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Mr Lynn SWL
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Board of Governors of the Federal Reserve System
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International Sections

REVIEW OF FOREIGN DEVELOPMENTS

January 28, 1947

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Price Control in Germany[1]

Paul G. Hermberg

Price control in Germany and especially in the United States zone has been very effective. Its most impressive successes are the following:

1. Prices and wages have been maintained close to the level prevailing before the occupation. Increases have been authorized at critical points, but have been so limited as to prevent their cumulative effect on the cost of living from necessitating any adjustment in the level of wages. This has been accomplished despite an overwhelming abundance of purchasing power.

2. A decentralized price control system operated by German agencies under central supervision has been established in the United States zone of occupation. The control is administered on a "Land" basis by Price Formation Offices. A Special Commissioner for Price Formation and Price Supervision and a Price Formation Committee (on which trade unions, consumer cooperatives and salaried workers are represented) coordinate and control price developments for the entire zone. On November 15, 1946, the Price Division of the German Executive Committee for Economics at Minden formally took over responsibility for price control in the merged British and United States zone.

1/ Editor's note: Dr. Hermberg is now on leave of absence from the Board working for the Office of Military Government in Germany.

3. Uniform principles of price control for all of Germany have been established on a quadripartite basis. According to these principles, increases of legal prices have been granted in a unified manner in all four zones. Prices, however, are not exactly the same throughout Germany. Differences are increasing and exceed to some extent the inequalities which always existed among different regions of the Reich. Nevertheless, a high degree of unity has been maintained in the total German price system. Statistics on a uniform basis have been computed in all four zones to show the effects of price changes on the cost of living.

In spite of the successes of the price control policy, however, a critical point is approaching beyond which no control system will be able to ward off any longer the destructive effects of the discrepancy between purchasing power and the supply of goods, except by removing the discrepancy itself.

The Disappearance of a Normal Function of Money. There is no real inflation in Germany, in the sense of runaway prices. Rationed goods are sold at fixed legal prices, though it is increasingly difficult to secure the rationed quantities. In addition to the official market a black market exists, where prices are often more than a hundred times as high as on the official market. Even black market prices, however, show no inflationary symptoms. They have remained nearly unchanged during the last year. In this sense, inflation has been avoided. From another angle, however, the German economy is experiencing the same paralysing influence which accompanies the final stage of inflation--one of the normal functions of money is disappearing.

Certainly money cannot become completely useless as long as prices of rationed goods and wages are maintained at a fixed level. Nevertheless, money can lose its most important quality--that of being respected as a value in itself for future use. The following symptoms indicate that money is in fact being deposed step by step in the German economy.

(a) Money has maintained its full value only as an adjunct to the ration card. Money without a ration card has preserved only 1/10 to 1/100 of its nominal value.

(b) Compensation premia are demanded in addition to money payments even on the official market in an increasing number of cases. The simplest form is an illegal demand for additional payment in kind, consisting of food or cigarettes. A more complicated form is acceptance by the buyer of the additional obligation to deliver some other merchandise at legal prices (e.g., a plant delivers china at legal prices to a wholesaler who promises to supply rationed potatoes to the workers of the plant at the legal price). Workers on their part may demand that the employer make deliveries in kind, which are then charged at legal prices against their wage accounts.

(c) The next step leads from these forms of payment by compensation premia to actual barter. In many cases the deal is based on the legal prices of the bartered commodities, but no money changes hands; it serves only to express the price. Sometimes--especially in the case of farmers--barter deteriorates into a senseless hoarding of commodities of all kinds without attention to real values.

(d) In other cases a producer is not willing to produce for money but cannot conclude convenient barter deals. The most dangerous effect of the flight from money arises when the producer becomes reluctant to produce for the market at all. Sometimes he will choose the most circuitous and time-wasting methods of production in order to postpone selling as long as possible. The tanner will insist on tanning with natural bark, the farmer will feed grain and even milk to animals. Sometimes, however, production itself will be postponed.

Stagnation and reluctance to engage in economic reconstruction--which are visible today in many parts of Germany--are typical attendants of the degeneration of a highly integrated modern exchange economy toward primitive direct barter.

Problems Involved in the Policy of Frozen Legal Prices.

(a) A discrepancy has developed between the inherited price system and the price structure required for the future German economy.

The Allies inherited a German price system which was developed under the Nazi policy of making Germany a self-sufficient, "autarkic" country. The future German economy, however, will not be able to bear the burden of direct or indirect subsidies which an autarkic policy would impose upon it. In place of the self-sufficient system of the Nazis a self-supporting system must develop in which each economic unit and each part of the country produces, for direct consumption or exchange, goods and services adequate for its own support. Obviously this change in the economic system will require far-reaching changes in the system of prices. Furthermore--as explained in the Monthly Report of the Military Governor, U.S. Zone, No. 11, ("Trade and Commerce," paragraph 6)--"the present German legal price structure has not yet absorbed the economic costs of the war and of defeat--war damages, reparations, and other higher cost factors inherent in Germany's new economic circumstances."

A complete remodeling of the German price system, however, must be postponed "pending the establishment of a definite financial policy for Germany." Until a clear accounting basis has been established by financial and monetary reconstruction it will not be possible to calculate exactly which parts of the German economy are self-supporting and which parts are living on subsidies.

It should be kept in mind, however, that the reconstruction of free market prices is the ultimate aim of the United States price policy. The system of legal prices is viewed as a temporary expedient in order to avoid price chaos during the transition. Each day of prolongation of an antiquated price system, however, creates new wasteful dislocations and new obstacles to a definitive reconstruction of the economy.

(b) Price discrepancies also exist within the German price system.

German prices show a growing maladjustment not only in relation to the future German economy but also in relation to the present situation.

Prices of coal and steel are the subject of constant argument; price relationships between certain raw materials and finished goods produced from them, between certain wages and prices of finished products, are out of balance. An increasing number of manufacturers claim that they maintain production only by eating up reserves or by securing credits. In some cases these statements may not be correct. Reluctance to place new plants in operation, however, is not only caused by the distrust of money. In some cases the margin between costs of production and selling prices is too small to invite production.

(c) Discrepancies between the German and the world market price systems are numerous.

It is well known that since 1938, price increases in Germany have been much smaller than in other belligerent or neutral countries. (See Monthly Report of M.G. No. 11, "Trade and Commerce," page 4). This fact would offer no real problem for the future German economy if the relationship between individual prices had remained the same inside and outside of the country. Relations between individual German prices, however, have developed their own special pattern. (For example, one ton of hops in Germany costs as much as 47 tons of coal or 21 tons of salt; outside of Germany as much as 20-30 tons of coal or 38 to 58 tons of salt).

The discrepancies between the present German price system and the system of world market prices are so wide that a controlled and gradual adjustment must be carried out before free trade can be established between Germany and foreign countries. In the future the German economy will be much more closely related to world markets than ever before. Consequently the adjustment of German prices to the world market will simultaneously prepare a price system adapted to the future German economy. The points of greatest discrepancy between German prices and world market prices will be the points at which the adjustment of the German price system must start.

For very good reasons, however, Military Government authorities have refused to make fundamental changes in the German price system before reorganization of the German monetary and financial system removes or mitigates the present danger of inflation. Once a sound accounting basis has been brought about, the adjustment of German prices to the world market and simultaneously to the future German economy should start without further delay.

An additional difficulty should be considered. The present method of central control of German prices by a quadripartite committee was established to preserve the inherited system. It is a conservative control system and will not be flexible enough to perform the adjustments required to transform the present price system step by step. To attain the needed flexibility a central German agency must be established with authority to dictate price changes in a uniform way over the whole of Germany, following a general policy to be determined by agreement of the occupying powers.

Netherlands Internal Debt Conversion

Robert W. Bean

On February 15, the Netherlands Government expects at one stroke to reduce the interest rates and lengthen the redemption periods on approximately 40 per cent of its internal funded debt. There is little risk of failure. As an alternative to conversion, the bondholder may elect to have the proceeds from his redeemed bonds blocked for five years in a non-negotiable account.

This procedure falls one step short of conversion by coercion. The blocked accounts will bear interest at 2-1/4 per cent (Finance Minister Lieftinck having retreated from his original proposal to pay only one-half per cent on these accounts). The new loan will carry a rate of 3 per cent. Thus, persons who expect the price of the new loan to be at 96 or below at the end of five years might--if they were willing to forego negotiability during this period--prefer to have the face value of their bonds credited to the blocked account. To discourage such expectations and such preferences, the Finance Minister has announced that whenever the market price of the new bonds falls below 97, the Government will purchase on the market up to 2-1/2 per cent annually of the original amount of the loan. As a final deterrent--and it appears to be conclusive--the Finance Minister has obtained authority to convert the blocked accounts into a forced loan, either at the end of the five years or earlier. This would restore negotiability, but the forced loan would certainly not bear a rate of interest higher than 3 per cent or bring a better price in the market than the original conversion loan. This prospect would appear to destroy whatever advantage there might otherwise be in refusing the new issue.

The new loan is for 40 years and will bear 3 per cent interest for the first 10 years, and 3-1/2 per cent thereafter. It is offered in place of seven old loans: two issued in 1940 (prior to German occupation) for 40 years at 4 per cent; one issued in 1941 for 10 years at 4 per cent; three others issued during the occupation for 20 years at 3-1/2 per cent; and a 3 per cent loan issued in 1936 for 20 years. Close to three-fourths of the total amount of these issues outstanding is in 3-1/2 per cent bonds; the chief saving in the budget, therefore, will not be on interest expenditures but on annual redemption payments. It has been reported that the net saving on interest will be about 14 million guilders annually, and that annual redemption payments will be reduced by about 123 million guilders.1/ Together these are fairly substantial amounts when compared with total expenditures of 780 million guilders budgeted for servicing the national debt in 1947 (before allowing for the conversion).

Debt service is the largest single item in the Government's 1947 budget, and exceeds even military expenditures (apart from costs of the campaign in the Netherlands Indies). Interest payments alone were originally budgeted at 480 million guilders--about 6 per cent of the estimated national income for this year. This is approximately the same ratio of interest charges to national income as now prevails in the United Kingdom, and compares with a ratio of between 3 and 4 per cent in the United States.2/

1/ The Financial Times, January 6, 1947.
2/ Hansen, Economic Policy and Full Employment (1947), pp. 261-2.

Interest charges amounting to 6 per cent of the national income are probably not unmanageable for the Netherlands, but this proportion threatens to rise sharply. The national debt continues to increase, the budgeted deficit in 1947 being some 2 billion guilders, equal to about 14 per cent of the total internal funded and floating debt (Treasury bills) outstanding in July 1946. And still unsettled is the problem of how to handle the huge claims for war damages and the German debt to the Netherlands Bank, which will be assumed by the Netherlands Government. When all these items are included, the total national debt reaches a magnitude of some 24 billion guilders, close to three times the national income. Should it be necessary to consolidate a substantial part of these claims against the Government by issuing interest-bearing obligations, the problem of servicing the national debt would become exceedingly burdensome.

