reformed and as exchange rate policies are modified. Changes will have to balance revenue considerations with those of speeding up the integration of the economy into the world trading system.

It will be advisable to move as quickly as possible to a more arm's length relationship between the tax administration and taxpayers. Revisions

of the tax laws and regulations should aim at narrowing the scope for discretion by the tax administration. It will also be necessary to develop modern procedures for tax collection, processing of returns, enforcement and audit; and to reorganize the expanded National Tax Service, while beginning to computerize it.

(3) *Restructuring of government expenditures.* Economic reform will require a substantial restructuring of government spending over the next few years. For instance, imposition of a hard budget constraint will make it necessary to eliminate various forms of budgetary and extrabudgetary support to loss-making enterprises. Programs to support enterprises undertaking restructuring, and individuals displaced in the process, will need to be transparent, limited in time and amount, and designed to facilitate, rather than slow, the process of adjustment.

The pension reform due to begin in 1991, which widens the coverage of the pension scheme, improves benefits and provides for their full indexation, can be justified by the erosion of pensions in real terms during recent years and by the need to protect the most vulnerable groups during the transition period. It is intended that the reformed pension system should remain on a pay-as-you-go basis without budgetary support. Medium term scenarios based on demographic trends suggest that this may require substantial further increases in the payroll tax, with likely adverse effects on employment growth. It would be therefore advisable to tighten eligibility requirements, in particular by gradually raising the retirement age for most occupations, to lengthen the service period over which pension benefits are calculated, and to limit multiple pensions. Pension and disability programs ought not to be used as hidden unemployment compensation, especially as an unemployment insurance program is to be introduced shortly.

A more integrated approach to manpower and wage policies for the government sector is desirable, including an adequate differentiation of civil servants' salaries and a containment of the government payroll. Such changes could yield significant budgetary savings, and improve the quality of the public service.

The higher interest rates that will be needed for effective monetary control will have important implications for the budget. A part of the impact of higher interest rates on bank deposits can be

absorbed by the banking system or passed on to borrowers or both. However, as government debt represents the main counterpart to savings deposits, an increase in interest rates on outstanding debt seems all but inevitable, if adequate profitability of the banking system, and in particular of the Savings Bank, is to be ensured. The budget will also have to bear the full cost of market interest rates on new government paper.

While there may be a valid rationale for the creation of extrabudgetary funds for certain well-defined and limited programs financed from earmarked revenue (notably contingent liabilities such as the Social Security Fund) the proliferation of such funds that is now foreseen could seriously undermine the stabilization role of fiscal policy. It would also weaken the scope for unified scrutiny and control of the budget by policy makers. In particular, it appears inappropriate to shift capital investments of the government to an off-budget fund.

C. MONETARY POLICY. A priority of monetary policy at the outset of the reform program will be the absorption of excess liquidity in the economy (currently estimated at about one third of the stock of financial assets). In principle, the "monetary overhang" can be tackled through alternative approaches (or some combination of them): (1) through a monetary reform, which would confiscate or freeze a part of financial assets held by households and enterprises; (2) by letting the real value of existing financial assets be reduced by price increases; (3) by sales of financial assets of longer maturity (bonds or shares) or of physical assets.

A monetary reform would be the most sure and effective instrument, and it could distinguish between the assets of households and those of enterprises. It would also provide an offset for the writing down of loans that will become essential during the reform process. But, as the authorities stress, it could undermine popular support for the reform effort and future confidence in the currency, and clearly it should not be considered unless the budget deficit had been sufficiently reduced as to avoid the need for borrowing.

The authorities have recently proposed a partial freeze of enterprise deposits, to be eventually converted into shares and distributed to workers. These steps, while useful in reducing liquidity of the enterprise sector, may boost consumer demand, through a wealth effect, and may give a weight to workers' ownership in enterprises which

would run counter to the desired objectives of enterprise reform.

A preferable method to absorb excess liquidity, in particular of households, without risking an inflationary spiral, could be sales of government assets, including land, buildings, shops, small businesses and eventually shares in large enterprises. While the portfolio of government properties that could eventually be privatized is, indeed, very large and much in excess of any measure of the overhang, privatization is likely to proceed slowly, particularly in advance of the clarification of ownership rights. It might be useful, therefore, to launch quickly a program of sales of government bonds with the principal indexed and convertible in due course to shares in privatized enterprises or housing.

More generally, efforts need to be made to broaden the menu of financial assets, and to increase their attractiveness through a flexible and realistic interest rate policy. The recent increase in interest rates is a step in the right direction. However, interest rates remain well below the true rate of inflation, and—by a much wider margin—below the inflation rate expected next year. At the outset of price liberalization, interest rates should be raised further, to a level that provides the prospect of a positive real return on financial assets. Higher real interest rates would also discourage stock accumulation, and go some way to help ensure a more efficient allocation of credit. Although full liberalization of interest rates may have to await the development of a more competitive banking system and the strengthening of central bank supervision, early steps could be taken in that direction. For example, administrative control over bank interest rates could be limited to setting a floor on deposit rates and a ceiling on lending rates.

In the near term, it will be advisable to continue to set quantitative ceilings on bank credit, supported by adequate and firmly enforced penalties for excesses. Such controls, if successfully enforced, can limit the total volume of credit flowing from financial intermediaries to firms and households, and thereby help harden budget constraints. Inter-enterprise credits typically will rise in any period of credit tightening, partially offsetting the impact of restraint. Ways will have to be found to control the increase in these credits.

Beyond the credit ceilings, we recommend the imposition of reserve requirements at a uniform rate for all banks and types of liabilities. This would not only reduce the amount of credit that

banks would extend on any given deposit base, but also would begin to put in place indirect mechanisms of credit and monetary control. The use of market-oriented instruments of control should be expanded over time. These would include short-term refinance and rediscount facilities (at rates higher than those on bank deposits) and sales to the banks and others of government or central bank paper.

The Supreme Soviet has recently approved new banking legislation, establishing a full two-tier banking system, with a union reserve system, consisting of the State Bank and republican central banks, responsible for the definition of monetary and credit policies and the framework of bank supervision for the whole union. This approval, which had been delayed by controversy over the sharing of responsibilities in the monetary area between the union and the republics, should represent an important step towards the maintenance of a single currency within the union, and towards a more independent and less accommodating conduct of monetary policy. The actual extent of coordination of monetary and credit policies across union and republican central banks and of their independence from political influence—they are in principle accountable to their respective Supreme Soviets—will, however, only become evident over time. Financial discipline would certainly be strengthened by a ban on recourse by the union or the republics to central bank financing. Financing by other banks, including the savings banks, should be contained within strict limits, defined annually in the respective budget laws, and should be consistent with the overall targets of monetary policy set by the union reserve system. Experience in other countries also suggests that limits should be set on foreign or domestic borrowing by subnational governments with union guarantees.

D. EXTERNAL POLICIES. As discussed in section VI.2.c. below, the opening up of the Soviet economy to foreign competition through trade liberalization would be an important part of a comprehensive reform program, and one that would promote efficiency in resource allocation and moderation of inflationary pressures. Liberalization must be accompanied by a realistic exchange rate—as well as by financial stabilization—if it is not to lead to unsustainable deficits in the balance of payments. Rapid progress towards a unified exchange rate and current account convertibility of the ruble would also be necessary to reestablish confidence

in the currency and reverse a growing trend towards “dollarization” of the economy.

The recent introduction of a new, substantially depreciated, commercial exchange rate and the announced intention to begin operating a free foreign exchange market, represent steps in the right direction. A dual exchange rate system, however, will continue to provide incentives for a variety of distortionary practices, so long as a significant gap remains between the commercial and the free market rates. For this reason, an early move—certainly within one or two years—towards unification of the exchange rate is needed, which is likely to require a further depreciation of the commercial exchange rate, supported by adequately tight financial policies. Unification could be promoted by channeling an increasing share of transactions through the free market. To this end, the proportion of foreign exchange receipts that exporters are required to surrender to the authorities at the commercial rate should be made uniform and progressively reduced. Exporters should be required to tender within a set time the foreign exchange that they are not obliged to surrender to the foreign exchange market, and not be allowed to hold balances indefinitely in retention accounts. All enterprises should have free access to the market; and increasingly government imports should also be financed through it. Exchange rate policy after unification (floating or pegging) is best left to be decided at that time taking into account, in particular, the stance of financial policies, and the availability of resources to defend a particular level of the rate.

It has been suggested that there will be a separate foreign exchange market in each major republic, fed by both the surrender of currencies by enterprises and the republic's own reserves. It is natural, given the size of the USSR, that there should be several foreign exchange markets, but the efficient allocation of foreign exchange resources will require arbitrage across those markets.

The division of foreign exchange reserves between the union and the republics is also at issue. Given controls over access to foreign exchange, and their desire to set up their own exchange markets, individual republics each wish to obtain as large a share of the exchange reserves as possible. As the ruble becomes convertible, a unified intervention policy will be required, and any justification for the fragmentation of reserves will no longer exist.

Responsibility for the servicing of outstanding and future external debt is also debated between

the union and the republics. A recent presidential decree calls for the establishment of a joint union-republican fund to manage the bulk of foreign exchange surrendered by exporters. The fund will, *inter alia*, service outstanding and future debt of the USSR, and in 1991, 40 percent of export proceeds are to be used for this purpose. In the future, individual republics will be allowed to borrow abroad, and will then be responsible for the service of that debt. For this purpose, the decree proposes that 10 percent of surrendered foreign exchange—net of the amount for the service of external debt of the union and retention by exporters—would be transferred to the republics and local bodies. Given the impact that creditworthiness problems in one republic would be likely to have on the ability of others to borrow, some mutually agreed safeguards would need to be put in place.

The proposed decentralization of foreign trade activities, albeit welcome in itself, raises the risks of a further loss of central control over external financing, and of a proliferation of arrears in payments to suppliers. While a decentralization of foreign credit operations is necessary to promote a market-based trading regime, an effective mechanism to monitor all external financing obtained by enterprises engaged in foreign trade is also necessary, because failure by a few borrowers to service their debt could easily give rise to generalized refusals to lend to Soviet enterprises.

E. INCOMES POLICIES. Wage policy poses a critical problem during the transition period. The USSR has no developed industrial relations system and no tradition of decentralized wage setting in competitive labor markets. There is clearly a risk that the initial spurt of prices inevitably associated with price liberalization will give rise to wage demands that could contribute to a wage-price spiral. This risk would increase if state enterprises continued to have easy access to credit, or if inter-enterprise credits emerged as an important alternative financing mechanism, and if the practice of management being elected by workers continued.

As a hard budget constraint on enterprises is more effectively enforced, wage determination can increasingly be left to collective bargaining. But, at the start of the reform process, an incomes policy that would seek to cap wage increases will be needed for a time to contain wage pressures. At the same time, the need for social support for the reform process, and concern for the welfare of the

population, require that wages be to some extent protected from inflation by building in a floor for wage increases. These are both to be seen as temporary expedients to be phased out as soon as possible.

The stated intentions of the authorities are only partially in line with this approach. It is intended to protect the purchasing power of incomes through indexation. The presidential guidelines call for 50-70 percent indexation of wages (with the degree of indexation declining with income levels), and for 100 percent indexation of pensions and family allowances to the price of a minimum consumer basket. If, as might be required by budgetary considerations, the prices of the minimum consumer basket were to rise by more than the average increase in prices, then the proposed mechanism could become an engine for wage inflation. The authorities intend to use tax instruments to support incomes policy by levying very high taxes on enterprises which grant wage increases in excess of increases in their value added. However, in an environment of still soft budget constraints, liberalized prices, and substantial monopoly power, the tax as formulated may not prove effective in deterring excessive wage increases, as enterprises would be able to expand the room for wage increases by boosting prices of their products.

The wage tax could therefore be supplemented by a ceiling on wage increases, in the form of a uniform limit for all state enterprises on the growth rate of either the total wage bill or the average wage. The delinking of wages from enterprise revenue under either of these approaches would help prevent a wage-price spiral. The choice between the two forms of wage limit is not clear cut. The advantage of a cap on the growth of average wages is that it would not penalize enterprises which expand employment, while its risk is that it may encourage firms to replace higher paid with lower paid employees, possibly at a cost for productivity. By contrast, the wage fund approach might encourage labor shedding, but would also discourage expanding enterprises from increasing employment.

## 2. *Systemic policies*

A. PRICE REFORM. Nothing will be more important to the achievement of a successful transition to a market economy than the freeing of prices to guide the allocation of resources. Early and com-

prehensive price decontrol is essential to ending both the shortages and the macroeconomic imbalances that increasingly afflict the economy. Once resource allocation is based on market clearing prices, the ruble will become an effective medium of exchange; this should largely eliminate the economic disruption resulting from the growth of hoarding, barter, the black market, dollarization and imposition of restrictions on the free internal movement of goods. As the integration of the economy into the world economy proceeds through trade liberalization and current account convertibility, domestic relative prices for traded goods should be aligned with the structure of world market prices.

We see only a few areas where a case for state intervention in price setting might remain, but even in these instances prices should be raised substantially at the start of the reform process. First, public utilities (including public transport) are likely to remain public monopolies as in many other countries. Therefore, their prices are likely to continue to be regulated administratively. Second, in the housing sector, rents are currently minimal. They will have to be raised to cover maintenance costs and to create an incentive for construction and the purchase of dwellings. Money wages will also have to be adjusted to reflect the monetization of in-kind payments for housing. But present distortions are very large and the full set of supporting measures, including the legal and financial reforms needed for a properly functioning housing market, cannot be put in place immediately. Thus, rents (only for existing housing) will have to continue to be set administratively, with the intention of moving as swiftly as possible to a market system.

