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RFD 253

Board of Governors of the Federal Reserve System

Division of International Finance

REVIEW OF FOREIGN DEVELOPMENTS

May 24, 1955

Sterling Area Reserves in United States Recessions Stephen H. Axilrod	8 pages
Austria - Balance of Trade and Monetary Policy Gordon B. Grimwood	21 pages

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It has often been noted that, in contrast with the 1948-49 decline in domestic economic activity, the 1953-54 recession in the United States did not have a serious effect on the balance of payments positions of foreign countries. This is supported by the fact that while gold reserves and dollar holdings of most foreign countries declined in the earlier period, they continued to rise during the second recession.

In particular, the gold and dollar reserves of the sterling area declined by almost \$200 million in the year 1949 but rose by \$670 million in the 12-month period ending June 1954. 1/ Although this increase in reserves may suggest that the sterling area's external position was not adversely affected by the recent U. S. recession, the impact of a recession on reserves is better measured, not by absolute changes in reserve levels, but by changes in the rate of reserve accumulation during the recession compared with the rate of accumulation prevailing before the recession began. It will be seen that, from this aspect, the second recession had as great an impact on the sterling area as the first. 2/

This paper will concentrate on analyzing certain factors affecting the change in the rate of reserve accumulation during the recession periods. In particular, the change in rate of sterling area reserves accumulations will be related to changes in United States imports during the two recessions, and the disparate role of short-term capital movements in affecting the rate of reserve accumulation during the two periods will be briefly touched upon.

On the basis of this study, three principal points emerge regarding the experience of the sterling area during the two recessions:

1/ These two periods roughly correspond to peak-to-trough movements in the two recessions.

2/ Continued gold and dollar accumulations by the sterling area in the latest recession are in large part explained by changes in the area's international position during the period between the earlier and later recessions, resulting in a much higher rate of gold and dollar accumulations by the sterling area at the beginning of the recent recession than at the start of the earlier one--\$284 million compared with \$36 million. This can be explained by favorable developments in the area's trade with this country in the period between the two recessions. The U. S. trade balance with the sterling area (excluding exports of grant-financing military supplies) turned from a surplus of about \$180 million in the fourth quarter 1948 (just before the earlier recession began) to an estimated deficit of some \$100 million in the second quarter of 1953. Throughout the recent recession, the trade balance remained much more favorable to the sterling area than it was during the previous one.

(1) After adjusting for seasonal variations, the impact of U.S. import declines on sterling area reserves -- which depends as much on the rate of recovery from a recession trough as on the extent of a decline from peak to trough -- was somewhat greater in the first recession than it was in the second even though the second was of longer duration (in the sense that recovery was slower).

(2) The impact of capital movements during the two recessions varies with the time period used for comparison. Over nine-month periods in the two recessions (covering in the first recession a period roughly equivalent to the pre-devaluation period of 1949), capital outflows from the sterling area intensified the drain on reserves in the earlier recession, while capital inflows during the second modified the reduction in accumulations that was occurring because of other factors. Over longer time periods in the recessions, the influence of capital flows on the change in the rate of gold and dollar accumulations became less important because reverse movements of capital tended to offset initial movements as speculation worked itself out.

(3) Over one year periods, covering roughly peak to trough movements, the impact of the two recessions (and events occurring simultaneously) on the change in sterling area gold and dollar accumulations from their seasonally adjusted pre-recession rates was about the same. However, the recovery from trough to peak was slower in the second recession and a reduced (and even negative) rate of reserve accumulation continued; this recession, therefore, was accompanied by a larger negative impact on sterling area gold and dollar accumulations.

Impact on reserves of declines in U. S. imports

The following method of analysis is used to evaluate the impact of United States import declines on sterling area reserves. Cumulative declines in U. S. imports from the sterling area during the two recessions are derived by taking as a base the import level during the quarter immediately preceding the downturn in domestic economic activity, subtracting from it imports in ensuing quarters, and cumulating the results, as shown in Table 1. This procedure indicates the extent to which the loss in dollar earnings would be reflected in reduced accumulations (or increased declines) in gold and dollar reserves or in reduced sterling area purchases abroad, other things remaining unchanged.

The extent of the cumulative decline in imports, during a period covering recession and recovery, is affected by the path of import declines over time (whether, for example, there is a single sharp decline in one quarter or a gradual decline over a longer period) and, given the sensitivity of imports, depends both on the depth and the time span of the recession and the recovery. A recession would be over, from this point of view, when U. S. imports had regained peak levels. Thus a very moderate U. S. recession which lasts for a relatively long period may have a greater impact on foreign reserves than a severe but short recession. To put it another way, foreign reserves may be as much or more affected by the rate of recovery from a recession trough as by the distance from peak to trough.

Import declines during the recessions -- As may be seen in the appendix table, the latest recession is unlike the previous one in that, on the basis of quarterly data, a noticeable upswing in domestic economic activity had not yet begun after a comparable time period. During the earlier period, the upswing was noticeable in the fifth quarter after the peak, and during the second recession, not until the sixth quarter after the peak. Correspondingly, United States imports from the sterling area were slower in recovering during the second recession.

Import changes during the two recessions should be compared on a seasonally adjusted basis 1/ since the recessions began at different times of the year and covered different time spans. In the earlier recession, unadjusted U. S. imports from the sterling area regained their fourth quarter 1948 level by the first quarter of 1950, but it was not until the second quarter 1950 (six quarters after the peak) that adjusted imports achieved pre-recession levels. In the later recession, unlike the previous one, both unadjusted and seasonally adjusted imports from the sterling area had not yet regained their second quarter 1953 levels by the fourth quarter 1954, the sixth quarter after the peak. 2/

Comparing experience during the two recessions on the basis of seasonally adjusted data, it may be seen (Table 1) that imports declined cumulatively by \$250 million through the first quarter 1950 and by about \$195 million over the five quarters ending the third quarter 1954. Therefore, over equivalent time periods, import declines during the earlier recession had a greater absolute impact on the area's reserves. The different experience in the two recessions in part reflected larger price declines in commodities imported by the U. S. during the first recession than during the second; in the first recession, in addition to the greater effect of declining U. S. demand on world prices, a downward impetus was also given dollar prices by devaluation.

