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Efforts Toward Monetary Stability in the USSR
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EFFORTS TOWARD MONETARY STABILITY IN THE USSR

Gregory Grossman

The very drastic Soviet currency conversion of December 1947 may be presumed to have wiped out the monetary overhang inherited from years of war finance and to have restored some form of monetary stability to the Soviet economy. Nevertheless, the ensuing two state budgets — those for 1948 and 1949 — provided for very large surpluses of total receipts (including proceeds from loans) over total expenditures. It must be inferred that they were designed to offset at least equivalent inflationary pressures in the Soviet economy, although no explicit mention is to be found of these in current Soviet literature. Moreover, the budgetary surpluses point to the concern of the Soviet Government over the maintenance of monetary stability. To attain it the Soviet Union has developed in the course of the last twenty years a complex set of financial principles and techniques, quite effective in many respects, though not successful during the prewar five-year plan periods in "holding the line" against inflationary pressures, and even much less so during the war. These principles and techniques are being applied today with renewed vigor in order to maintain the ground gained by the currency conversion. They are rapidly spreading to the so-called "people's democracies" of Eastern Europe, and may yet face their severest test in a communist China.

In this essay we are concerned with currency^{1/} in the possession of the population, i.e. of individuals, and by monetary stability we mean^{the} condi-

^{1/} Soviet currency consists of bank notes, treasury notes, and subsidiary coins. As for other liquid assets held by the population, the use of private checking accounts is not widely practised, while savings deposits and state bonds are on the aggregate of questionable liquidity, the former being also relatively small in magnitude.

tion under which such an excessive money supply as would undermine plan fulfillment is avoided, shall omit from consideration means of payment -- whether "clearing" or "current" accounts with the State Bank (Gosbank), or currency -- at the disposal of enterprises, both state-owned or co-operative. This omission simplifies the treatment, and is justified on the following grounds. State-owned enterprises, the more important ones in terms of volume of transactions, are rigidly circumscribed in their financial activity; their cash receipts and expenditures are governed by the plan and are tightly controlled; they are not permitted to accumulate excessive cash (held chiefly in the form of "clearing accounts"); they can accept credit only from the banking system and not from each other; and they accept and pay fixed prices and wages. In short, the existence of an excessive money supply, on the whole, does not directly affect managerial decisions in Soviet state enterprises, as it would affect private entrepreneurial decisions. The same, but to a considerably lesser degree, is true of cooperative enterprises, such as collective farms and industrial co-operatives.

However, the economic behavior of the Soviet individual is significantly affected by the amount of cash at his disposal, and -- despite certain important differences -- in ways which are quite familiar to a capitalist society. If he is a worker, his willingness to offer his labor services depends on the cash already in his possession and on the consumer goods and services obtainable for additional money earnings. Although subjected to strong organized pressure to work, he may work less hard and avoid overtime work, be less interested in up-grading, and (in an extreme case) he or a member of his family may withdraw from the labor force altogether, if he has ample amounts of cash on hand. In times of rationing, which

has not been in force since December 1947, the availability of a ration card, which can be obtained without more than the minimum exertion on the job, may be of much greater importance to him than extra money earnings. If he is a peasant, similar considerations affect the effort which he puts into work for the collective farm, and his willingness to offer produce, either from his individual farming plot or received from the collective, for sale in a "free" ^{2/} market. Therefore, although resources are allocated directly in physical terms and consumers are not able -- regardless of the volume of purchasing power in their possession -- to divert them in their favor by "bidding" them away from other uses, an excessive supply of money nevertheless creates serious problems with regard to labor incentives, endangering the fulfillment of planned goals and deflecting the planned course of economic activity.

Owing to the existence of a "free" market for consumer goods, where prices are set largely by the interaction of supply and demand, along with the collectivized sector, with its rigid wage and price structure, an expanding money supply in the Soviet economy causes a peculiar combination of both the "open" and the "suppressed" varieties of inflation ^{3/}. In such a case, not only are the characteristics of both types of inflation present, but money tends to accumulate in the hands of the sellers in the free market,

^{2/} Also known as the "open" or "kolkhoz" market.

^{3/} "Open" inflation - substantial increase in money supply (in the hands of the population) relative to the supply of (consumer) goods, accompanied by a substantial increase in (consumer) prices; "suppressed" inflation - substantial excess of money supply (in the hands of the population) relative to the supply of (consumer) goods at stable (consumer) prices.

i.e. chiefly, the peasants. These reasons -- preservation of incentives and avoidance of a lopsides distribution of purchasing power -- explain the interest of the Soviet Government in the maintenance of monetary stability.

It may be convenient to think of any payment from the state treasury, a state enterprise (including the banking system), or a co-operative enterprise to an individual as adding to that part of the money supply in which we are primarily interested, and any payment in the reverse direction as subtracting from it. This approach corresponds closely to the Soviet concept of the "balance of money incomes and expenditures of the population" -- a concept which apparently serves as an important tool in the execution of Soviet monetary policy ^{4/}.

4/ Cf. Margolin, N. S.: "Nekotorye Voprosy Balansa Denezhnykh Dokhodov i Raskhodov Naseleniya", Planovoye Khozyaistvo, No. 4, 1949, pp. 52-65; and Margolin, N. S.: Voprosy Balansa Denezhnykh Dokhdov i Raskhodov Naseleniya, Moscow, 1939. This concept also includes transactions between individuals, which however necessarily cancel out. A related category is the "cash plan" of the Gosbank, which forecasts the Bank's in- and outflow of currency as determined by the general economic plan.

The First Approximation

The financial problem facing Soviet economists is basically quite simple and certainly not peculiar to the USSR, although the combination of its intensity and magnitude may be unique in peacetime. It is to preserve monetary stability while a very large fraction of the national product is being devoted, by political decision, to end-uses other than purchases by ultimate consumers, i.e., to investment in fixed and working capital, defense and security, general state administration, and free services to consumers (education, medical care, etc.). Let us lump all these under the term non-consumption, although the term may not be very appropriate as it includes services distributed to consumers free of charge. In addition, transfer payments to individuals and enterprises have to be financed; but let us disregard them temporarily and return to consider them at a later point.