Third, intervention through border taxes might temporarily be warranted for a small set of basic inputs, especially energy products, extensively used in industry and to provide protection to enterprises that could be endangered by sudden import competition despite good prospects for medium term viability. The use of export taxes would avoid the need for administered price controls, central allocation of these inputs, and export controls. The rationale for making this a phased rather than a sudden transition to world market prices is to provide enterprises time to adjust to the new situation. Indeed, unless the rise in such prices is constrained, the solvency of much of the industrial sector might be jeopardized. However, it is equally true that a failure to allow price

correction early in the reform process may weaken the incentive for more efficient use of the inputs concerned.

An announced timetable for the transition to world prices and the initial price increase would have to be established. Drawing the balance between the benefits and disruptions stemming from very rapid price changes is a matter of judgment. We would tend to favor a faster rather than a slower pace. For energy and a few other basic raw materials, a transitional mechanism could be envisaged involving the imposition of a temporary export tax set initially at a level which makes a large step toward world prices (e.g., 50 percent in the case of petroleum) and declining to zero by the end of three years as full convergence is achieved.

The impact of price increases for food and other basic consumer goods is a matter of particular concern. While current subsidies encourage wasteful consumption of some goods such as bread, and some initial decline in the real incomes of households will be an unavoidable cost of the reforms, price increases should not be allowed to place an unacceptable burden on the more vulnerable segments of the population. The preferred approach to mitigate this effect would be a combination of increases in pensions and other transfers to individuals not active in the labor force and supplementary income transfers to targeted groups (e.g. households below a particular—regionally adjusted—poverty level).

If, as some have cautioned, means-tested income support is too cumbersome to be put into effect in the near term, an alternative would be to give each person ration coupons carrying the right to purchase a fixed quantity of certain essential goods at a specified price. Those wanting more of such goods would be able to purchase them at the unsubsidized market price. A variant of this approach would be to provide each person with a given amount of food stamps which could be used as money in buying eligible foods at regular market prices. Since the stamps would have a fixed monetary value, an individual's real consumption would vary with the market price of the goods concerned, but the budgetary cost of the subsidy would be fixed.

Because of the special importance of food prices, we further recommend that, in the early stage of reform, the government use imports to stabilize retail prices of the most sensitive basic consumer goods—bread, milk, and meat. To be effective, however, a strengthening of the distribution net-



work would be essential. Such imports should be only a temporary device for the USSR should quickly be able to feed itself.

B. ENTERPRISE REFORM. The industrial sector consists almost entirely of huge state-owned firms. Average employment in the 47,000 enterprises exceeds 800 workers; an estimated 30-40 percent of total industrial output is accounted for by products for which there is but a single manufacturer. Even when there is more than one producer, industrial branch ministries cartelize their activities. Seventy-five percent of production orders and inputs come from the state, while prices are administered rather than market-determined.

Alongside these giant enterprises are a growing number of much smaller firms operating largely outside the state planning system and having an unclear legal status. By October 1990 there were approximately 215,000 cooperative enterprises employing about 5.2 million workers. Many cooperatives have leased whole plants or operate units of on-going state enterprises. Individual ownership in the industrial sector is limited to artisan activities involving no employees.

Managers of state enterprises have been given increasing responsibility for decision-making over the past three years, and there has been a proliferation of new forms of enterprise. A process of spontaneous privatization is taking place in large sectors of industry through the leasing of facilities to cooperatives consisting of the managers and workers of state enterprises. Given the uncertainty of ownership rights, including the right to sell enterprise assets, the incentives of new managers tend toward short-term income maximization at the cost of enterprise decapitalization.

The present setting is one of confusion and strain that can only be satisfactorily resolved by moving as fast as feasible to clarify and change ownership and enterprise goals so that firms begin to base their decisions on commercial criteria in a competitive environment. This will involve procedures for ownership reform, demonopolization, and the enforcement of a hard budget constraint on enterprises that continue under state ownership.

(1) *Ownership reform: privatization and commercialization.* While the ultimate goal of ownership reform is to privatize almost all enterprises in the USSR, an intermediate step of commercialization—moving effective control away from the bureaucracy to a more commercially oriented

management and control structure—will be necessary for most large firms. Prior to privatization, commercialized firms should be managed in accordance with the procedures outlined in the section on “Management of State Enterprises under state ownership” below.

Rapid privatization would not only hasten the benefits of private ownership but can also yield revenue at a time when both the budget deficit and the monetary overhang need to be cut. However, there are also disadvantages in trying to move very fast in this area. When relative prices are still unsettled, the value of enterprises is difficult to assess. Firms might be acquired at far below (or even far above) their actual values, and ownership might become concentrated in the hands of a relatively few individuals with money or connections. Moreover, the state’s productive assets are valued at a sum far in excess of the savings available to the private sector, so that even for small enterprises, provision may need to be made for buyers to pay in installments.

An alternative approach would be to assume that since these complications cannot be quickly resolved, the prospective revenues from privatization should be forgone in the interests of speed and distributive equity. This could for example be accomplished through a voucher scheme that gave shares to citizens. But such giveaways have a number of disadvantages. Most importantly a voucher system would result in widely scattered ownership which would be unlikely to result in effective monitoring and control of enterprise managers. If use were to be made of the voucher system its disadvantages could be reduced by transferring the ownership of enterprise shares to holding companies that would exert effective ownership control. The shares of the holding company could then be distributed to the public.

To strike a balance between the desirability of moving rapidly and the practical impossibility of doing so effectively on a large scale, it is necessary to use a flexible approach that varies according to the type of activity and size of enterprise, and, if necessary, the preferences of the different republics. The need for revenues to help cover some of the costs associated with the economic reform—among them the costs of restructuring potentially viable enterprises, of cleaning up the balance sheets of banks, and beginning to catch up on the backlog of necessary infrastructure investments—argues for sales rather than give-aways. However, there may well be advantages to giving



away some shares in some of the larger enterprises.

We support the rapid privatization of small enterprises through outright sales to individuals, cooperatives, and others. Assets should be sold through open and well publicized auctions and as quickly as possible. Payments in installments should be permitted to promote both rapid sales and a wide distribution of assets. It is of special importance to privatize transport, storage, and distribution services rapidly. These are sectors where assets—e.g., trucks, warehouses, retail shops—are easily sold off in small units, and where existing service monopolies can therefore be broken quickly. Privatization in these areas is vital to overcoming bottlenecks that otherwise slow supply responses, especially in agriculture. The privatization of larger enterprises will necessarily take longer and could proceed along essentially either of two paths: the direct sale or leasing of divisible product lines, stages of production, or service activities; or alternatively, in two stages. First, commercialization through conversion into joint stock companies under the initial ownership of state holding companies created for this purpose and second, the sale of shares directly or through mutual funds.

Direct sales would be by open and well publicized auctions and should require a significant equity down payment by the new owners, allowing the balance to be financed on normal market terms. Leasing arrangements could be used for all sizes of enterprises. To ensure that lease holders have an adequate interest in protecting the value of leased assets, they should be able to sell lease contracts, subject to antimonopoly laws and regulations. Over time, as financial savings and markets develop, shares remaining with state holding companies could gradually be sold to individual and institutional investors, including pension funds and insurance companies. Alternatively, or in addition to selling off their holdings enterprise by enterprise, the original holding companies could, in effect, convert themselves into mutual funds, selling shares in their portfolios.

It has been proposed that preferential treatment in the buying of property and shares be given to labor collectives. Experience of labor-managed enterprises in other countries, however, has been disappointing. Workers in control of their own enterprises have tended to concentrate on the relatively short-term maximization of their own incomes thereby limiting the employment of new workers and running down the assets of the enter-

prise over time. Accordingly, substantially less than a controlling share might be made available on a preferential basis to an enterprise's own work force, and these shares should be distributed to workers on an individual rather than collective basis. Workers would enjoy the same ownership rights as other shareholders, including the right to sell their shares (as well as to acquire new shares) in the market.

Another issue that needs to be resolved concerns the treatment of debts of existing enterprises. Debt should be written down to below the value of a firm's assets (with consequences for banks considered in section VI.2.d). Asset valuation is, of course, exceptionally difficult; review procedures for sales and leasing contracts, vested in independent government agencies answerable to the union and republican Parliaments, could help ensure that valuation is neither arbitrary nor opportunistic. Such reviews should be limited to the most questionable cases which could be brought to light by ensuring widespread publicity for all such arrangements.

(2) *Management of enterprises under state ownership.* Large enterprises should be commercialized and operated as joint stock companies so long as they continue under public sector ownership. Enterprises should be accorded no preferential treatment from the state by virtue of their public ownership. State-owned shares should be held initially by state holding companies that would be organized and operated in a very different manner from the present branch ministries. A board of directors for each holding company would be appointed by the government and charged with operating the entities for which the holding company was responsible as commercial, market-oriented enterprises. To encourage competition, ownership of enterprises producing the same goods or close substitutes should not be concentrated in the same holding companies. Thus, there would be a number of holding companies, rather than a single state property fund, at both the union and republican levels. Each holding company should be responsible for the liquidation of any chronic lossmakers in its portfolio and for arranging restructuring, including the reduction of vertical integration, where this would strengthen profitability.

These state holding companies should follow the model of a private sector holding company. Dividends on shares held by the holding companies would flow to the budget; although some

profits could be retained to finance new investments, a minimum dividend payment could be specified in advance as a fixed share of after-tax profits. Thus earnings retained by the holding company could be reallocated among its firms to finance investments meeting normal commercial criteria. However, holding companies should not keep chronic loss-making firms in operation by cross-subsidizing continual operating losses of some enterprises with the profits from others.

Holding companies, while monitoring and assessing enterprises' performance, should not interfere in their day-to-day management. The holding companies would exert ownership rights through the boards of directors of the individual enterprises; it would appoint the members of these boards and then hold them responsible for their performance. The boards, in turn, would be directly responsible for setting enterprise policies, monitoring performance, and hiring and, as necessary, dismissing enterprise managers. The latter would have the full responsibility for the day-to-day management of the enterprise, including the power to determine the organization of production; to set the offer price, quantity and composition of output; to hire, reward and dismiss workers; and to manage the enterprise's finances.

The main weakness of such a system is that, in practice, it might prove difficult to insulate holding companies from political pressures or to prevent those who now run the branch ministries from taking their traditional management cultures with them to the holding companies. A possible way around these difficulties would be to establish very strong management incentives at both the individual enterprise and holding company levels tied to the medium-term success of their companies. Another important weakness is likely to be a shortage of trained and experienced managers and management courses will need to be set up.

Whatever their ownership, enterprises will respond to market signals and to the pressures of competition only if their owners and managers are truly held responsible for the financial results of their decisions. Such responsibility requires the imposition of a hard budget constraint, which means that losses should not be covered by transfers from other enterprises, the budget, or automatic credits from the financial system. Financial autonomy needs, of course, to be accompanied by more general managerial autonomy which permits enterprises to adjust to changing constraints and

opportunities. The hard budget constraint should be implemented as rapidly as possible, both as an incentive for enterprise reform and as a contribution to macroeconomic management.

Because it will take time for many enterprises to adjust to the new economic conditions, the presidential guidelines propose the creation of union and republican stabilization funds, with independent administrations, to provide financial support for properly justified restructuring efforts. There is a risk that such funds become substitutes for, rather than a complement to, the needed restructuring. A strict budgetary constraint on the resources available to them and rigorous criteria governing both their activities and their financial results should limit this danger.

(3) *Demonopolization.* Finally, there is also an urgent need for an effective framework of antimonopoly laws and regulations, along with the institutions to enforce them. The framework should abolish so-called "profile restrictions" that limit the range of goods that a firm can produce, assure the rights of new entrants, help prevent collusion among enterprises and discourage predatory behavior that would lead to the monopolization of an industry. The current tendency for enterprises which are now in a particular branch ministry, to join together in trade associations is a matter of concern, since it may favor oligopolistic rather than competitive behavior. One major barrier to the entry of new firms is the highly monopolized state supply system. The breakup and privatization of wholesale trade should thus be among the first priorities of economic reform.

Because production in some sectors is concentrated in a single or very few enterprises, it will be desirable to split up such firms in order to increase competition. While state action is necessary to support demonopolization, markets can provide powerful pressures against monopoly. The removal of quantitative restrictions on imports, coupled with reasonable tariff levels, would put an effective ceiling on the ability of domestic enterprises to raise prices of tradeable goods. During the transition period, monopolistic firms would inevitably be able to reap higher than normal profits. But provided there is free entry, and sanctions against monopolistic practices, these profits themselves will eventually encourage new entry into the industry and consequently demonopolization.

### C. EXTERNAL TRADE REFORM AND FOREIGN DIRECT INVESTMENT.

(1) *External trade reform.* The conditions under which foreign trade takes place are heavily distorted, and this situation cannot change fundamentally until domestic prices are liberalized. Due to the continuing existence of state-trading arrangements, licensing, quotas, multiple exchange rates, border taxes of various kinds, and prohibitions on "middleman" activities, incentives to engage in trade are largely unrelated to inherent comparative advantages or underlying cost-price relationships. Initial reforms have created a situation in which trading rights are in principle widely distributed, but in practice limited by pervasive quantitative restrictions and inadequate access to foreign exchange.

