Price Reform

1. INTRODUCTION

Under central planning and the central allocation of real resources, prices have generally been viewed as playing largely an accounting role with little effect on consumption, investment, or production decisions. Prices remained fixed for long periods of time at levels unrelated to the pattern of underlying scarcities, and resource allocation generally depended instead on administrative decisions. Even with the focus on physical balances, however, it is likely that the low prices maintained on such basic industrial inputs as energy and steel both reflected and helped to perpetuate the low priority given by planners to economizing on those resources. Inadequate investment in housing and poor maintenance of the existing housing stock may also be attributable, in part, to the low level of financial flows to the responsible government agencies which resulted from subsidized rents. At the same time, household consumption patterns have been influenced by the heavy subsidization of particular foodstuffs.

Whatever the influence of prices under central planning, they become crucial as allocation decisions are decentralized and enterprises are placed increasingly on a self-financing basis. The need for massive price adjustments has been widely recognized in the USSR and was a central element of all the major economic reform proposals put forward in 1990. General agreement does not exist, however, on either (1) the timing and speed of price correction, or (2) the extent of future price control. In the discussions of price liberalization, even among those who advocate radical reform, emphasis is frequently put on the need to wait to free prices until scarcities are eliminated, supplies are stabilized, and monopolies are broken up. The role of prices in influencing demand and as a signal to producers for resource allocation, which itself would help to remove shortages, is often given less weight.
In the eyes of many Soviet observers there are also significant economic concerns that argue against rapid price liberalization, including widespread monopoly, and fears of an explosive wage-price spiral, of large-scale bankruptcy of enterprises and displacement of workers, and of severe declines in real incomes. Many of these same dangers exist, however, even in a scenario involving slower administered adjustment of prices. The question is which option offers the most acceptable trade-off between likely short-term costs and prospects for stability and growth in the medium term.

2. THE PRESENT SYSTEM

a. Price administration

Like most aspects of the Soviet economy today, prices and the manner of their determination are in a state of flux and confusion. Superimposed on a formal system of price controls, the administration of which is divided among several agencies at each level of government, are “contract” prices, negotiated by enterprises within administratively set limits and later converted to “list” prices by Goskomtsen, the state price control agency; and rapidly growing legal and semi-legal (i.e., tolerated) parallel markets where cooperatives and other nonstate forms of enterprise pay more for their inputs and enjoy greater freedom to set their own prices, and where both state and nonstate enterprises acquire needed inputs or scarce consumer goods for their workers. For these reasons, available price information and price indices, which generally refer to official prices, may present a misleading picture of both price levels and trends. The analysis of prices is further complicated by the wedge between retail and wholesale prices represented by turnover taxes and subsidies at implicit rates that vary widely from one industrial branch and product to another.

The prices of most goods and materials exchanged among industrial enterprises are, in theory, set by the all-union and republican-level offices of Goskomtsen. Producer prices in a particular industrial branch, at the time they are set, are generally based on the branch’s average costs of production, plus a normative markup, building in some incentive for individual enterprises to hold down costs. Demand is generally not taken into account in the pricing decision. Moreover, infrequent revisions weaken cost-price relationships over time. Although the official prices of specific items remain fixed for long periods of time, old products disappear from production, and new products are continually being introduced, to which new prices must be assigned. The branch ministry usually assigns a provisional price on the basis of cost data submitted by the producing enterprise. This price must later—often several years later—be given final approval by Goskomtsen, which may conduct a thorough review of costing at each
stage of the production process as well as a comparison with the costs of similar goods at other enterprises.