It is evident that re-financing the debt at lower rates will be helpful, but not a complete solution. Clearly, means will be sought for achieving a drastic reduction of the debt. The first weapons are intended to be the capital increase tax and the capital levy, which together are expected to yield about 5-6 billion guilders, payable over a period of years. This amount could easily be swallowed up by current deficits, however, and in any case would not suffice to wipe out the extraordinary claims. The most interesting suggestion thus far was put forward in May of last year by a group of six Dutch economists. Their proposal was that the debt should be reduced to a level not much greater than twice the pre-war debt (in conformity with an approximate doubling of the price level). Everything in excess of this figure--including current budget deficits--should be booked on a separate, non-interest-bearing account. The capital increase tax should be applied immediately and would serve partly to offset the current deficits. The capital levy, however, should be postponed until a balancing of the budget was achieved, and should then be applied with sufficiently stiff rates to yield the full amount of the debt marked for liquidation. It was estimated that this would amount to more than 10 billion guilders (depending on the size of current deficits), a figure which is roughly equal to the total amount of the extraordinary claims against the Government.

A capital levy which would yield 10 billion guilders would involve much higher rates than those contemplated in the bill presented to the parliament last October (10 per cent on all capital up to 100,000 guilders, increasing gradually to 25 per cent on all capital in excess of 1,000,000 guilders). The Government is apparently persuaded, however, that so drastic a levy would not be politically feasible, and has gone ahead with its plans for applying the more moderate scheme. This leaves in doubt the ultimate size of the debt which will have to be serviced, but scarcely leaves doubt that further efforts will be made to reduce the charges and to extend the redemption periods.

The 1948 Budget for International Affairs

M. J. Roberts

In the President's budget message, expenditures by the Government for international affairs and finance in 1948[1] are estimated at 3,510 million dollars, or almost 10 per cent of total expenditures for all purposes. This figure represents a decrease of 45 per cent from expenditures for the Government's international program in 1947. The sharp decline may be accounted for by the disappearance by 1948 of such items as initial subscriptions to the International Bank and Monetary Fund, by a substantial reduction in estimated advances on the Treasury loan to the United Kingdom and in loan disbursements of the Export-Import Bank, and by the near exhaustion of the United States contribution to UNRRA's foreign relief and rehabilitation program. The following table shows actual or estimated government expenditures in the years 1946 through 1948 for international affairs and finance and estimated appropriations for the 1948 program.

Budgeted Expenditures and Appropriations of the United States Government for International Affairs and Finance
(In millions of dollars; fiscal years)

Program or Agency	Expenditures			Appropriations[a]
	Actual	Estimate		Estimate
	1946	1947	1948	1948
Reconstruction and stabilization:				
Treasury loan to United Kingdom	-	1,500	1,200	-
Export-Import Bank loans	464	1,025	730	-
Reconstruction Finance Corporation loan to United Kingdom	-39	-39	-40	-
Subscriptions to Fund and Bank	159	1,426	-	-
Aid to China	120	-	-	-
U. S. Commercial Company	-118	20	-	-
Total	586	3,932	1,890	-
Foreign relief:				
UNRRA	743	1,515	305	-
War Department	-	556	645	725
Other	4	3	-	-
Total	747	2,074	950	725
Philippine-aid program	28	105	137	144
Membership in international organizations	2	15	18	18
Foreign relations	101	152	188	206
Proposed legislation	-	116	326	76
Grand total	1,464	6,394	3,510	1,169

a/ Appropriations are not required for certain estimated expenditures in 1948 either previously authorized by specific legislation or covered by appropriations made in earlier years.

1/ All years referred to in this article are fiscal years.

Of total estimated expenditures in 1948 more than half will be disbursements on the Treasury loan to the United Kingdom and net advances to the Export-Import Bank to finance reconstruction and development abroad. The largest single disbursement of 1,200 million dollars will be made on the British loan. This amount, plus the 1,500 million dollars of estimated advances in the current fiscal year, will leave a balance of 1,050 million dollars available to the British after June 1948.

During the current fiscal year and in 1948, the Treasury will make net advances to the Export-Import Bank of 1,025 million dollars and 730 million dollars, respectively. The 1947 advances will represent the purchase by the Treasury of the balance of the Bank's authorized capital stock and net withdrawals by the Bank from its account with the Treasury; in 1948, advances will take the latter form exclusively. Total disbursements by the Bank on loan commitments will exceed Treasury advances; in 1947 they will reach a peak of about 1,200 million dollars and in 1948 about 900 million dollars. The excess of loan disbursements over Treasury advances will be met principally by repayments on prior loans and by advances made by commercial banks out of their own funds under the Export-Import Bank's guaranty. Of the Bank's total disbursements, by far the greater share will be under existing loan authorizations. In view of the fact that the International Bank is now about to assume the major responsibility for making reconstruction and development loans, the Export-Import Bank's future commitments will probably be restricted to credits to finance United States trade, to development loans in which the United States has a special interest, and to a limited number of reconstruction loans to countries not now members of the International Bank.

Against these estimated expenditures in 1948 for loan disbursements there is one small offsetting item of 40 million dollars, the estimated repayments of principal on the Reconstruction Finance Corporation loan to the United Kingdom authorized in 1941. This loan commitment of 425 million dollars (which was utilized to the extent of 390 million dollars) was extended to finance purchases of supplies in the United States prior to lend-lease. It is being repaid out of the earnings of securities which were pledged as collateral.

During 1947, the United States will complete its subscriptions to the International Monetary Fund and the International Bank by the payment of 1,426 million dollars. Of this sum 476 million dollars is the balance of the United States 20 per cent paid-in capital subscription to the Bank. The remaining 950 million dollars is part of the United States 2,750 million dollar quota in the Fund, all of which must be subscribed by March 1, 1947; the balance of the quota is to be paid from extra-budgetary sources, i.e., from gold now held by the Exchange Stabilization Fund. The payment of the total subscriptions to the Bank and Fund was authorized by Congress in the Bretton Woods Agreements Act.

The last two items in the reconstruction and stabilization group are aid to China and the United States Commercial Company. Financial aid to China up to the amount of 500 million dollars was authorized by Congress in 1942 principally for the purpose of assisting in the stabilization of the

Chinese monetary system. In 1946 final advances of 120 million dollars were made under this program. No terms of repayment were specified in the original authorization and the basis for settlement is still undetermined.

The United States Commercial Company, which showed a surplus in 1946 as a result of the winding up of its war-time operations, required a small amount of funds in 1947, mainly in connection with special commodity transactions with occupied areas. The present expiration date for the United States Commercial Company is June 30, 1947, but the President in his budget message urged that Congress authorize the Company to continue operations beyond that date. The continuance of the Company would probably not entail large net expenditures of public funds (if any) since its operations are largely self-supporting.

In the international affairs and finance budget, estimated expenditures for foreign relief in 1948 are second only to those for foreign reconstruction and stabilization. Foreign relief in 1948 will be provided principally through UNRRA and the War Department. Estimated expenditures in 1948 by the United States for the UNRRA program will be 305 million dollars, or about 20 per cent of expenditures in 1947. This sum represents the unexpended balance of the 2,700 million dollar authorized United States contribution to UNRRA, all of which had been appropriated by June 30, 1946. The appropriation for UNRRA will expire at the end of this fiscal year. After that date no further obligations may be incurred for the UNRRA program, thereby preventing United States Government procurement agencies from contracting for goods for shipment to UNRRA-recipient countries. However, expenditures under obligations assumed prior to June 30, 1947, may be made subsequently. The foreign relief program of the War Department outlined by the budget calls for expenditures of 645 million dollars in 1948. These funds will be used mainly to provide food and other supplies necessary to prevent disease, hunger and unrest in occupied areas, and to maintain the working efficiency of the populations. Another objective of the program is to stimulate production in order that the economics of the occupied areas will gradually be re-established on a self-supporting basis, thereby reducing the amount of financial assistance which the occupying powers must provide.

In addition to these outlays for foreign relief, the budget includes provision for expenditures of 350 million dollars in the current and succeeding fiscal years[1] to provide a "modest relief program" for a few countries in desperate economic straits, including, perhaps, Italy, Greece, and Austria. Appropriations for this program will be sought in 1947. The major share of the balance of 76 million dollars for 1948 appearing under the final item in the preceding table is believed to represent the United States contribution to the International Refugee Organization now in process of formation under the United Nations.

For the rehabilitation of the Philippines, estimated expenditures in 1948 are 137 million dollars. About 110 million dollars of these expenditures will be made through the Philippine War Damage Commission set up by the Philippine Rehabilitation Act of 1946. For 1947, estimated expenditures

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1/ In the table estimated expenditures of 100 million dollars in 1947 and 250 million dollars in 1948 are included under the heading "proposed legislation."

of 105 million dollars include the full 75 million dollars of credits which the Reconstruction Finance Corporation is authorized to extend to help the Philippine Government meet its current obligations.

For United States membership in international organizations, the budget provides 18 million dollars to be used primarily for the payment of the United States share in the administrative budgets of the United Nations and its affiliated specialized organizations. In this item are included estimates of the amounts required for United States participation in the World Health Organization and the proposed International Trade Organization.

The budgeted expenditures for foreign relations are to be made principally by the State Department to defray a variety of costs incident to the conduct of foreign relations.

Higher Interest Rates and the Credit Shortage in France — A. O. Hirschman

On January 9, the Bank of France split the discount rate which, since January 1945, had stood at 1-5/8 per cent. While raising it only slightly to 1-3/4 per cent for Treasury bonds and short-term commercial bills financing genuine sales, the rate was increased to 2-1/4 per cent for all other commercial bills, such as, e.g., bills mobilizing banking overdrafts. The rates for advances were raised concurrently. Furthermore, the National Credit Council, an organ given large powers of supervision and direction of banking and investment by the Banking Nationalization and Reorganization Law of December 2, 1945, has reinforced its qualitative credit control. The main innovation consists in requiring conclusive proof for credit need from the applicant when the amount of credit requested exceeds a given limit (reported to be 30 million francs). Besides submitting complete information as to his past and present financial position, the applicant must also furnish a prospective budget and explain in particular why the amount sought could not be procured by a reduction of inventories.

These measures, which were foreshadowed by the recommendations of the "Financial Inventory" issued in December by the Ministry of Finance under the direction of Robert Schuman, are the logical monetary complement to the attempt to provoke, by the recent officially decreed 5 per cent price cutback, a liquidation of inventories and thereby a cumulative downward movement of prices. Officials were, however, at pains to point out that no massive credit deflation is intended; the intention is rather to provide for discrimination between credit requests for "productive" and "speculative" purposes. Apparently the Bank has profited from its experience during July 1946 when a selective credit policy was first recommended and was coupled with an almost total cessation of open market purchases by the Bank of France. This sudden reversal greatly disturbed the bill market by raising doubts as to the liquidity of Treasury bond investments and contributed to an excess of redemptions over subscriptions in the following months. That the Bank of France is not acting with similar rashness this time is indicated by the increase of its open market portfolio from 37.7 to 39.2 billion francs during the first week in January.