Let us assume -- which may be rather close to the actual situation at this time -- that, in terms of the existing money cost structure, non-consumption absorbs 60 per cent of the total Soviet national product entering into exchange ^{5/}. In other words, only 40 per cent of money incomes earned as a result of productive activity stem from the production of goods and services for purchase by ultimate consumers. Were these goods and services to be sold to the population at their cost of production (which in the final analysis means at virtually the cost of individual incomes paid out at all

^{5/} i.e. excluding consumption and investment in kind, which are very significant in the total product. This seems to be a useful concept of national product for our immediate purpose; hereinafter we shall use the term "national product" in this limited sense, unless explicitly qualified. We have here in mind "net national product at factor cost", i.e., after deduction of price-increasing taxes and of capital consumption. Following western practice, we include both commodities and services.

stages of their production and distribution) their retail value would correspond to only 40 per cent of total incomes earned. An amount of money corresponding to the remaining 60 per cent would be left with the population, and if not taxed away it would be available to be hoarded, deposited in savings banks, or used to drive up prices in the free market. Future non-consumption activity would have to be financed by means of new money issue. Clearly, such a situation would very rapidly lead to an excessive money supply and to the inflationary difficulties which we have already considered.

The "financial plan" is designed to collate financial requirements in the economy with sources of financing. Although the plan is a complex document, the Soviet method of meeting this situation is basically rather simple. Essentially, it is to boost the aggregate retail value of consumer goods sold during a given period to the point where it roughly equals the total of money incomes earned in that period, the retail prices on individual commodities being administratively determined subject to this over-all condition. The difference between the state's proceeds from retail trade and the cost of production (and distribution) of consumer goods accruing to the treasury is thus available and -- if the procedure is successful -- sufficient to finance non-consumption, leaving money supply at a stable level. Let us call this difference the "spread". In terms of the quantities assumed above, the ratio between the value of retail sales and the cost of production of consumer goods would be 100 : 40, the "spread" would correspond to 60 per cent of the value of retail sales (and of the money national income); therefore, on the average, the "spread" would account for 60 per cent of the retail price of a consumer good.

Most, but not all, of the "spread" is channeled through the budget ^{6/}. The chief fiscal device for absorbing the "spread" -- or, in the language of Soviet economists, "for realizing the surplus product" -- is the turnover tax. Actually misnamed under present circumstances, it is more in the nature of an excise tax and is usually collected only once in the process of production and distribution, both in state and co-operative channels. Since the beginning of 1949 it has been levied only on consumer goods, and on petroleum products; before 1949, when producer goods were subject to this tax, they accounted for but a small fraction of receipts from it. As has been noted, the tax is not a price-determining factor, but a means of absorbing the "spread", and a direct function of the level of administratively determined retail prices. Changes in retail prices are carried out primarily by variation in the turnover tax rate ^{7/}.

These propositions can be deduced from such a first approximation to the Soviet financial system:

1. The average turnover tax rate, expressed as a fraction of the retail price, is essentially equal to the fraction of the national product which is allocated to non-consumption ^{8/}.

^{6/} The Soviet budget is usually presented in consolidated form for all levels of government (the "state budget").

^{7/} Cf. Bogolepov, M. I., The Soviet Financial System, London, 1945, p. 11.

^{8/} It may be estimated that at the present time (1949) the average turnover tax rate is in the neighborhood of 60 per cent, or the same as our (independent) estimate of the fraction of national product devoted to non-consumption. Although we should not expect the two ratios to be identical as we depart from our simplified model, this rough equality is not entirely fortuitous.

Cf. the discussion in Dobb, M.: Soviet Economic Development Since 1917, London, 1948, pp. 360-3.

2. There are two distinct price levels ^{9/}. One of them -- it may be called the producer price level -- corresponds in general to the planned factor cost of production and distribution of commodities and services ^{10/} and is relevant to purchases by enterprises and by administrative organs of the state. Wages and prices paid for agricultural deliveries ^{11/} being virtually the only costs of production in the final analysis, it is a direct function of their levels. The other price level -- the retail price level -- is relevant to consumer purchases (and certain scattered purchases by producers), and is higher than the "producer price level" by the relative magnitude of the "spread". Under our assumption the retail price level would be 2.5 times the producer price level, although the relationship may and does vary widely for different commodities (or services) -- a consideration which must be borne in mind in connection with attempts to compute the purchasing power of the ruble and similar problems.

3. Reduction in retail prices is warranted, without endangering monetary stability, under the following circumstances:

(a) In the event of a fall in the average money costs of production of consumer goods owing to rising efficiency or to a reduction in wages, etc., in the same proportion.

^{9/} We are still referring to the first approximation. In reality, more than two price levels can be recognized in the USSR.

^{10/} Moving away from the first approximation we would have to add planned profit margins and subtract planned subsidies, which are integral components of "producer prices".

^{11/} The low prices paid by the state for obligatory deliveries of agricultural products may be viewed as incorporating a tax on agricultural producers. This view, however, does not affect our money-flow approach.