In reality, it is impossible for Goskomtsen to review more than a fraction of the price proposals brought to it each year or to evaluate more than a handful of them rigorously. Consequently, most prices between the major revisions are, in fact, set by the enterprises and branch ministries in accordance with rules set down by Goskomtsen. The result is probably considerable exploitation of the opportunity to introduce minor innovations as new products, but nevertheless keeping price increases within tactical limits to avoid provoking a later Goskomtsen audit. Ministries may also attempt to push prices above the average costs plus the normative markup in order to avoid losses in the less efficient enterprises.

b. Industrial input prices

As noted above, official wholesale prices have been comprehensively adjusted only infrequently. Prices for such basic inputs as electric power, fuels, and metals have changed little during the interim periods. Whatever may have been the relationship to external prices initially, the present internal structure of prices bears little relation to relative prices in international markets.\(^5\) Table IV.1.1 illustrates the wide variation in the ratios of the domestic to world market prices across products. The domestic price of oil relative to electricity, for example, is less than one third the comparable ratio in the world market; the relative price of scrap steel is about one seventh the world market ratio; while the relative price of ammonia is almost twice the world market ratio.

With input and output prices bearing little relation to supply and demand, enterprises as a matter of necessity have found ways of introducing some flexibility into the otherwise rigid price system. One common vehicle for price adjustment, as alluded to above, is the introduction of a “new” product, which may in fact vary little in cost, quality, or productive value from the old product, but which is put forward for revaluation by Goskomtsen. Goskomtsen is not equipped to evaluate all such proposed increases closely, and the branch ministries have no incentive to do so. Prospective customers for a “new” intermediate good, who may not themselves be subject to a hard budget constraint, find little difficulty in acceding to its higher price. The result may be further distortion of relative prices, insofar as prices in multiproduct and nonstandard product industries (e.g., machine tools) are inherently less easy to control than are the prices of single, mass produced standard products (e.g., electric power, metals, bulk raw materials).\(^6\)

State orders were still intended to cover about 75 percent of production in 1990 and to fall rapidly thereafter. However, the greater freedom enjoyed by many enterprises to make their own production decisions (see Chapter IV.2) has come at a cost in terms of the loss of guarantees of input deliveries from the state supply
system. At the same time, new formal supply channels (wholesale markets) have been slow to form.\footnote{In addition, production problems and the diversion of raw materials and intermediate goods from the official system into the “shadow economy” has resulted in uncertain supplies even for deliveries still tied into official supply channels. According to Goskomstat, 24 percent of state industrial enterprises failed to comply with their contractual obligations for the supply of products during the first eight months of 1990. Enterprises reported spending substantial time and energy searching for needed inputs in barter markets and lining up stocks of goods to trade on that basis. Some producers apparently export goods below world market price in order to acquire imported goods (e.g., VCRs) that can be traded internally on barter markets for production inputs, food and other consumer goods for workers, or construction materials for worker housing, thereby also evading the closer monitoring and controls placed on money wages. Nevertheless, the extent of actual shortages of industrial inputs is unclear. Total production has not fallen drastically thus far, and given that the production of most raw materials and intermediate goods is highly concentrated in a few enterprises, even in barter markets the buyers must be acquiring the bulk of their production inputs from traditional suppliers.}

Most barter trade would therefore appear to represent a mechanism for surreptitiously accommodating changing price relationships. Input costs are clearly rising. With the price controls most effective at the end of the production chain—i.e., final consumer goods—the profits of consumer goods producers must be getting squeezed, except to the extent that they, in turn, are able to divert production themselves to the parallel markets or, by leasing or reorganizing as a cooperative or other business form, to avoid retail price controls.

The costs to the economy of supply uncertainties and diversions of resources and managerial time, as well as related transport costs, are undoubtedly high and becoming more serious. There are limits to the level of activity that can be supported by these means in an economy as complex as that of the USSR, and falling industrial output may be a sign that the system is operating very close to those limits.

c. Consumer goods prices

Reflecting a longstanding official commitment to retail price stability, the official prices of consumer goods at the retail level have been even more stable than producer prices; some have not been changed for 30 years or more. The official consumer price index rose by an annual average of slightly more than 1 percent per year in the 1980s, and most of this inflation was explained by sharp increases in the prices of alcoholic beverages. Not reflected in the official price index, however, has been the “hidden inflation” associated with the introduction of supposedly new products, and the costs to consumers and to society as a whole of goods being rationed by store-by-store searches and long queues, favoritism,
and corruption. Frequently, particularly in the smaller towns and rural areas, many goods were not available at all at the official prices. The impact of these shortages on work incentives is revealed in the common worker saying that “we pretend to work for the money they pretend to pay.” Also not captured by the official data is the rapidly growing proportion of consumer goods and services accounted for by nonstate enterprises at significantly higher prices, and apparently growing diversion of goods from official to nonofficial channels.