The new measures have served to dramatize a development with which observers of the Paris money market have been familiar for some time. The high state of liquidity which was characteristic of the market throughout the German occupation was, it is true, further strengthened during the first year of liberation, mainly as a result of the currency exchange which brought about considerable preventive conversions of currency holdings into bank and savings deposits. On January 20, 1945, the discount rate was lowered from 1-3/4 per cent to 1-5/8 per cent, the lowest rate in the history of the Bank of France. However, the first signs of change were seen as early as a few weeks after the exchange of currency. The exceptional factors which had led to a rapid increase of bank deposits at the expense of the note circulation ceased to operate. At the same time, expanding economic activity and wage increases reduced the liquid resources of industrial and commercial enterprises which were often forced to redeem their Treasury bond holdings and to have more frequent recourse to banking credits in the forms of discounts and overdrafts. An important factor in this situation is the slowness with which the French Treasury settles its obligations. Not only are cash payments often considerably delayed, but in many cases the State pays its contractors in bills with a maturity of one year which the contractors must discount with the banks in order to obtain cash. Credit requests for the purpose of holding stocks in anticipation of price increases placed further burdens on the banking system.

Under these conditions the Bank of France saw its rediscount portfolio rise rapidly and, in addition, was compelled to intervene on the open market by consistent purchases in order to make the market at all receptive to short-term Treasury issues. The following table shows these two items and the note circulation as they appear at different dates in the Bank's balance sheet (in millions of francs):

Date	Open market portfolio	Rediscount portfolio	Note circulation
August 2, 1945	11,059	11,897	444,476
December 27, 1945	17,979	25,852	570,006
June 27, 1946	24,982	46,204	629,181
December 26, 1946	37,618	79,389	721,865

Further evidence of tightening credit supply conditions was offered by the poor reception of a reconstruction loan issue by the Credit National in July 1946 and by the slow but steady rise of long-term interest rates. As is seen from the table, recourse to the credit facilities of the Bank of France expanded considerably in the second half of 1946. This period was highlighted by the excess of redemptions of Treasury bonds over subscriptions, by consequent direct advances of the Bank to the State, and by a particularly rapid rise of prices.

The simultaneity of price inflation, currency expansion, and credit shortage has given rise to rather confused comments, the most characteristic one being a release of the Ministry of Finance in August 1946 which stated that "in contrast to an opinion widely spread, France is not at present in a period of monetary inflation . . . . in relation to the pre-war period the rate of increase of the note circulation is indeed clearly below that of the cost of living . . . . it does not seem that there is a plethora, but rather a contraction of the means of payment . . . . the volume of means of payment is inadequate in relation to the requirements of the country." (Monde, August 29, 1946)

One cannot help remembering, in this connection, the thesis of many German economists (Helfferich in particular) that there really was no inflation in Germany in 1920-23 since all experience testified to the scarcity of the circulating medium and since, relative to the rise in price of gold or of domestic goods, the volume of the German currency in circulation had actually contracted. There is no need to re-expose this sophism after the masterful job done by Bresciani-Turroni in his well-known work on the German inflation.1/ It is interesting to note here, however, that according to Bresciani-Turroni a shortage of working capital was first felt in Germany in the late stages of 1922, that the rise in prices started to outdistance the rise in currency circulation (in relation to 1913) in December 1920 while in countries with moderate post-World War I inflations such as France and Italy prices never caught up with the increase in money supply.2/

The similarity between the present French situation and the later stages of the German inflation should not lead to too dark a view of French prospects. It must be recalled that French production had to recover from an extremely low level after liberation and that shortages of working capital and scarcity prices were therefore bound to occur. Secondly, there exist even today large-scale hoardings of cash on the part of French farmers waiting for the opportunity to buy machinery and cattle and of consumers hoping for prices to come down again, and the shortage of business cash is therefore due more to imperfection in the monetary flow than to anticipatory price markups caused by a universal scramble for real assets.

Finally, the measures used are evidence that the French Government has revised its former complacent position (particularly characteristic of M. Pleven's term as Minister of Finance) that monetary and banking policy can hardly make any contribution to the solution of the inflationary problem and that all that can be done is to wait for increased production to bring prices down. It has recently been pointed out that private borrowing exerted a by no means negligible influence on the various inflationary processes after the first World War.3/ The new French policy of interest rate discrimination and of qualitative credit control presents an interesting attempt to reconcile the aims of expanding production, of preventing the use of bank credit for commodity hoarding and speculation, and of actually speeding up the turnover of inventories.

1/ C. Bresciani-Turroni, The Economics of Inflation, London, 1937, pp. 155-182.
2/ Op. cit., pp. 162, 165, and 366.
3/ League of Nations, The Course and Control of Inflation, 1946, pp. 28-32.

The Chinese Inflation and China's Foreign Exchange Position

Arthur B. Hersey

Effective participation by China in world economic and financial organizations awaits a solution of China's monetary inflation problem. The 9-1/2 years that have elapsed since the outbreak of war in 1937 have seen a continuous spiraling of prices, government deficits, and the money supply. Prices have doubled or tripled year after year. Wholesale prices in Shanghai now average about 6,000 times pre-war, in Chungking about 2,500 times pre-war. (The present gap between these indexes for the leading port and for the former capital of Free China has developed in the past eleven or twelve months. In January and February 1946 the Shanghai index was 900-1800, the Chungking index 1400.1/)

After VJ-Day, resumption of trading contacts with the outer world changed the form and nature of China's inflation problem. Imports of commodities and of gold now provide a weapon against inflation which was lacking before, but the continuation of inflation makes it greatly important that foreign exchange transactions be managed in such a way that China's foreign exchange reserves may be conserved. A year ago the reported Chinese short-term assets (private and official, but exclusive of gold holdings) in the United States were 756 million dollars.2/ At the end of last September they stood at 525 million dollars and it is unlikely that they much exceed 400 million dollars at present. This decline has occurred during a year when UNRRA has been supplying part of China's imports and disbursements have been made on a number of small loans from the United States and Canada. A number of factors would enter into a full explanation of this loss of foreign exchange holdings, but the major one is China's passive balance of merchandise trade on commercial account in 1946. The United States dollar value (c.i.f.) of Chinese imports, excluding UNRRA, is tentatively estimated to have been at least three times as great as the value of exports.

Efforts to stimulate exports and industrial production have not been very successful. In addition to the many difficulties which stem directly from civil war, Government policies designed to curb inflation have also played a part in limiting the growth of trade. For example, in order to minimize currency inflation the government has discouraged private credit expansion. Partly for this reason, a curious situation existed in Shanghai in the three or four weeks before January 22, New Year's Day in the Chinese lunar calendar. This is a time at which it is customary to settle all outstanding accounts. Commodity prices were comparatively stable, though higher than ever before. Total money in circulation in China was doubtless continuing to rise and there was certainly no expectation of a permanent halt in the inflationary spiral. Yet money was extremely tight in Shanghai. Interest rates for private commercial borrowers, ordinarily around 15 per cent a month, stood for a day or two at a peak of 30 per cent. Many small businesses were failing, caught between high interest rates and stagnant local markets for their goods. Withdrawals of deposits from native banks caused a number of failures among these concerns. Interest rates of 10 to 15 per cent a month are of course entirely natural when the price level is

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1/ Indexes rounded off from those given by the Central Bank of China in its *Weekly Report on Financial and Price Statistics*. January 1947 estimates are based on November indexes and reports on current developments.

2/ As of January 31, 1946. See *Federal Reserve Bulletin*.

doubling or quadrupling in a year, but the still higher rates during this interlude of price "stability" must be explained by the element of uncertainty affecting lenders' attitudes and by the shrinkage which has occurred--at least in real terms and perhaps also in money terms--in the lending powers of the native banks during the past year. The Central Bank of China for the most part has followed a policy of refusing to rediscount commercial loans, except loans by government-owned banks to government-owned enterprises. This policy, however, was temporarily relaxed just before the New Year holiday.

A second particular--and a most important one--in which the Chinese Government finds it difficult to curb inflation without hindering trade is in fixing an appropriate foreign exchange rate for the yuan, or Chinese National dollar. The Government has avoided either giving the exchange market a free rein or pegging the rate at a level corresponding to the full depreciation in the currency's domestic purchasing power. The Government has apparently felt that to adopt either course would merely create more pressure for the upward price movement. Acceleration of the price movement would feed on itself, since it would mean (1) a faster rise in government money outlays for military and other expenditures and (2) increased inadequacy in the purchasing power of government revenues, which can be spent only with a lag after the time they are levied. The Government has sought instead to stabilize both the exchange rate and domestic prices in such a relationship that imports would be cheap but exports not impossible.

Are expensive imports and high profits in the export trade (the consequence of an undervalued yuan, assuming it possible for the yuan to stay undervalued) preferable to cheap imports and low profits (or no trade at all) for exporters? This is a real dilemma. China's need for imports is great, and so is her need for expansion of export activity. The Government has made two separate decisions with regard to the exchange rate, first in March 1946 and again in August, both of which were intended to aim between the two horns of this dilemma. But stabilization of domestic prices proved impossible even with cheap imports. Both decisions turned out, after a few months of further price inflation, to favor imports strongly and to restrict exports. The time seems to be approaching when a third decision on the exchange rate will have to be made.

Meanwhile, the necessity of safeguarding exchange resources has dictated an elaboration of the exchange controls first imposed in February 1946 and the institution of quota restrictions and allocations with respect to imports of key raw materials. New regulations promulgated on November 19 are still in the course of being implemented. For the moment administrative delays are interfering seriously with the import trade. This development, which comes on the heels of last autumn's shipping tie-up on the United States west coast, temporarily relieves the pressure on foreign exchange resources but constitutes still another restriction on the expansion of industrial activity in China.

The Economic Merger of the American and British Zones in Germany

J. Herbert Furth

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On August 2, 1945, Marshal Stalin, President Truman, and Prime Minister Attlee released the text of an agreement on the principles that would guide the allied policies toward Germany. This agreement, which became known as the Potsdam Declaration, provided for destruction of Germany's war potential, elimination of the concentration of economic powers in the hands of cartels and similar monopolistic arrangements, and reorganization of the German economy with emphasis on the development of agriculture and peaceful domestic industries. Sufficient goods should be produced to meet the needs of the occupying forces and displaced persons, and to maintain in Germany "average living standards not exceeding the average of the standards of living of European countries." Essential commodities should be distributed equitably between the several zones of occupation "so as to produce a balanced economy throughout Germany and to reduce the need for imports." Measures should be taken to expand coal production and agricultural output. Payments of reparations should leave enough resources to permit the German people to subsist without external assistance. Allied controls should be imposed only to the extent necessary to carry out that program, and Germany should be treated as a single economic unit.

