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Foreign Trade of Northwest Europe - II

Robert W. Bean

In a previous note appearing in this Review, 1/figures were presented showing the official foreign trade targets or forecasts of five Northwest European countries for 1947. The figures of actual trade during the first quarter are now available, and may be compared with the targets or forecasts.

Table I Foreign Trade of Northwest Europe, First Cuarter 1947, and Official Targets or Forecasts for Year (In millions of dollars)

	Impor	ts	Expor	ts	Balance		
Country	1947 target	First	1947 target	First	1947 target	First	
	or forecast	quarter	or forecast	quarter	or forecast	quarter	
Belgium-Luxem-		,					
bourg	1,480	480 <u>2</u> /	1,255	269	-225	-211ª/	
Sweden	790	274	720	134	-70	-140	
Netherlands	980	291	490	130	-490	-161	
Denmark	495.	109.	405	81	-90	-2 8	
Norway	435 <u>b</u> /	127 <u>b</u> /	270	66	-165	-61	
Total	4,180	1,281	3,140	680	-1,040	-601	

a/ Estimate based on import figures for first two months.

b/ Excluding ships.

Together, the five countries during the first quarter imported at an annual rate which would exceed the combined target figures by close to \$950 million, and exported at an annual rate which fell short of the targets by more than \$400 million. (In some cases the targets given here are median figures.) Their combined trade deficit thus was accumulating at an annual rate \$1,350 million in excess of the planned figure.

These facts appear more alarming than they are. A substantial volume of imports during the first quarter was licensed before the 1947 targets were selected. In the case of Sweden, import restrictions were not imposed, and the trade program drawn up, until March 15. All of the countries except Belgium-Luxembourg now have stringent import licensing systems. But whether they could undertake the paring down of imports from an annual rate of \$5,100 million during the first quarter to an annual rate of \$3,700 million during the remaining three quarters, without endangering their recovery, is problematical. Likewise it is questionable whether exports can simultaneously be raised from an annual rate of \$2,700 million to an annual rate of \$3,300 million.

Table II indicates the average <u>quarterly</u> rate of imports and exports during the remainder of 1947 which would result in fulfillment of the targets or forecasts.

Table II

Import and Export Rates for Last Three Quarters of 1947

Consistent with Plan or Forecast

(In millions of dollars)

and the second s		[mports	Exports		
	First quarter	Permissible quarterly average remainder 1947	First quarter	Required quarterly average remainder 1947	
Belgium-Luxembourg Sweden Netherlands Denmark Norway	480 <u>2</u> , 274 291 109 127 <u>b</u>	172 196 , 129	269 134 130 81 66	329 195 120 108 68	
Total	1,281	933	680	820	

a/ Estimate.

After making allowance for the fact that these are targets, and may purposely have been set high to spur activity, one has also to take account of several favorable factors with respect to exports. The first of these is the general upward trend of recovery, month by month, since liberation, which one may expect to generate a greater volume of exports by the end of 1947 than was achieved at the beginning. Second is the normal seasonal upswing in exports during the summer and later months, particularly for Denmark and the Netherlands, which export a considerable volume of foodstuffs. Finally, there is the fact that the unusually severe winter curbed exports during the first quarter, and that period therefore cannot be taken as a test of capabilities for the year.

b/ Excluding ships.

Netherlands exports during the first quarter were actually at an annual rate somewhat exceeding their plan. This was achieved, however, with the aid of a greater rate of imports than can be sustained for the year. Denmark was the only country which imported at a lower annual rate during the first quarter than was planned. The explanation for this probably lies in the fact that the Danish plan is contingent upon their obtaining a \$50 million loan from the International Bank, and the loan has not yet been secured. The Government has apparently managed to keep imports near a level consistent with Denmark's existing resources and volume of exports. Allowing for the seasonal rise in exports which may be expected, there is no reason why Denmark should not succeed in limiting its trade deficit for the year to \$90 million, as planned, even though this may mean foregoing some of the imports which had been scheduled.

Norway's record during the first quarter came closest to plan. During the remainder of the year, imports need to be cut 20 per cent and exports raised only 3 per cent above the January-March rate. Sweden will have to make the greatest percentage adjustment to attain its target—a cut of 37 per cent in imports and a boost of 46 per cent in exports. It is the only one of the five countries the trade program of which calls for an export surplus during the remainder of 1947.