This state of affairs reflects in part the fact that reform efforts to date have attempted to pursue too many, and often contradictory objectives: insulating domestic prices from pressures coming from abroad; encouraging higher value added exports while protecting the domestic availability of scarce goods; assuring balanced trade while maintaining an overvalued exchange rate; and preventing decentralized decision makers from reaping "undue profits" by exploiting the distortions that the system has created. Most of these objectives have not been achieved.

Trade performance, especially the lack of dynamism of exports of manufactured goods to Western markets and continued reliance on exports of energy products and raw materials, has been unsatisfactory. In addition, the growing disruptions and shortages in the domestic economy have been spilling over into the trade sector through the failure to complete contracted deliveries, a scramble for imported inputs and consumer goods, and a resultant sharp deterioration in the overall trade balance.

There are three essential elements in shifting from a system of centrally administered trade to one in which the determination of exports and imports is achieved through the decentralized operation of market mechanisms: first, enterprises must be able to decide freely in a competitive environment what to buy or sell and on what markets; second, appropriate price incentives need to be allowed to operate in guiding these decisions; and third, a system must exist whereby firms are freely able to obtain the foreign exchange they need to carry out their transactions.

These interrelated aspects of reform require a range of actions.

Rights to engage in foreign trade have in principle been extended to all enterprises. But to make these effective, licensing and other quantitative restrictions on trade need to be lifted, and access to foreign exchange liberalized. At the same time, trading operations should be demonopolized, so that the gains from trade are not captured by trading companies with dominant market positions in specific goods, at the expense of the ultimate producers or consumers. An important step would be to abolish the branch ministries, so that the trading associations they sponsor would diversify the range of goods that each handles and the foreign trade organizations would become independent trading companies. Competition would also be strengthened by the ending of present widespread prohibitions on "middleman" operations in international trade, the rationale for which disappears with domestic price liberalization.

Even after domestic price liberalization, the structure of relative prices will differ significantly from the structure of prices on world markets. One reason is that the commodity arbitrage that characterizes market economies cannot be expected to play its full role overnight. Another is the existence of the present jumble of quotas, border taxes and other restrictions. While allowing enterprises to be abruptly exposed to the full difference between domestic and foreign prices could be disruptive, neutralizing such differences through administrative intervention would prevent price signals from playing their key role in improving resource allocation. A middle way is necessary during the transition.

The recommended approach is to establish a set of tariffs averaging not more than 30 percent, with a minimal degree of dispersion, that would serve as a guide to enterprises concerning longer-run price relativities. In exceptional cases, temporary border taxes could also be imposed to allow domestic firms more time to adjust to the relative price changes required in the reform process. If it is desired to restrict consumption of luxury goods, for example, this should be done through excise taxes rather than high import tariffs or quotas. Indeed, quotas should not be used at all, because *inter alia*, the resulting quota-rents are likely to be captured largely by foreign suppliers.

In principle, there might be a parallel argument for providing temporary subsidies to exporting

enterprises that were non-competitive in foreign markets. However, it is not persuasive for two reasons. First, if the exchange rate is at a market-clearing level, only a few enterprises are likely to find themselves in this situation after price liberalization, and the export sales of such non-competitive firms should not be protected. Second, most firms' exports account for only a small proportion of their total sales, which suggests that the loss of unprofitable export markets would not be the determining factor in the success of their restructuring.

Price signals can be effective in shaping trade only in conjunction with a mechanism that makes foreign exchange available to firms on a competitive basis through a foreign exchange market, rather than through administrative allocation. A substantial increase in transactions taking place through the free exchange market, the avoidance of any quantitative restrictions on imports financed through the free market, and a rapid unification of exchange rates, are therefore essential.

Over the next several years the demand for imports arising from economic restructuring and from meeting consumer needs could potentially be high relative to the foreign exchange available to meet these demands. The essential task of maintaining equilibrium in the external accounts in these circumstances will fall on a tight macro-economic policy and appropriate relative prices as well as the exchange rate; but there is clearly a premium on identifying those areas where incremental foreign exchange can be earned most rapidly, either by raising exports or substituting for imports. Whatever the long-run comparative advantage of the USSR (and considerations of dynamic comparative advantage suggest that manufactured goods will over time come to play an increasingly important role in Soviet trade) it is probable that increased energy exports and reduced agricultural imports represent the most promising near-term approaches to easing the foreign exchange constraint. Domestic reform to raise efficiency in these sectors (including a substantial increase in the cost of petroleum to domestic users) would thus have a particularly high priority from a balance of payments perspective.

In addition to higher oil prices, the intended shift in CMEA trading relations to convertible currency settlement at world prices is also likely to ease the foreign exchange constraint in the short run even if, as expected, intra-CMEA trade volumes decline sharply. The USSR is at present

negotiating bilateral agreements with its CMEA partners. It would not be in its economic interest to delay the proposed shift to world market prices or to convertible currency settlement (though this would intensify foreign exchange constraints on some other CMEA countries). Neither would it be desirable to direct a large share of trade with these countries through state orders. Rather, efforts should focus on facilitating decentralized and market-driven trade among enterprises in the CMEA countries. One step in this direction would be to develop export credit arrangements by which enterprises could compete on equal footing with Western enterprises in the credit terms offered for trade, especially in the area of capital goods.

(2) *Foreign direct investment.* The impact of foreign direct investment has so far been minimal in terms of both foreign capital infusion and overall contribution to economic development. A severe limitation has been the inadequacy of the legal and institutional structures. Other major obstacles stem from the risks and practical difficulties of conducting business in the USSR, especially given the persistence of centralized allocation mechanisms. Under these circumstances, joint ventures have largely operated in quasi-enclaves concentrated in the services sector, and specialized operations where high returns are possible with low levels of capital commitment through exploitation of loopholes and inconsistencies in the existing regulations.

Notwithstanding the lackluster performance to date, foreign direct investment could potentially make a major contribution to the structural transformation of the economy through capital infusion, the transfer of technology and managerial skills, and, equally important, by exposing domestic enterprises to market competition. A substantial increase in foreign direct investment, however, can be expected only once fundamental improvements have been made to the political, economic, and regulatory environment. The reform efforts should concentrate on three main areas: the broad constitutional aspects and legal system; the economic setting; and the specific regulatory structure applying to foreign investment.

First, as stressed earlier, there is a need for an unambiguous determination of the legal status of private sector activity and a clear definition of the regulatory responsibilities of the different levels of government. Foreign investment may well be regulated under laws, rules and regulations ema-

nating from different levels of government and full compatibility is imperative. Given the present political and economic uncertainties, an amendment to the property law which protects foreign investors from confiscation and expropriation should be considered.

Second, the economic conditions for conducting business should be extensively improved. This is as essential for domestic enterprises as for foreign investors. The latter need to see a rapid development of domestic wholesale markets and liberalization of trade so that they can have readier access to needed inputs. The development of domestic credit markets is essential and convertibility of the ruble would help enterprises manage their foreign exchange needs. In addition, potential foreign investors will be affected by the extent of competition permitted in the domestic market as well as the extent to which the all-union market remains intact.

Third, regulatory requirements applying specifically to foreign direct investment should be simplified and legal protection strengthened. Authorization procedures need to be liberalized and streamlined. Investment screening policies should be based on transparent and unobstructive criteria, and confined to a very few sectors. Impediments to investment in service activities should be removed. Administrative as well as legal guarantees are needed for the repatriation of investment income and the proceeds from liquidation, and for the extension of full investment protection. Adequate arbitration and dispute settlement procedures should be put in place. In all these areas, regulatory mechanisms and procedures should conform closely to internationally agreed principles and understandings. The draft foreign investment law presented to the Supreme Soviet represents a step in the right direction but still falls short of international standards. For example, profit remittances and capital repatriation continue to be restricted to what can be self-financed from retained foreign exchange proceeds. This might preclude investment in domestic sectors such as distribution and trade where foreign participation could make an important contribution to the establishment of competitive markets.

Policies should aim at treating domestic and foreign investors equally. Similarly, environmental regulations should be applied without discrimination. If, as a transitory device, the present discriminatory tax treatment or other incentives in favor of foreign investors are to be maintained,

they should be clearly limited in terms of budgetary implications and time frame.

During the transition to a market based economy, there may be considerable scope for mobilizing large scale foreign investment in particular sectors through self-contained arrangements, such as capital-intensive projects in energy and natural resource exploitation and in certain segments of the reconverted military industries. But these will make sense only in very few sectors and cases. They should be limited to these, and not be seen as an alternative to the fundamental reforms needed to attract investment across a wide range of economic sectors.

D. FINANCIAL SECTOR REFORM. The banking system comprises the State Bank, the State Savings Bank (which collects household deposits), the Vneshekonombank (which carries out all foreign exchange transactions of the government) as well as three specialized banks<sup>7</sup> and a number of small banks. The system is currently evolving on two tracks: the division and commercialization of the three specialized state banks set up to act commercially in 1987, and the rapid proliferation of small commercial and cooperative banks, which followed the enactment of the Law on Cooperatives in 1988. The specialized banks currently account for some 95 percent of total credit, and the more than 400 commercial and cooperative banks for the remainder. The specialized banks are to become universal banking institutions organized as joint stock companies. They are also to be completely responsible for mobilizing their own resources and for their own financial performance. Their shareholders are initially expected to consist largely of state organizations, but the situation is complicated by conflicting ownership claims by different levels of government, and it is possible that they will be broken up along geographical lines.

A well functioning banking and payments system is an essential element of a market system. The banking reforms, which started by encouraging the development of quasi-private commercial banks and the conversion of specialized state banks into universal joint stock banks, should be carried forward as quickly as possible to support the growing private sector. Banking legislation should be enacted without further delay, establishing, inter alia, a strong banking and supervisory authority and setting a common regulatory framework for the specialized state banks and the new

commercial and co-operative banks. Of equal importance are measures to modernize the payments system.

The recently introduced prudential regulations are a positive step toward Western standards. However, the Banking Supervisory Department of the State Bank should be strengthened to ensure compliance with prudential regulation. Intensive training of bank inspectors is required for effective on-site inspections, notably at republican and local levels. Furthermore, banking regulators and examiners should pay increased attention to the danger of conflict of interest situations and inadequate risk management. To the extent these activities fall within the competence of the republics, efforts should be made to ensure that central and regional regulatory frameworks and supervisory practices are fully harmonized.

The pace of commercialization and subsequent privatization of the specialized state banks is constrained by the quality of their loan portfolios. The amount of bad debts is unknown but probably large given past lending practices, and likely to increase as economic reforms in the real sector proceed. Existing bad debts should either be written off or shifted to a special state agency for collection or liquidation. The treatment of doubtful loans, including provisioning, must be defined to provide a sound basis for managers, regulators, and depositors to assess and protect bank solvency. In addition, accounting standards need to be upgraded to enable bank managers to engage in adequate profit planning and cost control as well as risk management. More generally, there is need for large-scale training of professional staff at all levels of bank management.

As essential reform of infrastructure and organization within financial institutions is implemented, their full commercialization and privatization can follow the principles envisaged for state enterprises. This will, of course, take some time; in the interim, the ill effects of inadequate competition could be partly offset by encouraging the banks to diversify their lending and other financial service activities. Meanwhile, borrowers and depositors can begin to make more intensive use of their already established rights to select banking partners freely. Product and territorial competition can eventually be intensified by allowing foreign banks to enter the market in joint ventures with privatized Soviet banks.

During the transition, the State Savings Bank (SSB) could remain under state control as the principal mobilizer and intermediary of house-

hold savings. As the government's financing needs are reduced, and the residual financed through a growing securities market, and as the specialized banks are progressively commercialized, the SSB could expand its own lending activities through the interbank market and increasingly move away from its role as a passive intermediary. Its major credit activities would then be lending either through the interbank market or, increasingly, directly to private sector customers.

The proposal to retain one specialized bank under state ownership as a vehicle for channeling preferential credit to state-designated activities should be reconsidered. Experience in other countries suggests that subsidized state directed lending easily becomes subject to special interests, is frequently inefficient and can ultimately undercut the soundness of the bank itself. A better and more transparent procedure is to provide such funds to the extent they are needed through explicit subsidies from the state budget.

The issuance and trading of government debt instruments should be encouraged. It will assist efforts to finance the budget deficit and to mop up excess liquidity. In the present uncertain environment, a shift of focus from the long-term end of the market to that for medium-term and short-term instruments could heighten the appeal of government paper to savers. The Government also intends to support the creation of stock and commodities markets as well as brokerage companies, insurance companies and other institutions found in developed financial markets. A commodity exchange has already been opened in Moscow, and securities exchanges are being opened in Moscow and Leningrad. This is potentially important, although here too there are serious gaps in the legal and regulatory framework; efforts in this area should not in our view take priority over the strengthening of the banking system. The informal issuance and trading of securities is likely to grow. These new instruments can play a useful role in mobilizing risk capital and in providing liquidity to the ownership claims arising from enterprise commercialization. The authorities should neither endorse nor prevent such activities; but the risks involved in the absence of a satisfactory regulatory framework should be adequately publicized.

E. SOCIAL SAFETY NET, LABOR MARKET, EDUCATION AND TRAINING. The structural reforms will create great stress in labor markets during the transition period. Unemployment will almost certainly rise

before the economy turns around. Thus, transitional policies must be concerned both with adapting labor market practices to a market economy, and creating an effective affordable social safety net.