Since, in the second recession, adjusted imports had not regained second quarter 1953 levels by the fourth quarter of last year, there was

1/ A quarterly seasonal adjustment was calculated on the basis of 1948-1953 experience. The seasonals worked out to the following: first quarter imports from the area are normally up about 7.5 per cent because of seasonal factors; second quarter up about 5 per cent; third quarter imports down 9 per cent; and fourth quarter down 6 per cent. These, and other seasonal adjustments used in this paper, are tentative calculations made through the use of simple statistical techniques; they would certainly be modified by more detailed analysis. It is thought that the direction of adjustment is certainly correct, while the relative size of the adjustment is a reasonably close approximation.

2/ The dock strike in London reduced fourth quarter exports from the U.K. below what they otherwise would have been. Taking the dock strike into account, fourth quarter seasonally adjusted U.S. imports from the sterling area would have been higher, perhaps approaching second quarter 1953 seasonally adjusted levels.

a further loss in dollar earnings from this cause in the sixth quarter after the peak, and the cumulative decline in imports became larger. The difference between cumulative import declines in the two recessions thus became smaller. In other words, because of a slower rate of recovery from the trough, the behavior of U. S. imports during second recession had nearly as large an absolute impact on sterling area reserves as the first.

Table I

Cumulative Declines in U.S. Imports from the Sterling Area
(Millions of dollars)

		<u>U.S. merchandise imports</u>	
		<u>Unadjusted</u>	<u>Seasonally adjusted</u>
From level of 1948 IVth quarter			
Cumulative decline to			
1949	I	- 40	5
	II	1	79
	III	101	176
	IV	135	211
1950	I	130	249
From level of 1953 IInd quarter			
Cumulative decline to			
	III	58	- 1
	IV	128	22
1954	I	231	127
	II	265	161
	III	359	193
	IV	449	223

Effect on reserves -- The cumulative decline in sterling area export earnings may be related to the level of reserves just before the downturn, showing the percentage by which sterling area reserves would have declined because of reduced export receipts alone, other things remaining unchanged. At the end of 1948, the area's gold and dollar holdings (official and private) amounted to \$2,918 million and by mid-1953 they had risen to \$3,910 million; seasonal adjustment would leave these figures unchanged in 1948, but would reduce them to \$3,850 million in 1953. 1/

1/ A tentative seasonal adjustment to sterling area gold and dollar reserve levels based on 1948-1953 experience--the experience itself being adjusted to take account of the fact that first principal and interest payments on Canadian and U.S. debts did not begin until December 1951--indicated that fourth-quarter reserve levels may be down by 4 per cent because of seasonal factors while second-quarter levels may be up by 1 per cent. This adjustment, however, would not apply to reserve levels before 1951. In the pre-1951 period there was apparently no consistent seasonality to fourth-quarter reserve levels, so that no seasonal adjustment is made to the fourth-quarter 1948 level.

After eliminating seasonals, the recession apparently had a significantly larger relative impact on reserves in the earlier period. Using seasonally adjusted figures, the loss of export receipts represented an 8.5 per cent decline in the area's gold and dollar holdings during the five quarters ending first quarter 1950 and only a 5.0 per cent decline over the five quarters ending third quarter 1954; reserves would have declined by 5.7 per cent over the six quarters ending fourth quarter 1954. In other words, declines in U.S. imports from the sterling area, not only caused somewhat larger declines in area reserves during the first recession than during the second, but they also had -- in view of the large rise in reserves between the two recessions -- a significantly larger relative impact on area gold and dollar holdings, after adjusting for seasonal factors.

Change in sterling area reserves during two recessions

A cumulative-type analysis can also be made for the change in the rate at which sterling area gold and dollar reserves were accumulated during the two recessions. Table 2 shows the changes in the area's gold and dollar reserves as compared with the additions to reserves that would have obtained if fourth quarter 1948 and second quarter 1953 rates of accumulation had been maintained over one year periods in the respective recessions.

Table 2

Changes in Sterling Area Reserve Accumulation
During Two Recessions
(Millions of dollars)

	<u>Change in area gold and dollar holdings</u>	
	<u>Actual</u>	<u>Seasonally adjusted</u>
A: 1948, fourth quarter (annual rate)	144	144
B: 1949 - (annual total)	- 192	- 192
C: Decline in reserve accumulations (A-B)	<u>336</u>	<u>336</u>
A: 1953, second quarter (annual rate)	1,136	896
B: 1953-54 (annual total)	670	670
C: Decline in reserve accumulations (A-B)	<u>466</u>	<u>226</u>

The actual decline in reserve additions over a one-year period was somewhat larger in the present recession than in the last, as shown by the first column of the table. After seasonal adjustment to lines A, however, (no seasonal influence is assumed in the fourth quarter of 1948) declines in reserve additions were larger in the first recession -- although the seasonals here can be no more than educated guesses and small

errors one way or another might change the data significantly. The safest conclusion to draw would be that in the two recessions, when one-year comparisons are made as shown, the decline in reserve accumulations was about the same. ^{1/}

However, similar comparisons first over a shorter period during each recession and, secondly, over a longer period show interesting variations in reserve movements as between the two recessions. Taking the cumulative decline in reserve accumulations over the first nine months of each recession, this decline, seasonally adjusted, amounted to 575 million dollars in the first recession and to 325 million dollars in the second, in part reflecting the different effects of short-term capital movements in the two recessions.