The over-all 1947 trade figures for Belgium-Luxembourg are more in the nature of official forecasts than targets. A great variety of goods may be imported into Belgium without license. Although imports would have to be cut 30 per cent and exports raised 22 per cent against the January-March rate in order to fulfill the forecast for the year, it is possible that the Government may be willing to suffer an increase of the trade deficit above the forecast of \$225 million. Not even Belgium's substantial reserves of gold and foreign exchange, however, would permit an import surplus of \$845 million, which was the annual rate during the first quarter. In all probability this means that the Belgian import licensing system will be extended.

The Three-Year Plan in Hungary

C. B. Rose, Jr.

A law recently enacted by the Hungarian Parliament makes criticism of the three-year economic plan (to be inaugurated on August 1) a crime against the State and punishable by severe methods. The exact plan to which this law applies has not yet been adopted by Parliament.

Several plans have been under discussion for some time. In December 1946, the Communist Party announced that it had drawn up a program. This was published in February 1947, and a few weeks later the Social Democratic Party also cane out with one. The Smallholder Party, nominally in control of the Government by virtue of a 57 per cent majority won in the 1945 election, has not published a plan although it has been reported that one has been prepared dealing exclusively with agriculture. In view of recent political developments in Hungary, it may be assumed that the Communists will have the deciding voice regarding the final form of the plan to be put into effect. It has been reported that the Social Democrats and Communists have agreed upon a compromise, but no details are available.

In many respects, the plans of these two parties are not dissimilar. They have been compared and analyzed in a recently received Hungarian publication of from which the data reproduced here has been taken. Both plans lay their chief emphasis upon the expansion of industry. Increased industrialization would result in decreased relative importance for agriculture. Such a development would have favorable aspects in that it would help to absorb some of the excess agricultural population. Even under the land reform it has not been possible to provide all farm families with land, and many units resulting from the division are uneconomically small. The major basic difference lies in the fact that the Social Democrats count on the use of some foreign capital in the implementation of their plan, while the Communists apparently expect to cover requirements from domestic sources alone.

National Income and Production Goals

Different national income estimates are given as the basis for the two plans. These are compared in Table I (p. 8). The Social Democratic estimate is for gross national income without allowance for depreciation. The Communist figure is net. It has been stated that, in 1947/48, for which the Social Democrats foresee gross national income of 17,755 million forint, the corresponding net figure would be 17,000 million forint. This compares with the Communist figure of 15,200 million forint for the same year. Disregarding the different levels of estimated income, the increase anticipated in the two programs is quite similar. For the year 1949/50, the Social Democrats plan for an increase to 106 per cent of the 1938 level, and the Communists, 110 per cent. In comparison with the estimated present level, the gains would amount to 68 per cent and 78 per cent respectively. Neither goal should be outside the range of possibility. The present level of national income is estimated at about 62 per cent of 1938.

The production goals of the two plans (Table II, p. 8) are in general conformity and, under certain conditions, not impossible of achievement. One, and perhaps the most crucial condition, is access to foreign capital. This becomes apparent when the required financing is considered (see below). Special difficulties arise in the case of agriculture, and neither the Social Democrats nor the Communists anticipate that it will be possible to bring production back to prewar levels during the existence of the plan. A marked increase is foreseen for mining, but this is largely the consequence of the fact that output of bauxite and oil, which forms a substantial part of present and anticipated production, was negligible in the base year. For coal mining alone, an increase of 29 per cent over 1938 is projected by the Communists, and 23 per cent by the Social Democrats.

Although the overall expansion of industrial production is not far apart under the two schemes, greater differences between them appear in the industrial groupings. Both plans place emphasis on the production of electrical energy, and also indicate intentions for considerable increase in the output of the chemical industry. The Communists, however, project the greatest gains in the iron, steel, and metallurgical industry (given as one group), while the Social Democrats do not plan even for a return to prewar levels in

^{1/} Judik, Jozsef: "A haromeves gazdasagi terv", Kozgazdasagi Szemle, Vol. 89,
Nos. 1 - 2, January-February 1947, pp. 1-53.

^{2/} For other possible explanations of the discrepancy, cf. Table I, p. 8, footnote 1.

this branch. The Social Democrats foresee a far greater expansion of production in the machinery and machine tools industry than do the Communists. The former, moreover, anticipate expanded production in the wood-working and textile, leather, and clothing industries to higher levels than do the latter. The Communists, in contrast, place more emphasis on the food, and on the paper and printing branches of industry than do the Social Democrats which do not expect these lines to reach prewar levels by 1949/50. The Communists contemplate an advance in small, handicraft industry beyond the 1938 level while the Social Democrats do not expect that level to be reached. Since all such forecasts of the results of the plan must be tentative, in view of the unusually large number of unknown factors, and the differences are ones of degree rather than direction, it should not have been difficult for the two parties to merge their objectives.