Table IV.1.2 shows the extent of budgetary subsidization of selected food products. In 1986, the average retail price of butter, for example, covered only 40 percent of the cost to the state of its purchase, transportation, processing, and sale. If related budgetary support and credit forgiveness to state farms and collectives are added in, the total cost to the state was almost three times the retail price. Direct price subsidies for agricultural products, mostly foodstuffs, grew from rub 72 billion in 1986 to a planned rub 100 billion in 1990. Over this same period, price subsidies to industry (excluding food processing) remained roughly constant.

3. THE OPTIONS FOR PRICE REFORM

As noted above, there is no fundamental disagreement on the need for price reform in the USSR. All of the major reform proposals have included comprehensive price reform as a key element, but none has advocated complete price liberalization at the outset. In particular, all the proposals would extend controls on the retail prices of basic food goods, rents, and key industrial raw materials (particularly energy) for at least two years. The risks of rapid price liberalization have been alluded to above. There are risks on both sides, however, and apparently not as well recognized by the Soviet authorities are the risks of not freeing prices quickly and early in the reform process.

a. The risks of rapid price liberalization

Perhaps the greatest danger of a rapid abandonment of state price controls is the possibility of setting off hyperinflation. It must be acknowledged at the outset that economic reforms will inevitably involve a substantial increase in the average level of prices and money wages in the USSR, even if monetary and fiscal discipline are maintained. Many prices would have to be raised several-fold to approach international price levels, and, given the downward “stickiness” of prices, the upward adjustments are unlikely to be fully offset by price declines in those goods currently overpriced in relative terms. The needed price increases will, in turn, have a serious impact on both production costs and real incomes, creating pressures for subsequent rounds of price and wage adjustments that could easily ratchet out of control. Moreover, while tight monetary and fiscal discipline could

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undoubtedly bring inflation to a halt, the process may not be smooth, and substantial short-term unemployment could be created.

That said, tight monetary and fiscal discipline are a *sine qua non* for successful economic reform. The government budget in 1990 was expected to be in deficit on the order of 8 percent of GDP, mostly financed by monetary emission (see Chapter II.2). It is apparent that a sharp reduction and continuing control of the deficit must be taken as a precondition to price liberalization in the reform program. The price subsidies in the state budget currently exceed the total deficit and will grow rapidly in 1991, in the face of administered wholesale price increases, unless drastic action is taken to adjust retail prices. Failure to take such action would make extremely difficult, if not impossible, the achievement of the Government’s announced fiscal targets and the control of inflation.

A principal concern of the Soviet authorities, of course, is the impact of consumer prices on the living standards of the population. The heavy subsidization of basic consumer goods has, in effect, substituted for money wages throughout the economy, and the expectation of continued subsidization has influenced the savings decisions of the large number of households dependent on pensions and other transfers. The several-fold increases in prices necessary to eliminate subsidies in basic foodstuffs and housing rents could, unless compensated, have a devastating effect on the real incomes of many, if not most, Soviet citizens and would be politically intolerable. Although full compensation is not feasible, because it would all but preclude the necessary reduction in the state budget and containment of monetary expansion, some way must be found to provide at least partial amelioration of the impact on family living standards.

Another risk of rapid price liberalization is the possibility of major disruption of the industrial sector. The technologies in use and the financial viability of many Soviet enterprises are based on heavily subsidized prices of energy and other inputs. A rapid increase in those prices could thus jeopardize the solvency of enterprises unable to adjust their production processes and input mixes quickly to the changed terms, and unable to raise output prices in the face of domestic or external competition. Also at risk would be the solvency of the state banks whose loans to such enterprises comprise an important part of their assets. Subsidies to such enterprises through a transition period would, of course, impact negatively on the budget and complicate macroeconomic stabilization efforts.

