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The Exchange Rate in Soviet-type Economies
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THE EXCHANGE RATE IN SOVIET-TYPE ECONOMIES

Edward Ames

Summary

The exchange rate in a Soviet-type economy does not have a function of determining levels of production and prices. By altering the exchange rate, however, the monetary authorities can influence the profits or losses which are earned by the Ministry of Foreign Trade in the process of carrying out any particular trade program. By altering the exchange rate, the authorities can similarly influence the effect which any particular trade program will have upon the domestic money supply. Such a change in the money supply will in turn have an effect upon the internal economic stability of the country. Therefore, the exchange rate has an influence upon the internal economy of a Soviet-type country, even though it does not directly affect production, foreign trade, or internal prices.

Introduction

Under a world market system if a country changes its exchange rate, there will be three distinct types of consequences. First, a change in one country's exchange rate means shifts in demand and supply conditions in world markets, since a unit of the country's currency will now represent a different number of units of other currencies. Second, the country's internal prices will change in reaction to the change in domestic and world market conditions. Third, production will change not merely in the country which changes its exchange rate, but also to some extent in other countries as well.

Countries such as the Soviet Union, however, try to keep domestic production and prices from being affected by changes in production and prices in other countries. Although the Soviet bloc countries all quote exchange rates and although four of these countries have changed their rates since the beginning of 1950, actual conversion of foreign exchange occurs only in the case of visitors and foreign missions, and the value of which is small compared to trade transactions. 1/ Trade transactions in the Soviet bloc are carried on exclusively by the Ministries of Foreign Trade. Within the bloc, trade transactions are on the basis of bilateral clearing accounts, which since 1950 have been kept in rubles. The ruble prices are set by negotiation, and have no necessary correlation to domestic prices since world prices or Soviet domestic prices are taken as the starting point in negotiations. 2/ Foreign

1/ Harry Schwartz, Russia's Soviet Economy, New York, 1950, p. 402, nevertheless claims that this type of transaction was the main purpose of the Soviet exchange rate from 1930 to 1950.

2/ It is obvious that the Soviet exchange rate does not equate Soviet and world retail prices. (See T. Schulz and P. Wiles, Earnings and Living Standards in Moscow, Bulletin of the Oxford Institute of Statistics, September-October 1952.) The difference between Soviet and world wholesale prices, at the official exchange rate, though less than retail price differences, still appears considerable. By these standards, satellite exchange rates are probably also overvalued.

exchange (including claims in clearing rubles) is held by the central bank, and the export and import of currency is forbidden. Export and import quotas given in trade agreements form a part of the economic plans of the individual countries, and are not as a rule contigent upon internal developments in the participating countries.

Theories about the Soviet exchange rate

Soviet economic literature is virtually silent on the role of the exchange rate, and some non-Soviet writers have tended to consider the exchange rate in the Soviet-type country as being of no importance. Thus one authority states that "... Of all the characteristics of an international currency, only the purely technical condition that the ruble shall be related to national currencies through exchange rates is fulfilled. This in itself without fulfillment of the condition that exchange rates shall be relevant, gives the ruble only the appearance of an international standard of value, and may satisfy only the requirements of prestige."1/ The difficulty with this argument is that it is hard to see who would be impressed by this particular type of prestige, since "workers" are ordinarily not interested in international finance, and "capitalists," especially in the financial community, are not apt to be impressed by a currency they can never use.

Other writers 2/ stress that exchange rates expressed in terms of gold are recognized in Soviet thinking; that from a practical point of view their importance would be in settlements among Soviet-bloc members, since most of the trade of each member is with other members; and that the most probable reason for interest in exchange rates is the need for establishing a method whereby a country in the bloc can pay for a deficit

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1/ M. R. Wyczalkowski, The Soviet Price System and the Ruble Exchange Rate, International Monetary Fund Staff Papers, September 1950.

2/ Alfred Zauberman, Gold in Soviet Economic Theory and Policies, American Economic Review, December 1951; and Equalization of Living Standards within the Soviet Orbit, Eastern Quarterly, August-October 1952. M. V. Condoide, The Soviet Financial System, Columbus, Ohio, 1951 states (page 61) that a change in the exchange rate has no effect on Soviet imports and exports but that the revaluation of the ruble in 1950 is nevertheless a step in the incorporation of the satellites into the Soviet System (page 63).

in trade with one country out of a surplus earned in trade with another. 1/ This argument has the merit of recognizing a practical problem which might well arise within the Soviet bloc, and which could be solved if some sort of meaningful exchange system existed, but it does not point to the existence of any link between the internal and external equilibrium of a Soviet-type economy such that the selection of one exchange rate could lead to "better results" than the selection of another.