(1) *The social safety net.* Short- and long-term aspects of the social safety net should be considered. In the short term, policies would need to deal with the increases in unemployment that will certainly accompany the economic reform program as well as the impact on low-income earners of rising inflation (which is described above). The new Employment Law presented to the Supreme Soviet provides some social protection to the unemployed by providing unemployment benefits, training and public works. This package of measures is similar to those offered in Western economies, though its implementation may give rise to difficulties. It is essential to have in place a workable system of unemployment benefits before hard budget constraints are imposed on state enterprises. Expected higher levels of unemployment and present weaknesses of funding arrangements make some financing from general budgetary revenues a necessity in the near term. Over a longer time period, arrangements should be made to finance the normal unemployment compensation program through contributions from both employers and employees.

A longer term concern involves the need for a permanent social security system targeted towards specific vulnerable groups. This is easier said than done. Means testing by income levels may be particularly difficult, given regional differences, and the importance for real income of housing, subsidies and other benefits. Targeting could be achieved, for instance, through the provision of milk for infants and school feeding.

Proposed reforms of the pension system, child benefits and other allowances go in the right direction from the standpoint of interregional and inter-generational distribution consequences. However, over the longer term, the growth of benefits must not exceed that of contributions so as to avoid the need for budgetary support. Moreover, the pooling of pension funds across republics could degenerate into 15 separate funds with limited redistribution of resources. Were this to happen, the recently established system of universal minimum pensions could unravel.

(2) *The role of government in wage determination.* The government should reduce its role in the

setting of wages during the transition. Some form of incomes policy is required to support monetary and fiscal policies in preventing the initial adjustment of prices following liberalization from becoming an inflationary spiral. The medium-term objective should be that enterprises and workers arrive at a wage consensus.

Presently, wage rates ("tariff wages") are set on a statutory basis for several thousand individual occupations and have been left unchanged over an extended period of time. The tariff structure is topped up by bonus payments, a whole array of fringe benefits and preferential access to goods in short supply. This system of remuneration has little, if anything, to do with labor supply and demand conditions. Consequently, a proper incentive structure and an allocative role for wages to direct labor to its most productive and rewarding use do not exist. It would be desirable to dismantle the tariff structure and to transform fringe benefits into wage payments. This would make the relationship between pay and work more transparent, and would allow for a widening of sectoral, occupational and regional wage differentials.

Current policy intentions are to simplify the present structure of tariff wages and redefine them as wage minima, thereby giving enterprises freedom to differentiate actual wage increases above this floor so as to reflect differing scarcities and performances. This would be a first step towards wider wage differentials. But it is only a beginning. More thorough reforms of the wage tariff system are clearly necessary.

(3) *Industrial relations.* In most market economies, wage agreements are reached through free collective bargaining. In order to ensure that this occurs at the plant or enterprise level, workers should be free to choose their representatives. In this connection, the responsibility for providing social support that is now entrusted to the official trade unions should revert to the public authorities, so that benefits remain available to all workers regardless of their union affiliation.

In our view, the structure of collective bargaining must be adapted to a wide range of conditions. Decentralized collective bargaining at the individual enterprise level, although a flexible instrument, can lead to leap-frogging wage settlements in situations in which enterprises compete among themselves in accommodating labor demands. Centralization of bargaining may therefore be beneficial in limiting wage price spirals but may



not be practical in a country as large and diverse as the USSR. To provide market signals and incentives, wages must reflect productivity performance and regional differentials in cost of living. More appropriate, therefore, would be regional or economic branch negotiations between employers' organizations and federations of workers' representatives to establish guidelines for plant-based negotiations.

(4) *Labor market policies.* Open unemployment is a recent development in the USSR. Official estimates of the increase in the number of unemployed in 1991 range between 1 to 6 million. The incidence of unemployment is likely to be concentrated in regions with obsolete industrial structures and on vulnerable groups. Beyond economic considerations, during 1991 the labor market will be affected by regional migration, emigration abroad and military demobilization. The authorities estimate that some 600,000 people alone might be forced to leave their present homes because of political instability. This concerns particularly Russians living in Central Asia and the Caucasus, as well as ethnic groups leaving unstable regions within the Russian Republic. Furthermore, the Government is considering changing the emigration law so as to permit Soviet citizens to leave the country freely. This could lead to a considerable outward migration to countries with which Soviet citizens have special ties.

A more radical reform program might give rise to even higher increases in unemployment which would underscore the need for active labor market programs. These programs might include placement, mobility and training which mitigate frictional unemployment, but in the case of large scale redundancies more effective measures are needed. Nevertheless, efforts to strengthen the necessary infrastructure, in particular a network of public employment offices, should remain a priority. Special measures for the unemployed like training and public works, if economically meaningful, should be pursued with the objective of reintegrating displaced workers as quickly as possible into gainful work and to prevent the occurrence of long-term unemployment. The development of small-scale private enterprise might also be an effective way to mitigate unemployment.

(5) *Vocational education and training.* A sound personnel and institutional base exists in the USSR, on which skills that will be in demand in a market

environment can be developed to support economic restructuring. Most citizens join the labor force with at least ten years of schooling, and the majority of them receive higher education or training in a vocational or technical institution. In addition, extensive retraining and upgrading of skills are provided for those who have already joined the labor force. The present vocational training system is responsive to the changing needs of enterprises. Rapid structural change will put this system to the test.

There may be some areas where training capacity should be developed in anticipation of future demands—computer-related skills, for example. However, in general, training should take place in parallel with physical investment. This calls for close involvement of enterprises in identifying skill requirements. The most important needs for new training are likely to be in the areas of finance and management, where existing expertise is inadequate and the requirements in a decentralized market economy are great.

F. LEGAL REFORM. The most serious legal problem facing the Soviet economic reform effort is the lack of a general accord concerning the location of authority to legislate, the nature and extent of the legislative and executive powers, and the appropriate bodies and methods for implementation of the law. The primary and most publicized source of dispute is the current debate between the central government and various subordinate territorial governments concerning the proper relationship between and among the constituent parts of the union. Some resolution of this conflict, even if temporary or subject to gradual evolution, is clearly required before an economic reform program can be successfully implemented.

The problem of uncertainty concerning state authority is not solely related to political relationships. The traditional Soviet legal theory envisioned an organic and indivisible state power, and, although change is occurring in this area, there is a continuing lack of clear boundaries between the powers of various bodies. While a constitutional and/or legislative redefinition of the power of Soviet state bodies will require a substantial amount of time, improvements could be made in the interim by increased provision in legislation of clear limitations on the discretion of executive and lower bodies in implementing the law.

Technical and organizational problems also contribute to legal uncertainty and particularly to



lack of uniformity in implementation of the laws. As political power and responsibility for economic regulation are becoming decentralized, increasing amounts of responsibility for economic regulation and enforcement will fall into the province of local bodies that may not have institutional structures designed to fulfill these functions or the resources to adequately interpret, refine and enforce economic law and that may also be subject to strong local political pressures. Localization of control should proceed with caution during the transition period and should not be permitted to substitute for resolution of difficult political and economic issues.

Market-based systems are strongly dependent upon an adequate civil law foundation, i.e., clearly defined property rights, the ability to exchange property through enforceable contracts, and a system for enforcement of those rights. With respect to property, current reform programs call for substantial expansion of property rights and the equalization of the rights of individuals and other entities to own and use property and to pursue business activities. Implementation of such proposals will require significant legislative changes. The Fundamental Principles of Legislation on Ownership may need to be amended to equalize the ownership rights of individuals and those of juridical persons and, in order to avoid confusion and uncertainty, the use in legislation of permissive lists of the objects of ownership rights and of the means by which the property of specific organizations may be formed should be discontinued. With respect to contracts, many of the basic principles of Soviet civil codes are not inconsistent with market relations, but articles of the codes which provide special rules for state enterprises and mandatory transactions will need to be eliminated and existing principles updated to support complex commercial relationships. Until the codes as a whole can be updated, certain types of contracts which are not adequately provided for in existing civil codes (e.g., pledge, insurance) will need to be addressed through the existing practice of passage of specific legislation defining and developing such contracts.

Changes will also need to be made in the systems of civil dispute resolution and law enforcement. With respect to the unique system of state *arbitrazh*, which has performed dispute resolution, rule making, and law enforcement functions for state enterprises and planned transactions, its functions will need to be separated so that law enforcement and rule making functions do not

interfere with dispute resolution. In order for the civil courts and state *arbitrazh* to function effectively together in resolving economic disputes, the relationship between the two bodies and their divisions must be clarified, particularly where jurisdictions overlap. If jurisdictional overlap is to be permitted, some appropriate method must be found to ensure a uniform standard of interpretation among bodies, by the provision of a single highest instance of review or by another means.

The Soviet Procuracy, another unique institution with responsibility for the general supervision of legality, as well as investigation and prosecution, currently has nearly unlimited rights to review business records and other information and to conduct "fishing expeditions" for legal violations. The most effective means for limitation of the Procuracy's role in private business affairs would be to amend the statute governing its activity to eliminate or restrict powers of general supervision over private activities.

As a matter of urgent attention, there are still a number of articles of the criminal and administrative codes of most republics that prohibit behavior that is both rational and economically beneficial. While it appears likely that many of these articles will be eliminated in the next major revision of the criminal codes, steps need to be taken to repeal or strictly limit the reach of the most destructive articles. In particular, laws punishing commercial middleman activities need to be eliminated immediately, and laws concerning speculation must either be eliminated or, at a minimum, amended to restrict application to the most destructive cases of abuse of rationing and subsidy systems.

Current reform proposals call for the creation of equality of economic opportunities in an environment in which market forces are able to operate. Perhaps the most important step that could be taken in regard to the equalization of conditions for business activity would be the passage of a clear and detailed law concerning the relationship between the state and its employees and agencies and any business, enterprise, or commercial organization in which the state has an ownership interest. Such a law could clearly define the permissible and impermissible relationships between state-owned entities and state bodies, providing a management structure with specific safeguards against interference (whether helpful or harmful) in the financial or business affairs of the enterprise. Properly drafted and enforced provisions of this type could be of great assistance in eliminating some of the most troubling inequities in the

current conditions for market activity, including subsidization and the absence of a hard budget constraint for many state enterprises and anticompetitive behavior by state bodies.

Reliable sources of information concerning new laws and regulations must be available to participants in market activity, as well as systems for efficient registry of businesses, property, and legal encumbrances. A bankruptcy law defining procedures and specific legal standards for the liquidation of failing businesses, temporary protection from creditors where appropriate, and registration and publication of such proceedings would also be of assistance.

Before substantial privatization can be implemented, the locus of ownership of state property must be conclusively determined, whether through the conclusion of a new union treaty or some other means. In the interim, privatization might be facilitated by the creation of a process by which a prospective purchaser could obtain the explicit agreement of all relevant government bodies, union and republican, to the transfer of the property by a particular State Property Fund. Whatever the pace of privatization, legislation requiring and protecting competition will be required in order for markets to function properly.

G. ACCOUNTING, AUDITING, AND STATISTICS. Accurate and timely information is an essential input to economic decision making in a market economy. In the USSR, vast quantities of information are gathered in forms intended to be of direct use to the planning authorities but of little use for other purposes. Improvements in both the accounting system and in government statistics are required to facilitate the transition to a market economy.

The accounting system will need to be revised. It must provide the information necessary to present a full and fair view of the financial position of an enterprise or bank and to allow managers to evaluate performance and take key decisions, for instance on investment. Audited financial accounts, incorporating a proper valuation of assets and liabilities, will need to be published for the information of shareholders, creditors, and those entrusted with supervisory authority. This will require a number of relatively straightforward changes to the present accounting regulations, perhaps promulgated by a new central professional body. Getting managers to apply the new concepts may take time and effort, and it will be necessary to train accountants and auditors as well as financial commentators. Training of

government administrators, inspectors and tax auditors needs to keep pace with education and reform at the enterprise level.

Present economic statistics are limited and suffer from various methodological and definitional deficiencies that restrict their usefulness in monitoring and managing a market economy. Particular problems exist in areas of the national accounts and in the balance of payments. Price indices used to aggregate output in NMP bear no relationship to production costs or consumer demand. Statistics on services which are used to calculate GDP are also inadequate. On the balance of payments, the authorities record only transactions on a settlements basis, thus excluding a large part of foreign transactions such as barter trade and trade credits. The authorities acknowledge many of these problems, and steps have been taken to correct some of them. For instance, efforts are now being made to compile national accounts statistics on an SNA basis; and technical assistance has also been requested in a number of areas, such as balance of payments compilation. Rapid progress will be important both to aid domestic decision makers, and to encourage foreign investment. At the same time the secrecy still accorded to a number of economic and financial statistics requires re-examination and care will need to be taken to make sure that as private sector activities increase they are caught by those who compile the statistics.

### 3. Sectoral issues

Many of the reforms proposed in this study apply in principle across the entire economy, but must be implemented sector by sector and industry by industry. They will lead, more or less rapidly, to important shifts in the structure of the economy. Indeed, their principal purpose is to begin to correct the enormous cumulative misallocation of resources that central planning has produced.

The following sections describe the distortions and costs that have emerged over the years in the main sectors of the economy and a range of measures which could be taken to begin the process of rationalization and restructuring. In every case the most pressing problems are related directly to a serious misalignment of prices, giving force to our view that early price reform is of paramount importance. Together with commercialization and privatization, which are essential for the determination of an appropriate price structure, price reform can deliver substantial efficiency gains

even before a major reshaping of the economy has begun. Waste can be discouraged in the storage and distribution of food, and in the use of energy, metals and other inputs. Demand for goods and services, priced well below their true cost, can be curtailed. Pressures on the environment and natural resources can be reduced. And sectors such as housing, distribution and transportation—traditionally starved of resources by the planning system—can begin to develop by using their own investable surpluses.