There is also concern that the freeing of prices would allow the numerous monopolies that characterize the Soviet economy to exploit their market power at the expense of their consumers and to the detriment of efficient resource allocation; and that prices and incomes would be further distorted by the actions of unrestrained “speculators” and market manipulators. These concerns partially derive from the lack of a full appreciation of market processes (although not, perhaps, of the motivations of those engaging in market activities). Indeed, as discussed below, price liberalization is essential for breaking down the market
power of monopolists in the system, while “speculation,” as currently defined in Soviet law and concept, contributes positively to the efficiency of the market system.\(^{13}\)

b. The risks of gradual price liberalization

The subsidy burden on the union budget of food subsidies is, as noted above, considerable. The authorities have correctly perceived the need to raise agricultural prices for producers in order to provide incentives for increased output. Much of these cost increases have been absorbed in the budget, however, rather than passed on to consumers.\(^{14}\) The greater decentralization of fiscal responsibilities that might take place under a new union treaty would only serve to shift this deficit into the budgets of the republics. Whereas the risk of social and political disruption from removing subsidies is real and well recognized, the risk of macroeconomic instability generated by the food subsidies also must be taken into account.

Failure to allow full price correction early in the reform process also implies that resources would continue to be used inefficiently throughout the system, as producers and consumers both continue to respond to distorted signals. Under present proposals, energy, whose use per unit of output in the USSR is almost double the average of the Western industrial countries, would continue to be wasted, along with other underpriced inputs; the housing stock would continue to depreciate more rapidly than technically necessary or economically justified; and the distorted profit patterns among industries would attract investment and credit to many inefficient uses, while other more efficient activities would be unable to attract the necessary resources. In the short run, the costs to the economy would be manifested in continued shortages and the diversion of resources to possibly unintended uses and beneficiaries. The distortion of new investment flows would have a longer-term impact and significantly raise the later costs of adjustment, when prices were finally corrected. At that time, both the enterprises that were created or expanded in response to the distorted prices, and their lenders and investors, would be put at risk.

The underpricing of key inputs and basic consumer goods almost inevitably implies their continued central allocation and invites as well corruption and favoritism in their distribution. It also means large illicit profits to those able to acquire these goods at low controlled prices and to resell them in the black market. These undesirable consequences of price controls are already well evident in the USSR and may serve to discredit the economic reforms generally in the eyes of many.

As regards the impact of price increases on consumers, governments around the world have instituted various price controls with the intention of protecting the purchasing power of the poorest members of society. These efforts have been exceedingly costly, however, and have seldom succeeded. In the first place, in-
come support through price subsidization is highly inefficient, inasmuch as all purchasers of the subsidized goods benefit whether or not they need such assistance. Where feasible, a targeted program directing income to those in need can meet the same social objectives, while placing a far smaller burden on the state budget. Moreover, the goods themselves often end up being acquired in the black markets by those who can afford to pay higher prices, while the benefits of the subsidy accrue largely to the black marketeers and those officials who may help them to acquire the scarce supplies of goods at the subsidized prices. Indeed, at least some part of the feared inflation and reduction in real incomes has already occurred in the USSR, as a result of the disruption of supplies and diversion of products from the state stores to cooperatives and to the black market. To that extent, the freeing of prices would simply recognize and validate the inflation that has occurred and would permit the concentration of any compensating income subsidies on the intended beneficiaries. At the same time, the very high rents captured by those taking advantage of the present system would be eliminated.15

Failure to free prices can also serve to help perpetuate the highly concentrated market power found in most Soviet industries. Given the vast market of the USSR and its rich and diversified resource base, all but a few of these monopoly situations depend on administrative barriers to competition rather than on technical and other advantages. Indeed, many of the huge enterprises are too large to be cost efficient and would be forced by free market pressures to reduce their scale of operation. These competitive pressures operate through the price system, as both new enterprises (as well as existing enterprises from other sectors) are attracted to enter markets precisely by the high profits accruing initially to the monopolists. As the new enterprises enter into competition, prices are bid down, and the monopolist is forced to restructure and modernize its own operations in order to survive the competitive onslaught.16