Finally, Condoide and Zauberman suggest that exchange rate changes reflect Soviet desire to equate money wages and ultimately real wages in the various bloc countries as a prerequisite for incorporating the satellites into the USSR. If the Soviet aim is indeed this, it is understandable that there should be an attempt to unify relative price structures. However, there seems to be no difference between a Soviet annexation of (say) Poland in which zlotys are converted to rubles at a 1 - 1 rate and one in which the conversion is at a 100- 1 rate, relative prices in both countries being the same in both cases.

There is, nevertheless, a link between the international and domestic economic activities of Soviet-type countries; this paper will attempt to show that the exchange rate is one element in such a link; and that a "proper determination" of the exchange rate will lead to better results (in terms of internal economic stability) than will an "improper" exchange rate. The exchange rate does not have the same function or the same importance in determining the price structure and level of economic activity in a Soviet-type economy that it has in a classical model of the international gold standard. It does, however, have a definite role in the internal monetary stability of a Soviet-type economy.2/

1/ In this connection, it may be pointed out that the controversy over gold itself is irrelevant. It would be sufficient (but not necessary) that a single set of ruble prices be used in all intra-bloc trade to establish the prerequisite for transferring ruble balances between bloc members, so that, in terms of a member's advantage, there is no gain to a country from transferring its exports from one bloc member to another, given a particular economic plan. A gold standard (even of the Soviet sort) is unnecessary to achieve this result. Milenkovic, Sirenje valutnog monopola Sovetskog Saveza, Ekonomist (Beograd), No. 4, 1952, emphasizes the practical importance of establishing a procedure for such transfers, and indicates that the fact that such balances are held in rubles gives the USSR an opportunity to centralize control over them. This control, of course, would be possible only if a clearing union existed, and there is no published evidence to show that it does.

2/ The expression "soviet-type" is used in preference to "communist" because Yugoslavia, though communist, has adopted a rather different exchange rate system. See Mladek, Sturc and Wyczalkowski, The Change in the Yugoslav Economic System, International Monetary Fund Staff Papers, November 1952.

The argument is theoretical rather than empirical, and starts from a small number of facts known about the procedures used in Soviet international trade and finance rather than from documentary evidence. It will deal with the exchange rate in terms, first, of the operations of the Ministry of Foreign Trade, and, second, of the operations of the central bank. 1/

Operations of the Ministry of Foreign Trade 2/

The Ministry of Foreign Trade acts as middleman in foreign trade transactions, buying goods from domestic producers and selling them to foreign countries; and buying foreign goods for resale to domestic enterprises. The Ministry sells its foreign exchange earnings to the central bank, with which it keeps all its funds on deposit. It may be assumed, for analytical convenience, that all trade is with other Soviet bloc countries, and that the volume and value of goods are fixed by administrative decision and not by market forces. Hence, prices and quantities in international trade may be treated as largely independent of each other for purposes of this argument. Since the quantities of goods moving in international trade are assumed to be fixed on the basis of firm bilateral commitments, internal output will be influenced by the trade program rather than trade by the level of internal output. 3/

The Ministry of Foreign Trade thus conducts transactions with foreign countries, and also with domestic enterprises. In its financial dealings, however, it has relations not only with foreign countries but also with the central bank of its own country with which it carries on transactions in foreign exchange, including the fictitious foreign exchange represented by

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1/ Similar reasoning is found in two articles by the Yugoslav economist Dragoslav Avramovic: Odnos izmedu spoljnih i unutrasnjih finansija socijalisticke privrede, Finansije, 11-12, 1951, and Funkcija deviznog kursa u socialistickoj privredi, Ekonomist, No. 3, 1952. Avramovic is mainly concerned with the consequences of isolating domestic and world prices in the Soviet-type economy, and devotes less attention to the monetary aspects of the system than is done here.

2/ In this simplified description of Ministries of Foreign Trade, it will be assumed that they engage only in trade transactions, and that capital and invisibles movements are handled through other sources. The point will further be discussed in the following section of the paper, which deals with the central bank's international financial transactions.