During the second and third quarters of 1949, there were large drains on area reserves because of speculative short-term capital outflows from the United Kingdom (including the so-called "leads and lags" whereby the United States importer delayed payment for goods received and the sterling area importer accelerated payments for his imports) based on expectations of devaluation. As a result, the drain on reserves in the first nine months of the earlier recession was intensified. In contrast, there were moderate inflows of short-term capital to the United Kingdom during the early part of the second recession, and these served to dampen the decline in reserve accumulations.

After the September 1949 devaluations, a large return flow of short-term capital to the United Kingdom contributed to a sharp rise in reserves. Therefore, over the whole year 1949 the impact of capital flows on reserve accumulations was small, and the influence of trade factors became more apparent.

If the two recessions are compared over the first five quarters from the peak, the declines in reserve accumulations, both adjusted and unadjusted, would be larger in the 1953-54 than in the 1948-49 period because the area was adding to reserves at an annual rate of only about \$180 million during the third quarter of 1954 (after adjusting for a sizeable voluntary repurchase from the IMF and payment of EPU debts at renewal of the Union) while it was adding to its reserves at an annual rate of \$1.3

^{1/} There were increased acquisitions of gold from new production and other sources (excluding purchases from the U.S.) during the two recessions as compared with such additions to reserves in peak quarters. These increased acquisitions amounted to \$27 million in the first recession and \$193 million in the second. If data on net purchases of gold from new productions alone were available the differences between the two figures would probably be smaller. Nevertheless, it would follow that the decline in reserve gains in the first recession would be smaller than in the second on the basis of all transactions except net purchases of gold from new production; this comparison is relevant because it may be assumed that such net purchases are generally insensitive to recessions.

billion by first quarter 1950. During the fourth quarter of 1954, sterling area reserve accumulations, seasonally adjusted, were near zero, still well below second quarter 1953 accumulations. Thus, the second recession, partly because of its longer duration, was associated with a larger negative impact on sterling area reserves than the previous one, when considered in terms of declines in reserve accumulations.

Appendix Table

Year and Quarter	Index of Industrial Production (1947-49 = 100)		Gross National Product (Billions of dollars)		U.S. Imports of Goods from Sterling Area (Millions of dollars)		Change in Sterling Area Gold Reserves and Dollar Holdings (Millions of Dollars)
	Seasonally adjusted	Unadjusted	Adjusted (annual rate)	Unadjusted (quarterly total)	Unadjusted	Seasonally adjusted	
1948 IV	104	105	267.0	70.9	324	343	36
1949 I	99	99	259.5	62.6	364	338	17
II	95	95	257.9	62.5	283	269	-245
III	96	95	256.5	64.4	224	246	-221
IV	96	97	255.5	67.8	290	308	257
1950 I	100	101	264.4	63.8	329	305	327
II	109	109	275.0	66.6	363	343	416
1953 II	136	136	369.9	91.5	461	435	284
III	135	133	367.2	91.1	403	436	160
IV	129	130	360.5	93.8	391	412	- 20
1954 I	124	125	355.8	86.7	358	330	174
II	124	124	356.0	88.0	427	401	353
III	123	122	355.5	88.4	367	403	-165
IV	128	129	362.0	94.1	371	395	-172

Sources: U.S. Department of Commerce and Board of Governors, Federal Reserve System.

NOT FOR PUBLICATION

May 24, 1955

Austria - Balance of Trade and Monetary Policy

Gordon B. Grimwood

For the first time since the stabilization of mid-1952, inflationary pressures are beginning to be reflected in the Austrian balance of payments. These pressures may be aggravated by the State Treaty of May 15, 1955, which, while giving Austria her long-sought freedom, at the same time imposed heavy burdens upon the economy.

Austria achieved internal and external financial stability in mid-1952 by the application of appropriate monetary and fiscal policies. Stabilization was followed by a rapid expansion in the volume of exports; by 1954 the high level of production in the export industries had spread to the industries producing for domestic consumption. Increased domestic demand coincided with the obligation to liberalize imports under the code of the OEEC. There was a sharp rise in the trade deficit during the fourth quarter of 1954 which has continued during the first quarter of 1955. This deficit has been accompanied by a rapid expansion in the volume of commercial credit outstanding.

This paper will examine the nature of the trade deficit as reflected by the trade statistics. It will then review the relation between monetary policy and Austria's external position during the past two years, and will suggest some tentative conclusions regarding the ability of the monetary authorities to take remedial action within the framework of existing institutional arrangements.

Development of trade deficit

An examination of the trade statistics, details of which are shown in Tables I to V in the Appendix, reveals that the reversal from surplus to deficit in the balance of trade during the fourth quarter of 1954 was due entirely to a sharp increase in the value and volume of imports. Imports during that quarter increased 48 per cent by value and 65 per cent by volume as compared with the fourth quarter of 1953. Exports increased only 10 per cent by value and 13 per cent by volume. There was a decline in prices of both imports and exports; import prices declined more rapidly and the terms of trade improved during the period under review.

The increased volume of imports reflected "boom" conditions in the Austrian economy as well as the results of a liberalization of imports vis-a-vis the EPU area during the third quarter of 1954. Industrial production on the average increased by 14 per cent during the year as compared with an increase of only 2 per cent in 1953. Average employment during 1954 was up 3 per cent from 1953, while unemployment during the year averaged about 10 per cent below 1953. Wholesale and retail prices increased slightly and there were some upward adjustments in wages; prices and wages were markedly stable, however, in the face of a 25 per cent increase in the money supply in one year (see Table I, Appendix).