The proposition that supplies of goods must be stabilized before their prices can be freed would also seem to reflect a misreading of market processes. The argument is that current shortages will lead to an excessive increase in prices. To a considerable extent, however, the shortages themselves are the result of prices fixed at levels that provide inadequate incentives to produce and exaggerated incentives to consume, indeed to waste. In other words, distorted prices breed shortages, not the reverse. With the system of state orders no longer able to compel production and deliveries, it is mainly through increased prices that the shortages can be eliminated.

So-called speculators (i.e., people who buy goods at one price in order to sell them at a higher price) serve an indispensable market function, assuring that goods in scarce supply are distributed to their most valuable uses. Most producers engaged in mass production in a market economy find it uneconomic to establish the full base of information, personal contacts, and communications and transport facilities necessary to reach widely dispersed potential users. Most buyers, too,
would find it difficult to deal directly with all their potential suppliers. Specialized intermediaries thus form the heart of the wholesale marketing activity, establishing the flow of intermediate goods between producers and of final goods from producers to retail shops. The differential between the buying and selling prices of traders is necessary to cover their costs in setting up the necessary information networks and to provide the profit needed to attract them to engage in this useful activity. The main difference between such traders and the official supply agencies that currently fulfill this function in the USSR is that the former are forced by competition to minimize their costs and to provide reliable and satisfactory service to their customers on both the buying and selling sides. This is not to say that markets cannot be manipulated, and that there are not persons in every society who will take advantage of opportunities to seek illicit gain. A proper legal and regulatory framework can serve to minimize these dangers, however, and to punish offenders, without distorting the markets themselves and leading to the inefficiencies that have become evident everywhere that administrative decisions have been substituted for the market. Corruption and opportunism will still occur: they cannot be eliminated entirely. It may be less a problem in market systems, however, where unusual profit margins invite competition, which in turn serves to reduce excesses.

Until and unless price distortions are eliminated, it probably will not be possible to impose the hard budget constraint necessary to induce enterprises to respond to market forces. If enterprises are forced to be financially self-sustaining in the face of distorted prices, efficient firms could fail, because their prices are held arbitrarily low; while inefficient firms could remain profitable, because they benefit from prices that are too high.

Finally, without prior price reform, there is no way of accurately valuing assets for the purpose of selling or otherwise distributing enterprise shares in the course of privatization and restructuring (see Chapter IV.2). Whether shares are distributed in accordance with equity concerns and/or on the basis of individual choice, their relative values will depend on the profitability and prospects of the respective enterprises in the marketplace. Continuing the controls over prices maintains the distortions and uncertainties that must affect the evaluation of enterprise performance and place a potential responsibility on the government for later losses when the remaining price controls are removed.

c. Recommendations

For the reasons given above, the desired transition to a market economy in the USSR would be best served by an earlier, more rapid, and more comprehensive liberalization of prices than is contemplated in the presidential guidelines. This view is influenced in part by the degree to which the administered supply system has already broken down, resulting in shortages of both industrial inputs and consumer goods, hidden inflation, and an apparently massive shift to barter.
activity to keep production going. Despite the Government’s admonitions to enterprises to respect traditional supply relations and to honor state orders, it is doubtful whether the administered system can be reconstituted in such a way as to function at its previous level of effectiveness. In addition to encouraging greater efficiency, rapid price decontrol may now be the fastest, if not the only, road to re-establishing a stable flow of goods. At the same time, however, measures need to be taken to mitigate the impact of price increases on household incomes.