3/ In other words, given Soviet planning methods, a country may have a "marginal propensity to export," or it may have a zero "marginal propensity to import."

"clearing rubles." The books of the Ministry can therefore be represented by two sets of accounts. The first will be called "central bank accounts," and represents the ruble value of entries in the bilaterial clearing accounts, converted into domestic currency at the official exchange rate. The second will be called the "domestic accounts," and represents the value (in domestic currency) of transactions between the Ministry and the domestic enterprises. The income statement of the Ministry should be of this type:

Type of account	Income	Expenditure
Central Bank	Earnings from exports	Payments for imports
Domestic	Earnings from sale of imported goods	Payments on goods for export
(Balancing)		Profit or loss

If the Ministry conducted its transactions with domestic enterprises at the same set of prices as those prevailing in the ruble clearing accounts (converted at the official exchange rate), plus some normal commission to cover its own costs, it would operate without profit or loss. Since, in fact, the two sets of prices are not necessarily related, a profit or loss can occur.

The balance in the Ministry's "central bank accounts" may reflect a variety of factors. If it shows a gain, this may result from a temporary (or unplanned) lag in imports by the Ministry. In this case, it will reflect increased claims on foreigners by the central bank, which is the holder of such claims. A gain may also result from the fact that exports are planned at a level exceeding imports, because the country is paying reparations, transferring profits of joint corporations to the Soviet Union, making loans, or making other invisible payments. These latter transactions need not reflect increased claims on foreigners by the central bank.

The balance in the "domestic accounts" is likewise affected by a variety of factors. Changes in domestic wholesale prices will alter the terms on which the Ministry of Foreign Trade settles with domestic enterprises. An increase in the price at which the Ministry sells foreign goods or a decrease in the wholesale prices of domestically-produced export goods will improve the domestic balance of the Ministry. Changes in volume will also affect it. If exports remain constant, an increase in the volume of imports will improve the position of the Ministry in its dealings with domestic enterprises, since it receives revenue from selling such exports. There is thus some presumption that the balance in the "domestic account" will be of the opposite sign from that in the "central bank accounts."

The Ministry may have profits or losses if clearing ruble prices differ from domestic prices. If the volume of exports increases, other things being equal, the income side of the "central bank accounts" of the Ministry increases, because it is selling more to foreigners, but the expenditure side of its "domestic accounts" increases because the Ministry purchases more from domestic enterprises. If the Ministry sold its output abroad for the ruble equivalent of domestic wholesale prices, its own position would be unaffected. However, this need not be the case since the ruble prices may be determined quite independently of domestic prices.

The profit or loss which the Ministry of Foreign Trade obtains from a given trade program thus depends upon three factors, which in the Soviet-type economy are determined independently of each other:

(1) The domestic wholesale prices at which the Ministry carries on transactions with domestic enterprises;

(2) The clearing ruble prices, at which the Ministry carries on transactions with foreign countries; and

(3) The exchange rate at which revenue or expenditures of the Ministry in clearing rubles are converted into domestic currency.

The exchange rate and the money supply

The exchange rate can affect the money supply of a Soviet-type economy as well as the profits of its Ministry of Foreign Trade. The mechanism involved can be shown by an examination of the impact of foreign trade and financial transactions upon the balance sheet of the central bank.

In non-Soviet economies, exports tend to increase the money supply of a country as exporters deposit the proceeds of their sales abroad; similarly imports tend to decrease the money supply as importers reduce their deposits to purchase foreign exchange with which to pay foreigners. An export (import) surplus therefore tends to increase (decrease) the money supply. If this export (import) surplus is accompanied, however, by changes in investments abroad, purchases (sales) of gold or foreign securities will tend to offset the effect of an export (import) surplus upon the money supply. In the absence of such offsetting gold or capital movements, the change in the money supply will be accompanied by increases or decreases in bank holdings of foreign exchange, or, if the banks must sell their foreign exchange to the central bank, in bank reserves.