Today, the economic provisions of this declaration seem remote from reality. In the west, and especially in the American zone, cartels are being dissolved, but in the east the entire economy is ruled by ten Soviet-controlled combines. The agrarianization of Germany has been made impossible in consequence of the virtual annexation by Poland of Germany east of the Oder-Neisse line. Peaceful industries are working at a small fraction of their pre-war level. At least in the American and British zones, the occupying forces and displaced persons must rely entirely upon the contributions of the occupying powers. Average living standards of the German people, far from tending to exceed those of other European nations, have been prevented from falling below a minimum subsistence level only by relief imports from the United States and the United Kingdom. Many essential commodities are distributed among the several zones of occupation neither equitably nor inequitably, but not at all.

The need for imports has been increased rather than reduced. Coal production and agricultural output have dropped rather than risen. The Germans are in dire need of external assistance although, at least in the American and British zones, scarcely any reparations are being paid. Allied controls pervade the entire economy without making it possible to carry out the Potsdam program. Moreover, the zones of occupation have been separated from each other more rigidly than Germany was ever isolated from the outside world under the Nazi regime.

The "agreement for economic fusion of United States and United Kingdom zones in Germany," of December 2, 1946, is the first indication of a partial return to the principles of the Potsdam declaration. In itself, the merger of the zones can contribute but little to the rehabilitation of Central Europe, but it may become highly important and successful in preparing the way for a more fundamental revision of allied policies in Germany.

Economic Character of the Zones

The merged zones form neither a geographic nor an economic unit. They are shaped somewhat like an hourglass. The northern glass (British zone) includes the states of North Rhine--Westphalia, Lower Saxony, and Schleswig-Holstein as well as the Hanseatic cities of Hamburg and Bremen. The neck, barely 75 miles wide at its narrowest point, and the southern glass (American zone) includes the states of Greater Hesse, Wuerttemberg-Baden, and Bavaria. The main lines of communication between north and south are intersected by other zones: the railroad lines from Munich, Stuttgart, and Frankfurt to Cologne and the Ruhr district run through the French zone, the main line from Munich to Hamburg through Russian-controlled territory. The border follows neither geographical demarcations nor historic traditions, bisecting the former German states of Baden, Wuerttemberg, and Hesse, and the former Prussian provinces of Hesse-Nassau and Rhineland, and often separating from each other parts of the same district or township. This inconvenience was unimportant as long as the zones were believed to be purely military rather than economic divisions, but has proved very embarrassing since the zones have become almost watertight compartments.

In May 1939, the territory of the merged zones had a population of 34 million, representing 49 per cent of the population of the Reich (area of 1937). Since that time, the natural increase through the excess of births over deaths has been overbalanced by the losses in manpower suffered as the result of the war. After the armistice, however, refugees from the east came in, including many of the 9 million Germans expelled by Poland from the Reich territory east of the Oder-Neisse line, and of the 2.9 million expelled by Czechoslovakia from the Sudetenland, as well as smaller numbers expelled by other Central European countries. As a result, the census of October 29, 1946, showed a population of 16.7 million in the American, and of 22.8 million in the British zone, making a total of 39.5 million, or about 60 per cent of the present population of the Reich (exclusive of the territory east of the Oder-Neisse line). In addition, more than 700,000 "displaced persons," mainly of Polish, Baltic, and Jewish origin, are living in temporary camps within the zones. The advent of the "expellees" would have taxed the economic facilities of the area in times of prosperity. Actually it came in a period of unprecedented disaster, when from 75 to 90 per cent of all houses in large cities were destroyed or damaged, when food, clothing, and heating were lacking even for the original population, and when economic activity was virtually at a standstill. In the future, the newcomers may well contribute substantially to the rehabilitation of the area; meanwhile their presence aggravates its problems, especially because of the small proportion of men of working age among their number.

The economic importance of the merged zones is shown by their contribution to the pre-war national income of Germany. In 1934 (latest data available), the present American zone accounted for 19.6 per cent of the total; the present British zone for 29.3 per cent; the present French zone (excluding the Saar) for 7.3 per cent; Berlin for 9.8 per cent; the present Soviet zone (excluding the Russian zone of East Prussia) for 22.5 per cent; and the area east of the Oder-Neisse line for 11.6 per cent. The contribution of the merged zones was thus 48.9 per cent, or approximately the amount corresponding to their share in the total population. The percentage remained virtually unchanged in the inter-war period, and thus may also be applied to later years, such as 1936 (the base year for the "level of industry" plan), when total national income was about 65 billion reichsmarks (26 billion dollars at the official exchange rate of that year).1/

The merged zones include 43 per cent of the agricultural land and 42 per cent of the forest of the pre-war Reich. The territory produced (1939-43) 38 per cent of the country's bread grains, 40 per cent of its feed grains, and 33 per cent of its potatoes, but 53 per cent of its vegetables (mainly cabbage) and 54 per cent of its fruit (mainly apples). The American zone also produces large quantities of hops, some wine, and some tobacco. The merged zones are poor in sugar beets, and almost lacking in oil seeds and vegetable fibers. On the other hand, just before the final assault on Germany (June 1944) the area had 53 per cent of the country's cattle, 48 per cent of its hogs, and 42 per cent of its sheep.

Altogether, before the war the territory produced from indigenous resources foodstuffs representing approximately 1,800 calories daily per head of the population, as compared to an average of 2,450 calories for the entire Reich.2/ In view of the increase in population and the lack of manpower, machinery, farm animals, and fertilizers, production probably has declined to no more than 1,400 calories daily per person. The decline would have been far greater if production had not been shifted to a considerable extent from feed to direct food crops.

In contrast to its minor role in agriculture, the area of the merged zones was predominant in Germany's pre-war mining and manufacturing industries.

1/ Mr. P. Hermberg has calculated German national income for 1936 at 62.6 billion reichsmarks, equal to 17.6 billion dollars at a "purchasing power parity" rate, based upon changes in the cost of living in Germany and the United States in the period 1929-1936 (see Review of Foreign Developments, September 10, 1945, p. 8).

2/ Miss L. Bacon and Mr. N. Jasny, of the Department of Agriculture, kindly supplied information on German agriculture and nutrition. They are not responsible, however, for the author's estimates and conclusions.

The British zone alone has more than 80 per cent of Germany's known hard coal[1] and one-third of her brown coal deposits, as well as substantial deposits of iron ore, potash, salt, and oil. The American zone includes some coal, iron ore, potash, salt, and copper deposits. At present, however, production of coal and minerals is far below the pre-war level. Until recently, hard coal production in the British zone averaged less than 4.7 million tons per month, as compared to 11.4 million in 1938. As the result of improvements in wages and rations, output increased in November and December, and has reached a monthly level of 5.2 million tons. Hard coal production in the American zone (0.1 million tons per month) and brown coal production (totaling approximately 4.8 million tons per month in both zones) are closer to pre-war levels, but far less important for the economy. Iron ore output (around 370,000 tons per month in both zones) is less than half of pre-war, and far below the needs of manufacturing industries. Oil production (around 55,000 tons per month) also covers only a fraction of minimum requirements.

The British zone includes the Ruhr district, one of the most important industrial areas of the world, the steel mills of which reached an annual output of 18.5 million tons during the war. In November 1946 production was at an annual rate of 2.7 million tons. In the American zone, steel production was closer to the pre-war level, but insignificant in absolute figures (annual rate of 0.2 million tons). Before the war, the territory of the merged zones produced 74 per cent of Germany's steel, 80 per cent of her iron manufactures, 57 per cent of her chemicals, 56 per cent of her transport equipment, 56 per cent of her leather products, 50 per cent of her textiles, 49 per cent of her machines, 41 per cent of her optical instruments, 38 per cent of her paper, 35 per cent of her machine tools and electrical equipment, and 34 per cent of her clothing. Altogether, the area accounted for 51 per cent of the country's output of manufacturing industries, which in 1936 was valued at more than 34 billion reichsmarks (13.6 million dollars at the official exchange rate). In November 1946, the level of industrial production in the American zone averaged 44 per cent of pre-war, but this figure was heavily influenced by relatively high production in several industries (iron goods, fertilizers, glass, lumber products, farm equipment, ceramics), which were essential for rehabilitation purposes, but added little to the immediate supply of consumers' goods. In most branches of industry, the level was below one-third of pre-war. Similar comparisons are not available for the British zone, but existing data indicate that the situation is not very different from that in the American zone.

In spite of the low level of production, unemployment is moderate. In September 1946 (latest data available), the American zone had about 479,000 unemployed, out of a labor force of 6,541,000. The unemployed, moreover, included 168,000 persons classified as "not fully employable." About half the unemployed were either clerks and semi-professional employees, or persons "without permanent occupation." In several important occupations (construction, unskilled manual work, domestic service, forestry, mining) the number of unfilled jobs was substantially larger than existing unemployment.

1/ This term is used as the equivalent of the German "Steinkohle", and includes anthracite, bituminous, and semi-bituminous coal.

Relatively high employment in spite of the low level of output is due to the low efficiency of labor, which according to British sources has decreased to one-third of the pre-war standard. To some extent, this decrease is due to conditions beyond the control of the occupying powers. In many enterprises, some work still must be devoted to the removal of rubble and similar tasks which are not reflected in actual output. Moreover, the war has depleted the ranks of young workers. Part of this loss is temporary in view of the expected return of prisoners of war from continental European countries and especially the Soviet Union, where an estimated 4 million Germans are being held. The release of these prisoners, however, will not immediately relieve the situation since about 87 per cent of the prisoners so far returned from Russia have proved to be permanently or temporarily unfit for work, mainly on account of hunger edema and tuberculosis. The lack of male workers is reflected in the high proportion of female workers (37 per cent of the labor force, as compared to 34 per cent in pre-war Germany).

The greater part of the drop in labor efficiency, however, is due to economic and political causes that are susceptible to correction. Plant utilization is hampered by lack of fuel and raw materials. Workers are physically weakened by insufficient food, inadequate clothing, and poor housing. They have no incentive to strive for higher money wages because they can buy nothing for money except their meager rations. In order to raise these rations to the merest subsistence level, they have to spend considerable time in search of food or in black market activities. Finally, workers and managers are loath to exert themselves because they are convinced that they are working for foreign conquerors rather than for their own benefit. This is particularly important in the case of the Ruhr miners, who remember the "passive resistance" which they staged in 1923 against the French and Belgian occupation.

International Economic Position

In 1936, Germany imported commodities valued at 4,218 million reichsmarks (1,687 million dollars), of which 1,499 million were foodstuffs and feed, 1,571 million raw materials, 750 million semi-finished goods, 220 million finished producers' goods, and 178 million finished consumers' goods. The area of the merged zones had about one-half of the population, national income, and industrial production of the Reich, and therefore it may be assumed that approximately one-half of all imports was destined to that territory. In the same year, German exports were valued at 4,768 million reichsmarks (1,907 million dollars), of which only 88 million were foodstuffs and feed, 419 million raw materials (mainly coal), 459 million semi-finished products, and 3,802 million finished goods. The area of the present American zone contributed 16 per cent, that of the present British zone 42 per cent of the total. The territory of the merged zones thus had a somewhat larger export surplus than the Reich as a whole. In domestic trade, the territory exported among other goods coal and metallurgical products to, and imported foodstuffs and raw materials (especially iron ore) as well as textiles from, other parts of the country.