Extent and Distribution of Investment

Far more scope for disagreement lies in the amounts of money to be spent in the implementation of the plans, the distribution of the capital investment, and the sources from which the funds will be derived. (p. 8) gives the planned outlays by major categories of expenditure and by years. Over the three-year period, industry would receive the largest sum under the Social Democratic plan, and transportation under the Communist. Although agriculture, supporting more than half of the population of Hungary, is the most important single source of national income and is basic to the economy of the country, it receives relatively little assistance under either plan. Of course, expenditures for the development of the agricultural machine and implement industry, for transportation and for the food-processing industries would all directly or indirectly benefit agriculture. The main problems in agriculture, moreover, are of a sort which require not so much large capital expenditures as organization and education for their solution. It would appear, however, that neither the Social Democrats nor the Communists have devoted enough attention in their economic plans to this important sector of the Hungarian economy.

The overall amounts to be spent under the two plans do not diverge markedly. It may be noted that the Social Democrats expect to have to spend more money to achieve a smaller relative increase in national income than do the Communists. This may be indicative of greater realism, as some have claimed, or of less efficient planning, i.e,, because investment is diverted to purposes which yield a return relatively lower than that offered in alternative fields of investment.

The Social Democrats estimate that in addition to the sum of 6,727 million forint required for capital investment during the three-year period, there will be 870 million forint invested outside the plan, making a grand total of 7,597 million forint. They propose that 1,971 million forint of this sum be secured through foreign loans, leaving 5,626 million forint to be derived from domestic sources. This compares with the 6,114 million forint which the Communists foresee as the sum necessary to activate their plan. Neither party considers the question of working capital needs in these calculations, nor is the burden of reparations included in these figures.

Relation of Investment to National Income and Standard of Living

If the view is accepted that a part of the funds required can be secured outside Hungary, the burden placed upon the domestic economy is very substantial. Table IV (p. 9) includes the Social Democratic estimates of investment required from domestic sources, and an estimate of working capital requirements contained in the article referred to above. 1/ It has been estimated that capital investment in the prewar years of 1937 and 1938 averaged 575.3 million pengo a year, which is taken as equivalent to 2.3 billion forint. The inclusion of working capital requirements would bring the figure up to 3 billion forint which compares with the 4.8 billion estimated requirements for 1947/48.

In relation to national income, an expenditure for investment and working capital, and reparations amounting to a total of 4.8 billion forint, in 1947/48 would represent 28 per cent of the national income which the Social Democrats estimate for that year, and 32 per cent of the Communist estimate. If a compromise between the two estimates for national income is reached, investment and reparations would burden net national income to the extent of 30 per cent. The corresponding figure for 1938 is 15 per cent: investment of 750 million pengo and national income of 4,911 million pengo. The intention, thus, is to divert a huge part of national income from current consumption. Even in the last year of the plan, 1949/50, the investment program would utilize 26 per cent of national income.

Calculations have been made which show that the amount available for consumption, after investment and other charges upon national income, and assuming an import surplus (Table IV, p. 9) would increase 13 per cent in 1947/48 over the present level, 37 per cent in the second year of the plan, and 68 per cent in the third. If an import surplus could not be financed, the increase would amount to only 6 per cent in the first year, and 30 per cent in the second. All these forecasts assume optimum conditions of production, especially in agriculture where predictions at best can be only tentative. Since the present standard of living is extremely low, these increases are not regarded as satisfactory by either party. Both Social Democrats and Communists expect to be able to channel to the working classes the greater part of such improvement as occurs. The question has been raised as to how much scope for action there is along these lines in view of the shifts in income and property which already have occurred since the war.

Scurces of Investment Funds

The Communists have ruled out the possibility of foreign loans in support of their three-year plan, their press describing as "treason" any suggestion that such a course would be necessary. Tables V and VI (pp. 9-10) show the Communist2/ideas on the agencies through which the planned investments would be made, and the sources from which funds for the investment by the State would be derived. They expect public (municipal) and social insurance agencies to be able to cover their share from surplus. It is highly problematic, in the first instance, whether such a surplus in fact could

^{1/} Cf. p. 1, footnote 1. The Communist plan apparently covers this point less fully.