It is recommended that the prices of virtually all goods in the economy be freed early on, with only a few items excepted. Even for most of the exceptions, however, there is a need for substantial price increases at the beginning of the reform process. The first exception would be public utilities, including public transport, which are likely to remain state monopolies as in many other countries. A second exception would be made for housing, where present distortions are enormous, but the basic legal and financial infrastructures will require time to develop (see Chapters IV.5 and 7). Third, exceptional treatment might be accorded a handful of key industrial inputs—e.g., energy—for which (1) the supply and demand responses to increased prices are likely to be slow; (2) the potential disruption of industrial production, without a reasonable period allowed for adjustment, would be large; (3) the products concerned are important inputs, for which a reasonable degree of predictability of prices is important for users’ production plans; and (4) the state supply system is still capable of assuring reliable supplies at or near the present levels. For these goods, a time-bound, preannounced schedule of adjustment to world prices over, say, 3 years might be appropriate, giving the affected industries forewarning of the need to adjust their technologies, product and input mixes accordingly. A large initial adjustment should be required (say, to 50 percent of world market prices), achieving full convergence to world market prices by the end of the transition period. A border tax, rather than direct price controls and supply allocations, could be used to create the desired wedge between domestic and world prices.  

The presidential guidelines call for the prices of energy and other basic materials to be set by agreement among the republics. If this procedure is used, it should be agreed from the start that the purpose is to ease the transition to international prices within an established time frame, as outlined above. The adjustment of industry generally could also be eased somewhat by an initially high uniform external tariff (replacing the present myriad quantitative restrictions), that was reduced over time in accordance with a preannounced schedule (see Chapter IV.3).

Although retail food prices should be freed, it is recommended that, in the initial stage of reform, the Government seek to use imports to stabilize supplies of the most sensitive basic consumer goods—bread, milk, butter, meat—to prevent hoarding and price overshooting, while at the same time, assuring that market prices fully cover freed producer prices and the costs of transportation and dis-
tribution. As the wholesale and retail marketing networks were privatized, government intervention through managed imports could be eliminated. The stabilization of inflationary expectations in the wake of this adjustment would depend heavily on the success of the monetary and fiscal program and on guaranteed supplies of imports of the indicated goods. Bilateral assistance might be provided during the first stage to assure import supplies. The composition, volume and resale prices of specific commodity aid, however, would have to be carefully managed to avoid harming domestic producer incentives.

For workers, the removal of price subsidies would represent a sharp reduction of what has, in effect, constituted wages in kind. It may be appropriate for both economic and equity reasons that the reduced subsidies be partially compensated by permitted increases in money wages. This increased cost to the enterprises would be partially offset by the transfer of certain social expenditures from the enterprises to the government (see Chapter IV.6) and would constitute a first step toward the market-oriented reform of labor remuneration policies also alluded to in the presidential guidelines. Increased labor costs, along with other input costs and higher interest rates, would now be reflected in the prices of goods in the market.

Pensions and other transfers to individuals not active in the labor force would also have to be adjusted. One approach that has been used elsewhere is a flat per capita transfer for all individuals. Although administratively more difficult, a targeted approach, based on maintaining acceptable real minimum family income levels, would achieve the same social objectives at a lower cost to the budget. Overall, the extent of compensation to consumers for the loss of subsidies would depend on their fiscal impact and on the requirements of macroeconomic stabilization. Short-term reductions in the real incomes—although not necessarily consumption—of some members of the population are probably an unavoidable cost of the reforms. The challenge to the Government is to ensure, through the design of the reform program, that this short-term cost is (and is perceived to be) a sound investment in the future.

If, as some observers have cautioned, it might prove infeasible to initiate means-tested income support in the near term, an alternative could be to give each person ration coupons carrying the right to purchase a fixed quantity of certain essential goods at a specified price. Individuals or households wanting more of such goods would have 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 free market prices. Since the stamps would have a fixed monetary value, the price an individual had to pay (or the amount he would be able to buy) would vary with the market price of the goods concerned, but the budgetary cost of the subsidy would be fixed.
NOTES

1. In 1986, the USSR consumed US$7.71 worth of oil equivalent (at international prices) per US$10,000 of GDP, compared to an unweighted average for the five major industrial countries (United States, Japan, Germany, France and the United Kingdom) of US$4.28. Moreover, while the industrial countries were reducing their energy use per dollar of GDP by 25 percent between 1973 and 1986, the ratio in the USSR rose by 15 percent. See Maddison (1989).