Comparison of the commodity composition of imports for the fourth quarter of 1954 with the fourth quarter of 1953 reveals large percentage

increases in foodstuffs, machines and vehicles, and finished goods (see Table IV, Appendix). The increase in the category "machines and vehicles" is particularly striking; such imports doubled between fourth quarter 1953 and fourth quarter 1954. A similar comparison between January-February 1954 and January-February 1955 shows much the same picture, although comparison of percentage increases might be misleading because of differing commodity categorization.

Three circumstances are known to have influenced the volume and commodity composition of imports during the last quarter of 1954: Flood damage to crops necessitated higher imports of foodstuffs, the expiration of certain tax concessions regarding depreciation as of 31 December 1954 provided an incentive for imports of capital equipment prior to that date, and a further relaxation of imports restrictions effective 1 December 1954 made possible the free imports, from the EPU area, of iron and steel goods and machinery. There are indications that some part of the increase under the category "machinery and vehicles" reflected higher imports of consumer durable goods. The March report of the Austrian Institute for Economic Research states that passenger car imports (new and used) in January and February totaled 3,570 and 4,472, respectively, as compared with 837 and 1,143 during the same months of 1954.

The relaxation of restrictions against imports from the EPU area made effective the demand generated by the domestic boom. Lists published in May 1954 increased the liberalization to 75 per cent of total 1952 EPU imports, and the lists were further extended to 83 per cent of the total as of December 1, 1954. The influence of the trade liberalization on the geographical distribution of imports is indicated in Table V, Appendix. The share of the EPU area, on a "country of payments" basis, rose from 71 per cent of commercial imports in 1953 to 78 per cent in 1954. If ERP-financed imports are added to the total these percentages become 66 and 76 per cent, respectively.

Liberalization of EPU imports resulted in some "shunting" of commodities from other areas, the extent of which is indicated in Table V. In 1953 the excess of goods purchased from EPU countries over goods originating in those countries amounted to 6 per cent of total commercial imports; in 1954 this figure increased to 9 per cent. Austria's accumulated EPU surplus declined from \$123 million at the end of September to \$55 million at the end of February, a decline which was due entirely to a relatively greater rise in imports from the EPU area than in exports to that area during the period. On the import side, the "switch" transactions alone would account for about \$30 million of the net decline of \$68 million.

Table V also indicates the extent to which the shunting of dollar area commodities gained in importance during 1954. During 1953, dollar commodities accounted for only about 5 per cent of total shunting through the EPU area; during 1954 they increased to 36 per cent.

Austrian trade statistics indicate that most of the shunting was done through Great Britain and the Netherlands. Great Britain accounted

for 748 million schillings of the net total of 794 million; in 1954 the comparable figures were 1,114 million of a net of 1,493 million schillings.

Certain factors tending to increase imports during the fourth quarter of 1954 were temporary, e.g., the necessity to increase food imports because of bad crops and the expiration of tax concessions. There are, however, no indications of a slackening of the present high level of domestic activity which has created the demand for imports. The Government has announced that imports will be further increased if necessary to relieve pressure on prices. And there can be little doubt that high domestic demand will have an adverse effect on the supply of goods for the export market. Without corrective monetary policies there might well be a further rise in the trade deficit.

Monetary policy and the banking system

Austria achieved internal and external financial stability by the application of appropriate monetary and fiscal policies in mid-1952. At that time the discount rate was raised to 6 per cent and reserve requirements, established by earlier "voluntary agreements" between the Austrian National Bank and the commercial banks, were increased. Banks were permitted to use only 50 per cent of any increase in liabilities for the expansion of credit. An illustration of the calculation of the ceiling for joint stock and commercial banks is shown in Table XII. By the end of the year prices were stabilized, savings began to increase, and there was an improvement in the balance of payments which was consolidated in May 1953 by a unification of the multiple exchange rate system.

The rate of increase in economic growth, which had been fostered by inflationary pressures during the postwar years (and was accompanied by large balance of payments deficits), slackened after the monetary stabilization. Industrial production did not increase appreciably during 1953, unemployment reached a postwar high in February of that year, and the national income decreased slightly as compared with increases of 32 per cent and 14 per cent in 1951 and 1952, respectively. The Austrian National Bank progressively reduced the discount rate from 6 per cent to 4 per cent during the year and to 3.5 per cent in June 1954.

The unification of the exchange rate, the stabilization of prices, and a favorable development of international prices caused a rapid expansion in the volume of exports during 1953; by 1954 the high level of production in the export industries had spread to industries producing for the domestic economy. At the same time the accumulation of foreign exchange expanded the money supply and improved the liquidity of the commercial banks (see Table XI). Their position was further improved by an increase in the rate of savings. There was a large unsatisfied demand for investment funds which did not result in a commensurate expansion of investment credit because of the high liquidity preference of the Austrian saver and the absence, for several reasons, of an operating capital market. Short-term funds accumulated in the banking system at a rapid rate during this period.

These developments are clearly reflected in the balance sheets of the National Bank and the commercial banks, as shown in Tables IX and X. Cash holdings of commercial banks at the National Bank and the Post Office Savings Bank increased steadily, while National Bank holdings of commercial bills and Treasury certificates dwindled. By mid-1954, the volume of commercial credit of the large banks was 2.2 billion schillings below the credit ceiling; primary and secondary liquidity stood at 27 and 57 per cent, respectively, as compared with required reserves of 15 and 40 per cent. Austrian National Bank holdings of commercial bills and Treasury certificates had declined to an insignificant amount.