The capital requirements for a comprehensive renovation and reorganization of the Soviet economy are clearly enormous. But it must immediately be said that over past years the USSR has poured enormous amounts of capital into several of these sectors. The investment ratio of the USSR has long been one of the highest in the world. The weakness lies not in a shortage of capital, but in how it has been allocated. Capital, like any other resource in the market sectors of the economy, cannot be allocated efficiently or effectively until a rational set of prices (including real interest rates) has been established. Even with rapid price liberalization, it will take time for the new patterns of demand and supply to emerge and thus for investment to begin to grow again on a broad front. The measures proposed therefore focus primarily on creating the conditions for sound future investment.

A. ENVIRONMENT. Environmental concerns cut across all sectors. Many of the industrial and agricultural regions of the USSR are on the verge of ecological breakdown, posing an imminent threat to the health of present and future generations. Environmental health risks in some regions are up to 10 to 100 times greater than those accepted in most OECD countries. Severe ecological conditions affect 16 percent of the total land area. The economic costs of environmental degradation, including its effects on health and natural resources, are substantial, and according to the Soviet authorities reduce GDP by about 10 percent.

Well-functioning markets can contribute to improved environmental conditions by spurring efficiency in resource use, including a reduction of waste in production inputs (e.g., energy and other raw materials). Industrial restructuring should contribute to the closure of inefficient plants, and in so doing, impact favorably on resource use. If new investments incorporate advanced Western technology, pollution will be further reduced.

Increased efficiency in the use of inputs per unit

of output will lead to reductions in some pollutants. It will not eliminate the threat from the extensive use of inherently polluting technologies. Because markets by themselves cannot internalize environmental costs, it is necessary to establish appropriate environmental laws, institutions and policies to do so.

The allocation of responsibility among levels of government is an important issue. Experience in other countries suggests that there are benefits to be gained from assigning the following responsibilities to the union level; managing trans-republican environmental problems; establishing minimum ambient and other environmental standards; harmonizing environmental measures and product standards that might otherwise distort inter-republic trade and investment; international environmental co-operation; and burden sharing across regions. Other aspects of environmental authority, in particular the application of union-wide standards to local conditions and the implementation and enforcement of policy measures, should be devolved to the republics or to regional and local levels. Public bodies will need to be held accountable for the environmental consequences of their policies.

The creation of effective institutions will take time and require training, particularly at the regional and local level. The institution-building effort should be accompanied by a range of instruments concentrating on: pollution fees and fines which will help finance administrative costs; user charges on environmental services like water and sewage treatment to fund future environmental investments; a monitoring system to assist in policy design and implementation; effective procedures for establishing standards and, most importantly, enforcing them; and implementing demonstration projects in priority areas, e.g., river basin and airshed management.

The design of environmental institutions also needs to take account of the emergence of environmental groups which have forced the closure of dangerously polluting factories and blocked new investment projects. Greater access to environmental information, participatory decision-making processes and effective procedures for assessing the environmental impact would provide the best means of securing the support of these groups.

There is a danger that the severity of budgetary constraints might push environmental issues to the margins of the reform debate. But if environmental problems are allowed to accumulate, they

become more expensive to correct and impose a greater burden on later generations. Policies should therefore be focused on a limited number of priority problems, emphasizing inexpensive, cost-effective approaches such as accident prevention and emergency response at ageing facilities; environmental audits at production facilities; enhancing reduction of particulate, toxic and heavy metal air pollution; the design of toxic waste management facilities; and improvements in nuclear safety policies.

#### B. DISTRIBUTION, TRANSPORTATION AND TELECOMMUNICATIONS.

(1) *Distribution.* Both retail and wholesale trade continue to be dominated by the state, mostly at republic and local levels. Private activity that is legal is still confined to the collective farm markets, accounting for no more than 2.5 percent of retail sales in 1988, and trade cooperatives, whose share is probably smaller still. The designation of such trade as a nonproductive activity has made distribution a neglected sector of the economy. Employing around 7 percent of the work force, the sector is less than half the size of comparable sectors in the main market economies. Retail markups are one-fifth to one-quarter of those prevailing in the G-7 economies, and distribution as a whole receives only 3 percent of total investment, compared to roughly 4-9 percent in France, Germany, the United Kingdom and the United States. In a system characterized by central allocation and chronic excess demand, there is no incentive to develop a modern marketing infrastructure: advertising, packaging, self-service retailing and financial services are rudimentary or nonexistent. Worsening shortages have encouraged enterprises to produce their own inputs and to bypass the distribution system by resorting to barter.

Initial reforms might usefully focus on three aspects: the elimination of legal and licensing restrictions which prohibit or discourage new entrants; the privatization of small-scale distribution operations, including the bulk of the retail sector; and the commercialization of larger, mostly wholesale, distributors along the lines suggested for other state enterprises. Additional resources could be used in the first instance to develop financial and marketing information services, and to upgrade storage facilities (refrigeration capacity in particular) in food distribution.

(2) *Transportation.* The USSR is the world's most freight-intensive economy, but it is at the opposite end of the spectrum in terms of passenger mobility, which is far below Western norms. The structure of transport services in the USSR is also very different from that in most Western economies. Railways and pipelines dominate freight movements, together accounting for nearly 80 percent of ton-kilometers, while roads carry only 13 percent and waterways less than 8 percent. The number of passenger cars per capita is only one eighth that of Western Europe, so that public mass transit accounts for at least 75 percent of passenger-kilometers, in contrast to 18 percent in the E.C. countries.

Intense utilization of existing equipment results in low costs, and, despite low tariffs, all modes except urban passenger services report healthy profits—although profits appear to be exaggerated due to underrecording of true capital costs and underpriced fuel. Capacity constraints, particularly in vehicles and rolling stock, have become one of the sector's main problems, aggravated by outmoded technologies, inadequate maintenance, and shortages of spare parts. The prevailing monopolies provided little stimulus to modernize the system or otherwise respond to the need for improved quality of transport services.

Major tariff increases, particularly for rail and urban mass transit, would help rationalize and reduce demands on the transport system, thereby providing additional resources for modernization, maintenance, and capacity expansion. The creation of competitive market conditions would also stimulate greater responsiveness to transport users' needs as well as efficiency gains. Government barriers to entry of new companies, whether public or private, should be promptly removed for all modes. Private road and water transport could quickly become a dynamic new force on the market, and tariffs should be market-determined. For railways and, to a lesser degree, aviation, where natural barriers to entry of new firms are more formidable, privatization is arguably less important than decentralization, introduction of competition, and other measures to strengthen incentives and accountability. Until such time as a significant degree of market competition is established, the government should retain some control over tariffs for railways and aviation.

Investment resources should be concentrated on technological modernization where large gains in efficiency and/or service quality are attainable (e.g., improved information and operating sys-

tems, heavier freight trains, retrofitting of aircraft and buses with fuel- and pollution-efficient engines, air navigation systems); in expanding the supply and range of more modern vehicles, rolling stock, aircraft, and ships; in the most critically congested infrastructure (particularly railways and aviation); and in extending all-weather farm access roads. Of particular importance is the establishment of high-standard integrated intermodal transport services, which could reduce the need for inter-city highways and enhance the competitiveness of Soviet industry on world markets.

(3) *Telecommunications.* The Ministry of Post and Telecommunications (MPT) controls the manufacture, installation and operation of most civilian telecommunications systems, including radio and television. A few key sectors—energy, rail and aviation—have their own networks, partly because MPT's service is regarded as inefficient and unreliable. There are an estimated 10 telephone lines per 100 inhabitants—roughly 25 percent of the average density in Western Europe. Large cities are relatively well-equipped, the rural areas much less so. There are 15 million people on the waiting list for a telephone. Capacity is particularly low for international calls: except for official users, international direct dialling (IDD) is available only in Moscow, and is limited to 2000-3000 lines. The use of advanced technology is uneven: satellite communications are being introduced rapidly, yet there are very few digital exchanges, mainly because imports have been limited by COCOM restrictions and a lack of hard currency. The tariff structure bears little relation to costs. The prices for outgoing international calls are three times those for incoming calls, and are used partly to cross-subsidize low domestic long-distance rates and provide free local calls. Average revenues per line are roughly one-seventh of those in Western Europe.

There is scope for substantial decentralization of MPT's project operations, including the development of business services, data transmission and new exchanges. Strategic and coordinating functions, however, should be retained at the national level. In the longer run, a number of private operators could compete for the long-distance and international business which the authorities currently propose to pass to a new monopoly (Sovtelcom). Local services could be provided by regulated regional monopolies. The first priority, however, should be to improve the quality of service to the business user, through an

expansion and upgrading of capacity both for international calls and for fax facilities. Tariffs should be rationalized and, on average, raised substantially.

C. AGRICULTURE. Agriculture is a key sector in the Soviet economy, contributing about one quarter of GDP and employing one fifth of the work force. At about 230 million hectares, the area cultivated in the USSR is the most extensive of any country in the world. Most of the land is planted in grains and fodder crops; overall, half the value of production comes from livestock products. Ninety-seven percent of the agricultural land is divided almost equally between large state and collective farms. The remainder is farmed in household plots of up to one half hectare. These plots are used for high value products; essential inputs and services are obtained from the state or collective farms. Both crop and livestock yields show great regional variation, as production has been undertaken and maintained in areas ill suited for the purpose.

The USSR is the world's largest producer of wheat. Soviet wheat yields, at 1.7 metric tons per hectare, lag significantly behind those of the E.C. countries, but are comparable to North American yields; input usage per unit of output is high. Milk yields per cow in the USSR are relatively low, just half those of the E.C., and 40 percent of American levels.

Despite favorable resource endowments, the USSR is a net importer of food. Imports average just under US\$20 billion per year, about half of which is grains and sugar. The need to import arises in large part from the inability to process efficiently and distribute the very substantial domestic production of food and fiber. Wastage and losses are roughly equal to imports. Substantial food losses arise because of shortages of packaging material, storage facilities, outdated processing technology and inadequacy in, and disruption of, transport. In addition, environmentally insensitive production methods have lowered productivity through the degradation of soil and water resources, and led to the contamination of food. Waste of perishable foods, such as fruits, vegetables, and potatoes, is estimated to be as much as 40 percent of the crop. Losses of wheat are estimated to be approximately 20 percent of the crop, compared to an estimated 2 percent in the United States.

Agriculture shares with other sectors chronic problems of distorted prices, inefficient enterprises,

waste and pilfering at all stages, and ill considered investments with poor returns. Trade is under tight state control: severe restrictions affect, inter alia, protein feeds imports, giving rise to an inefficient use of grains, while cooperatives are banned and individual producers severely restricted in retail trade.

Base prices for producers vary widely by region. For instance, the basic procurement price for milk varies across republics by as much as 75 percent. Prices also tend to be lower for private producers than for state farms. In addition, bonuses, which are largely based on costs of production, tax efficient producers and subsidize inefficient producers. Consumer prices for many food items in official outlets have been held constant since the early 1960s, despite accelerating inflation and rising production costs, thus requiring growing subsidies. Meat and dairy products account for three quarters of food subsidies; consumption patterns vary by region, with higher subsidies in wealthier regions. Excess demand at subsidized prices has resulted in shortages and fostered corruption while at the same time products are used wastefully. Costly alternative distribution channels have replaced much ordinary retail trade in food. The poor and the state budget both fare badly under these distribution schemes. Rural inhabitants have more limited access to subsidized food from official retail outlets and must pay the higher prices for foods bought from other outlets or the parallel market.

As in the enterprise sector, the present agricultural system provides workers and managers with little autonomy to make decisions and few incentives to boost efficiency. Whatever costs were, they have been covered by rising procurement prices, production subsidies and debt. The role of the Agricultural Bank has been that of cash transfer agent rather than lender. In December 1989 half of outstanding farm debt was written off, but even after this event, the bequeathed assets of the agricultural banking system which has recently been put on a commercial basis are of questionable quality. Agriculture and related activities (rural infrastructure, food processing, and the supply of agricultural inputs) have absorbed approximately one third of total investment over the past 25 years, and yet agricultural and rural infrastructure are underdeveloped, food processing technology is outdated, and input supplies are of poor quality.

The deterioration during 1990 in marketing and distribution throughout the economy, and the resulting rise of autarky and barter between republics has been particularly damaging for agriculture. Efforts to shift the costs of subsidies to the local level, together with increased local control over retail prices, has led to barriers to deliveries from particular regions and to local procurement prices below harvest costs. Waste of perishable food has increased. Meat is being held in inventory in the form of livestock. The deterioration in transportation and distribution has aggravated food shortages in major cities. In a wider sense, however, the shortages are a consequence of growing price distortions and macro-imbalances.