(b) In the event of a decline in the proportion of the national product being allocated to non-consumption. For instance, raising the share of consumption from 40 to 50 per cent of the national product (i.e., lowering non-consumption from 60 to 50 per cent) would warrant, ceteris paribus:

-- a 20 per cent reduction in the retail price level, since with 5/4ths of the former volume of consumer goods being available to meet the same money incomes prices would have to be only 4/5ths as high;

-- a 16.7 per cent reduction in the total "spread",

$$\frac{0.6 - 0.5}{0.6} = 0.167;$$

-- but because of the larger volume of consumer goods, a reduction on the average in the absolute tax ("spread") collected per physical unit of commodity of 33.3 per cent, $0.6 - 0.5 \times \frac{4}{5}$

$$\frac{\quad}{0.6} = 0.333$$

Other devices of Absorbing the "Spread"

Let us now bring our simplified model closer to reality. We have so far assumed that the turnover tax absorbs the whole "spread" between the factor cost of production of consumer goods and their ultimate retail value. At the present time this seems to be actually so with respect to something like 90 per cent of the total "spread". The rest of the "spread" is absorbed by other fiscal and financial devices, the most important of which is planned profit of state enterprises, and such above-plan profits as may accrue to them. In this connection we ought to consider only profits included in the price of goods which, directly or indirectly, are destined for ultimate purchase by individual consumers. Profits on goods which are ultimately acquired by

the state result in a mere "washout" operation, raising equally the income and expenditure sides of the state's accounts ^{12/}. The economic identity of profits and of the turnover tax as devices for absorbing the "spread" is recognized by Soviet economists and the line between them is admitted to be arbitrary and based on administrative considerations. In fact, profit margins seem to have been somewhat widened in connection with the price revisions at the beginning of 1949, and at the expense of turnover tax proceeds. Profit margins, usually several per cent of the total unit cost of production, are so planned as to give leeway of operation and incentives to managers without allowing them to amass large free funds.

Profits may be used by individual enterprises for the expansion of their fixed and working capital, within the framework of the plan of course, and in smaller measure for incentive purposes. The part of profits not so used, and in any case not less than 10 per cent, are turned over to the budget. Conceivably, the full amount of profits (or the amount after incentive payments) could be turned over to the budget, the particular enterprises then receiving grants for capital expansion from the budget, as they do in those cases where their own profits are insufficient for their expansion needs. We are pointing this out to draw attention to the arbitrariness of the scope of the Soviet budget, which is only one account -- though a large one -- in the financial plan, distinct from other accounts, as much for reasons

^{12/} The same consideration applies to turnover taxes on goods which are destined for ultimate acquisition by the state. Since the beginning of 1949 this would refer primarily to the turnover tax on petroleum products which could hardly represent more than a small part of total proceeds from this tax.

of administrative feasibility and custom as for generic reasons 13/.

Other means of absorbing the "spread" include customs receipts, differential rent, and various other price-increasing taxes and fees 14/.

Additions to and Deductions from Incomes

Heretofore, we have considered only that money income of individuals which is earned as a result of productive activity. This approximation comes quite close to the actual situation. In 1949, transfer payments to the population may be taken to add somewhat over 40 billion rubles, or 8-9 per cent, to a total of earned money incomes which may be roughly estimated at 470 billion rubles 15/.

We have also assumed heretofore that retail prices are set sufficiently high to absorb all of current money income of the population, i.e., that the "spread" between the value of retail sales and the total cost of production of consumer goods is sufficient to finance the requirements of non-consumption and, we might now add, transfer payments to the population. This simplified assumption is also not very far from the actual situation at this time. The "spread" is large enough (i.e., retail prices are high enough) to meet the bulk, say something like five-sixths, of such requirements, leaving the other sixth to be financed -- assuming no large net

13/ It may be mentioned at this point that the Polish budget, serving the needs of a similar economic and financial system, goes so far as to absorb current depreciation reserves of state enterprises.

14/ Here, again, only those taxes and fees are relevant which are passed on to the ultimate individual consumer. Net proceeds from the sale of consumer goods received under reparations might also be included in this grouping.

15/ Transfer payments are taken to comprise the budgeted amounts of social security payments (21.4 bill. r.), state aid to mothers (3.4 bill. r.), state social insurance payments (11.8 bill. r.), and service on government bonds (4.0 bill. r.), totaling 40.6 bill. r. Source for the first three items is article by A. Zverev in Planovoye Khozyaistvo, #2, 1949, p. 48, while the last item is an extrapolation of the budget plan figure for 1948 (3.5 bill. r.).

For estimation of total money incomes see the Appendix.

addition to the money supply -- by deductions from disposable incomes such as direct taxes, bond sales to the population, and the increment in savings deposits. The last three items are to yield somewhat more than 60 bill. rubles to the state during 1949 ^{16/}, while the turnover tax and the various other devices of absorbing the "spread" must yield no less than 300 bill. rubles, as an examination of published budgetary data for 1949, will show ^{17/}.

Soviet preference for taxation of consumption, falling primarily on necessities (and especially on bread), over direct taxation as a means of maintaining monetary stability is not difficult to understand, given the general economic objectives of the regime. Under conditions where consumption is intentionally depressed to release resources for investment and defense, where the tax load is necessarily extremely heavy, where productivity is the daily watchword, and where the inequality of incomes is an important aspect of labor policy, it is more feasible to tax consumption than to tax income (i.e. work). Were income taxes relied upon to yield the bulk of the required funds of that magnitude, the incremental tax rates (since some progression could hardly be avoided) would have to be so heavy as to present a serious deterrent to labor and managerial incentives. While such an alternative might be preferred in a democratic society, even at the hazard of impairing

^{16/} Direct taxes are budgeted at 36.5 bill. rubles, subscription to the bond campaign was 23.8 bill. rubles, and increment in savings deposits may be estimated at 1.5-2 bill. rubles.

^{17/} Cf. Pravda, March 11, 1949, and Zverev's article, op. cit.

incentives, it could hardly be expected to be preferred by the Soviet regime 18/.

In the 1949 budget all taxes levied directly on the population are scheduled to yield only 36.5 billion rubles, or a mere 8 per cent of total budgetary receipts and the same percentage of the estimated earned money income of the population. In addition to the income tax this category includes proceeds from the agricultural tax and from the "tax on bachelors, single citizens, and citizens with small families" 19/

The quantitative breakdown has not been published. The income tax, which is paid by the non-agricultural population, varies by economic group, and is very mildly progressive by our standards 20/. The differential rates avowedly have socio-political purposes, while the mild progression with regard to the largest tax paying group, that of workers and employes, is most likely designed to preserve labor incentives, and not to discourage above-norm output and up-grading. Considering the small revenue which

18/ Soviet propaganda makes much of the low direct taxes paid by the population, while referring to the bulk of the burden borne by the consumer, the "spread", as "socialist accumulation" with the implication that it is not a levy!