The preponderance of the merged zones in Germany's export trade was due to the fact that the heavy industries (including mining), which are concentrated in the Ruhr district, contributed more value to exports than all other economic groups together. Of the thirteen industries that in 1936 exported products valued at more than 100 million reichsmarks each, only the textile and paper industries did not belong to that group.

As compared to pre-war figures, present exports from the merged zones are insignificant. Export commitments from the American zone totaled 20.5 million dollars in the period from January through September 1946. Actual shipments, however, amounted to only one-third of that total and represented almost exclusively the sale of the current hops harvest. The bulk of the undelivered commitment consisted of lumber, the scarcity of which delayed actual shipments for a considerable time.

Exports from the British zone would show a similar picture if it were not for coal exports. Although coal production is hardly sufficient for the minimum needs of the zone itself, exports were forced as part of the allied program of assistance for liberated countries. In the first nine months of 1946, the British zone exported a monthly average of 1.1 million tons, valued at approximately 11 million dollars, of which 0.2 million tons went to Austria, 0.2 million to France, 0.4 million to the Low Countries, 0.2 million to the Scandinavian countries, and 0.1 million to Italy. Beginning with October 1946, however, depletion of stocks and growing scarcity within the zone forced a curtailment of the export program to 0.8 million tons per month. This figure represents less than one-third of the volume of pre-war coal exports from the area.

Import figures for both the American and the British zones at present are dominated by relief shipments of foodstuffs, which amount to an estimated 200 million dollars per year for the American, and an even larger sum for the British zone. The only other imports of importance to the American zone are cotton (mainly under a special program; see below), vehicles, and oil products. In the period from August 1945 through September 1946, total imports into that zone other than foodstuffs were 62 million dollars, of which 36 million dollars represented cotton. Detailed figures for imports into the British zone are not available, but it is known that the only transactions of any importance (other than shipments of foodstuffs) concerned a wool program, similar to the cotton program devised by the American authorities.

In the fall of 1946, the military government of the American zone (OMGUS) made arrangements with the United States Commercial Company, a subsidiary of the Reconstruction Finance Corporation, for credits to finance the importation of raw materials and to be repaid out of receipts from the export of products manufactured with the aid of those materials. A similar arrangement had been made some months earlier with respect to cotton. The new agreement covered imports valued at only 7.75 million dollars, to be used for the manufacture of ceramics, optical instruments, building materials, chemicals, and toys. It is expected that the exportation of these articles will yield approximately 32 million dollars.

Germany's interzonal trade is somewhat larger than its international trade in absolute figures, but equally low in comparison to pre-war domestic trade. In the period from January through August 1946, "restricted" goods (which include virtually all important commodities) moving from the American zone to the remainder of Germany were estimated at 112 million dollars, and those moving into the American zone at 72 million dollars.[1/] More than 60 per cent of the total trade was with the British, and less than 10 per cent with the Soviet zone. In August 1946 (latest data available), interzonal "exports" totaled 26 million dollars, of which around 50 per cent went to the British, 30 per cent to the French, and 20 per cent to the Soviet zone, and interzonal "imports" 17 million dollars, of which around 75 per cent came from the British, 25 per cent from the French, and 5 per cent from the Soviet zone. Important "export" articles were pit props, electric power, iron ore, rubber tires, and conveyor belts; "imports" included coal, petroleum products, electric power, gas, iron, synthetic rubber, and coal tar. Similar data for the British zone are not available, except for coal shipments: in the period from July through September 1946, the British zone exported a monthly average of 766,000 tons to the American, 173,000 tons to the French, and 265,000 tons to the Soviet zone (including all of Berlin); in October, the shipments were cut to 660,000 and 151,000 tons for the American and French zone, respectively, but raised to 291,000 tons for the Soviet zone and Berlin.

The "Level-of-Industry" Plan and the Balance of Payments

The Allied Control Council in Berlin released on March 28, 1946, its plan for reparations and the level of the post-war Germany economy. Under this plan, Germany was forbidden to maintain certain industries deemed to represent its war potential (synthetic oil, synthetic rubber, synthetic ammonia, roller bearings, heavy machine tools, heavy tractors, aluminum, magnesium, beryllium, vanadium, radio-active materials, hydrogen peroxide, war chemicals, and radio transmitters). Steel production was limited to 5.8 million tons per year, subject to review by the Council, and the consumption of non-ferrous metals confined to fixed quantities. The capacity of the chemical industry was to be reduced to 40-80 per cent of the 1936 level, that of the machine tool industry to 11.4 per cent, and that of other engineering industries to 30-50 per cent. Production limits in absolute figures were set for automobiles (40,000 passenger cars, 40,000 trucks, and 4,000 light road tractors per year), railroad cars (30,000 freight cars and 1,350 passenger coaches; the number of locomotives will be determined in 1949), agricultural machinery (10,000 light farm tractors), and precision instruments. The mining of coal and potash, however, was to be maximized, and the quotas set for the paper and textiles industries made allowances for substantial exports. A number of light industries (furniture and woodwork, glass, ceramics, bicycles and light motorcycles) remained free from restrictions. It was estimated that manufacturing industry as a whole would be reduced to 50 or 55 per cent of the immediate pre-war level. Imports and exports were expected to be balanced at 3 billion reichsmarks (at 1936 purchasing power, approximately 1.8 billion dollars at present purchasing power) with not more than half of the imports being earmarked for foodstuffs and feed.

1/ The original reichsmark figures were converted into dollars at the pre-war exchange rate of 40 cents per mark because they were obviously based upon legal (i.e., pre-war) prices.

There are severe doubts as to the practicability of that program in the long run. For the moment, however, the low levels of the plan are so much higher than those actually reached that the achievement of the standard of production set by the plan would represent a fundamental improvement in the economic life of the merged zones.

The plan was based upon the assumption that the post-war population of Germany would number 66.5 million. The recent census has shown a population of 65.9 million, but returning prisoners of war probably will raise the figure above the estimated number. The difference, however, probably will not be large enough to warrant substantial changes in the program on that account. The authors of the plan also assumed that the program would make possible a standard of living of the German people only about 25 per cent below the base year, 1936. The validity of this assumption is very doubtful.

The following analysis attempts to estimate the import requirements and export capacities of the merged zones in a typical post-reconstruction year (say, 1949). It is assumed that economic activity will remain within the limits prescribed by the Council, and that productivity in industry will have regained its pre-war level.

The merged zones are expected to produce foodstuffs sufficient for approximately 1,650 calories daily per head. The decline from the pre-war level will be due to the increase in population resulting from the settlement of refugees from the east. Total production will be larger than before the war (in terms of calories) because the shift from feed to food production is assumed to be made permanent. Assuming a simple diet of 2,800 calories daily to be sufficient, import requirements would be about 1,150 calories daily per head, or about 17 trillion calories annually.1/ These requirements could be met by importing 4 million tons of bread grains, 360 thousand tons of fats (including lard and vegetable oils), and 2 million tons of feed grains. At mid-1946 prices, these imports would cost around 725 million dollars. To this figure is to be added the value of 30 per cent of Germany's pre-war imports of coffee and tobacco (around 50 per cent of pre-war consumption per head for 60 per cent of the pre-war population), or around 45 million dollars at present prices. Total imports of foodstuffs would thus amount to 770 million dollars.

Importation of textile fibers will have to continue at 72 per cent of the pre-war level if consumption and exports of textiles are to reach the figures prescribed in the level-of-industry plan. Imports for the merged zones would thus have to reach approximately 144,000 metric tons of cotton, and the same amount of wool and hard fibers, with a total value of 240 million dollars (at mid-1946 prices). The figure does not make any provision for the importation of yarn and cloth so that the estimate is very conservative.

Raw materials and semi-finished goods for the metallurgical and chemical industries may be estimated at around 25 per cent of the pre-war volume, and would cost around 150 million dollars. Raw materials and semi-finished goods for other industries may be estimated at 45 per cent of the

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1/ Such a diet would provide almost 100 per cent of pre-war in terms of calories, but would be much inferior in quality.

pre-war volume. Assuming a price level 150 per cent of pre-war (in terms of dollars), these imports would cost around 162 million dollars. Imports of finished goods may be estimated at 12 per cent of the 1936 imports, or around 28 million dollars. In view of the limitation of the expansion of domestic industries implied in the level-of-industry plan, this estimate is certainly conservative. Total non-foodstuff imports would thus require at least 580 million dollars.

On the basis of these estimates, the sum of all needed imports would thus be at least 1,350 million dollars. This sum is higher than the quota which would be computed for the merged zones on the basis of the level-of-industry program (60 per cent of 3 billion reichsmarks, at 1936 purchasing power).1/ The difference is due primarily to the program's underestimation of required foodstuff imports, which in turn presumably resulted from not taking into account the full effect of the loss of the area east of the Oder-Neisse line.

Export possibilities will depend not only on the rehabilitation of the German economy but also on demand conditions throughout the world. The following estimates are based on the assumption that Germany will be able to sell all exportable goods she can produce. Coal exports will be larger than before the war since the restricted German heavy industries will require less fuel. If domestic industrial production increases to about twice the present level, domestic requirements can be satisfied with around twice the present hard coal allocation, that is, with around 84 million tons for the merged zones and 12 million tons for the rest of Germany. This would leave an exportable surplus of 42 million tons as compared with pre-war exportation of 34 million tons from the Ruhr. At mid-1946 prices, these exports would be valued at around 420 million dollars.

Exports of other raw materials or foodstuffs (hops, potash) are estimated at 20 million dollars. Exports of manufactured products are (perhaps optimistically) estimated at that proportion of pre-war exports furnished by the merged zones that corresponds to the changes in total production of each industry contemplated under the level-of-industry plan. Prices of finished goods are assumed to be 150 per cent of pre-war (in terms of dollars). On this basis, exports from the merged zones would be approximately as follows: chemicals 143 million dollars, iron goods 139 million, machinery 21 million, other metallurgical and mechanical industries 81 million, textiles 147 million, paper products 34 million, leather products 29 million, and all other finished products 168 million, making a sum of approximately 760 million dollars. Added to the exports of coal and other raw materials, the total would thus be 1,200 million, leaving a deficit in the balance of trade of approximately 150 million dollars.

Part of that deficit could be covered by the expected surplus on non-trade accounts, especially by revenue from transit traffic and tourist trade. These revenues were around 250 million reichsmarks or 100 million dollars annually in the pre-war period, and were estimated at 50 million

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1/ The sum of 1.8 billion reichsmarks at 1936 purchasing power would correspond to approximately 1,080 million dollars at mid-1946 purchasing power if reichsmarks were converted into dollars at the official exchange rate of 1936. If Mr. Hernberg's conversion formula were used, the present dollar value would be about 30 per cent less.

dollars annually for the merged zones in the post-war years. The figures exclude revenues from Germany's pre-war merchant marine, and on the other hand disregard payments on pre-war or post-war debts or on reparations. The current net deficit would thus be around 100 million dollars per year.