The trade deficit during the fourth quarter of 1954 coincided with a rapid expansion in the volume of commercial credit. The money supply during 1953 and 1954 increased at a rate of 25 per cent per annum, primarily as a result of an excess of purchases over sales of foreign exchange by the Austrian National Bank. During the fourth quarter of 1954, there was a net decline in foreign exchange holdings which was, however, not sufficient to offset the expansionary effect of a sharp increase in commercial credit outstanding. Bank credit (net) to the economy during 1954 accounted for 45 per cent of the increase in money supply whereas in 1952 and 1953 the operations of the banking system had exerted a slight contractive force. Most of the increase in bank credit occurred during the third and fourth quarters of 1954 (see Tables VII and VIII, Appendix).

During the third and fourth quarters, coinciding with the liberalization of EPU imports, the commercial credit volume of the large banks (excluding reconstruction and export credits) increased by 8 per cent and 7 per cent, respectively, as compared with an increase of 3.5 per cent and a decline of 4 per cent during the third and fourth quarters of 1953. By the end of March 1955, credit had expanded an additional 9 per cent above the December 1954 figure and stood almost 30 per cent above March 1953.

The amount of credit unutilized under the June 1952 agreement dwindled rapidly after mid-1954 as did the liquidity reserves of the banks. Cash deposits with the Austrian National Bank were reduced to less than half the June 30, 1954, figure and National Bank rediscounts of commercial bills began to rise after September 30, 1954 (see Tables IX, X, and XI, Appendix).

Statistics regarding the use of commercial credit by major sectors of the economy are only a rough measure of the use to which credit is put. However, during the fourth quarter credit to trade and transportation, which may be assumed to include the import firms, expanded by 18 per cent as compared with an expansion of 1 per cent to industry and mining and an increase in the total of 8 per cent (see Table XIII, Appendix).

Perhaps a better indication of the impact of the credit expansion can be gained by measuring the expansion against developments in other sectors. The table below gives such a comparison which, although rough, seems to indicate clearly that the expansion in commercial credit went primarily to finance increased imports.

Change over Same Quarter Previous Year
(In per cent)

	Fourth Quarter 1954	First Quarter 1955
Commercial credit ^{1/}	21	29
Industrial production	13	n.a.
Wholesale prices	7	7
Imports (value)	48	49

^{1/} Excluding reconstruction and export credits.

n.a. Not available.

To what extent can the voluntary agreement between the Austrian National Bank and the commercial banks be relied upon to control this expansion of credit and thus the deterioration in the balance of payments? On the face of it, the large banks are just about "loaned up." The permissible expansion as of March 31, at 428 million schillings was lower than at any time since the conclusion of the agreement. Primary liquidity was below the required minimum, although secondary liquidity remained about 7 per cent above the minimum. There are, however, some misleading elements in this picture.

In the first place, the word "voluntary" should be stressed. The Austrian National Bank has no power to enforce or to vary the provisions of the agreement, although there are some mild sanctions in the form of penalty rates to be paid to the Austrian Ministry of Finance if reserves slip below the required minimums or if credit exceeds the permitted volume. Theoretically, since the banks are nationalized, the Minister of Finance could direct them to comply with any new regulations promulgated by the National Bank. As a practical matter, however, the Minister of Finance has not interfered with the operations of the banks since their nationalization.

Secondly, the initiative has passed to the commercial banks. The National Bank has no paper which can be sold to the commercial banks when a tightening of the money market is indicated. The commercial banks hold about 750 million schillings of "occupation cost" Treasury certificates which the National Bank is required to by law to discount. These certificates are acceptable up to 50 per cent for primary reserves, but would automatically become cash reserves upon presentation to the National Bank.

The liquidity position of the commercial banks has now reached the point at which the banks are coming to the National Bank for funds, even though their cash reserves remain fairly high and they still retain almost 750 million schillings in automatically rediscountable Treasury certificates. Within these limits the National Bank, by increasing the dis-

count rate slightly 1/ and by exercising a policy of restraint in rediscounting commercial bills, might be able to exercise a moderating effect upon the expansion of commercial credit without relying upon the terms of the agreement of 1952. Consideration would have to be given, however, to the overall structure of interest rates, which has only recently been reduced to a level at which some signs of a capital market are now appearing.

Summary and conclusions

An increase in the rate of growth of economic activity, sparked by the export industries, resulted in higher disposable income and increased demand during 1954. Employment was higher, net wages increased somewhat more than did prices, and there was a reduction in income taxes at the beginning of the year.

The increased demand coincided with the obligation to liberalize imports under the code of the OEEC. The flow of imports during the last half of the year undoubtedly operated to keep prices relatively stable, even though the money supply expanded about twice as rapidly as domestic production. During the first three quarters the increase in money supply was generated primarily by the accumulation of foreign exchange. During the fourth quarter, when there was a decline in foreign exchange holdings, the money supply increased more than in any previous quarter. This was due primarily to the expansion in commercial credit.

The Austrian Government is aware of the danger of renewed inflation, but, because of the fear of a renewal of the price-wage spiral, pays more attention to domestic prices than to the balance of payments. The announced policy of the Government is: (1) To rely upon the June 1952 agreement to control credit; (2) to combat price increases by further liberalization of imports, if necessary; and (3) to postpone until next winter a portion of the investment from the budget.

National Bank holdings of gold and foreign exchange totaled \$347 million as of April 15, 1955, from which should be subtracted free deposits of foreign banks at about \$16 million. The deficit on current account during the fourth quarter of 1954 was running at an annual rate of \$120 million, which might be increased by an estimated \$30 to \$65 million annually by the effects of the State Treaty, which was signed on May 15, 1955. 2/ Assuming a deficit at the level of the fourth quarter of 1954 (or, as is more likely to be the case, an increasing deficit), foreign exchange reserves would be reduced within a year to a point at which some effective action would have to be taken to reduce the deficit on balance of payments.