19/ The agricultural tax is paid by members of collective farms according to sown areas (differentiated by type of crop) on their individual plots and the number and kind of livestock in their individual possession. Peasants who are not kolkhoz members pay on the same basis but double the rates. The tax on bachelors, etc., is paid as follows: Wage- and salary-earners (men between the ages of 20 and 50, women between 20 and 45) pay the following percentages of their wages or salaries: with no children -- 6, with one child -- 1, with two children -- 1/2; other persons, including those without incomes, pay fixed annual sums. Cf. Mar'yakhin, G.L., Nalogi i Sbory s Naseleniya i Kolkhozov, Moscow, 1946, Chs. II and V, and Plotnikov, K.N.: Biudzhët Sotsialisticheskogo Gosudarstva, Moscow, 1948, pp. 277-8.

20/ Workers and employes pay a maximum incremental income tax rate of 13 per cent on incomes over 1000 rubles per month, while the steepest progression is in effect for incomes of craftsmen not belonging to co-operatives and some other types of incomes, where it reaches 65 per cent on earnings exceeding 70,000 rubles per annum. (Mar'yakhin, op. cit., Ch. IV.)

is derived by the budget from the income tax proper 21/ -- only a few per cent of total receipts -- and the presumably high cost of its collection, one may question the rationale for its existence in the Soviet fiscal structure. The explanation is to be found in Soviet sources 22/, that it (a) "assures the participation of the whole working population by means of their personal incomes in the financing of economic and cultural measures", and (b) "stimulates the formation of craftsmen's co-operatives", while at the same time it is called for because of (c) "the insufficient realization at the present stage of development of the socialist principle of remuneration according to the quality and quantity of expended labor". This explanation is not very convincing. As to (a), the Soviet citizen is given ample opportunity to participate in other ways in the financing of the state's economic and cultural measures; while arguments (b) and (c) would seem to suggest that the income tax could be restricted to the very small non-collectivized sector outside of agriculture. It would seem that the existence of a progressive income tax in the collectivized sector of a planned economy could be justified on certain theoretical grounds. Though hardly influential in this instance, "bourgeois" welfare theory would argue for a direct tax in lieu of still higher turnover tax rates. But, under the existing conditions, it might find its strongest rationale in enabling the fiscal demands to make allowance for varying dependency status among taxpayers, a consideration which the turnover tax not only ignores but indeed reverses. However, the actual structure of the tax (even

21/ Or even adding to it the proceeds from the tax on bachelors, etc., which may be considered as a supplement to the income tax, adjusting its burden on a dependency basis.

22/ Cf. Ibid., p. 58.

including the tax on bachelors, etc.) does not seem to be particularly responsive to that consideration.

A further alternative course with regard to maintaining monetary stability might be to set retail prices low enough to permit the accumulation of free funds in the hands of the population and to rely on borrowing for absorbing accretions to the money supply. This course is not followed, and understandably so. Consumption being at such a low absolute level and constituting such a small part of the national product, it is most unlikely that any such enormous funds at the population's disposal would be saved voluntarily, or even under considerable pressure. More likely, they would be sent chasing after the limited quantity of consumer goods, baring the shelves of state and co-operative stores (where prices are fixed) and bidding up prices in the open market, i.e., creating the kind of inflationary situation and its consequences which we have discussed above. And they would be largely hoarded as currency, rather than invested in state bonds or savings deposits as has been demonstrated by the recent wartime experience.

Almost all personal saving, other than hoarding, is in the form of government bonds. During the 1949 bond drive, subscriptions totaled some 23.8 billion rubles (approximately the same sum as in each recent year) and, despite the quasi-compulsory nature of the drive, corresponding to less than 5 per cent of total money incomes, earned and transferred. At the same time savings deposits are rising at the very low rate of some 1.5 - 2 billion rubles a year, or by a fraction of one per cent of total money incomes. Thus, the role of "voluntary" savings in the Soviet financial plan is decidedly a secondary one. Apparently, the Soviet Government

resorts to it chiefly in order to mop up small "pools" of purchasing power left in the possession of the population despite high retail prices (turn-over taxes) and some direct taxation. The propaganda potentialities of bond drives may furnish another reason for their annual recurrence.

The Credit System and Inflationary Pressure

Soviet financial principles call for the financing of long-term needs for both fixed and working capital on a non-inflationary^{23/} basis, primarily from the state budget and from the profits and depreciation reserves of enterprises. State-owned enterprises receive outright grants, while co-operative enterprises can avail themselves of long-term loans. The so-called "specialized banks" act as disbursing and lending agents of the government.

Accordingly, short-term credit is to be resorted to primarily for seasonal and emergency working capital needs. The Gosbank is virtually the only source of short-term credit, which it apparently extends in a manner similar to that of commercial banks in capitalist countries, i.e., by simultaneously creating new means of payment on its books in the form of increments to the "clearing accounts" of the borrowing enterprises. Sooner or later a large part of these increments is, of course, transformed into currency form and enters into general circulation. Ostensibly, a limit is placed on this process by the legal requirement that a minimum 25 per cent reserve of gold, other precious metals, and foreign exchange be maintained

^{23/} The term is here used merely with regard to the volume of money supply, with no direct reference to price movements.

against banknotes ^{24/}, but this limitation may have been disregarded (or waived) in times of emergency, such as the recent war.

Were the extension of short-term bank credit actually limited to seasonal and emergency needs there would be no substantial additions to the money supply from this source from year to year, or at least not in excess of the increasing money requirements of a rapidly growing economy. There are, however, important exceptions to this principle, which apparently have the effect of injecting considerable amounts of new currency into circulation, although recent Soviet literature is conspicuously silent on the presence of any inflationary sources in the banking system, or for that matter, anywhere in the economy. Such exceptions are listed below:

(a) Goods in transit are, as a rule, financed by the Gosbank; one-fourth of all its credits are said to be on this account ^{25/}. This practice is a concomitant of the rule prohibiting credit extension between enterprises. Thus, the Gosbank is financing a certain type of inventory accumulation in the economy, which proceeds at a rate comparable to, if not greater than, that of economic expansion in general.