During the period of reconstruction, the deficit in the balance of payments will be much larger than this. In view of the lower productivity of agriculture, foodstuff imports cannot be curtailed much even if rations for the average urban consumer are set at only 2,000 calories daily for the first, and 2,400 calories daily for the second year of rehabilitation. Demand for some raw materials will be reduced since industrial production will be far below normal, but on the other hand there will be an abnormally large demand for factory equipment, for replenishing inventories, and for some import goods that ordinarily would be produced domestically. On balance, import needs were estimated at approximately 1,060 million dollars for 1947, and 1,205 million dollars for 1948. In contrast, exports cannot be expected to be more than one-third of "normal" in the first, and two-thirds of "normal" in the second year of reconstruction, or around 400 million dollars and 800 million dollars, respectively. This would leave a deficit in the trade balance of around 660 million dollars and 405 million dollars, which net receipts on non-trade account would reduce to approximately 630 million dollars and 365 million dollars. Thus the total deficit for the first three years after the start of rehabilitation might be estimated at around 1,100 million dollars.

In later years, the deficit may become smaller or disappear completely if the terms of trade, which at mid-1946 prices were heavily in favor of raw material producing countries and therefore unfavorable to Germany (except in relation to coal exports), should move in favor of industrial countries. A relative change in raw material and industrial prices of about 10 per cent would bring the balance of payments into equilibrium. Even in that case, however, it would hardly be possible to repay the cost of occupation or even the advances to be made for rehabilitation purposes in the period of transition. If an export surplus sufficient to make such repayments is to be reached, it will be necessary either to reduce the standard of living of the German people below the level contemplated in the Potsdam declaration, or to permit the production of German heavy industries to exceed that proposed in the level-of-industry plan.

All the foreign trade figures discussed above exclude shipments from and to the other zones of Germany. It is not expected that the area of the merged zones will receive substantial food imports from the rest of the country. The great bulk of such surpluses as the Russian zone can produce will be needed for the city of Berlin. Neither will the area receive large quantities of textile fibers from the other zones. The exchange of other industrial commodities will not affect the estimates made in this report since the corresponding pre-war figures were not included in the statistics of foreign trade, on which the present estimates were based.

The Merger Agreement and its Effects

The merger agreement, which is to go into effect on January 1, 1947, provides that the two zones will be treated as a single area for all economic purposes, with the aim of achieving a self-sustaining economy by the end of 1949. Indigenous resources and imports will be pooled, and the governments of the United States and the United Kingdom "will become responsible on an equal basis for costs of approved imports brought into account after December 31, 1946 (including stocks on hand financed by the respective governments)." The present ration standard of 1,550 calories daily per "normal" (i.e., non-working adult) consumer will be raised to 1,800 calories as soon as possible.1/ A Joint Export-Import Agency of the occupying powers, and joint German administrative agencies will be set up, in addition to the existing Bi-Partite Finance Committee, and in Washington a joint committee will be established to aid the Export-Import Agency in procuring commodities in short supply. Barriers to trade with Germany will be removed, financial reform in Germany effected, and the exchange value of the German mark established.2/

The agreement deals in some detail with the problem of German foreign trade. Imports are divided into two categories: those required "to prevent disease and unrest" (category A), and those required for purposes of economic recovery (category B). Imports of category A will be paid for by the governments of the occupying powers in equal shares until such a time as they can be covered from export receipts. Imports of category B will be financed initially by a sum of 29.3 million dollars contributed out of past proceeds of coal exports from the British zone,3/ 14.5 million dollars representing accumulated exports from the United States zone, a contribution by the United Kingdom (matching the sum of the two amounts just mentioned) of 43.8 million dollars, and an estimated 34 million dollars, representing the share of the United Kingdom and the United States in the value of German assets in Sweden made available to the United Nations. Further imports of category B goods will be covered primarily by receipts from future exports, and any balance will be financed by the occupying powers on an equal basis "in such manner as they may agree." Whenever German exports yield revenues sufficient to cover all imports of categories B and A, the surplus shall be used to defray the costs incurred by the occupying powers for their zones prior to January 1, 1947. Exports shall be paid for, according to the directives of the Joint Export-Import Agency, in dollars or sterling, or in other currencies that are convertible on demand into dollars or sterling.

1/ The ration for the "normal" consumer is smaller than the average consumption of the urban consumer, on which the import estimates of this report are based, since the latter includes non-rationed foodstuffs (e.g., home-grown vegetables) as well as black-market supplies.

2/ See Review of Foreign Developments, January 14, 1947, p. 14.

3/ This sum was counted as an American contribution because of an agreement of September 1945 in which the British promised to let the American zone participate in the receipts from exports from the British zone.

For the time being, the main effect of the agreement will be a rise in interzonal and in foreign trade. The increase in foreign trade will have to precede any growth in interzonal trade; as long as industry has not been revived by increased imports, interzonal trade will lag because of the absence of commodities to be traded. Only for a very few commodities have supplies surplus to local needs been accumulated. The most important of these are construction materials; it has been estimated that the merged zones together can produce building materials sufficient for reconstruction purposes while the British zone alone would have an excess and the American zone alone a deficit. In most other cases, the best that can be accomplished will be the satisfaction of an urgent demand in one zone at the expense of a less urgent, although still important, demand in the other. Such a redistribution may lead to a limited rise in overall production and in the general standard of living.

The amount of trade between the American and British zones is expected to be around 200 million dollars per year in each direction during the period of transition.1/ If this estimate is meant to include coal shipments, it would represent an increase over the present rate by only one-third. Trade between the merged area and the Russian zone has been set by an agreement of January 18, 1947, at 84 million dollars in each direction for the calendar year 1947.2/ The merged zones will deliver iron, steel, and rubber products, the Russian zone some foodstuffs, brown coal, chemicals, synthetic rubber, and wood products. Shipments in each direction will be approximately balanced in each month. In addition to these goods, the British zone will continue to deliver coal valued at 28 million dollars annually; the method of paying for the coal deliveries was not disclosed. The representative of the Russian zone declared that the trade figures would soon be revised upward, and predicted that trade between the Russian zone and the West would reach a rate of 320 million dollars annually at a later date. Past performance on the part of the Russian zone makes fulfillment of that prediction rather doubtful, although even that figure would represent only a small fraction of pre-war commerce between eastern and western Germany.

The core of the program is the contemplated increase in imports above the "unrest and disease" level. On the basis of the estimates explained above, the merged zones will need imports of goods other than foodstuffs to the extent of around 465 million dollars in 1947. The amount initially available for such imports will be 120 million dollars, equal to requirements for about three months. Since substantial exports cannot start until several months after the inception of the program, the occupying powers will have to make further advances approximately as large as the initial contribution, but these may be expected to be covered by exports in later months.

1/ The official estimate speaks only of raw materials and semi-finished goods to be shipped from the British to the American zone. Since the British zone specializes in the production of raw materials and producers' goods and the American in consumers' goods industries, the flow of consumers' goods from the British to the American zone probably will be negligible. Past experience indicates that the British shipments to the American zone will be approximately balanced by deliveries from the American to the British zone.

2/ The original mark figure has been converted into dollars at the pre-war exchange rate of 40 cents per mark because the value of traded commodities is expressed at legal, i.e., pre-war, prices.

In addition, the occupying powers will have to finance the entire cost of "category A" imports. In the second year, exports should pay for all "category B" imports, and for about half the foodstuff imports. The over-all advances of the occupying powers, equal to the estimated three-year deficit of 1,100 million dollars minus the initial contribution would be around one billion dollars, or 500 million dollars for each of them. It should be emphasized, however, that these estimates are not only extremely tentative but also based on somewhat optimistic assumptions, especially as to the progress inthe reorganization of the German economy.1/

Fulfillment of the program will be possible only if the productivity of German labor again approaches the pre-war standards. A slight decline in efficiency, such as has been observed in most Western European countries, could be offset by the increase in the labor force, due to the inflow of refugees from the east. The return to more normal levels of nutrition, clothing, and housing, and the increased availability of other consumer goods probably will solve the problem of productivity in the manufacturing industries, but an increase in the output in coal mining may well require further incentives. At present, the main effort is being directed toward increasing the number of persons available for mining, by recruitment among the unemployed of both zones, an appeal to France and the Low Countries to release German prisoners of war, and an improvement in working conditions. The first measure can have only limited success since mining is an occupation requiring a high degree of skill. The second is hampered by the fact that German miners are urgently needed in the countries now retaining them to compensate for reduction in numbers of native miners and of workers from Eastern Europe who before the war constituted a large proportion of the labor force in the mines of Western Europe. The third measure is having some effect, as evidenced by the increase in output in November and December 1946, but in itself it will hardly be sufficient to raise the output per worker to about 250 per cent of the present level--the improvement necessary to reach pre-war production. In view of the strong convictions of the Ruhr miners, political as well as economic inducements may have to be used. The British Government seems to hope that the prospect of socialization of the Ruhr industries will appeal to the workers. Greater success probably will be achieved by the contemplated relaxation of controls, and the transfer of authority from allied to German agencies. Until the psychological prerequisites for normal conditions in the Ruhr can be achieved, however, the success of the recovery program will remain very much in doubt.

The extension of advances totaling one billion dollars will affect the economics of the occupying powers in different ways. After the first half year, virtually all the advances will be in the form of food shipments (mainly grains). Since world trade in overseas grains is expected to decrease sharply from 1947 on, as the result of the rehabilitation of European agriculture, the exports from the United States will benefit American agriculture by preventing as severe a fall in demand for its produce as might otherwise be inevitable. Insofar as the Government buys grains for export to Germany which it would otherwise have bought for no immediate use under the agricultural stabilization program, the credits will not constitute a heavy real burden on the American economy or even on the federal budget.

1/ The London Economist (November 30, 1946) asserts that advances of two billion dollars will be needed for the rehabilitation of Western Germany.

It will be different in the case of the United Kingdom, which has no exportable food surplus and will have to purchase abroad virtually all "category A" goods that represent her contribution to German imports. It is understandable, therefore, that the British Government has been criticized for agreeing to share on equal terms the deficit of the merged zones, especially since in 1945-46 exports from the British zone were much larger than from the American. The agreed distribution of the deficit can be justified, however. The British zone, with its larger population and greater industrialization, will need far heavier reconstruction imports than the American. Moreover, the British economy is so closely connected with the fate of Central and Western Europe that it has more to gain from the recovery, and more to lose from the prolonged stagnation, of Western Germany than the United States.

Criticism and Appraisal

The rehabilitation of Germany is not primarily an end in itself. The United States and the United Kingdom are willing to contribute to that rehabilitation mainly in order to aid in the recovery of their European allies, whose economic systems depend upon a certain degree of prosperity in Germany, and to prevent the German people from becoming again, because of sheer misery and despair, a willing helper to any disturber of world peace.