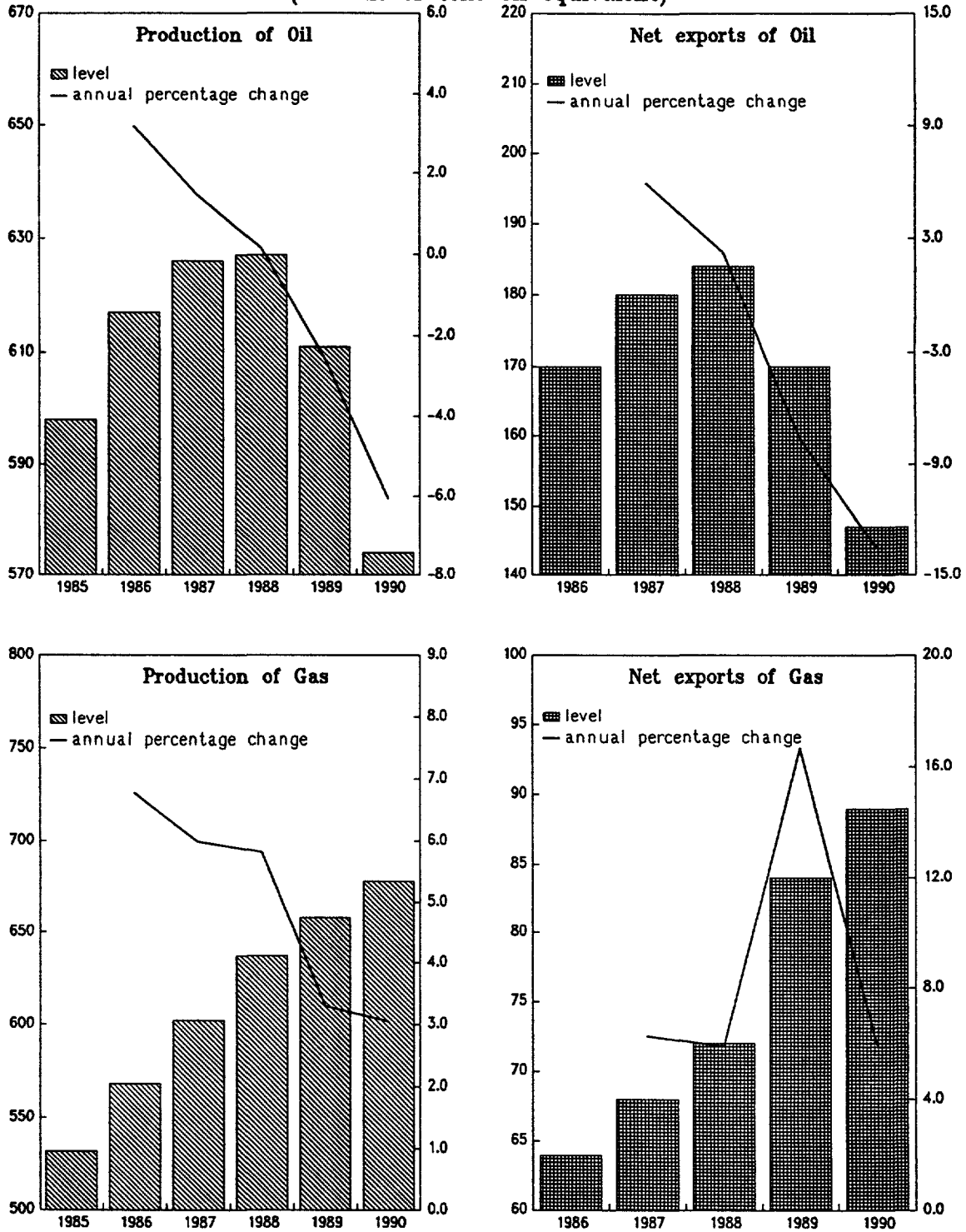
Reform in the agricultural sector must above all address the critical areas of price liberalization, and of enterprise and land reform; large new investments should be deferred until significant progress is achieved in these areas. Priority needs are for investment in small scale production, technology, construction of all weather farm access roads, and food processing capacity to reduce wastage. Once the transition to a market economy is underway, many important issues, including research and extension, and supportive financial services will demand attention.

The overall strategy for the agricultural transition must also include the termination of agricultural state orders; phased withdrawal of the state's role in direct provision of agricultural inputs and rural construction materials; privatization (with individual, joint shareholding or cooperative ownership) of processing, of wholesale and retail trade in food, and of small-scale transport (mainly trucks). Land and enterprise reform involves the disbanding of state and collective farms and the establishment, on the basis of local choice, of private individual or cooperative farms with full private ownership of land. Nondivisible machinery and buildings should be held by a service cooperative, with services sold to managers of land, both cooperative and individual. Reform of agricultural credit and establishment of new criteria for agricultural investment are also urgently needed. Joint ventures could play an important role, inter alia, in the food processing industries where introduction of modern technologies is particularly needed.

D. ENERGY SECTOR. The USSR is generously endowed with energy resources. Oil and gas production accounts for 22 percent and 40 percent

Chart 4

USSR  
ENERGY PRODUCTION AND TRADE  
(millions of tons oil equivalent)



Source: Narkhoz 1989, IEA estimates, MVES and staff calculations.

respectively of world output. Energy exports account for about 40 percent of Soviet hard currency earnings. However, the energy industries are presently in a precarious position. Coal and oil output are falling, the growth of gas output is decelerating and domestic energy shortages are developing (Chart 4). Although the energy sector accounts for a substantial part of investment (15 percent of total gross fixed investment and nearly half of industrial investment) outdated technologies, obsolete equipment, and poor maintenance are endemic in much of the fossil energy sector. Energy-related air pollution, water and land degradation have grown largely unchecked.

Exploitation of fuel reserves has often relied on techniques that result in the rapid short-term expansion of production at the cost of longer term recovery prospects; production inefficiencies abound. One consequence has been the eastward movement of production to new but more remote and costlier to exploit reserves in order to maintain output levels. Coupled with the inappropriate location of some refineries and power generating plants, this has led to increases in both transport requirements and production costs for coal, petroleum, natural gas, and electricity. Energy planners seek to use coal, gas and nuclear power more extensively to meet domestic demand in order to free up oil for export. However, the short run scope for increased use of gas is constrained by poorly constructed and maintained pipelines and processing plants. Increased use of coal faces serious transport shortages and poses environmental problems if emissions are uncontrolled. And more use of nuclear power is constrained by public opposition.

One salient characteristic of the Soviet energy sector today is its lack of flexibility. Oil and gas storage capacity is insufficient to cope with marked changes in demand, refinery shutdowns or pipeline bottlenecks. Electricity generating capacity is strained and new construction is delayed. Existing port and pipeline capacity could handle oil exports up to the equivalent of the 1988 peak level which was about 25-30 percent above the 1990 actual level. Refinery capacity is not matched to the structure of demand.

Energy pricing has also been inflexible. Consumer prices are below production costs and well below world market prices (Table 5). Consequently energy is used very inefficiently, with energy use two and a half times as high relative to GDP as the average for OECD countries. Production is subsidized and cross-subsidized; in-

centives to promote efficiency are virtually nonexistent. Investment is centrally allocated and does not take sufficient account of conditions prevailing in individual enterprises. Performance indicators for environmental protection are based on money spent, rather than on the effectiveness of expenditures.

A two-stage approach to reform is needed. First, in the near term, efforts are urgently required to restore oil production and exports to previous levels, giving particular emphasis to improving field management practices and secondary recovery techniques. Efforts are also urgently required to shore up the faltering electric utility system. In this regard, timely completion in conformity with generally recognized international environmental and safety norms of power plants under construction, including nuclear ones, is vital. Bringing on stream additional electricity generating capacity will also be critical. Priority should also be given to rehabilitating fuel processing plants, and to improving system flexibility, safety, efficiency, and environmental performance. Better public understanding of energy issues and needs will be essential to the achievement of these near

**Table 5 USSR: Domestic and World Energy Prices**

(wholesale prices to industrial consumers)

	1990 (rub 0.58 per US\$1)	1991 <sup>1</sup> (rub 1.80 per US\$1)
<b>Oil</b>		
in rubles per m.t.	30.0	70.0
in US\$ per m.t.	52.6	38.9
in percent of world market price <sup>2</sup>	26.3	19.4
<b>Coal</b>		
in rubles per m.t.	27.0	50.0
in US\$ per m.t.	46.6	27.8
in percent of world market price <sup>3</sup>	93.1	55.6
<b>Gas</b>		
in rubles per th.cm.	25.0	50.0
in US\$ per th.cm.	43.1	27.8
in percent of world market price <sup>4</sup>	33.7	21.4

1. The ruble prices refer to officially announced new domestic energy prices for oil, coal and gas, effective from January 1, 1991.

2. World market prices are assumed to be US\$200 per million metric tons (m.t.) in 1990 and 1991.

3. World market prices are assumed to be US\$50 per million metric tons (m.t.) in 1990 and 1991.

4. World market prices are assumed to be US\$130 per thousand cubic meter (th.cm.) in 1990 and 1991.

Source: Data provided by the Soviet authorities and staff calculations.



term goals. Second, commercialization and price reform, coupled with investment in more advanced technology, are essential for development and energy conservation over the longer term.

A substantial increase in relative prices of energy products is likely to reduce the waste in the short run and encourage supply in the longer run. Conservation can have potentially powerful effects on export earnings: a 1 percent reduction in domestic consumption would increase export potential by nearly US\$1 billion (assuming oil prices of US\$26 per barrel). Over the longer term, capacity expansion will still be required as domestic demand expands as a result of income growth, and this will require new investment incorporating advanced foreign technology.

The Government has made a commitment to implement a range of extraordinary measures to reverse the drop in oil production. Foreign investment and know-how will be critical to this effort. To attract foreign capital, a favorable investment climate is required. Fundamentally, this means implementing the restructuring sketched out earlier. In addition, legal and regulatory concerns of potential foreign investors will need to be addressed. Proposed reform plans to lease fuel deposits are a step in that direction. The royalties and other taxes paid by foreign companies engaged in the exploration of energy resources could provide a welcome boost to budget revenues over the medium term. However, the issue of ownership of energy resources has to be resolved before foreign companies can be expected to enter into significant long-term contractual arrangements, and clearly defined environmental standards will need to be established. An internationally agreed investment regime with international arbitration would also help to strengthen confidence of foreign investors.

E. METAL AND MINING. The USSR is the largest producer in the world of iron ore, zinc and nickel; the second largest of gold, aluminum (for which it is heavily dependent on imports of bauxite) and lead; and the third largest of copper. Domestic prices for metal mining products consumed internally are severely distorted, having a price (in terms of heavy machinery) of perhaps one third of that on world markets; such prices have also limited the possibilities of generating internal funds for investment or encouraging economy in the use of inputs. And with increasing needs for foreign exchange in the economy, a clear distinction has emerged between those industries whose

output is used primarily domestically, and those whose output is exported.

The export-oriented subsectors, consisting of the gold, platinum and diamond, and nickel industries, have been generously treated in terms of investment allocations. Worker motivation may also have benefitted from retention rights to foreign exchange—albeit modest—that have been used to acquire consumer durables. The identified resource base is sufficient to support production at present levels in the medium term, notwithstanding the apparent decline in gold production over the last decade. In contrast, domestically-oriented subsectors are characterized by antiquated machinery and technologies with virtually no computerization, and a resource base that is rapidly dwindling. As in the case of energy, difficulties of access characterize many mining activities, leading to high transport requirements because of the distance between the mines and the processing units.

While the demand for minerals, other than gold and nickel, tends to be excessive because of low domestic prices, energy use in mining production is extremely high. Most of the metal industry, moreover, is characterized by severe environmental problems.

Presently, the enterprises of the metal mining and smelting operations typically fall under the control of the Ministry of Metallurgy. The exceptions include those dominant in gold and nickel, which are responsible to the Council of Ministers and are accorded preferential treatment in the allocation of investment funds and equipment. For the most part, semifabricating is not undertaken by the metal mining enterprises but is relegated to enterprises under other ministries. With the liberalization of trading rights, large organizations have taken the opportunity to establish contacts directly with foreign purchasers for the sale of large tonnages outside of state orders, rather than going through the industry's foreign trade organization. A new trading company has recently been established to handle sales of small spot lots of various materials produced in excess of planned production. The proceeds are used to purchase consumer goods for the workers.

Looking ahead, price liberalization will have a major impact on the metal industry as input and output prices are highly distorted in relation to world market prices. But liberalization is essential for efficiency and should encourage recycling which is presently totally neglected. Producers are likely to face a sustained decline in domestic

demand for most metals. Efficient producers could then seek markets abroad, but there would in any case be widespread need for restructuring and rationalization. While additional investments are likely to be needed in modern technologies and for purposes of environmental protection, there might nonetheless be a decline in overall net investment. Managers will need to acquire the necessary skills to function in a market environment, although present standards of technical training appear high. As in other industries, the present large bureaucracy controlling the sector should be dramatically streamlined and reoriented away from directing investment and production, toward general policy issues that arise in a market environment such as demonopolization, commercialization and privatization.

F. MANUFACTURING SECTOR. The Soviet manufacturing sector accounts for about 26 percent of GDP, which is roughly the same share as in Eastern Europe (25-30 percent) and industrial countries (20-25 percent), but employment in that sector is higher in the USSR than in some market economies (Chart 5). Enterprises are typically very large, with almost three fourths of the employees in firms with over 1,000 workers and one-fifth in firms with over 10,000 workers. Exports of manufactured goods represent only a small part of output, with exports to non-socialist countries accounting for less than 1 percent of output and exports to socialist countries less than 2 percent.

The systemic weaknesses in the manufacturing sector are readily apparent: the rise in the capital output ratio from 2 in 1975 to 3 1/2 in 1987 reflecting the diminishing return from large-scale investment; excessive use of raw materials and energy (the use of energy in steel-making is nearly half above that in Japan and a quarter above that in the United States); low labor productivity; and overmanning (reaching 100 percent in many plants).