(b) A large part of the permanent working capital of heavy industry is financed by bank credit. This practice, in effect since 1939, is explained as a means of strengthening "control by the ruble" over heavy

^{24/} Enacted in 1922 and apparently still in force (Cf. Finansovoe Pravo, Moscow, 1946, p. 303). Treasury notes comprise currency of smaller denomination (one to five rubles).

^{25/} Atlas, Z. V. and Bregel, E. Y. A.: Denezhnoe Obrashchenie i Kredit v SSSR, Moscow, 1947, p. 333.

industry ^{26/}, although in a situation where heavy industry expands very much faster than the rest of the money economy it cannot but have an inflationary effect.

(c) Beginning with 1943, the Gosbank has been advancing "large" credits for the reconstruction of enterprises in the liberated areas, especially for the purpose of rebuilding their working capital ^{27/}, and seems contrary to the above-mentioned principle (if not consistent practice) that the bulk of working capital needs is to be provided from internal profits and from the budget. This practice, even if still persisting, ought to be tapering off by now.

(d) As the acute wartime and early postwar shortages of supplies and equipment eased, considerable replacement, restocking and maintenance, which had been perforce deferred for years, was undertaken by enterprises ^{28/}. However, their depreciation reserves and other free funds in cash form -- a total of 20 billion rubles -- had been "mobilized" for war expenditure at the beginning of the war ^{29/}. Furthermore, the general reduction in physical inventories during the war must have resulted in their conversion into working capital in liquid form; it is not clear whether these funds were also "mobilized". If the deferred expenditure is now being financed by the re-creation of the previously "mobilized" funds

^{26/} Ibid., pp. 322 ff.

^{27/} Ibid. p. 241.

^{28/} The volume of maintenance work in 1947 is said to have been double that in 1940, Meshalkin, S. V.: Finansirovanie Kapital'nogo Remonta Osnovnykh Sredstv, Moscow, 1948, p. 6.

^{29/} Atlas and Bregel, op. cit., pp. 241-2.

by the banking system, or by utilizing past liquid working capital accumulations, there would of course be an inflationary pressure on that score at this time.

(e) Last, but not least, is the expansive effect of newly-mined gold, which is still presumably purchased by the Gosbank, although positive indication of this is lacking. While this would not result in a multiple expansion of the money supply on a reserve-ratio basis, there being virtually no commercial bank other than the Gosbank itself, it would cause an equivalent increase in the money supply. This may be a substantial inflationary factor 30/.

Disinflation Through the Budgetary Surplus

The currency expansion generated by the banking system provides a likely explanation for the very large budgetary surpluses of recent years, to which we have made reference at the beginning of this essay. The excess of receipts (including proceeds from loans) over expenditures projected for 1949 is 30.7 billion rubles, or one-third larger than the budgeted loan proceeds and -- we might guess -- equivalent to nearly the amount of currency in circulation. Coming after the very drastic currency conversion of December 1947, and after an even larger surplus achieved in 1948, it could hardly have been intended to withdraw currency in circulation at the beginning of the year. Indeed, allowing for the rapid growth of the money economy, a certain annual expansion in currency in circulation (5 to 10

30/ For instance, an annual output of gold of 200 metric tons would correspond to 1.2 bill. rubles at the parity gold value of the ruble, and probably to a multiple of that sum at the current cost of mining. That the Gosbank continues to purchase gold (and other precious metals), though for the account of the Ministry of Finance, is indicated in a postwar Soviet source; Boguslavski, M., Greben, Ya., and Proselkov, A.: Operativnaya Tekhnika i Uchet v Gosbanke SSSR, Moscow, 1946, pp. 293-5.

billion rubles?) would seem warranted, without endangering monetary stability. Thus, the 1949 surplus appears to be intended to offset expansionary pressure elsewhere in the economy of probably over 30 billion rubles, primarily generated by short-term credit activity of the Gosbank. The actual mechanics of the process apparently involve the lending out by the Gosbank of the treasury's excess cash funds on deposit with the Bank ^{31/} but from the standpoint of monetary management the causation runs in the opposite direction, i.e., from the Bank's lending to the accumulation of budgetary surpluses.

If this is the chief reason for the existence of the budgetary surplus, it can be readily seen to be merely a creature of the particular internal accounting and administrative practices employed by the state. Clearly, the treasury could use the funds now forming the surplus to provide direct grants to enterprises for their full working capital needs, as it already does to large measure, eliminating much of the resort to short-term bank credit; similarly, the treasury rather than the Gosbank could purchase newly-mined gold. The expenditure side of the budget would then be correspondingly larger, and the budgetary surplus correspondingly lower. In this sense, the disinflationary operation of the budgetary surplus in the USSR is different from a similar operation undertaken in a capitalist economy, where the surplus is usually intended to counteract the inflation generated by the financing of private activity rather than by

^{31/} Cf. this translation of a recent statement by a Soviet financial writer: "During the postwar years, even more so than before the war, the temporarily free current funds of the budget are being used for the extension of short-term credit to the economy. The 1949 state budget of the USSR provides for an excess of receipts over expenditures in the amount of 30.7 billion rubles. This not only strengthens monetary circulation, but also serves as a most important source of extension of short-term credit to the economy." (Plotnikov, K.: "Credit in the Socialist Economy", Pravda, May 18, 1949).

the actions of the state itself in its other economic roles.

It could be argued that the budgetary surplus is a fictitious entity and that the funds are in fact used for expenditures of a secret nature. While this hypothesis cannot, of course, be disproved with the present state of statistical information coming from the Soviet Union -- and it may in part or in whole be true -- it does not seem to be fully convincing. First, as appropriations are revealed for the broad expenditure categories only, there is ample room for "secret" items to be included therein. Secondly, the presence of all or at least some of the inflationary pressures listed above seems quite plausible, and the intention to "hold the line" is not only frequently professed but could also be reasonably expected.