On the other hand, the rehabilitation of Germany also has its dangers. After the first World War, Germany received large credits from her former enemies, and used them for rebuilding her industry on a scale that enabled her to surpass many of her former enemies in economic development and to overrun them in war. Germany's neighbors fear that the advances to be made by the United States and the United Kingdom under the merger agreement might be used for similar purposes. This fear explains in part the mixed reception which the agreement received in Continental Europe.

The French response to the agreement was a move to initiate economic--and possibly also political--union of the Saar area with France. It is true that the coal mines of the Saar are closely connected with the iron industry of French Lorraine, but coal exports from the Saar into France could be safeguarded without detaching the Saar from Germany. For the time being, the prospects of becoming part of the French economy--which in spite of its many shortcomings looks like paradise to the Germans of today--certainly appeals to many inhabitants of the Saar. This appeal may fade, however, as soon as more nearly normal conditions are restored in Germany, and the Saar may become again, as in 1920-35, a sore on the political body of Western Europe.

The Russian answer to the merger agreement was at first a vehement denunciation over the Soviet-controlled German radio stations. The agreement was described as the attempt of Western monopolistic capitalists to control German industry and foreign trade, the incorporation of Germany into the Anglo-American system of trusts, the "colonization" of Rhine and Ruhr, and the spreading of sufferings from one zone (presumably the British) over both zones. In this connection, the financial reform program contemplated by the Western powers also was denounced as threatening German enterpreneurs with ruin and forcing them to apply for credits from "American and British capitalists" and to surrender their economic position "into the hands of foreign owners."

On January 15, 1947, however, the Soviet-sponsored German Socialist Unity Party announced over all Soviet radio stations an agreement between that party and the Soviet occupation authorities, which obviously represented a Russian effort to counteract the effects of the merger agreement on German public opinion. The Soviet authorities promised to relax their demands for reparations and occupation costs, especially in respect to the dismantling of factories and the deliveries of foodstuffs, consumers' goods, and potash fertilizers out of current production. They also promised to permit production in the Russian zone to be raised to two or three times the limits set in the level-of-industry plan. The first part of this agreement was a return to the principles of the Potsdam declaration, which had sought to avoid the payment of reparations out of current production and the dismantling of enterprises needed for Germany's peace-time economy. It is, therefore, in line with the policy of the United States and the United Kingdom, as expressed by the merger agreement. The second part was later repudiated by the Soviet authorities. Unofficial British reports indicate, however, that British military government experts, who have opposed the limits included in the level-of-industry plan from the very beginning, are prepared to advocate raising these limits by 50 or 100 per cent for the Western zones. If these reports are correct, the repudiated promise of the Soviet authorities may also have been in harmony with the intentions of the administration of the merged area.

Czechoslovakia complained that the agreement would enable Germany again to compete with Czechoslovak industry. Those European nations whose political and economic outlook is most similar to that of the United States also expressed some misgivings. Representatives of the Netherlands were most outspoken as to their fear, on the one hand, of the continuation of the present stagnation of the German economy and, on the other hand, of the possibility that rehabilitation measures might be used by Germany for preparations for renewed aggression. They wanted the allied authorities to give greater attention to the protection of Netherlands investments in Germany, and to the production of spare parts for Netherlands industry. Finally, they proposed that the Netherlands Trust Company, which was authorized by the Netherlands Government to act as trustee for all Netherlands interests in their relations with Germany, be granted the handling of part of the credits destined to revive Germany's foreign trade so as to enable the Netherlands to share in that revival.

The United States can view the merger agreement with more equanimity than the nations of Continental Europe. To end the present pauperization of Germany is an aim justified by humanitarianism as well as by the interest of the American taxpayer. The question arises, however, whether the merger agreement shall be the limit of American assistance to, or merely the first step toward a complete restoration of, the German economy. This problem can be solved only through weighing against each other the economic advantages and political dangers resulting from the rehabilitation of Germany.

The advantages are largest, and the dangers smallest, in the most immediate future; unfortunately the ratio will become less favorable with the passage of time. At present, an increase in coal production and exports would hasten recovery in France, the Low Countries, Austria, and Italy. In a few years, when coal production in other countries (Great Britain, Silesia) has been more nearly restored to pre-war levels, Ruhr coal may become as difficult to sell abroad as it was in the early 'thirties. Exports may become even less important if the expectations of scientists come true that new sources of energy will soon start to replace coal. At present, resumption of production in the German metallurgical industries would provide machinery and spare parts essential for the restoration of the industrial countries of Western Europe and for the development of the agricultural countries of Eastern Europe, which cannot be supplied from any other source. In a few years, American and British enterprises, and possibly also the expanding Russian plants, will probably be able to satisfy the entire world demand for metallurgical products, and German industry will become again a dreaded competitor rather than a needed supplier. The situation will be similar in the case of the German chemical and textile industries.

It is true that Germany will always remain an important market for her neighbors. The countries of Central and Eastern Europe, however, which used to sell a large part of their agricultural produce to Germany in return for industrial commodities, have fallen into the Russian sphere of influence, and will resume their dealings with Germany only insofar as such development coincides with the political program of the Soviet Union. Outside of the Russian sphere of influence, only the Low Countries are so closely connected with the German economy that recovery of the latter can contribute substantially to their well-being. There might be, however, more direct and less expensive ways of assisting the Low Countries than by rebuilding German industry.

It is also true that all trading nations will benefit to some extent from an increase in Germany's foreign trade, and therefore from a rise in the German level of production and consumption. A similar consequence would result, however, from a rise in the level of production and consumption of any other country. In the long run, such rises might be accomplished by large-scale assistance from the United States and the United Kingdom in many parts of Europe, and in the very long run also in Latin America, the Near East, and the Far East, perhaps at no greater expense than in Germany.

On the other hand, any danger from a renewal of Germany's war potential would become acute only after the occupying powers relinquish their hold upon Germany, withdraw their troops, and relax their controls. In the immediate future, when the revival of German industry would be most essential to the devastated and the undeveloped countries of Europe, there would be neither incentive nor opportunity for Germany to use her regained economic strength for aggressive purposes. At a more distant time, when the peacetime importance of German industry will be somewhat smaller, both political and economic possibilities of military uses will be greater.

Thus the ideal solution of the German economic problem would be to rebuild German industry immediately beyond the limits set by the Potsdam declaration, and to impose such limits only when occupation armies and control agencies are withdrawn. Unfortunately, such a course is impossible. German industry cannot be put into full production immediately, first, because of the inevitable time lag between the start of reconstruction and the achievement of full production, and secondly, because of the fact that most materials necessary for the reconstruction of German industry are needed just as urgently for the reconstruction of the liberated nations. The occupying powers may be compelled, therefore, either to forego the rehabilitation of German industry beyond the subsistence level set at Potsdam in spite of the possible economic disadvantages of such a policy, or to risk the danger that the rehabilitation will come too late to be of great importance to the liberated nations, but early enough to provide Germany with a new war potential.

If the second alternative is chosen, the world, for the second time in a generation, might witness the paradoxical--although probably inevitable--spectacle of the Western powers, far from receiving reparation payments, pouring funds into Germany in order to rebuild the industrial system which they had just destroyed.

APPENDIX

Basis of Estimates

Pre-war population, national income, and natural resources of the area of the merged zones were computed on the basis of data from the Statistisches Jahrbuch für das Deutsche Reich (1938). Since national income data were not given for territorial units smaller than provinces, the income of provinces overlapping different zones was divided among the respective zones according to the distribution of the population.

The share of the various zones in Germany's pre-war production was taken from figures presented by the Stuttgarter Rundschau (quoted in the Neue Zürcher Zeitung, October 12, 1946), and the share in Germany's pre-war exports from the Stuttgart Wirtschafts Zeitung (September 27, and November 1, 1946).

Import Estimates for 1949. Food import requirements were estimated on the basis of the following schedule of consumption:

Estimated Food Consumption in the Merged Zones, 1949

Item	Quantity: Per average consumer (kg.)	Quantity: Total (thousands of metric tons)	Caloric Value: Per gram (calories)	Caloric Value: Per average consumer: Per year (thousands of calories)	Caloric Value: Per average consumer: Per day (calories)	Imports (thousands of metric tons)
Bread grains	160	6,400	3 1/	480	1,320	4,000
Potatoes	200	8,000	.7	140	385	-
Pulses	6	240	3	18	50	-
Fats	17	680	9	153	425	360 2/
Meat 3/	30	1,200	2	60	165	4/
Milk	90	3,600	.6	54	150	4/
Sugar	18	720	4	72	200	-
Other food 5/	-	-	-	36	100	-
Total	-	-	-	1,022	2,795	-

1/ 85 per cent extraction. 2/ Including oil seeds and cakes for feed.
3/ Including meat equivalent of fish. 4/ Feed grain imports (50 kg. per average consumer, 2 million tons total) equal about one-third of caloric value of meat and milk consumption. 5/ Mainly vegetables and eggs.

Prices (per metric ton) were assumed to be 85 dollars for bread grains, 800 dollars for fats, and 50 dollars for feed grains. While prices are appreciably higher at the moment, it is expected that they will soon return to their mid-1946 level.

The estimate of textile imports was based upon the level-of-industry program of 480,000 tons for all of Germany, at prices (per metric ton) of approximately 670 dollars for cotton and 1,000 dollars for wool and hard fibers. Imports of raw materials and semi-finished goods for the metallurgical and chemical industries were estimated on the basis of 1936 imports of approximately 1 billion reichsmarks. It was estimated that the area of the merged zones includes about 70 per cent of all German industries in these fields, and that they will be permitted to operate at an average level of production of 35 per cent. Import requirements thus will be around 25 per cent of 1936, or 250 million reichsmarks at 1936 purchasing power, corresponding to approximately 150 million dollars at present prices. Imports of raw materials and semi-finished goods for all other industries were estimated on the basis of 1936 imports of approximately 600 million reichsmarks. It was estimated that the area of the merged zones will account for 60 per cent of the light industrial capacity of post-war Germany, and that the total capacity will be reduced to an average of 75 per cent of 1936. Import requirements thus will be approximately 45 per cent of 1936 or 270 million reichsmarks at 1936 purchasing power, corresponding to around 162 million dollars at present prices. Imports of finished goods were estimated on the basis of 1936 imports of around 400 million reichsmarks. It was estimated that the area of the merged zones will account for 60 per cent of the population of post-war Germany, and that the post-war standard of living will permit no more than 20 per cent of pre-war imports of finished goods per head of the population. Import requirements thus will be around 12 per cent of 1936 or 48 million reichsmarks at 1936 purchasing power, corresponding to around 28 million dollars at present prices.

Export Estimates for 1949. Exports of industrial products were estimated as follows: pre-war exports from the area of the merged zones were calculated by multiplying the value of total exports of each industry group by the percentage in which the area shared in total production of each group. The product was multiplied by the percentage of operation permitted under the level-of-industry plan, and the result adjusted for the estimated increase in prices. Where the level-of-industry plan provides for a range of limits, the unweighted arithmetic average of the various limits was taken.