Another weakness is the great concentration of production in a single or a few very large producers (e.g. refrigerators and T.V. tubes), which has made the manufacturing industry highly fragile to temporary disruptions in production or transportation. An example is the recent shortage of cigarettes which was due, in part, to the shut-down of monopolistic glue and filter manufacturing facilities in Azerbaidzhan and Armenia. Moreover, despite the relative closedness of the economy, some of the manufacturing industries

are critically dependent on imported raw materials and imports. This was evident in 1990 when the decline in industrial production was largely attributed to constraints on certain imports (e.g. cold rolled steel sheets for the auto industry; dyes and lacquer for the furniture industry and packaging material for the food industry).

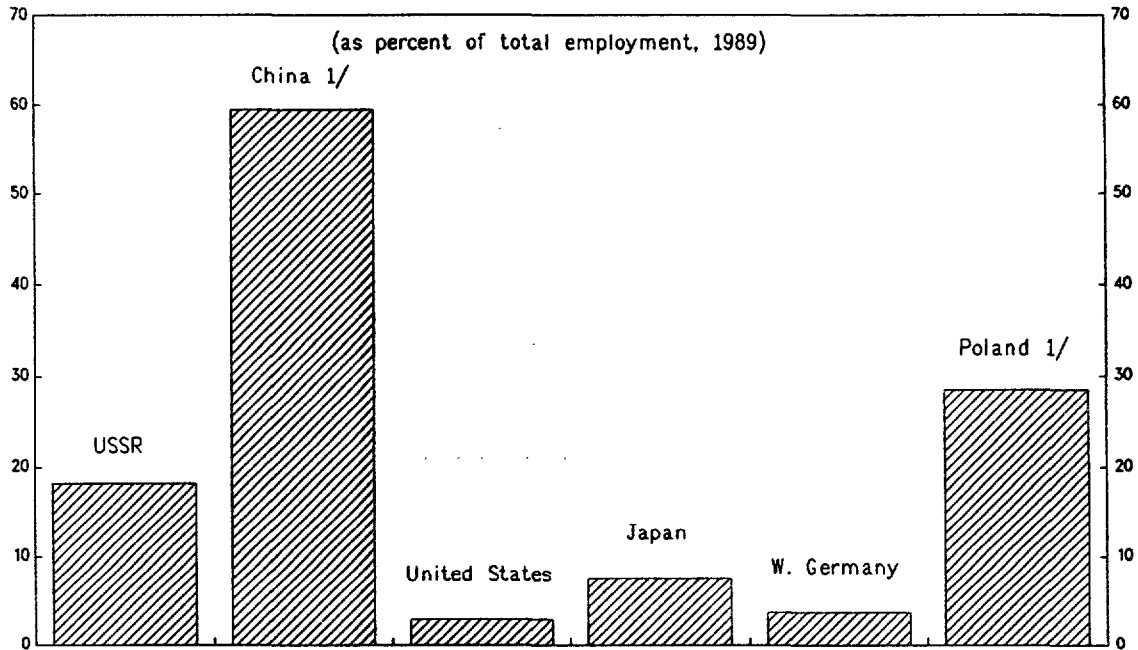
The central planning system has created a mismatch of demand and supply resulting both in shortages of inputs for enterprises and finished goods for consumers and in excessive stockbuilding. A recent survey at the consumer level showed that nearly 90 percent of the basic industrial goods reviewed were judged to be in short supply. While shortages have persisted for many years, they have become more severe recently because of the persistence of price controls and rising excess demand. At the same time, stocks of some goods are very high, as enterprises do not necessarily produce goods in demand and the interest cost of holding stocks is low. For example, in 1990 stocks in machine tool plants were equivalent to six months sales, compared with one month or less in market economies.

The move to a market economy will require the end of most of the administrative controls, the establishment of market signals, and the provision of basic services such as transportation, communication and financial services. Branch ministries should be dissolved and one Ministry of Industry at each union and republic level should support and regulate manufacturing activity, while being totally separated from production. Their roles should be to formulate and administer industrial policy; review and monitor long-term trends and international developments; disseminate technical and market information; promote Soviet industry abroad; elaborate and update product standards; work with concerned agencies in applying safety and environmental standards; and assist regulatory agencies to develop and monitor controls on monopolies and anti-competitive practices.

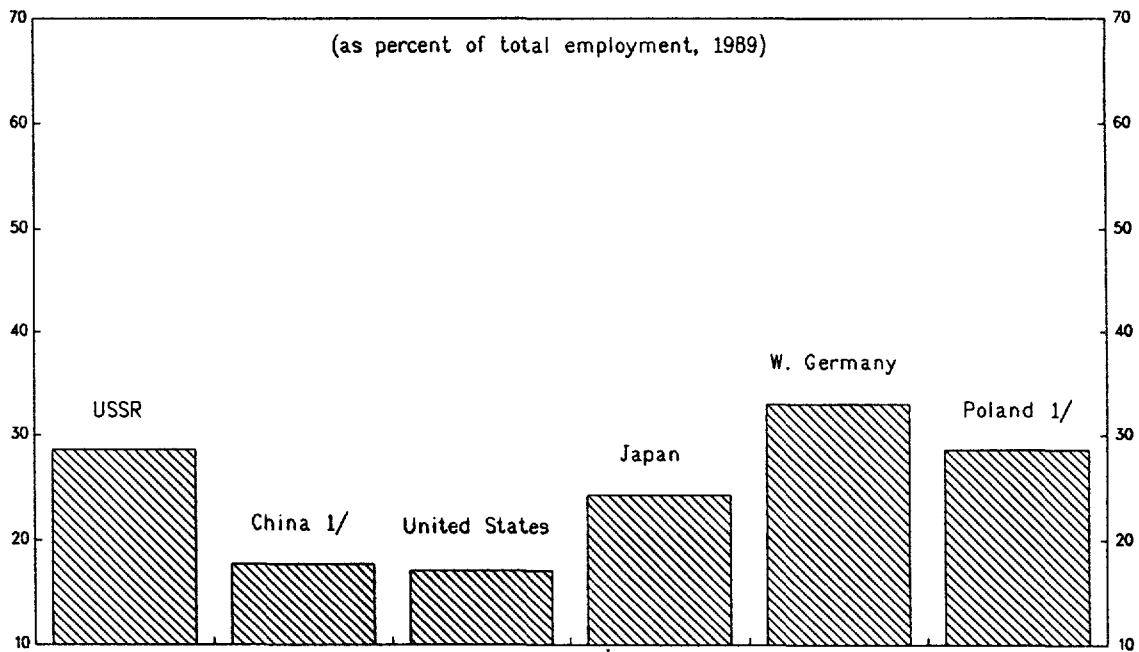
In addition to commercialization and privatization, the transition to a market economy will require the elimination of the restrictions on the permitted range of products that currently prevent competition, and a removal of other licensing requirements that pose undesirable barriers to competition. It is particularly important to facilitate the growth of the small business sector. In large firms, especially in heavy industries and producer good industries, the units that produce

Chart 5  
USSR  
EMPLOYMENT BY SECTOR

*a. Agriculture*



*b. Industry*



Source: Goskomstat, national sources and staff estimates.

1/ 1988.

consumer goods should be split off as autonomous firms. Certain subsectors, such as steel, petrochemicals and machine building, will face particularly difficult adjustment problems, given the expected drastic switch in demand to services and consumer goods in the wake of price liberalization and the reduction in military production and procurement. For these industries, downsizing or liquidation rather than enterprise specific restructuring may be required.

Adequate business infrastructure would require, for example, development in telecommunication, transportation, and financial services. Training for managers who have a good basic education but are completely unfamiliar with conducting business in a competitive environment is critical. The scope of such training is enormous considering the existence of 46,000 industrial enterprises and the need for the training of several employees in each of these enterprises.

The conversion of military industries to civilian production, and the transfer of technology from military to civilian industries, are of particular concern to the authorities. There are over five million workers employed in the military industries and the level of technology is high. While the resources of these industries are increasingly being shifted to production of civilian goods, past conversions have sometimes resulted in inefficient product mixes. The potential for further conversion remains large. However, greater exposure to market forces will be required if these industries are to become competitive. A detailed examination of these matters was beyond the scope of the present study and would need to be undertaken at a later stage. The authorities have indicated their interest in foreign investment in conversion activities.

G. HOUSING. The unsatisfied demand for housing is very large, with 18 percent of all families having been on waiting lists for more than 10 years. Individual housing constitutes only 22 percent of city floor space, and its quality is very low. Per capita living space is below half that of West Europe. The housing situation is a major obstacle not only to labor force mobility, but also to macroeconomic stabilization. Rents are basically unchanged since 1928 and households now spend less than 3 percent of their income on rents and utilities. This is equivalent to about one tenth the share in some major market economies. Maintenance is heavily subsidized, yet actual expenditures cover less than 40 per cent of the cost of even

minimal required levels. This gap significantly contributes to the steady deterioration in the quality of the housing stock. Both production and rent subsidies are linked to the housing unit, and not to the means of those who live in it.

The introduction of a market-oriented housing system will require reforms in four areas. First, property rights—the core component of any housing system—need to be clearly established through a strengthening of ownership rights, conversion of “permanent and guaranteed” administrative tenancy rights to fixed-term renewable rights, and the free and unrestricted exchange of existing units and leases, with monetary compensation permitted. Second, subsidies and allowances should be channeled away from the construction industry to households, and targeted as far as possible; moves toward full economic rent should be coordinated with both wage reform and the privatization of various segments of the state-owned stock. This process should begin at an early date. The sale of newly produced units should be started very quickly. In 1989 financial assets per household averaged only one third of the official construction cost of a standard urban housing unit so the potential for absorbing household savings is considerable.

Third, housing finance must be developed and become an integral component of financial sector reform. Subsidy elements should be separated clearly from finance credit, so that funding is transparent. Particular attention must be given to ensuring that finance is available to carry long-term mortgage instruments. During the transition toward market determined wages and rents—characterized by the conversion of in-kind payments such as housing into wages—special mechanisms may be needed to improve affordability while minimizing subsidies.

Finally, increased competition is needed within the housing industry. This will become easier as households gain greater control over financing decisions, subsidies are redirected, markets for building materials develop, and access to land is facilitated by local governments. Preferential treatment for large state firms should be eliminated. Revised urban planning and changes in building codes are needed to accommodate greater diversification of housing types and smaller, more flexible housing projects which could also absorb labor shedding by other sectors. It is estimated that such reforms could cut the costs of providing housing by 30-40 percent.

## VII. Criteria for, and Forms of, External Assistance

This section describes the criteria for, and forms of, external assistance which could support a reform program. In our view, the criteria for such a program should be the adequacy and mutual consistency of the major structural reforms and financial policies. We would stress, in particular, the need for a significant and broad-based liberalization of prices in an environment of increased domestic and external competition, supported by a clarification of property rights and encouragement of private ownership along with the commercialization of the larger state enterprises. This in turn requires that the necessary legal framework and a judicial system be put in place as rapidly as possible. Initially, the development of a private sector should be fostered by the sale of small enterprises and the encouragement of small-scale market activities. The commercialization of large state-owned enterprises would bring them under the discipline of a hard budget constraint, and would be a step towards both more efficient management and privatization.

These efforts need to be buttressed by tighter financial policies and a more realistic exchange rate policy so as to contain inflationary pressures and prevent major external imbalances. To cushion the effects of the reforms on the poorest segments of the society, these measures should be supported by an incomes policy and by an effective social safety net (including an adequate system of unemployment compensation). Limited assistance in support of restructuring should also be provided to viable firms facing severe transitional problems. Time will be needed to complete this process but the initial changes have to be sufficiently deep and wide that they are seen to mark an irrevocable break with the past and to establish a climate in which private economic activities are encouraged and protected.

In a revolutionary departure from earlier thinking the Government of the USSR has committed itself to move to a market economy. The presidential guidelines set out broad intentions that go in that direction. The specific measures that have been adopted do not yet constitute the coherent and comprehensive program which, in our view, is necessary if the transition is to be successful. Experience suggests that measures that are less than comprehensive have but a poor chance of success, and this is particularly likely to be true in the USSR where major domestic and

external imbalances have arisen and the mechanism for administrative control has fallen into disarray.

The elaboration and implementation of the necessary reforms will inevitably be a protracted process whose success will depend above all on the efforts and determination of the Soviet people themselves to transform their economic system. But the international community can play an effective supporting role in the period during which preparations for reform are being made, and while the reforms are being implemented, such as technical assistance, food aid and selected projects. More general balance of payments assistance would only be effective if a comprehensive program of macroeconomic and structural reform were to be implemented.

During the preparatory period, a primary focus of aid would be *technical assistance*. Union, republican and municipal authorities all indicated their interest in technical cooperation and advice. Assistance is needed in the design of policies, the establishment of new institutions and the development of a legal framework. Work has begun in these areas but it will need to be extended to cover laws affecting contracts, property rights, monopolistic practices and bankruptcy. Assistance would also be helpful in developing statistical and accounting systems and in setting up accounting firms so as to facilitate the transition to a market economy. Technical assistance is also needed in the fields of fiscal and monetary policies, foreign exchange and banking.

Beyond these specific areas, a major contribution could be made to the easing of inevitable transitional difficulties by providing expertise in such sectors as labor markets, management and marketing. A large and widespread international effort is justified, but to be effective it would need to be closely coordinated primarily by the USSR itself. As everything cannot be done at once, priorities have to be set; and a decision is needed as to how technical assistance can best be channeled to the republics and other territorial administrations. A large part of this technical assistance should be provided by the private sectors of Western countries with the role of public sectors being limited to filling any important gaps.