The question still remains whether the disinflationary action of the state via the budgetary surplus is of sufficient magnitude to offset the expansion of the money supply through the banking system, in excess of such additions to currency circulation as are required by the growing economy. Has the Soviet Government been successful in maintaining the monetary stability achieved by the currency reform?

Past Inflationary Experience

In the past, the Soviet regime has not been successful in avoiding "suppressed" inflationary situations over shorter planning periods, and, consequently, had to resort to periodic spurts of "open" inflation, i.e., upward adjustment in the official retail price structure, to meet the increase in purchasing power in the hands of the population. Prices on the free market usually responded even more sharply under pressure of

expanded monetary circulation. Publication of a comprehensive retail price index was discontinued in 1930, just as the inflationary pressure was gathering force. State retail prices of rye bread -- a favored object for the turnover tax -- increased twelve-fold from 1928 to 1940, and are now at 30 to 35 times their 1928 level.

The over-expansion of the money supply, insofar as not foreseen by plan, has typically resulted from failure to meet the rigorous requirements of both sides of the "balance of money incomes and expenditures of the population". It has been difficult to keep income payments, chiefly wages and salaries, within planned bounds. Competition by managers for scarce skilled labor, failure to raise labor efficiency to the planned extent, premature up-grading, payroll "padding", and other causes have constantly been pushing the wage bill above its planned limit, despite the periodic upward revision of piece-work norms. The official wage level followed suit, recognizing the de facto increases and thus adjusting itself to the expanded money supply. Between 1928 and 1940, the average annual wage or salary had increased almost six-fold, with no commensurate rise in productivity even claimed by official sources; since 1940 the figure must have almost doubled again, with productivity hardly much above the prewar level, if at all. The year 1937, the last year of the Second Five-Year Plan, provides an interesting case in point. Originally, the Plan foresaw a total wage bill of 50.7 billion rubles and an average wage (or salary) of 1,755 rubles for that year. The annual plan for 1937 had revised these figures upward to 78.3 billion and 2,976, respectively. The actually

realized figures were 82.2 billion and 3,047, respectively, despite the underfulfillment (in terms of "constant" 1926-27 prices) of the targets for both national income and the gross output of industry.

Nor has it always been found possible to maintain the planned volume of the return flow of money from the population to the state (and co-operative entities) -- the other side of the "balance of incomes and expenditures of the population". Since the bulk of this flow ^{32/} results from retail purchases by the population in state and co-operative stores, the "spread" being the chief disinflationary device (as discussed above), the availability of consumer goods for retail sale is the main condition of monetary stability, at the planned level of retail prices. Plan fulfillment with respect to consumer supply has not been an outstanding feature of the Soviet economy even in peacetime. Consequently, the return flow of currency to the state was frequently inadequate; there was continual pressure for more bank credit, and money supply expanded leading to periodic upward adjustments in official retail prices in recognition of this (and of the concurrent rise in wage-costs).

Credit activity by the Gosbank both reflected and aggravated the inflationary pressures. Short-term credits extended to the economy by the Gosbank rose from 3.1 billion rubles on October 1, 1928 ^{33/} -- the start of the First Five-Year Plan -- to approximately 55 billion rubles on January 1, 1940 ^{34/}. Currency in circulation amounted to 1.97 billion rubles on

^{32/} Margolin (Voprosy..., cited, p. 132) suggests that over 80 per cent of the return flow consists of proceeds from retail trade of state and co-operative stores.

^{33/} The "loans and discounts" items in the Bank's balance sheet before the 1930 reform.

^{34/} Golev, Ya, "Razvitie Sovetskogo Kredita", Finansy SSSR za XXX Let, Moscow, 1947, p. 126.

October 1, 1928, the beginning of the First Five-Year Plan period, was anticipated to increase by 0.95 - 1.25 billion rubles during the First Plan period, but instead rose to 8.41 billion rubles by January 1, 1933, and to 11.26 billion rubles on January 1, 1937, the latest date for which such statistics are available. It may be estimated to have reached 18 billion rubles by January 1, 1941 ^{35/}.

Wartime Inflation and the Reform

The duration and severity of the Soviet war and reconstruction efforts undoubtedly had a tremendous inflationary impact. While outlay on military needs, rehabilitation, reconstruction, and other emergency requirements increased sharply, the main tax base, the volume of retail sales to the population, contracted greatly. Financial controls became less rigorous as war requirements took precedence over cost considerations. However, direct taxes were raised, and the state borrowed or received in gifts large sums from the population. It is admitted that during the first three years of the war currency in circulation expanded to 2.4 times its prewar figure ^{36/}. No data, direct or indirect, are given on the development of circulation during the next three and one-half years preceding the monetary reform of December 1947, but we may surmise that the expansion in currency in circulation must have been very large to warrant a conversion

^{35/} See the Appendix for computation of this estimate.

^{36/} Voznesenski, N.: The Economy of the USSR During World War II, Washington 1948, p. 82.

ratio of one new ruble for ten old ones at the time of the Reform 37/.

Since total budgetary receipts (including proceeds from loans and gifts) during the whole period 1941-1947 are stated to have been approximately equal to total budgetary expenditures, we must look to the very liberal credit policy of the Gosbank in assisting conversion, evacuation, reconstruction, and reconversion for the primary source of currency expansion 38/.

A serious inflationary situation developed and persisted throughout the period, a combination of "suppressed" inflation in the official sector (where prices on consumer goods remained fixed at substantially their pre-war level until the full of 1946, 39/ and rigid rationing was in force) and "open" inflation in the free market. Labor and management incentives suffered, and purchasing power gravitated into the hands of the chief sellers in the free market, the peasants.

To meet this adverse situation the monetary reform of December 1947

37/ However, we need not infer that it reached as much as ten times the "proper" volume required by the economy at the time of the Reform; the conversion factor may have been set intentionally rather high (a) so as to err on the "safe side", and (b) because the currency hoards were distributed very unevenly, and it may have been desired to wipe out as much of it as possible (without completely suspending monetary transactions by the population) so as to start with a "clean slate".

