## Discussion

Several panelists commented on the reasons Shleifer and Vishny gave for the collapse in production in the Soviet Union. Merton Peck agreed that repressed inflation probably suppressed output in earlier years, but believed that reduced imports of essential inputs was now the major factor crippling production. William Nordhaus suggested that the importance of repressed inflation as the source of declining output might be exaggerated by Shleifer and Vishny, recalling that repressed inflation in Germany after World War II was even more severe but any output decline was moderate. Furthermore, the decrease in queues and the similarity of black market and tourist exchange rates provided evidence that repressed inflation lessened after the April price reform, yet output continued to decline. Finally, Nordhaus observed that the output decline was severe in the important oil sector where the Shleifer-Vishny model did not apply. Rather, oil production was apparently reduced because of earlier failure to maintain and repair the fields. Franco Modigliani questioned whether the diversion of intermediate goods from normal channels was necessarily a major cause of the reduction in output. With the goods moving from planned channels to other uses, the other uses may simply be output that does not appear in official statistics or is badly measured in them. In fact the diverted goods may be employed in more, not less, productive uses. Shleifer responded that although some consumer goods or inputs may be used for barter and omitted from official statistics, the decline in the output of heavy machinery, machine tools, and other nontradable goods indicates a legitimate decline in Soviet production.

A few panelists discussed the reliability and interpretation of statistics from the Soviet press. Peck doubted that each Soviet adult spends four hours a day in line, citing an earlier survey that found 1.2 hours per day per household. He questioned the use of data from a single currency

auction, given the large variation in prices from week to week. Peck also doubted that the indicated inventory change between January 1990 and January 1991 provided evidence of output decline, noting that the January 1991 wholesale price liberalization was announced in November 1990, creating an extraordinary incentive for hoarding. Christopher Sims also questioned the interpretation of the rising ratio of intermediate inventories to inventories of finished goods reported by Shleifer and Vishny. Observing that these ratios are highly variable in the West, he wanted to see some comparison with the behavior of inventories in Western economies during an output decline.

Lawrence Summers warned against the optimism of many macroeconomists who believe that once repressed inflation is eliminated, the Soviet Union will be on the road to recovery. He referred to the experience of Eastern Europe as sobering evidence to the contrary. John Williamson agreed, arguing that the whole set of problems will change very quickly once prices are liberalized. With respect to interregional trade, he thought that if the republics issue separate currencies, they will stop accepting rubles in payment and a premium will arise on orders from the other republics provided that they are paid for in hard currency. In this light he thought it necessary to start thinking again about a payments union.

Summers observed that although it was tempting to believe that cascading competition between states would facilitate the process of liberalizing prices, the increased competition would also increase the pressure for trade barriers. He felt it is not obvious whether the competitionenhancing aspect of freeing prices is greater or less than the incentive to set up restrictions on trade. Based on his experience in Ukraine, William Hogan judged that the dynamics would favor trade restrictions. Summers noted that coordination of price reforms among the republics would help avoid protection by minimizing price differentials. Stanley Fischer discussed whether making aid conditional on economic reform could reduce the risk of trade barriers arising between regions. He observed that there has been conditionality on aid to Latin America and Africa for decades, and it may only now be having some effect in Latin America. He inferred that conditionality might be useful but should be used moderately to influence decisions at the margin rather than as an all-or-nothing condition for aid.

While agreeing that price liberalization is necessary to move toward

a more competitive environment, William Brainard wondered whether the high concentration in Soviet industry is consistent with competition. Unless existing enterprises are broken up, monopoly rather than competition is the likely result. Peck responded that monopoly prices are in any case better than regulated ones because they tend to be market clearing and because in the long run they attract new entry. As an example, he noted that in the Soviet Union chemical fibers are produced by 32 enterprises, enough to ensure competition. However, each enterprise produces only a limited line of chemical fibers, some of which are profitable and some of which are not. If prices are freed, firms would expand their profitable lines and cut the others, which would in itself improve efficiency. Once firms started adding new profitable lines to their own production, it would enhance competition as well.

Richard Cooper pointed out that competition would be enhanced by moving early to a convertible ruble and allowing imports free of licensing. He also questioned the adequacy of the Soviet transportation network, noting that no long distance road system exists, except in the far west; east-west transportation depends almost entirely on the railroad system, and north-south freight moves mainly by river. He emphasized the importance of settling who owns the railroad system and how it will be used for moving goods between republics. Robert Hall suggested that it is not important that the railroad be privatized, noting that railroads were not private in most industrial economies. Rather it is important that the railroad be a common carrier, accepting business from all comers.

Responding to Stanley Fischer's remarks on existing trading relationships, Hall commented on the issue of whether during the introduction of price liberalization firms should be required to deliver quantities called for under existing contracts. He noted that absent transactions costs, there was no efficiency burden to continuing to enforce past contracts, and there might be a substantial gain. Thomas Richardson commented that phasing in a new trading system, though in principle a good idea, is politically infeasible because it could only work under a strong, central authority. Ralph Bryant questioned whether the existing external debt of the Soviet Union could be properly allocated among republics under Fischer's regrouping scenario. Hogan responded that Ukraine would probably be willing to accept a share of the debt in exchange for independence and for concessions on other painful issues, such as sharing the responsibility for Chernobyl.

Peck observed that the tremendous debts accumulated under central planning are a special problem, making it difficult to value enterprises properly. He noted that canceling the old debts of enterprises that were accumulated during the planning era had some logic to it but noted it would create new macro problems because these debts are so large. Enterprise debts in the Soviet Union are about 300 billion rubles whereas financial assets are 100 billion rubles, so that canceling the debts would eliminate the assets of the state banking system and require in turn the write-down of some of its liabilities, which are the deposits of individual citizens. Implicit deposit insurance means that state bonds could be substituted for the eliminated assets, but this would add to the deficit.

Sidney Winter stressed the interdependence between the tight control of credit to enterprises—so-called hard budget constraints—and the price liberalization needed to evaluate gains and losses correctly. He explained that the desirability of having a hard budget constraint depends on whether the prices used to evaluate gains and losses make sense. For this reason, one would prefer to have reached equilibrium relative prices through a successful price liberalization before imposing tight budget constraints on enterprises. The problem is that prices may never get to their equilibrium with firms operating under soft budget constraints. He also noted that the imposition of hard budget constraints depends on how difficult their imposition is for the political system, ultimately depending on the willingness of the authorities to shut down enterprises that are making persistent losses. Even with appropriate pricing mechanisms in place, the U.S. experience does not provide an encouraging example: the government has failed to impose hard budget constraints on automobile manufacturers and banks and has created Chapter 11 as a way of introducing soft budget constraints to avoid the pain of shutting down loss-making enterprises. Peck echoed the same theme. He observed that in Czechoslovakia and Hungary, it has been very difficult to introduce and maintain market discipline, partly because it is hard to identify which enterprises would be running losses if all inputs and outputs were priced appropriately.

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