A more immediate problem, due largely to the breakdown of the state procurement and distribution system, is that food shortages have emerged in some parts of the USSR, and especially in large cities. *Food aid*, if targeted and successfully delivered to the regions most affected, could allevi-

ate present distress. An early implementation of economic reform would make the single largest contribution to alleviation of shortages.

Substantial *foreign investment* could be expected when a more comprehensive reform program had been put in place which would require the responsibilities of the union and the republics to be more clearly delineated. The effectiveness of widespread project assistance is subject to the same prerequisites but the energy and environment sectors may be the exceptions, for in these areas immediate new investment could have a quick pay off for the USSR and the rest of the world (in particular the modernization of existing nuclear plants, the improvement of oil extraction technologies and capacities, and the updating of the gas pipeline and distribution systems so as to favor energy savings). Early support for the removal of bottlenecks in economic infrastructure (e.g., telecommunications and distribution) may also be justifiable.

A comprehensive reform program could benefit from financial assistance, including *project assistance*. Project assistance could make contributions in many sectors, but immediate attention should be directed toward infrastructures where investments (both public and private) are of strategic importance for the transition to a decentralized market economy in which autonomous units will need to establish direct horizontal relationships. Furthermore, these infrastructure investments will be essential to encourage foreign direct investment and privatization. Retailing and distribution are two areas where foreign assistance can be particularly useful: these areas will be critical in the transition to a market economy and, in both, restructuring and privatization can take place somewhat faster than in sectors which require heavy investments. Telecommunications is another sector in which new investment would support decentralization and marketization. Equally project assistance in transport, in agriculture (where the need is for new investments in small scale production technology), in food processing, and in banking will be important. The opening of the economy would benefit also from a reconsideration of existing trade barriers imposed by Western countries, including the present COCOM restrictions.

In regard to *balance of payments assistance* several scenarios could be constructed. For illustrative purposes two have been chosen. They are based on assumptions of: crude oil prices of US\$26 or US\$20 per barrel and declines in oil exports of 17

percent or 25 percent respectively. They yield a range of estimates for the current account deficit with the traditional convertible currency area of between US\$10.1 billion and US\$14.7 billion (excluding gold exports which might be estimated at \$3.5 billion). In addition, a large amortization (amounting to about US\$12 billion) of medium and long term debt in convertible currencies will fall due in 1991, and there will be a need to repay sizable overdue trade credits (of the order of US\$5 billion).

Given the already secured financing and allowing for gold exports, the ex ante financing gap in convertible currencies could range between US\$5.6 billion and US\$10.2 billion. But part or all of this gap will be filled by the prospective surplus vis-à-vis the CMEA area, which can be estimated at between US\$9.9 billion and US\$6.6 billion under the two alternative scenarios depending on the financing available to these countries, and on the disposition of their accumulated claims in transferable rubles on the USSR. If there were to be large settlements in convertible currencies by CMEA partners to the USSR this would aggravate the balance of payments problems of these countries, and could require a reassessment of the scale of assistance to be provided to them.

However, the date on which far-reaching reform will be introduced is not now known and the requirements for balance of payments assistance will have to be re-evaluated in the light of the prospects at that time. Such assistance might include consumer goods and food to increase supplies at the outset of price liberalization. Assistance through a stabilization fund could also provide important support for an early move towards the full convertibility of the ruble. But we must stress that balance of payments assistance should accompany the introduction of a major and comprehensive reform program. Without such a reform, additional financial resources would be of little or no lasting value. With it, assistance could provide important support during a time of a difficult transition to integration of the economy of the USSR into the world economy, with benefits for all partners.

## VIII. Endnotes

1. The term commercialization is used in this study as shorthand covering the establishment of an enterprise as a financially and managerially autonomous entity without necessarily implying

private ownership (see section VI.2.b.(1) for details).

2. The evaluation of economic developments is of necessity conditioned by the available statistics. Soviet economic statistics are subject to well-known methodological problems, uncertainties of interpretation, and various systemic biases tending to overstate economic performance. Certain problems, most critically the evaluation of aggregates compiled on the basis of prices that may reflect neither use values nor production costs, are insuperable. These limitations need to be kept in mind throughout the study. Data on external debt and debt service were broadly of the same order of magnitude as those compiled through external creditor sources, but the comparison of trade data compiled in the USSR and by partner countries was handicapped by methodological differences between the two sources. Nevertheless, it is our view that the statistical base

is adequate to support the policy analysis and recommendations made in this study.

3. External debt comprises debt contracted or guaranteed by the Vneshekonombank (the Foreign Trade Bank). It therefore excludes financial debt (relatively small) of enterprises and suppliers' credits (including arrears).

4. This concept includes an allowance for that part of the increase in household and enterprise holdings of cash and deposits that is estimated to be held involuntarily.

5. The official rate remains in effect only for ruble-denominated credits of the USSR.

6. Including, in particular, substantial new credits and grants from France, Germany, Italy, Saudi Arabia, South Korea, Spain, the United States, and the European Communities.

7. The Industry and Construction Bank, the Agriculture Bank, and the Social Investment Bank.

## APPENDIX TABLE I

### USSR: Incomes and Prices

(annual growth in percent)

	1986	1987	1988	1989	1990 (estimates)
Retail price index	2.0	1.3	0.6	2.0	4.8
Average monthly wage	2.9	3.7	8.3	9.4	10.0
Household money incomes	3.6	3.9	9.2	13.1	14.5
Household purchases of goods and services	2.8	3.1	7.2	9.5	13.7
Saving rate (percent of disposable income)	6.9	7.6	9.2	12.0	12.9

Source: Data provided by the Soviet authorities.

### USSR: Money and Credit

(annual average growth in percent)

	1981-85	1986	1987	1988	1989	1990 (estimate)
Currency	6.0	6.1	7.8	13.6	19.5	21.5
M1	6.8	7.6	15.7	15.4	14.3	13.4
M2	7.5	8.5	14.7	14.1	14.8	15.3
of which:						
Households	7.2	9.4	9.8	11.3	15.0	13.5
Enterprises	8.7	5.5	32.6	22.5	14.5	20.0
M2 (percent of GDP)	—	51.2	56.9	61.2	65.5	72.5
Total credit	8.7	4.2	6.6	11.3	11.2	10.9
of which:						
to firms	8.7	-13.3	-5.0	-6.8	-3.8	-4.3
to government	8.7	18.8	40.3	46.0	30.0	17.2

Source: Data provided by the Soviet authorities.

## APPENDIX TABLE II

### USSR: External Trade

(annual average percentage change)

	1986-89	1986	1987	1988	1989
Export volumes	4.5	10.0	3.3	4.8	—
of which:					
CMEA	1.7	3.9	0.9	—	1.9
Nonsocialist <sup>1</sup>	6.5	15.5	6.0	6.3	-1.0
Import volumes	1.3	-6.0	-1.6	4.0	9.3
of which:					
CMEA	1.0	0.7	1.5	—	2.0
Nonsocialist <sup>1</sup>	1.8	-14.3	-2.8	8.6	18.5
Terms of trade	-5.2	-10.5	-2.0	-9.0	1.1
of which:					
CMEA	-3.7	1.9	-5.6	-6.3	-4.5
Nonsocialist <sup>1</sup>	-6.4	-22.4	7.8	-11.2	3.3

1. Nonsocialist countries comprise all countries except CMEA countries, the People's Republic of China, Democratic People's Republic of Korea and Yugoslavia.

Source: Data provided by the Soviet authorities.

### USSR: External Debt and Reserves

(billions of U.S. dollars)

	1985	1986	1987	1988	1989	1990 (staff projections)
External debt <sup>2</sup>	28.9	31.4	39.2	43.0	54.0	52.2 <sup>1</sup>
of which:						
Short-term	6.9	7.4	8.6	11.2	17.7	10.0 <sup>1</sup>
External debt service <sup>3</sup>	—	7.8	8.8	8.2	9.4	13.4
(percent of goods and services) <sup>4</sup>	(—)	(27.7)	(26.5)	(23.1)	(24.2)	(33.0)
Foreign exchange reserves <sup>5</sup>	12.9	14.7	14.1	15.3	14.7	5.1

1. June 1990.

2. External debt contracted or guaranteed by the Vneshekonombank.

3. Total debt service on debt contracted or guaranteed by the Vneshekonombank, excluding repayments of short-term debt.

4. In convertible currencies.

5. BIS data excluding end-1990 which are staff projections.

Source: Data provided by the Soviet authorities, the Bank for International Settlements (BIS) and staff projections.



APPENDIX TABLE III

USSR: Distribution of Population, NMP and Budget Revenue by Union Republic

	Population (percent of total in 1989)	NMP			State Budget Revenue Retained by Republic (percent of total, 1990 plan)	Deliveries to Other Republics (percent of republican NMP in current domestic prices)	Exports Abroad
		Total	Industry (current prices, percent of total in 1988)	Agriculture			
Armenia	1.1	0.9	1.2	0.7	1.4	63.7	1.4
Azerbaijan <sup>1</sup>	2.5	1.7	1.7	2.2	1.8	58.7	3.7
Belorussia	3.6	4.2	4.0	4.9	4.7	69.6	6.5
Estonia	0.5	0.6	0.6	0.7	0.8	66.5	7.4
Georgia <sup>2</sup>	1.9	1.6	1.4	2.1	1.8	53.7	3.9
Kazakhstan	5.8	4.3	2.5	6.1	6.1	30.9	3.0
Kirgizia	1.5	0.8	0.6	1.3	1.2	50.2	1.2
Latvia	0.9	1.1	1.1	1.2	1.3	64.1	5.7
Lithuania	1.3	1.4	1.1	1.9	1.7	60.9	5.9
Moldavia	1.5	1.2	1.0	1.8	1.4	62.1	3.4
RSFSR <sup>3</sup>	51.4	61.1	61.9	18.0	55.3	18.0	8.6
Tadzhikistan	1.8	0.8	0.5	1.2	1.1	41.8	6.9
Turkmenistan	1.2	0.7	0.4	1.2	0.9	50.7	4.2
Ukraine	18.0	16.3	16.7	17.1	15.9	39.1	6.7
Uzbekistan <sup>4</sup>	6.9	3.3	2.3	5.2	4.7	43.2	7.4
Residual	—	—	3.0	4.4	—	—	—
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>—</b>	<b>—</b>

1. Includes 1 autonomous republic.

2. Includes 2 autonomous republics.

3. Includes 16 autonomous republics.

4. Includes 1 autonomous republic.

Source: Data provided by the Soviet authorities.

USSR: Social Indicators

	USSR	Eastern Europe <sup>1</sup>	OECD
Population (millions)	288.0	113.0	832.0
Per capita GNP (U.S. dollars, 1989)	1,780 <sup>2</sup>	2,465	17,606
Life expectancy (years, 1987)			
Male	64.2	67.2	71.6
Female	73.3	74.4	78.0
Infant mortality (deaths per 1,000 live births)	25.1	17.6	8.4

1. Data are for Bulgaria, Czechoslovakia, Hungary, East Germany, Poland, and Romania, except for life expectancy and infant mortality figures, which exclude Hungary. The per capita GNP figures are converted to U.S. dollars at official exchange rates. Since these rates are not market-determined, GNP comparisons derived from them must be regarded as subject to wide margins of error.

2. Converted at rub 1.8 per U.S. dollar.

Source: Data provided by the Soviet authorities, national sources, and staff calculations.





President Gorbachev and other leaders of the Soviet Union have indicated their intention to transform the USSR into a market-oriented economy integrated into the world economy. At the July 1990 "Houston Summit" the heads of state and government of the seven principal industrial democracies and the president of the Commission of the European Communities, in agreement with the Soviet Union, requested the International Monetary Fund (IMF), the World Bank, the Organisation for Economic Co-operation and Development (OECD), and the designated president of the European Bank for Reconstruction and Development (EBRD) to undertake a joint study of the Soviet economy, make recommendations for its reform, and establish the criteria under which Western economic assistance could effectively support such reforms. This study, which in December 1990 was submitted to the participants in the Houston Summit and to the Soviet government, summarizes the analysis and recommendations prepared by the staffs of these four international organizations. The more detailed background papers prepared as part of this study are being published by the OECD on behalf of these four organizations.

The transformation of the Soviet economy is bound to be extraordinarily complex and will take many years to complete. Three closely related areas require action at the outset of the process: macroeconomic stabilization, including fiscal, monetary, trade and payments, and incomes policies; price reform in an environment of increased domestic and external competition; and ownership reform, involving the rapid privatization of retail trade and small enterprises, along with the commercialization of large, state-owned enterprises.

Many measures are needed to support policy actions in these three areas. A social safety net, including an unemployment compensation program, will be needed to protect the most vulnerable from the short-term adverse consequences of the reform process. Other measures include completion of the legal framework for a market economy, the creation of a market system for banking and finance, the demonopolization and restructuring of many enterprises, the reconstruction of the transport and communications infrastructure, the development of a system of labor relations, the process of privatization of state enterprises and collective farms, and the addressing of serious environmental problems. These and other issues, and the close relationships between them, are discussed in the study.

The authors consider the conservative, or gradualist, approach to economic reform and conclude that the chances of staying with a conservative strategy through the medium term are slim. Consequently, they advocate a more radical approach. Recognizing the possible problems with this approach, however, they propose measures to mitigate the adverse effects of the transition on consumers and to cushion the impact of rapid adjustment upon enterprises, thus helping reduce the temporary losses in employment and output that will inevitably accompany the restructuring program.

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