38/ For Gosbank activity during this period see Atlas and Bregel, op. cit., p. 129 ff.

39/ An exception to this is the "commercial stores", established in early 1944, where foodstuffs and other consumer goods were sold ration-free at prices which were multiples of ration prices. Created both as a disinflationary device and as a spur to incentives, they were not of decisive disinflationary significance: during 1944 and 1945 the state's additional receipts from this source were only 15.7 billion rubles, or 3 per cent of total budgetary receipts for the two years (Zverev, A.: "Sovetskie Finansy i Stroitel'stvo Sotsializma v SSSR", in Finansy SSSR za XXX Let. Moscow, 1947, p. 70.

was carried out. In brief ^{40/}, concurrently with the abolition of all consumer goods rationing, currency was exchanged at the flat rate of 1 new ruble for 10 old ones, the bulk of government bonds in the possession of the population were to be exchanged for a new (and lower interest bearing) issue at the ratio of 1 : 3, and savings deposits were reduced on a sliding scale.

Present Situation and Outlook

The blackout on monetary statistics was in no way relaxed after the Reform. It seems reasonable to assume that the operation was sufficiently drastic to wipe out the monetary overhang and to re-establish a "proper" relationship between currency in circulation and the other aggregative magnitudes in the economy. One estimate places such a "proper" level of currency in circulation at 42 billion rubles ^{41/}, a figure which appears to us to be too high (see Appendix). If the "line" against currency expansion has not been held since the Reform, indications thereof must have been well concealed from the outside observer. Indeed, such scanty evidence as is available suggests that the "line" is being held. Prices in the free market have been on the decline since the Reform, at least by official claim. Collection of taxes levied directly on the population is to increase in 1949 by 10 per cent over the amount realized in 1948, suggesting a growth in money incomes at approximately the same rate, which is not disproportionate with the real rate of growth of the Soviet economy.

^{40/} For text of the decree see The New York Times, December 15, 1947. A discussion of the Reform may be found in P. A. Baran: "Currency Reform in the USSR", Harvard Business Review, March 1948.

^{41/} Bank for International Settlements, Monetary and Economic Department: "Soviet Monetary Reform", Brief Notes on Current Questions, C. B. 204, Basle, February 1948.

However, the strongest indication that the "line" is being held is to be found in the reduction in state retail prices, decreed effective March 1, 1949 ^{42/}. The official claim was made at that time that the price reduction will result in annual savings to consumers of 48 billion rubles in state stores only, implying a price reduction of something like 12-15 per cent on the average, and a reduction in revenue to the state (from lower turnover taxes, i.e. "spread", on sales in state and co-operative stores) of probably over 60 billion rubles. The propaganda value of such statements must be borne in mind, but if the price reduction is actually anywhere near the claimed magnitude, it would have been hardly undertaken to that extent were monetary stability considered to have been seriously in danger in the early part of 1949.

In prospect, the chances that a reasonable degree of monetary stability might be maintained under present conditions seem to be fairly high. True, the demands of investment, defense and the administrative apparatus on the national product continue to be fantastically high relative to the national product. A strong inflationary potential persists. But the hard lessons of monetary instability seem to have been learned, the fiscal and financial tools have been tempered, and the political power of the state to impose high retail prices and to conduct compulsory loan drives is not to be doubted. Barring another upheaval, only major mis-planning and mismanagement, or an over-confidence which would disregard the limits placed by human psychology on any monetary system, could explain the development of a new serious monetary overexpansion.

42/ There were also price reductions of minor scope during 1948. While the decree refers only to prices in state stores, co-operative stores follow suit, and so would to a large extent the free market unless the first two types of outlets are seriously short of supplies.

APPENDIX

Except for over-all budget figures, the Soviet Union has been publishing virtually no aggregative statistical data on the Soviet economy during recent years. The meager statistical information which is published does not permit the estimation of such magnitudes as the total wage bill, money income of the population, and currency circulation to a satisfactory degree of accuracy. The computations reproduced below do not purport to arrive at anything more than the general orders of magnitude. Crude as they are, these estimates nevertheless are felt to be of some value in placing the published data, such as the budgetary figures, in rough perspective within the economy.

Wage Bill and Money Incomes

The wage bill for 1947 was planned at 280 bill. r. (Pravda, March 1, 1947). This is presumably the "comprehensive" variant of the wage bill.^{43/} The actual wage bill for 1947 or the absolute data for subsequent years have not been published. However, the 1947 planned figure was probably substantially realized, judging by the fact that direct tax collections in that year deviated from budget estimates by only 1.1 per cent (Pravda, February 21, 1947, and February 1, 1948). Let us assume that the actual wage bill in 1947 was 280 bill.r.

In 1948 the wage bill was 10 per cent larger than in 1947 (Pravda, January 20, 1949), or 308 bill. r. Direct tax revenues in 1949 are planned to be 10.2 per cent over actual revenues in 1948. Since the income tax rate structure is only mildly progressive we may assume the wage bill to increase proportionately, i.e., by 10 per cent. Hence, wage bill in 1949 = 308 x 1.1 = 339 bill.r., or 2.1 times that in 1940 (161 bill.r.)

^{43/} cf. Bergson, A.: "A Problem in Soviet Statistics, " The Review of Economic Statistics, Vol. XXIX, #4, November 1947.

Baran^{44/} has estimated that "total money income paid out to the population" (earned and transferred) amounted to 236.42 billion rubles, and transfer payments to the population in that year totaled 12.43 bill. rubles. By subtraction, total earned money incomes of the population in 1940 may be placed at 224 bill. rubles. Assuming that this category increased between 1940 and 1949 in the same proportion as the total wage bill, which is its chief component, we obtain the estimate of total earned money income of the population of $224 \times 2.1 = 470$ bill. rubles for 1949.

We have already mentioned transfer payments to the population of 40.6 bill. rubles for 1949 (see text). Thus the total of money incomes of the population, earned and transferred, may be placed at 510 bill. rubles, approximately.

Currency Circulation on January 1, 1941, and January 1, 1948.

Soviet statistics of currency circulation do not go beyond January 1, 1937, when the total of banknotes, treasury notes, and coins in circulation was stated to have been 11,255.6 million rubles. (League of Nations, Economic Intelligence Service: Money and Banking 1937/38, vol. II, Commercial and Central Banks, Geneva, 1938, p. 183). Circulation on January 1, 1935, was 7,733.8 million rubles. (Ibid.)

The "net" indebtedness of the national economy to the Gosbank" increased from 13.9 billion rubles on January 1, 1935, to "over" 40 billion rubles on January 1, 1941. (Bol'shaya Sovetskaya Entsiklopediya: Soyuz Sovetskikh Sotsialisticheskikh Respublik, Moscow, 1947, p. 1058) The figure for 1937 is not given. The word "net" in this context presumably refers to a deduction of the amount of indebtedness of the Bank to economic enterprises -- i.e. their clearing and current accounts -- from the "gross" amount of credits extended by the Bank

^{44/} Baran, P. A.: "National Income and Product of the U.S.S.R. in 1940", Review of Economic Statistics, Vol. XXIX, No. 4, November 1947, pp. 228-30.

to the enterprises. If so, the increase (at least 26.1 billion rubles) in the "net indebtedness" figure between the two dates must have been offset on the Bank's balance sheet predominantly or entirely, by banknotes and treasury notes (which the Bank issues for the Treasury) placed into circulation, minus the increase in the Treasury's deposits with the Bank. The cumulative surplus in the state budget for the years 1935-1940 was 18.5 billion rubles; the quotation in footnote #31 in the text, leads us to assume that an equivalent rise in the Treasury's deposits with the Bank took place.

We now turn to the expansive effect of the increase in the gold stock during the years under consideration. Taking the production and export figures (in terms of U. S. dollars) as reproduced in "L'Évolution de la Production de l'Or dans le Monde", Études et Conjoncture, Économie Mondiale, March-April, 1949, Table XX, p. 55 ^{45/}, and converting them into rubles at the average parity rates for these years ^{46/}, we obtain a net increase in the gold stock of 2.6 billion rubles. We have no positive indication that the Gosbank ceased acquiring the increment in the gold stock throughout those years. Thus, we take it that its liabilities, must have increased-- probably virtually entirely in the form of an increase in notes in circulation -- by an equivalent amount. (However, if the Bank entered its gold purchases at the current cost of mining, the appropriate figure would probably be a multiple of the above estimate.)

Recapitulating:

Circulation on January 1, 1935		7.7	bill.	rubles
Add: Increase in "net indebtedness" to the economy, 1935-40		26.1	"	"
		33.8	"	"
Less: Cumulative budgetary surplus, 1935-40		18.5	"	"
		15.3	"	"
Add: Increase in gold stock, 1935-40		2.6	"	"
Estimated circulation on January 1, 1941		17.9	"	"

^{45/} Production figures as given in Board of Governors of the Federal Reserve System, Banking and Monetary Statistics, p. 543; export estimates by the Bank for International Settlements. ^{46/} Taken as (rubles per U. S. dollar): 1.15 in 1935, 5.0 in 1936, 5.15 in 1937, and 5.3 in 1938-40.

Relation of Currency in Circulation to the Wage Bill and Retail Trade.

Currency in circu- lation, end of year (a)	Wage bill, "compre- hensive" ^{1/} (b)	Total (c)	Retail Sales ^{2/} State and co-op. only (d)	(b)	(c)	(d)	
				(a)	(a)	(a)	
(billions of rubles)							
1933	6.86	n.a.	61.3	49.8	n.a.	8.9	7.3
1934	7.73	57.0	75.8	61.8	7.4	9.7	8.0
1935	9.71	69.6	96.2	81.7	7.2	9.9	8.4
1936	11.26	n.a.	122.3	106.7	n.a.	10.9	9.5
1940	17.9 ^{3/}	161.0	216.3	175.1	9.0	12.1	9.8

Sources: Soviet data, except as indicated.

^{1/} From Bergson, *op. cit.*, Table 1, column 5, p. 236.

^{2/} From Lifits, M.M., *Sovetskaya Torgovlya*, Moscow, 1948, p. 33.

^{3/} Our estimate.

The accompanying table relates currency in circulation to the wage bill and retail trade for the middle 'thirties and for 1940, in the latter instance based on our estimate of circulation on January 1, 1941 (i.e. at the end of 1940). It can be seen that our estimate is in line with the pronounced trend in the relationship between currency and retail trade which obtained during the middle 'thirties, while the higher ratio of the wage bill to currency in circulation in 1940 than in 1934 or 1935 should not be surprising, considering the increasing importance of the wage bill in the economy.

The B.I.S. estimate of the "proper" amount of currency in circulation just after the December 1947 currency reform is 42 billion rubles. ^{4/} It appears

^{4/} Cited in text, page 26.

to be high; the ratios of the announced planned figures for the ("comprehensive") wage bill (280 billion rubles) and retail sales (325 billion rubles, state and cooperative only) in 1947 to this figure are 6.7 and 7.7, respectively, as against corresponding ratios of 9.0 and 9.8 in 1940. The B.I.S. estimate was made by establishing a relationship for 1947 between currency in circulation on the one hand and retail trade, the turnover tax, and the wage bill, on the other, similar to that which existed during 1935. Among the pitfalls of the B.I.S. estimate may be mentioned the incomparability of the date on the wage bill and retail sales selected for the two years, ⁴⁸/ reference to circulation at the beginning of 1935 to compute the required circulation at the end of 1947, and failure to take account of the trend in the relevant relationships. If we apply the relationships which appear to have obtained in 1940 to the planned wage bill and retail trade for 1947, we arrive at a "proper" circulation after the currency reform (say, on January 1, 1948) of 31-33 billion rubles.

⁴⁸/ On the problem of comparability of wage bill data see Bergson, op. cit. The figure for retail sales in 1935 used by the B.I.S. (74 bill. rubles) is exclusive of "public catering", while the published figure for 1947 presumably includes that item.