Effects somewhat similar to these may also occur in the Soviet-type economy. The institutional situation is rather different, however, in that enterprises do not deal with foreign enterprises, but only with the Ministry of Foreign Trade, and foreign exchange is held by the central bank even though most transactions involving foreign exchange are made by the bank on behalf of the Ministry. The central bank is also the only commercial bank, and its liabilities include the cash resources of the Ministry of Foreign Trade, and of the Treasury and virtually all of the money supply of the country. Foreign trade transactions and exchange rate changes affect the balance sheet of the bank, which consists of these elements:

Assets	Liabilities
Foreign exchange (clearing rubles)	Treasury deposit
Loans to Treasury	Ministry of Foreign Trade deposit.
Loans to Ministry of Foreign Trade	(a) balance in "central bank accounts"
Domestic loans (assumed constant)	(b) balance in "domestic accounts"
	Money supply (deposits of enterprises and notes outstanding)

Foreign trade operations can affect the total assets of the bank, and a trade surplus (deficit) may increase (decrease) bank holdings of clearing rubles. The bank may lend to (borrow from) foreign central banks to finance a trade surplus (deficit). If the Treasury pays reparations, or if the Treasury rather than the bank makes international loans, it may borrow from the bank. Finally, the Ministry of Foreign Trade may borrow (repay loans) if it is operating at a loss (profit), in order to maintain its deposit at some working level. 1/

Foreign trade operations can also affect the composition of central bank liabilities. The Ministry may have a profit or loss (as shown above), which will normally affect the size of its deposit. The Treasury may have to change its taxation and spending programs if it must cover an export (import) surplus by the export (import) of capital, or if it must subsidize (receive profits from) the Ministry.

In an economic sense, the effect of a particular foreign trade program upon the money supply depends upon the actions which the fiscal and monetary authorities undertake in financing it, as well as upon the way it affects the cash position of the Ministry. In terms of the central bank balance sheet, this is true because the change in the money supply is necessarily equal to the change in bank assets minus the change in the Treasury and Ministry deposits. If the change in the money supply is affected

1/ In order that only factors relating to foreign trade may enter the problem bank loans to domestic enterprises are assumed to remain constant.

either by the size of the export surplus (measured in the domestic currency equivalent of clearing rubles) or the profit (loss) of the Ministry, it must, like these, be affected by the exchange rate.

It will be seen in the balance sheet shown above that if bank loans to enterprises are constant, and changes in the Ministry's "central bank" balance (which depends upon the exchange rate) are offset by automatic changes in central bank assets or in the Treasury deposit, the money supply will be affected only by the surplus or deficit which the Ministry incurs in transactions with domestic enterprises. Such changes can take place if (as in the case of the USSR before the war) trade imbalances were settled by gold or foreign exchange transactions, i.e., by changes in central bank assets. They can also take place if the Treasury deposit is of such a size that it can finance capital imports or exports without changing its internal tax and spending policy.

On the other hand, if trade imbalances occur because of planned capital movements 1/, as has been typically the case in the Soviet bloc in the postwar period, central bank assets will not change in response to a trade imbalance. Similarly, the Treasury may not be able to isolate its expenditures on (receipts from) capital exports (imports) from its internal budgetary operations. In this situation, a trade program will affect the money supply not only because of the transfer of funds to or from the enterprises by the Ministry in its domestic operations, but also because the central bank or Treasury may have to finance capital movements. Since these represent a trade imbalance in clearing rubles, their size will depend upon the exchange rate, and the money supply will similarly be affected by the exchange rate.

Soviet-type governments want to insulate the domestic economy from the effects of foreign trade programs, so that foreign trade programs will not affect the money supply. At any stage of the investment program within a Soviet-type economy, increases in the money supply tend to lead directly to shortages, since output is normally close to capacity levels, and the rigidity of price-fixing makes prices unresponsive to changes in purchasing power. If the money supply increases, the government must intensify its direct controls such as rationing, allocations, labor discipline, etc. Similarly, decreases in the money supply tend to lead directly to illiquidity and reduction of purchases by individuals and enterprises, since prices as a rule will not decline in response to decreased purchasing power. Hence a decrease in the money supply will normally lead to decreased output.

It follows then that if the monetary and fiscal authorities of the Soviet-type economy wish to insulate their economy from the monetary effects of a particular trade program they will have to take into account the exchange rate. If they wish to ignore the exchange rate, they may find that a trade

1/ Planned capital movements within the bloc consist mainly of reparations and expenditures on the maintenance of Soviet troops; transfer of profits of joint corporations in the satellites to the USSR; and medium-term loans (principally by the USSR, but to some extent by Czechoslovakia) to finance plant construction.

program leads to undesirable domestic monetary consequences. Thus, although the exchange rate may have no effect in determining the trade program itself, it has a definite role in determining the impact of the trade program upon the money supply and domestic economic equilibrium.

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