1/ The Austrian National Bank has announced an increase in the discount rate from 3-1/2 to 4-1/2 per cent, effective May 20, 1955.

2/ See my paper on this subject dated May 3, 1955.

Prompt anti-inflationary actions in the field of monetary policy should make it possible to avoid the necessity to reimpose trade restrictions at a later date. Such action would be much more effective if the National Bank were given more authority over the commercial banking system. The application of the appropriate monetary policies, accompanied by a cautious fiscal policy, would improve the balance of payments situation and would control internal inflationary pressures without endangering the high level of domestic activity which has been achieved since the monetary stabilization of 1952.

Statistical Appendix

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Table I
Economic Indicators

	1952	1953	1954	1955
National income (millions of dollars)	2,435	2,431	2,731	
Money supply (millions of dollars)	716	891	1,109	1,113 (March)
Industrial production <u>1/</u> (1937 = 100)	167	170	194	182 (Jan.)
Wholesale prices <u>1/</u>	822	776	811	838 (March)
Retail prices <u>1/</u>) (March 1938 = 100)	669	664	681	687 (March)
Cost of living <u>1/</u>)	696	658	683	689 (March)
Unemployment (%) <u>1/</u>	7.5	8.8	7.7	9 (March)
Net wages <u>1/</u> (April 1945 = 100)	723	723	759	779 (March)
Exports, Total	507	538	610	154 (1st
Imports, Total	<u>654</u>	<u>547</u>	<u>653</u>	<u>208</u> Quarter)
Balance (millions of dollars)	-147	-9	-43	-54
Exports, U.S.A. <u>2/</u>	26	34	29	4
Imports, U.S.A. <u>2/</u>	<u>120</u>	<u>71</u>	<u>41</u>	<u>9</u> (Jan-Feb)
Balance (millions of dollars)	-94	-37	-12	-5
Balance of payments on current account (millions of dollars)	-105	+71	+68	n.a.
EPU accounting position (cumulative) (millions of dollars) <u>3/</u>	+16	+96	+88	+40 (March)
Foreign exchange reserves (millions of dollars)	88	271	372	347 (April 15)

1/ Yearly averages, except latest month 1955.

2/ Converted at S 21.36 = \$1.00 for 1952 and first five months of 1953; S 26.00 = \$1.00, thereafter.

3/ After taking into account initial position (\$80 million) and special reserves (\$45 million).

n.a. Not available.

Source: Monatsberichte des Österreichischen für Wirtschaftsforschung, the Statistische Nachrichten of the Austrian Central Statistical Office, and the Monthly Report of the Austrian National Bank.

Table II

Balance of Trade
(In millions of schillings)

	Imports	Exports	Balance of Trade
1953 Total	13,268.5	13,187.5	-81.0
1954 Total	16,986.6	15,851.1	-1,135.5
1953 - IV	3,716.3	3,884.4	+168.1
1954 - I	3,622.9	3,586.9	-36.0
II	3,849.4	3,957.7	+108.3
III	4,020.2	4,019.0	-1.2
IV	5,494.1	4,287.5	-1,206.6
1955 - January	1,693.0	1,258.0	-435.0
February	1,644.0	1,286.0	-358.0
March p	2,077.0	1,462.0	-615.0

p Preliminary.

Source: Statistische Nachrichten.

Table III

Foreign Trade
(1937 = 100)

	Imports			Exports			Terms of Trade
	Value	Volume	Price	Value	Volume	Price	
1953 - I	816	90	912	853	128	654	72
II	974	96	1,019	1,012	132	747	73
III	838	81	1,033	1,194	154	760	74
IV	1,023	99	1,039	1,277	171	736	71
1954 - I	997	98	1,013	1,179	166	704	69
II	1,059	107	989	1,303	174	730	74
III	1,106	115	964	1,321	179	726	75
IV	1,512	163	926	1,410	194	715	77
1955 - January	1,396	144	969	1,239	170	722	75
February	1,356	142	950	1,267	173	726	76

Source: Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung

Table IV

Commodity Composition of Imports
(In millions of schillings)

	4th Quarter 1953	4th Quarter 1954	Per cent of increase	Jan-Feb 1954	Jan-Feb 1955	Per cent of increase
Foodstuff	705	1,187	68	514	803	56
Coal and coke	618	707	14	363	474	31
Other raw materials	777	912	17	679 <u>1/</u>	847 <u>1/</u>	25
Semi-finished goods	564	760	35	329 <u>1/</u>	503 <u>1/</u>	53
Machines and ve- hicles	587	1,176	100	365	611	67
Other finished goods	362	626	73	55	92	67
Other goods	<u>1</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total	3,716	5,494	48	2,304	3,337	45

1/ Commodity categories not strictly comparable.

Source: Statistik des Aussenhandels Österreich 1954, of the Austrian Central Statistical Office; Statistische Nachrichten.

Table V

Imports 1/ by Geographic Distribution
(In millions of schillings)

	OEEC			Dollar Area 2/			Other			Total	EPU 3/ Position
	A	B	B-A	A	B	B-A	A	B	B-A		
1953 - I	1,778	1,940	162	205	200	-5	703	546	-157	2,686	10
II	1,938	2,150	212	308	280	-28	995	811	-184	3,241	25
III	1,925	2,105	180	216	213	-3	767	590	-177	2,908	74
IV	<u>2,332</u>	<u>2,572</u>	<u>240</u>	<u>140</u>	<u>132</u>	<u>-8</u>	<u>1,045</u>	<u>813</u>	<u>-232</u>	<u>3,517</u>	<u>96</u>
Total	7,973	8,767	794	869	825	-44	3,510	2,760	-750	12,352	
1954 - I	2,314	2,584	270	272	218	-54	859	643	-216	3,445	113
II	2,523	2,914	391	256	119	-137	910	656	-254	3,689	117
III	2,848	3,188	340	201	119	-82	865	607	-258	3,914	123
IV	<u>3,728</u>	<u>4,220</u>	<u>492</u>	<u>441</u>	<u>181</u>	<u>-260</u>	<u>1,261</u>	<u>1,029</u>	<u>-232</u>	<u>5,430</u>	<u>88</u>
Total	11,413	12,906	1,493	1,170	637	-533	3,895	2,935	-960	16,478	
1955 -											
Jan.	1,056	1,189	133	175	142	-33	443	343	-100	1,674	68
Feb.	1,085	1,228	143	145	100	-45	403	405	2	1,633	55
Mar.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,071 p	40

A - Reported by country of origin.
B - Reported by country of payment.