This estimate is based on the assumption that the restricted industries will devote to exports as large a fraction of their production as before the war. This assumption might be attacked as either pessimistic or optimistic. The charge of pessimism might be based upon the fact that before the war the output of some of these industries was used largely for military purposes so that exports were a greater fraction of domestic civilian consumption than would appear from trade statistics. Furthermore, part of that output went to the area east of the Oder-Neisse line, and this part also should be added to the post-war export potential. In opposition to the first argument, it can be stated, however, that production of steel--the commodity most intensively affected by military consumption--is limited to the amount produced in Germany in 1932, in which year rearmament was in its infancy and civilian steel consumption below post-war domestic requirements, assuming a permitted level of civilian consumption approximately 75 per cent of 1936.

The second argument can be countered by the fact that many consumers' goods shipped from the West to the territory east of the Oder-Neisse line will in the future be needed by the population of that territory expelled into the present area of the Reich, and must therefore be considered as domestic requirements rather than as export potential. Since the "expellees" were not permitted to take along their capital, it is true that, in the period of transition, producers' goods formerly sent to that territory will be available for exports; that amount is probably negligible, however, since industrial enterprises in that territory were dependent upon the products of Upper Silesia and Saxony rather than on those of the West. Moreover, within the next few years the expellees will be integrated in the economy of the West and their enterprises will need additional producers' goods.

The charge of optimism might be based on doubts whether industries will be able to spare as large a fraction of their production as before the war for exports after having satisfied domestic minimum requirements out of their restricted output. In response, it can be argued, however, that at the bottom of the depression (1932) total German exports were higher by 10 per cent than in 1936 although industrial employment was only 60 per cent of 1936. This indicates that at the contemplated post-war level of industrial production (55 per cent of 1936), exports approaching the 1936 figure could be reached if the standard of living was reduced to 1932 levels. Since the contemplated post-war standard of living (75 per cent of 1936) will be approximately 110 per cent of 1932, the exportable surplus probably will be around 10 per cent below 1936 or around 4.3 billion marks (at 1936 purchasing power) for all of Germany. This would correspond to exports from the merged zones of around 2.6 billion marks or around 1.55 billion dollars at present prices. This figure should be reduced somewhat in order to account for the fact that the level-of-industry plan restricts those industries that contributed most to pre-war exports. A reduction by approximately 20 per cent should be sufficient for this adjustment, and such a reduction would yield the export estimate proposed in this report.

If the estimate, however, proves optimistic, it would merely mean that the limits set by the level-of-industry plan will have to be raised in order to reach an equilibrium in the balance of payments. For a considerable period, German heavy industries would have little difficulty in exporting a great deal more than the volume estimated in this report, in order to satisfy the reconstruction needs of devastated countries and the industrialization needs of undeveloped nations. On the other hand, exports of products of unrestricted industries hardly could expand sufficiently to pay for the imports necessary for maintenance of the standard of living contemplated by the level-of-industry plan.

In particular, the export estimates were based on the following figures of 1936 exports, adjusted for the area of the merged zones, the limits imposed by the level-of-industry plan, conversion into dollars, and change in the price level:

Estimated Exports of Manufactures from the Merged Zones, 1949

Item	1936 exports (million RM)	Contribution of area of merged zones (per cent)	Limits of level-of-industry plan (per cent)	Adjusted exports Million RM	Millions of dollars Purchasing power: 1936	Present
Chemicals	697	57	60	238	95	143
Iron goods	725	80	40	232	93	139
Machinery	606	49	11.4	34	14	21
Other metallurgical products	766	44	40	135	54	81
Textiles	487	50	100	244	98	147
Paper products	150	38	100	57	23	34
Leather products	86	56	100	48	19	29
Other products	744	50	75	279	112	168
Total	4,261	-	-	1,267	508	762

Estimates of receipts from non-trade items (mainly transit traffic) were based upon the assumption that the area of the merged zones will receive about half of the total income from that source, and that the reduction in volume from pre-war years will be approximately compensated by an increase in traffic rates. Since receipts from transit traffic to and from Czechoslovakia, which forms the bulk of the commerce in question, amounted to almost 30 million dollars in 1946, it appears reasonable to expect receipts of 50 million dollars in a "normal" post-war year, and of 30 and 40 million dollars in 1947 and 1948, respectively.

Import Estimates for 1947-1948. Imports of foodstuffs for the two years of rehabilitation were estimated on the basis of a schedule of consumption, which for the average urban consumer was equal for 1947 to five-sevenths of the "normal" of 2800 calories daily per person, and for 1948 to six-sevenths of the "normal." The latter estimate contemplates a caloric content approximately 10 per cent higher than the estimate from military government sources. It represents, however, the minimum requirements at which a steady increase in the efficiency of German labor can be expected. Any curtailment of the diet would result in lowering production and exports below the estimated level to such an extent that the losses would overbalance the savings in imports. In view of the fact that the self-supporting agricultural consumer usually is able to maintain his diet at the customary level (around 2,800 calories) regardless of the curtailment in rations for urban consumers, the average for all consumers for 1947 and 1948 would amount to approximately 2,160 and 2,480 calories per day, respectively. Domestic production available for these years is estimated at 1,400 and 1,525 calories, and the deficit at 760 and 955 calories, respectively. In terms of calories, import needs for these years would thus be only around two-thirds and five-sixths, respectively, of the estimated import requirement of 1,150 calories for 1949. In terms of value, however, the imports would be relatively larger. During the period of rehabilitation, Germany will need to import greater quantities of more expensive foodstuffs, especially meat, pending the replenishment of livestock. These additional imports were estimated at the equivalent of around 2.5 kilograms of meat per average consumer, making a total of around 100,000 metric tons (at about 900 dollars per ton) in 1947; approximately half that amount will be required in

1948. As a result, the value of imports in 1947 would be about two-thirds of the "normal" of 770 million dollars plus 90 million dollars, or a total of 600 million dollars, and, in 1948, about five-sixths of the "normal" plus 45 million dollars, or a total of 685 million dollars.

Imports of industrial materials for the period of rehabilitation were estimated on the assumption that their volume would suffice, in each six-month period, for sustaining the projected level of production in the following six-month period. This level was estimated to rise evenly from the present rate (around half the assumed "normal") to approximately the pre-war level for the unrestricted industries and the limits established by the level-of-industry plan for the restricted industries, the goal to be reached in the second half of 1949. This would correspond to import needs of 65 per cent of "normal" for 1947, and 85 per cent for 1948. To this figure was added an amount for non-recurring imports needed for the reconstruction of capital equipment and the replenishment of stocks, estimated at 20 per cent of "normal" imports of industrial materials. Three-fourths of that additional amount was included in the 1947 estimates, and the rest in the 1948 estimates. Thus total imports of industrial materials would be, in 1947, approximately 80 per cent of the "normal" of 580 million dollars, or about 460 million dollars, and in 1948, approximately 90 per cent of the "normal," or about 520 million dollars.

Comparison with Other Estimates

Military Government Estimate. According to unofficial reports from military government sources,1/ the export and import program for the merged zones for the years 1947 through 1949 contemplates approximately the following developments:

	1947	1948	1949
	(In millions of dollars)		
Imports	1,042	1,000	900
Exports	350	675	900
Import surplus	692	325	0

Since no explanation of these figures has been published, it is difficult to discuss their plausibility.2/ The figures for 1947 and the import surplus figure for 1948 are very similar to the (independent) estimates proposed in this report. As to post-1947 imports and exports, the estimates proposed in this report are increasingly higher than those from military government sources, the difference being around 20 per cent for the 1948 figures, 50 per cent for 1949 imports, and 40 per cent for 1949 exports.

Assuming the 1947 estimates to be justified, the military government estimates of imports for the following years seem to be too low. Experience in the liberated countries of Western Europe shows that a steady recovery

1/ New York Times, January 1, 1947.

2/ The London Economist (November 30, 1946, pp. 873 f.) mentions a five-year plan for Germany worked out by the Allied Control Council. This plan has not been available to the author.

is possible only if imports increase at least up to the pre-war level. In Germany, such an increase must occur in foodstuffs as well as industrial materials since the level of nutrition contemplated for 1947 is very low, and the possibilities of a rise in domestic food production are very limited. It seems optimistic, therefore, to expect a fall in total imports below the 1947 level while assuming a rise in exports (implying a corresponding rise in total industrial production) to almost two and three times the 1947 figure.

The military government forecasts of exports for 1948-1949 differ from the figures proposed in this report presumably because the military government authorities wished to keep exports of products of heavy industries at the lowest level compatible with an equilibrium in the balance of payments, rather than because of divergent estimates concerning the export capacity of these industries. If this interpretation is correct, the military government forecasts will have to be adjusted upward when it appears that necessary imports are higher than the military government sources had assumed.

German Estimate. A more detailed foreign trade program (for 1947 only) was prepared by Mr. Rudolf Mueller, until recently the chairman of the German Economic Council for the merged zones.1/ This plan discusses two alternatives, based upon a diet (apparently referring to rations for "normal" consumers) of 1,550 and 2,000 calories per day, respectively. In the first case, imports would amount to around 550 million dollars for food2/ and 410 million dollars for industrial materials; these imports would make possible exports of around 425 million dollars, thus resulting in a trade deficit of around 535 million dollars. In the second case, imports would be increased to 730 million for food and 520 million dollars for raw materials; they would enable the area to export 760 million dollars and thus reduce the trade deficit to 490 million dollars. Exports (under the second alternative) would include mainly coal (150 million dollars), machinery (160 million dollars), other metallurgical products (105 million dollars), textiles (105 million dollars), chemicals (60 million dollars), electrical appliances (40 million dollars), and optical instruments (25 million dollars). Under the first alternative, exports (except coal) would approximate half these amounts.

The import program (second alternative) conforms closely to the estimates proposed in this report. The export program of the "second alternative" seems to be optimistic in its application to 1947. It might be interpreted, however, as a program for 1948, and a general indicator of the post-war pattern of German exports. Conforming to the German policy of minimizing coal exports and expanding the role of heavy industries, coal exports under this program would be only one-half the amount estimated for 1948 in this report, while exports of machinery would be 10 times as large. The export program for other metallurgical products and textiles conforms to the estimates of this report, while that for chemicals is surprisingly low. The program does not state whether it takes into consideration the limitations of the level-of-industry plan or, if it does so, how the domestic economy could be satisfied with the insignificant output of the machinery industry that would remain after deducting such large exports. For this reason, the pattern disclosed by the program cannot be taken as the basis of estimates supposed to remain within the limits of the level-of-industry plan. It might be accepted, however, if the Allies agree on an upward revision of that plan.

1/ Wirtschafts Zeitung, January 10, 1947.

2/ The original reichsmark data were converted into dollars at the pre-war rate of 40 cents per mark.