^{2/} This section of the program has been more fully developed by the Communists than by the Social Democrats.

develop, and in the second, whether it would not be absorbed by the satisfaction of pressing local needs not otherwise provided for now. The Communists contemplate that the cooperatives' share would be met by contributions from their members. This seems doubtful of realization in view of the heavy drains imposed by the other elements of the financial plan. The Communists dismiss discussion of the source of private investment with the comment that the amount involved is too small to be worth mentioning. They point out that only half of the contribution to Hungarian-Soviet joint company investment would have to come from the Hungarian budget. In view of the precarious position of that budget, which has accumulated a sizeable deficit in the current fiscal year, even this might prove difficult of attainment.

So far as the projection for State revenues (Table VI, p.10) is concerned, the least that can be said is that it does not appear reasonable. It has been commented that, so far as one can at present foresee, the existing tax system in Hungary will not yield enough to cover normal investment, let alone the program envisaged under the three-year plan. Revision of the tax system through the imposition of new taxes and higher rates for old ones has limitations in view of the present weight of taxation. A heavy capital levy is proposed which might yield considerable revenue, but if this is successful, it is questionable whether the amounts intended to be secured through loans will be realized. Both would rely on the same sources. The State is prohibited by law from drawing directly on National Bank credit. Moreover, credit to private borrowers is strictly rationed in order to prevent a recurrence of last year's inflation.

The Communists apparently believe that enough will be available from savings deposits, insurance reserves, and bank credit (expressed as an increase in the note issue) to finance the working capital requirements of private business. Since, however, it is doubtful if the State can meet its own working capital requirements, and it is not unlikely that there would be a deficit in investment funds derived from other sources, the sums available through the means mentioned above would fall far short of the total requirements envisaged.

If this analysis is correct, foreign capital would be needed to make the plan work. This would be both short-term credits to finance an import surplus, and longer term capital which would go into fixed investment. Even if the Communist view is accepted, that no foreign capital is necessary, access to markets as a source of raw materials and equipment is important to the success of any such economic plan. This implies the possibility of using the proceeds of Hungarian exports in free markets. If the foreign trade of Hungary is to be oriented significantly to the East, it is difficult to see how any such plan could be carried out.

The conclusion must be reached that the three-year economic programs drawn up by both the Communists and the Social Democrats are too ambitious. Although capital investment in the interest of production expansion, and increases in the national income and standard of living, are urgently necessary, the scale of present plans is beyond the capacity of the country. If a large volume of foreign assistance were forthcoming, it might be possible to put into effect a program on the scale of that contemplated. In the absence of such assistance, there appears no alternative but to scale down the program.

Table I National Income Bases and Forecasts

1	1938 1946	/47 1947/48	1948/49	1949/50
A. <u>Millions of Forint</u> Social Democratic Plana/ Communist Plan	23,376 14, 19,355b/ 12,	806 17,755 000 15,200	21,383 18,000	24,823 21,200
B. <u>In Per Cent</u> Social Democratic Plan Communist Plan	10		144 150	168 178

Social Democratic figures are given as gross without allowance for depreciation. This would account for only a small portion of the discrepancy between the Socialist and Communist figures for 1938. In default of any further elucidation on this point in available literature it must be assumed that different 1938 pengo-forint conversion rates were used in developing the two plans. Moreover, the possibility of a difference in the concepts of national income should not be ignored.

b/ Inserted. The 12 billion Ft. figure given by the Communists for 1946/47 is approximately the figure of the Hungarian Institute for Economic Research which also calculates national income for

1946/47 at 62 per cent of 1938.

Table II
Production Goals in Per Cent of 1938

	Social Democratic				Communist		
	1946/47	1947/48	1948/49	1949/50	1947/48	1948/49	1949/50
Agriculture	54	66	77	- 89	75	85	96
Mining	100	114	131	141	124	130	148
Industry	61	77	95	111	91	109	128
Small industry	7 56	66	79	99	80	94	130

Table III
Capital Investment Program
(In millions of forint)

	Social Democratic				Communist			
	1947/48	1948/49	1949/50	Total	1947/48	1948/49	1949/50	<u>Total</u>
Agriculture	146	197	239	581	239	300 216	3 40 138	879 546
Mining Industry	150 914	176 8 2 3	164 701	489 2,438	193 373	349	376	1,098
Transportation Building	39 3 350	612 500	714 650	1,719 1,500	482 327	622 511	773 755	1,877
Others:/	-	-	-	_	20	40	60	120
Total	1,952	2,308	2,467	6,727	1,634	2,038	2,443	6,114

Social and cultural other than buildings for social purposes: hospitals, housing, etc.

Table IV

<u>Distribution of National Income by Use</u>

		1947/48	(In mi	<u>1948/49</u> Illions of	forint)	1949/50	
Α.	National income	17,755		21,383		24,823	
	Capital investments under the Plan		1,952		2,408		2,467
	Capital investments outside the Plan		238		276		356
D.	Working capital		2,091		2,475		1,971
E.	Public expenditure other than investment		1,650		1,800		2,000
	Reparations and other peace treaty obligation Total B - F	s 7,130	1,199	8,429	1,470	8,477	1,684
		•		0,4~)		٦٩٠١	
I.	Available for consumpti (A minus G) Possible import surplus Total H and J	10,625		12,954 755 13,709		16,346 521 16,867	

a/Social Democratic plan figures for national income, fixed capital investments, public expenditures, and reparations. Judik estimate of working capital requirements.

Table V Investment Distribution by Channelsa/

	<u>1947/48</u> (:	1948/49 In millions o	1949/50 f forint)	<u>Total</u>
State	1,166	1,341	1,569	4,076
Public and social insurance agencies	249	315	352	916
Hungarian-Soviet joint companies	36 36	36 84	29 141	10 1 261
Cooperatives Private	147	261	352	760
Total	1,634	2,037	2,443	6,114

a/ Communist plan.

Table VI Estimated State Revenuesa/

	<u>1947/48</u> (In mi	<u>1948/49</u> illions of fo	1949/50 rint)
Taxes and monopoly revenues	3,490	4,040	4,620
Extraordinary tax receipts	480	540	600
Loans	200	300	400
Surplus of enterprises b	-	60	<u>150</u>
To tal	4,170	4,940	5,770

a/ Communist plan.

Drawings Against the United States Loan to Britain

C. R. Harley

The rapid rate at which the dollar loan to Britain has been drawn upon in recent months is causing considerable uneasiness in the United Kingdon. Drawings to date in millions of dollars have been as follows:

3rd quarter 1946 - 300 4th quarter 1946 - 300 1st quarter 1947 - 500 2nd quarter 1947 - 850 (through June 3, 1947) 1,950

Concern appears to have been somewhat allayed, however, by persistent suggestions that drawings may have been larger than the immediate dollar requirements of the United Kingdom and that the gold and dollar reserves of that country may have been increasing. A recent article in the London Economist, 1/after analyzing the relationship between surplus receipts of the British Exchequer and drawings on the United States and Canadian loans, on the one hand, and the change in banking liabilities of the commercial banks, on the other, for the months of April and May, presents a "speculative conclusion" in the following terms:

"Is it possible, however, that the reserve of dollars and gold is still rising and that the borrowings from North America are accordingly providing much less effective sterling finance than the rate of drawings upon the credit might suggest? There would certainly be wisdom in a policy of borrowing now more dollars than are immediately required, for accelerated drawings after July 15th might give rise to misunderstandings about sterling's position, and to stage a deceleration then would be good tactics."

b/ Presumably reflects anticipated nationalization of considerable sector of industry.

^{1/} Economist, June 7, 1947, p. 902.

While the suggested justification for accelerated drawings appears reasonable enough, the acceptability of the <u>Economist</u> data is called into question in an accompanying article in this <u>Review.</u> It is argued there that the alleged discrepancy between resources available to reduce the Government's domestic debt and the actual use of those resources for that purpose disappears if the relevant data are examined for strictly comparable time periods. The implication is, accordingly, that no accumulation of gold and dollar reserves occurred on government account during the period examined.

Unfortunately this type of analysis cannot be applied to the earlier months of the year because of distortions introduced by shifts of an unknown volume of government debt from private hands into holdings of government departments. On the other hand, foreign trade data are available for the first quarter of 1947 and may be used to provide a rough impression of the relationship between Britain's Grawings upon the United States loan and its current dollar requirements during that period.

On May 20, Mr. Dalton, Chancellor of the Exchequer, replied as follows to a question in Parliament regarding drawings upon the United States loan during the first quarter of the year:

"Drawings were 500 million dollars, supplies from the United States for ourselves 320 million dollars, and for Germany 70 million dollars. Other supplies and services also cost us dollars, but a detailed analysis of these items in this recent period is not yet available."

According to British trade statistics, the figure of \$320 million represents gross imports on a c.i.f. basis from the "United States Dollar Area" which includes the United States and its possessions, the Philippines, all the Central American republics, and Columbia and Venezuela. Net imports from this area are recorded at \$235 million; this would appear to be the more relevant figure. The necessary dollar cost of these net imports would be somewhat further reduced if shipping and insurance charges paid to United Kingdom nationals were deducted from the c.i.f. value of the incoming shipments. Actual United States dollar requirements for net imports into the United Kingdom may have been about \$100 million less than the accurate but possibly misleading figure given by Mr. Dalton as the expenditure for "supplies from the United States for ourselves".

The figure of \$70 million for the cost of dollar imports into Germany charged to the United Kingdom appears reasonable in view of the fact that total dollar imports into the combined British-American zone were approximately twice that value during the period.

It will be noted that the Chancellor of the Exchequer did not state specifically that the \$110 million residual (after deducting the cost of supplies for the United Kingdom and Germany) was completely spent on "other supplies and services". While few data are available on which to base an estimate of Britain's dollar requirements for service payments and for transfer to other countries (either against sterling balance liabilities or against its undertakings to supply hard currency to certain sterling area countries), the sum of \$110 million does not appear unduly large for these purposes.

^{1/} See p. 13.

Some \$30-\$40 million may have been payable to the United States as motionpicture royalties and rental of lend-lease ships still in British possession. The import balance of the sterling area, excluding the United Kingdom, with the United States amounted to about \$115 million in the first quarter according to United States statistics. Nearly \$80 million of this trade deficit, however, resulted from the import surplus of South Africa which presumably financed its own purchases through sales of gold. A large proportion of the balance of the sterling area deficit may be assumed to have constituted a drain on the United Kingdom's dollar resources. A third source of United States collar expenditures by the United Kingdom lies in an agreement between Britain and Canada whereby the former has undertaken to pay for a portion of its imports from Canada in United States currency. No accurate estimate of the volume of such payments is possible. In agreements with other countries drawing heavily on Canadian credits, Canada has generally asked that hard currency be provided against 15-20 per cent of the Dominion's exports; if similar terms have been applied in trade with the United Kingdom, payments of United States dollars to Canada during the quarter of \$27-\$36 million would be indicated. In addition, the United Kingdom has been obligated since mid-September 1946 to permit current sterling earnings of Argentina to be converted into dollars for current payments.

Even assuming that the \$110 million for which Mr. Dalton gave no information was fully utilized for current dollar requirements of the type outlined in the preceding paragraph, the possibility still remains that drawings upon the loan in the first quarter may have exceeded current expenditures on goods and services and current transfers of dollars to sterling area countries by the estimated \$100 million representing the difference between total and net expenditures involved in financing imports into Britain from the dollar area. If this is the actual situation, one would expect the difference to be reflected in such developments as an increase in official gold—and dollar reserves, an increase in private dollar balances, an increase in private British investments abroad, or a decrease in the foreign indebtedness of the United Kingdom greater than that which might occur in connection with current account transactions, e.g., by net exports from the United Kingdom against payment from accumulated sterling balances held by foreign countries.

^{1/}An increase in gold and dollar reserves from this source would appear in British statistics (when published) as an offset to a decrease of some \$206 million in official reserves resulting from a gold payment of that amount to the International Monetary Fund in February.

The Level of Gold and Dollar Reserves in the United Kingdom

Robert A. Rennie

It is possible to trace movements in the level of official gold and dollar reserves of the United Kingdom by observing the fluctuations in government receipts. If the sterling derived by the Exchequer from the net sales of foreign exchange is less than the current drawings on foreign credits, an increase in reserves is indicated. Conversely, if the sterling revenue is greater than the draft on foreign loans, reserves will decrease, while, finally, if they are of equal magnitudes, reserves will remain unchanged.

The amount of sterling derived from the net sales of foreign exchange can be obtained as a residual item in the total government accounts. It is equal to the total sterling available to the Government to retire domestic debt less any surplus arising from other government accounts.

On the other hand, the actual retirement of government debt in any period can be broken down into the retirement of debt held by non-bank entities plus the retirement of debt held by the banks. It is not possible to determine directly from published material how much bank-held debt has been retired, but changes in bank deposits will give a direct measure if we assume that changes in other elements affecting the deposits can be deducted. The principal items influencing bank deposits beside changes in bank-held government debt are the changes in bank loans to private entities, the sales of securities to the public by banks, and changes in the total circulation of currency. Their total influence is eliminated if the decrease in government debt to the banks is equated to the decrease in bank deposits less any decrease in lending to private individuals less the sales of securities by the banks to the public less any increase in the total circulation of currency. Total retirement of domestic debt, therefore, will be equivalent to the foregoing quantity plus the retirement of debt held by non-bank entities.

In any period, the total money available to reduce the domestic debt will be equal to the recorded retirement of that debt plus the addition to Exchequer deposits. The latter change only slightly in the United Kingdom, since variations in financial requirements are met by fluctuations in Treasury bills and Ways and Means advances. If we equate the total money available to retire domestic debt with the recorded retirement and substitute one for the other, the amount of sterling derived from the sale of foreign exchange will be equal to (1) the retirement of debt held by non-bank entities, plus (2) the decrease in bank deposits, less (3) any decrease in lending to private individuals, less (4) the sales of securities to the public, less (5) any increase in the total circulation of currency, less (6) the total government surplus. 1

Because the government departments were buying bonds held by non-bank entities in unknown amounts prior to February 1947, the following statistical tables include only the four-month period ending in May. However, since the heaviest drawings on the United States loan have been in this period, the study may be illuminating. The statistical work is simplified

^{1/} For an algebraic demonstration of this relationship, see the note at the end of this article.

because the "below-line" expenditures of the Government--according to the Economist, 2/are approximately equal to the increase in debt held by non-bank entities, and the total circulation of currency has varied only slightly. As a result, these three elements will drop out, and only four factors remainthe decrease in bank deposits, the decrease in lending to private entities, the investments sold by banks to the public, and the ordinary government surplus.

Net Sterling Lerived from the Sale of Foreign Exchange (In millions of pounds sterling)

					947			
	Febru	uary	Marc		Apr	<u>il</u>	<u>May</u>	<u></u>
Decrease in bank deposits Minus		90.7		-32.5		-26.9		21.9
Decrease in lending to private entities Minus	-11.7		-17.2		-32.8		-35.7	
Investments sold by banks to public Minus	-12.1	,	-16.3		-5.6		-9.2	
Ordinary government surplus	133.1	109.3	-165.8	- <u>199.3</u>	-133.0	-171.4	77.9	33.0
Equals Net sterling derived from sale of foreign exchange		-18.6		. 166. g		144.5		-11.1

As stated previously, any excess in the net sterling derived from the sale of foreign exchange over the sterling equivalent of drawings on foreign credits will equal the accumulation of reserves.

Accumulation of Gold or Foreign Exchange Reserves
(In millions of pounds sterling)

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T.	February	March	April	May	<u>Total</u>
Sterling equivalent of drawings on foreign credits	39.8	59.6	49.6	121.6	270.6
<u>Minus</u>					
Net sterling derived from sale of foreign exchange	-11.6	166.8	144.5	-11.1	281.6
<u>Equals</u>					
Accumulation of gold or dollars	58.4	-107.2	-94.9	132.7	-11.0

^{1/ &}quot;Below-line" expenditures include excess profits tax refunds, housing outlays, the Civil Contingencies Fund, war damage payments, and other extraordinary outlays.

^{2/} The Economist, June 7, 1947, p. 902.

The foregoing figures would seem to indicate that despite drawings of £270.6 million during the period, reserves fell by £11.0 million. While the statistics and especially the assumption that "below-line" expenditures are equal to the net receipts from national savings are admittedly approximate, the margin of error does not permit any large-scale accumulation of official reserves. This conclusion does not, of course, exclude the private export of capital to build up trade channels, but the rigid limitations on foreign exchange expenditures by manufacturers' agents would indicate that outlays for this purpose are limited.

If developments other than those mentioned in the foregoing sections had occurred, the present analysis would have taken practically all of them into account. For instance, if Britain had bought £100 million in gold from South Africa which was paid for by a surplus of British exports, the following transactions would have taken place: the increase in domestic debt as a result of the Government's purchase of gold would have been balanced by a concommitant increase in deposits resulting from net exports. Addition of the gold to official reserves during the period would accordingly have been reflected in the failure of deposits to fall to the full extent of the Government's ability to retire the domestic debt. Near equivalence, as shown in the preceding tables, of the visible resources available for retirement of the domestic debt and of the decline of bank deposits therefore rules out the possibility of any substantial increase in official reserves of gold and dollar reserves combined, although there may be a shift in composition as between the two types of assets. To the extent that South Africa were willing to accept and hold Treasury bills in exchange for its sales of gold to the United Kingdom, however, the increase in reserves would not be reflected by the present analysis. In view of the large deficit in South Africa's current balance of payments with the United Kingdom and with the United States and considering the limits to its gold production, accumulation of reserves in this manner is considered unlikely.