1/ Excludes ERP-financed imports.

2/ U.S. and Canada.

3/ Accounting surplus or deficit cumulative, in millions of dollars, after taking into account the initial position (80 million) and use of special resources (\$45 million).

n.a. Not available.

p Preliminary.

Source: Statistische Nachrichten.

Table VI

Balance of Payments
(In millions of dollars)

	1952	1953	1954	1954			
				I	II	III	IV
Imports	654	547	653	139	148	155	211
Exports	<u>507</u>	<u>538</u>	<u>610</u>	<u>138</u>	<u>152</u>	<u>155</u>	<u>165</u>
Balance of trade	-147	-9	-43	-1	+4	--	-46
Services:							
Freight	-18	-19	-16	-5	-4	-3	-4
Tourism	+25	+53	+64	+10	+14	+34	+6
Interest	+1	+2	+1	+1	--	+1	-1
Other	<u>+35</u>	<u>+45</u>	<u>+62</u>	<u>+17</u>	<u>+16</u>	<u>+14</u>	<u>+15</u>
Total	+43	+81	+111	+23	+26	+46	+16
Balance on current account	-104	+72	+68	+22	+30	+46	-30
Compensatory capital movements ^{1/}							
Foreign credit, net	-6	+9	-39	-8	-3	-7	-21
Short-term foreign capital, net	-56	-151	-96	-40	-45	-46	+35
ERP aid	105	40	20	7	6	4	3
Errors and omissions	<u>+61</u>	<u>+30</u>	<u>+47</u>	<u>+19</u>	<u>+12</u>	<u>+2</u>	<u>+13</u>
	+104	-72	-68	-22	-30	-46	+30

^{1/} (-) indicates net inflow.

Source: Monatsberichte des Österreichischen Institute für Wirtschaftsforschung, February 1955, Table 9.6 in the Statistical Appendix.

Table VII

Consolidated Condition
Statement of the
Banking System,
Changes

	1954	1953	1952
<u>Net assets, changes</u>			
1. Credit to domestic nonbank borrowers, net	+2.5	-0.7	-0.1
Loans and advances	+5.2	+2.3	+0.8
Less:			
Savings and time deposits	-2.5	-1.7	-1.0
Government deposits	+0.25	-0.5	+0.2
Miscellaneous other net liabilities	-0.4	-0.8	-0.1
2. Foreign assets, net	+3.0	+4.8	+1.6
3. Total, 1 plus 2	+5.5	+4.1	+1.5
<u>Currency and private demand deposits, changes</u>			
4. Notes in circulation outside banks	+1.7	+1.5	+1.0
5. Sight deposits, private	+3.8	+2.6	+0.5
6. Total, 4 plus 5	+5.5	+4.1	+1.5

Source: Monthly Reports of Austrian National Bank.

Consolidated Statement of Banking System
(Change, in millions of schillings)

	1954				Total
	I Quarter	II Quarter	III Quarter	IV Quarter	
NET ASSETS					
Credit to domestic economy, net					
1. Loans and advances	+624.1	+465.2	+1,682.5	+1,992.9	+2,572.1
Central Bank	-188.1				+1,973.7
Commercial bills	-147.4	-93.5	-8.8	+73.7	-(171)
Reconstruction bills	-88.4	+115.8	-52.9	+111.2	+(85.7)
Treasury bills (Law 27)	-235.5	-100.2	-125.0	-23.6	-(489.3)
Treasury bills (note issue)	-75.0	--	--	--	-(75.0)
Signature loans	-6.0	--	-6.0	-0.1	-(12.1)
TOTAL	-552.3	-77.9	-192.7	+161.2	-(661.7)
Commercial banks					
Checks	+0.3	+6.5	+3.6	-5.4	+(5.0)
Interest & dividend coupons	+1.4	+16.4	-14.3	-0.4	+(3.1)
Treasury bills	+34.5	-43.0	-50.0	+1.0	-(57.5)
Other banks	+37.0	+277.4	+558.8	+546.3	+(1,419.5)
Commercial bills	+71.2	-47.0	+299.0	+360.0	+(683.2)
Loans	+122.2	+122.8	+185.2	+262.3	+(692.5)
Construction bills	+114.2	-107.5	-7.9	+17.9	+(16.7)
Other credits	+559.9	+706.3	+775.8	+650.0	+(2,692.0)
Liabilities against					
Treasury bills (Law 27)	+235.5	+100.2	+125.0		+(460.7)
TOTAL	+1,176.4	+1,032.1	+1,875.2	+1,831.7	+(5,915.4)
2. Less					
(i) Savings and time deposits	964.2	641.6	569.7	367.2	(2,542.7)
(ii) Government deposits	-116.8	30.8	153.1	-315.6	-(249.5)
(iii) Other miscellaneous as- sets and liabilities, net	-35.2	-183.4	658.4	-31.4	(408.4)
Foreign assets, net	+1,028.2	+1,105.7			+2,965.0
TOTAL	+640.1	+1,570.9	+1,450.8	-318.2	+5,517.1
Change in money supply					
1. Notes and coins in circulation outside banks	-130.6	+527.1	+387.0	+943.8	+1,727.3
2. Sight deposits	+970.7	+1,043.8	+1,063.6	+711.7	+3,789.8
TOTAL	+840.1	+1,570.9	+1,450.6	+1,655.5	+5,517.1

Source: Monthly Reports of Austrian National Bank.