2. Included among these parallel markets are longstanding, highly segmented barter markets for industrial inputs and consumer goods, whose principal actors are state enterprises; farmers' markets providing an outlet for production from private plots; and retail consumer goods markets for cooperatives and other producers outside the state supply system.


4. It has been estimated that in 1985, Goskomtsen was reviewing some 200,000 price proposals a year, or about 42 percent of the total submitted to it. Only a small fraction of these were reviewed in detail (Hewett (1988)).

5. For details see Chapter IV.3.

6. Another implication of this practice is a significant underestimation of the official rate of inflation. See Appendix II-2.

7. According to Goskomstat, 17 percent of the sales of producer and technical goods (i.e., excluding consumer goods, electricity, and heating) took place through the wholesale trading system in 1989. The development of wholesale markets has been inhibited, in part, by the continuing existence of criminal sanctions against "speculation" (see Chapter IV.7).

8. Another reaction to insecure input supplies, of course, is to accumulate large inventories of inputs, an activity also encouraged by low interest rates on enterprise deposits and loans as well as expectations of future price rises.

9. Total fiscal subsidies, including transport and marketing costs, production, support etc., were, of course, much higher.

10. A 1986 market survey carried out in Moscow and four U.S. and European cities gives an indication of the distortions in internal relative prices in the USSR (Radio Free Europe). For example, with one kilogram of wheat flour as the numeraire, the relative price of a kilogram of rye bread ranged from 1.3 to 4.0 in Washington, London, Paris, and Munich, respectively compared to only 0.4 in Moscow. The relative prices for a kilogram of beef in the four Western cities ranged from 10.7 to 38.0, as compared to only 4.4 in Moscow. A month's rent on a representative subsidized apartment ranged from the equivalent of 195-420 kilograms of wheat flour in the Western markets compared to 25 in Moscow. At the other extreme, the same ratios for a cotton t-shirt ranged from 5.7-9.0 in the West but was 33.2 in Moscow; while a 59 centimeter color television in Moscow cost 1,400 times a kilogram for wheat flour as compared to 400 to 840 times in the other four cities. All taxes were included. All such comparisons, of course, are complicated by inevitable quality differences among the goods found in the different markets.

11. It would be important in this respect to estimate the impact that price liberalization itself would have on the deficit. On the one hand, price subsidies on basic consumer goods would be eliminated by rapid price liberalization. On the other hand, the expenditures of the government in continuing public programs would, on balance, rise. Tax revenues would benefit from the increased profits of enterprises whose relative prices rise but would fall with respect to those enterprises whose profits suffer. The budget would have to bear whatever compensation is
paid out to government employees in wages and pensions and whatever compensation is offered as a "safety net" to society at large. Interest rate adjustments would also raise the cost of servicing the public debt and reduce the profits and tax payments of borrowing enterprises (but raise tax collections from banks and households). Obviously, the net result of these various impacts will have to be closely monitored, and the Government must be prepared to take whatever actions are required to keep the deficit and monetary expansion under control.

12. To the extent that price controls remain at the retail level, consumer demand will be higher than otherwise, and freed prices at the wholesale level will rise more than they would were prices to be liberalized at both levels. Subsidies will therefore increase still further under these conditions.

13. Both of these propositions depend, however, on an adequate legal and regulatory framework as discussed at greater length in Chapter IV.7.

14. Some Soviet analysts view the increased prices to the producer as the source of the budgetary problem and as having been a policy mistake. Under most circumstances, however, markets function most efficiently when consumers of a product bear its full costs of production.

15. Money wages have increased significantly more rapidly than output in recent years, leading to a growing "monetary overhang" of involuntary savings (see Chapter III.3). In this context, a distinction might be made between real income and "real" real income, the latter denoting purchasing power that can be actually converted into goods. Whereas corrective inflation will reduce real incomes, it might, for at least some consumers, raise "real" real income.

16. Pressures for vertical integration lead many of these same enterprises into the production of their own inputs, often at sub-optimal levels of production. Competition would also force enterprises to drop these uneconomic activities and to acquire many of their inputs instead from more specialized and efficient producers.

17. Needed reforms in the distribution sector are discussed in more detail in Chapter V.2.

18. Under competitive market conditions, the difference between world and domestic prices would be defined by the tax itself. Under the monopolistic conditions prevailing in the USSR, the domestic price would likely be higher than the border price, at least under conditions of price differentiating profit maximization. Under these conditions, the price could be kept down to the desired level by adjusting the rate of tax.

19. The comparison of newly liberalized prices with the previous official prices would tend to overstate the impact on household incomes, however, because of the unrecorded inflation that has already occurred through the shift of some goods to unofficial supply channels and free prices. Therefore, full compensation would not be required even if the objective were to maintain fully the purchasing power of consumers.

20. For a more extensive discussion of these issues, see Chapter IV.6.
### Table IV.1.1. USSR: Relative Prices of Goods on Domestic and World Markets, 1988

<table>
<thead>
<tr>
<th>Good</th>
<th>Domestic</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil</td>
<td>1.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Copper</td>
<td>66.0</td>
<td>127.0</td>
</tr>
<tr>
<td>Scrap steel</td>
<td>3.1</td>
<td>20.0</td>
</tr>
<tr>
<td>Ammonia</td>
<td>5.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Meat (per kg.)</td>
<td>0.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Wheat</td>
<td>7.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Color television</td>
<td>75.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Personal computer</td>
<td>8,125.0</td>
<td>125.0</td>
</tr>
<tr>
<td>Screw-cutting lathe</td>
<td>611.0</td>
<td>232.0</td>
</tr>
<tr>
<td>Videocassette recorder</td>
<td>61.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

*Source: The Economist, October 20, 1990, based on published Soviet sources.*

1. Numeraire is 1.000 Kwh of electricity.
2. Per ton unless otherwise indicated.

### Table IV.1.2. USSR: Subsidization of Selected Food Products, 1986

(Rubles per kilogram)

<table>
<thead>
<tr>
<th>Rye Bread</th>
<th>Beef</th>
<th>Mutton</th>
<th>Pork</th>
<th>Poultry</th>
<th>Whole Milk</th>
<th>Butter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost to the state for purchase, transportation processing and sale</td>
<td>0.20</td>
<td>5.37</td>
<td>4.79</td>
<td>3.42</td>
<td>3.02</td>
<td>0.45</td>
</tr>
<tr>
<td>Budget expenditures on the development of production</td>
<td>0.05</td>
<td>1.07</td>
<td>0.95</td>
<td>0.68</td>
<td>0.60</td>
<td>0.09</td>
</tr>
<tr>
<td>Total cost to the state</td>
<td>0.25</td>
<td>6.44</td>
<td>5.74</td>
<td>4.10</td>
<td>3.62</td>
<td>0.54</td>
</tr>
<tr>
<td>Average retail price</td>
<td>0.18</td>
<td>1.77</td>
<td>1.50</td>
<td>1.85</td>
<td>2.63</td>
<td>0.25</td>
</tr>
<tr>
<td>Excess of total cost to the state over average retail price</td>
<td>0.07</td>
<td>4.67</td>
<td>4.24</td>
<td>2.25</td>
<td>0.99</td>
<td>0.29</td>
</tr>
<tr>
<td>In percent of the average retail price</td>
<td>38.6</td>
<td>265.1</td>
<td>282.6</td>
<td>121.6</td>
<td>37.6</td>
<td>116.0</td>
</tr>
</tbody>
</table>

*Source: Bornstein (1990), pp. 130-144.*

1. Including capital investment, write-off of state farm bank loans, "planned expenses" of low-profit collective farms, insurance payments of low-profit state farms, capital repairs of budget-supported organizations, "operational expenditures," losses on housing and municipal services, price subsidies on machinery and mineral fertilizers and "other" outlays.