If the United Kingdom draws upon its foreign credits to furnish dollar exchange to holders of sterling balances, the criterion still applies. This type of transaction may well explain part of the use of the large drafts upon the United States loan. In this case, the foreign government will turn over to the Exchequer an equivalent amount of sterling or Treasury bills in exchange for the dollars. The operation is completely parallel to the purchase of dollars by the domestic importer.

A final case involves a country which has a surplus in its balance of payments with the United Ringdom and which accepts sterling balances in settlement during the period. The net result is a decrease in private domestic deposits as the importers pay for the goods, but an equal offsetting rise in deposits held by the foreign exporters. Whether these deposits are later shifted from the private foreign holder to his government is immaterial. None of the factors which would reflect a change in foreign reserves is affected.

The <u>Economist</u> article previously cited employs a similar analysis to demonstrate that the Exchequer may be accumulating dollars and gold reserves during the months of April and May at a much faster rate than indicated in this study. The discrepancy arises because the <u>Economist</u> does not use

comparable time periods. Its statistics on the government surplus correspond to the period from April 1 to May 24, 1947, whereas the figures on bank deposits apply to the period from March 20 to May 21, 1947. If the two series are made to coincide as closely as possible, the effective government surplus of £56 million as given by the Economist is converted into a deficit of £55.1 million. If the assumption of the Economist is correct-that the £50 million drawn in dollars during May could not have been spent immediately, and, therefore, no sterling finance accrued to the Exchequer -- the result is a reduction in reserves of £16.1 million instead of the increase of £95 million implied in the Economist.

It has been the purpose of this study to bring into focus all the domestic monetary and fiscal factors upon which a change in gold and dollar reserves would impinge. On the basis of assumptions made or accepted, the analysis tends to indicate that there has been no significant rise in reserves in recent months.

Algebraic note on the accumulation of reserves in the United Kingdom

Let: a = net sterling derived from the sale of foreign exchange by the Exchange Equilization Account.

b = drawings on foreign loans.

c = total money available to retire domestic government debt.

<u>d</u> = total retirement of domestic government debt.

e = the retirement of government debt held by non-bank entities.

 \underline{f} = the retirement of government debt held by banks.

g = decrease of bank deposits.

 $\frac{1}{1}$ = decrease in bank loans to private entities. $\frac{1}{1}$ = sale of securities to the public by banks.

j = increase in the total circulation of currency.

ky = ordinary government budget surplus.

ko = "below-line" government budget surplus.

 (k_1+k_2) = total government budget surplus.

1 = increase in Exchequer balances.

 $\underline{a} < \underline{b}$, reserves increase to the extent of the difference.

 $\underline{a} > \underline{b}$, reserves decrease to the extent of the difference.

a = b, reserves remain at the same level.

Then: (1)
$$a + (k_1 + k_2) = c$$

Therefore, (2) $a = c - (k_1 + k_2)$

$$(3) d = e + f$$

(4)
$$f + h + i + j = g$$

Therefore,
$$(5)$$
 $f = g - h - i - j$

Substituting this value of f in (3),

(6)
$$d = e + g - h - i - j$$

In any given time period,

(7)
$$c = d + 1$$

But <u>l</u> is negligible for the United Kingdom Curing the period under consideration.

Therefore, substituting c for d in (6)

(8)
$$c = e + g - h - i - j$$

Again, substituting this value of \underline{c} in (2)

(9)
$$a = e + g - h - i - j - k_1 - k_2$$

According to the Economist note cited on p. 14, the "below-line" government deficit is equal to the increase in debt held by non-bank entities. Moreover, the total currency in circulation has remained practically constant.

Therefore, (10)
$$-k_2 = -e$$
, or $k_2 = e$

And (11)
$$j = 0$$

As a result, e cancels with k_2 , and j drops out.

(12)
$$a = \# + g - h - i - \# - k_1 - k_2$$

(13)
$$a = g - h - i - k1$$

In other words, the net sterling derived from the sale of foreign exchange is equal to the decrease of bank deposits less the decrease in bank loans to private entities less the sale of securities to the public by banks less the ordinary government budget surplus as noted in the text.