Table IX

Summary of Balance Sheets of Joint
Stock and Private Banks
(In millions of schillings)

	31 December 1953	31 March 1954	30 June 1954	30 September 1954	31 December 1954	31 March 1955 1/
<u>Assets</u>						
Cash, deposits with ANB and Post Office Savings Bank	1,633	2,808	2,859	2,316	1,870	1,313
Federal Treasury Certificates	1,432	1,390	1,347	1,347	794	1,247
Domestic bills	2,419	2,493	2,396	2,635	3,026	3,150
Securities	491	474	516	592	658	690
Interbank claims	951	1,291	1,316	1,477	1,168	1,299
Sundry debtors	5,828	6,098	6,424	6,793	6,956	7,498
Loans	223	251	263	280	335	393
Foreign exchange due from Austria and foreign banks	522	455	581	707	713	n.a.
<u>Liabilities</u>						
Interbank commitments	3,160	4,372	4,443	4,278	2,950	3,688
Sundry creditors	7,447	8,002	8,176	8,582	9,143	9,065
Savings deposits	1,110	1,269	1,352	1,456	1,527	1,716
Loans	68	68	94	94	127	174
Foreign exchange due to Austrian and foreign banks	287	261	219	179	149	n.a.

1/ Partly estimated.

n.a. Not available.

Source: Monthly Reports of Austrian National Bank.

Table X

Selected Items from Weekly Statement of
Austrian National Bank
(In millions of schillings)

	31 March 1953	31 Dec. 1953	31 March 1954	30 June 1954	30 Sept. 1954	31 Dec. 1954	31 March 1955
<u>Assets</u>							
Gold and foreign exchange	2,590	7,057	8,085	9,190	10,340	9,669	9,334
Discounted bills <u>1/</u>	1,055	518	371	277	268	347	350
Treasury certificates under currency con- version law	555	518	282	182	57	28	24
Treasury certificates covering occupation costs	730	75	--	--	--	74	--
<u>Liabilities</u>							
Bank notes in circulation	8,770	10,474	10,423	10,959	11,355	12,252	12,062
Free sight deposits of commercial banks <u>2/</u>	350	1,496	2,284	2,817	3,105	2,213 (2,622)	1,860 (2,285)

1/ Including discounts of prefinanced reconstruction bills.

2/ Through September 30, 1955, includes deposits of foreign banks; parenthesized figures for December 31, 1954, and March 31, 1955, are comparable.

Source: Monthly Reports of Austrian National Bank.

Table XI

Commercial Credit Statistics
(In millions of schillings)

At end of	Commercial Credit 1/	Excess of Credit Ceiling over Credit Outstanding	Grade I Liquidity (%) 2/	Grade II Liquidity (%) 3/
1952 - December	6,312	1,142	19.3	48.0
1953 - March	6,913	858	17.4	48.4
June	7,254	885	18.4	50.1
September	7,510	1,637	23.5	56.7
December	7,219	1,594	21.0	56.0
1954 - March	7,377	2,190	28.1	59.2
June	7,543	2,190	27.4	56.9
September	8,154	1,574	22.6	53.9
December	8,726	794	17.3	49.4
1955 - January	8,974	713	15.1	47.8
February	9,199	707	15.2	47.2
March	9,485	428	13.9	47.3

1/ Excludes reconstruction and export credits.

2/ Cash, deposits with ANB and Post Office Savings Bank, Treasury Certificates up to one-half the ratio prescribed for Grade I liquidity reserves (15 per cent minimum).

3/ Treasury certificates in excess of ratio fixed for Grade I reserves, checks, securities acceptable as collateral by ANB, bills rediscountable at ANB, and demand deposits with Austrian banks (40 per cent minimum).

Source: Monthly Reports of Austrian National Bank.

Table XII

Illustration of Calculation of
Credit Ceiling
(In millions of schillings)

	June 30, 1952	February 28, 1955
Total credit volume	12,599	16,735
Less reconstruction credits	<u>4,794</u>	<u>6,831</u>
Commercial credit outstanding	7,805	9,904
Less export credits	<u>398</u>	<u>705</u>
Adjusted credit volume	7,407	9,199
Admissible expansion:		
Liabilities	7,232	12,606
Less		
(a) increase in Federal Treasury certificates	--	--
(b) increase in inter-bank deposits	<u>--</u>	<u>375</u>
	7,232	12,231
Change from June 30, 1952		<u>4,999</u>
50 per cent of change		2,499
Credit ceiling <u>1/</u>		9,906

1/ Adjusted credit volume, June 30, 1952, plus 50 per cent of change in adjusted liabilities.

Source: Monthly Reports of Austrian National Bank.

Table XIII

Commercial Credit Outstanding
by Major Sector of the Economy
(In millions of schillings)

	31 December 1953	31 March 1954	30 June 1954	30 September 1954	31 December 1954
Agriculture	1,307	1,372	1,462	1,625	1,753
Industry and Mining	5,068	5,318	5,504	5,788	5,865
Small business	1,310	1,405	1,610	1,796	1,974
Trade and Transportation	<u>3,189</u>	<u>3,282</u>	<u>3,280</u>	<u>3,532</u>	<u>4,173</u>
Total	10,874	11,378	11,855	12,742	13,765

Source: Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung.