Problems of European Reconstruction
Author(s): Nehemiah Robinson
Source: *The Quarterly Journal of Economics*, Vol. 60, No. 1 (Nov., 1945), pp. 1-55
Published by: Oxford University Press
Stable URL: http://www.jstor.org/stable/1880642
Accessed: 18/04/2013 16:13

THE
QUARTERLY JOURNAL
OF
ECONOMICS

NOVEMBER, 1945

PROBLEMS OF EUROPEAN RECONSTRUCTION

SUMMARY

I. War damage and its consequences: changes in economic structure, 1; destruction of property, 3; requisitions and other exactions, 6; the over-all losses, 10; war losses and national wealth, 12; effect on currency and economic recovery, 15; deflationary measures, 18; the present outlook, 21. II. Reparations: early opinions and decisions, 25; the Potsdam agreement, 26; the outlook for reparations, 29. III. The economic disarmament of Germany: plans and proposals, 32; objections to deindustrialization, 35; the Crimea and Potsdam decisions, 37; the German war potential, 38; effects of deindustrialization, 43. IV. Conclusions, 52.

I. War Damage and Its Consequences

For every country involved in the struggle, total war has meant radical changes in production and consumption, in the volume and distribution of imports and exports, and in the whole economic structure of the nation. In addition, Germany turned all countries under her domination upside down in every sphere of economic life — industry, agriculture, finance, foreign trade, manpower — and ruined them in the process. Nearly all European countries, and especially those in the West, were economically and financially intimately connected with the outer world, being dependent on imports for many of their basic industries and on exports for their surplus production. The process of fitting them into the German war economy meant, therefore, drastic reorganization of their economies. Many light and heavy industries processing imported raw materials from overseas were closed down or restricted, despite their importance for the war; many factories were removed or subordinated to German industrial groups.[1] The

1. See "Nazi Economic Imperialism," Foreign Policy Reports, August 15, 1942. Cf. Thomas Reveille, The Spoil of Europe (London, 1942), p. 256, concerning the fate of the textile industries in France, Belgium, and Holland.

dairy farming industry, based on imported fodder, was restricted in order to make room for cereals, hemp, flax, and oil seeds.[2] Some of the changes are of a lasting nature, since they involved a considerable reduction of livestock[3] and processing facilities, shifts in occupations, loss of foreign markets, and so on; but it cannot be expected that the countries concerned will want to retain these new activities, since they do not, as a rule, correspond to sound economic principles.[4] Of still greater importance will be the new European industrial set-up introduced by Germany. It involved a drastic relocation of industries, in order to make the rest of Europe dependent on German industrial production and convert all other nations into producers either of raw materials or of specific goods. This process was already apparent before the war in southeastern Europe, where the economically backward nations were induced to change from their usual agricultural production to the production of raw materials needed for German war preparations.[5] The war needs, and especially the fear of aerial bombardment, also made for major changes in the economic structure of Europe.

The scale of those changes can be gauged from the fact that, by 1942, 8,000 French factories had been closed (Das Reich, September 6, 1942); the largest steel concern in Belgium, S. A. Ougrée Marihaye, operated during the occupation at only 27 per cent of its prewar capacity (The Economist, July 8, 1944); the output of the 800 Belgian breweries did not exceed 15 per cent of the normal needs of the country (La Dernière Heure, December 13, 1944).

2. The Economist, July 8, 1944. In Holland the area of cultivated land was increased in three years of occupation by about 180,000 hectares. The area of bread grain was increased by 25 per cent, that of potatoes by 71 per cent, and of rape-seed by 1,700 per cent (Berliner Boersen-Zeitung, July 1, 1944).

3. According to Sir John Russel ("Small Farmers and Peasants of Europe Before and After the War," The Geographical Review, January, 1945, pp. 6–7), by the middle of 1942 the losses of the occupied countries in pigs were about 50 per cent, in sheep 30 to 35 per cent, in cattle 25 per cent; and the situation has become worse since then. As Sir John puts it, Europe after the war will be mainly a vast, worn-out farm. The number of pigs in Denmark decreased between June, 1940, and June, 1942, from 3,218,000 to 1,141,000, i.e., by 65 per cent (The Economist, May 12, 1945). In Poland, the country's herds of cattle now number only 2.8 million heads, as compared with 10.4 million before the war (Polpress News, August 1, 1945).

4. The forced increase of agricultural activity in these countries tends in many cases to raise the cost of living and the prices of the main articles of export.

5. A case in point is the soya bean. Germany prompted its cultivation in Southeastern Europe by special agreements. German sources (e.g. the Berliner Boersen-Zeitung, August 3, 1944) estimate the area of cultivation increased during the decade 1930–1940 from 5,000 ha. to 150,000 ha., and it is much larger now.

It will require years of strenuous effort and coördinated activities of all the nations involved to undo all these changes, to revamp the new set-up, and to revive the old pursuits or replace them with new ones. As the Germans had no regard whatever for old boundaries, properties of a multitude of nations were mixed together, combined or split up in accordance with Germany's plans or from a desire to weaken the economic positions of the countries concerned. Only by a common effort of all nations will it be possible to trace the whereabouts of the stolen and transferred goods and equipment, to decide in each case to whom a particular factory or parts thereof should be returned, or what should be removed from Germany as the equivalent of destroyed or unidentifiable goods. Reconstruction will obviously be delayed by failure to act promptly and in a coördinated way on these questions.

Destruction of Property

The task of reconstructing economic life will, no doubt, be greatly aggravated by the losses sustained during the struggle. Inasmuch as no census of property losses has yet been taken in the liberated countries, their exact amounts are unknown. We can, however, obtain a fairly accurate picture of what has happened to property from certain reports already available.

The French Ministry of Reconstruction and City Planning estimated in an earlier survey that between 1,200,000 and 1,500,000 buildings had been destroyed or damaged since the outbreak of the war, as against 927,000 during the First World War.[6] The cost of clearing the wreckage, rebuilding the houses and industrial and agricultural plants and enterprises was given in the Session of the French Consultative Assembly on March 3, 1945, at 1,236 billion francs.[7] The latest tabulation (up to June 30, 1945) lists 1,361,400 buildings damaged and 442,800 totally destroyed, among them 166,800 industrial and commercial structures damaged and about 50,000 destroyed.[7] A special French commission recently appraised the destruction of property resulting from the German occupation, Allied bombing, and the German retreat through France at 1,832,000,000,000 francs of current value.[8] On the other hand,

6. French Press and Information Service, Report of January 9, 1945.
7. Files of the French Press and Information Service.
8. Report of the Ministry, dated August 1, 1945 (files of the French Press and Information Service). In this figure are not included losses suffered through excessive use of machinery by the Germans, and similar damages, estimated at 258 billion francs.

P. O. Lapie, member of the Foreign Affairs Committee of the French Consultative Assembly, in a report submitted to the Government in the name of the commission, estimated the amount of reconstruction costs at 2,500,000,000,000 francs.[9] It is obvious that French property other than buildings also suffered damage; consequently, the above mentioned amount of 1,236 billion francs could not constitute the total damage to property. However, M. Lapie included in his report losses suffered through German removals of locomotives, cars and other equipment. The figure given by the damage commission would therefore seem to represent the French estimate of actual property damage through war activities.

The commission assumed that a franc of today is to the franc of 1939 as 1 to 3.4; this would reduce the amount of the damage to some 540,000,000,000 francs of prewar value. However, the total value of all French dwellings in 1939 was estimated at about 400 billion, and that of all buildings at 500 billion francs.[1] Since, according to M. Lapie, only one house out of every 40 was completely destroyed and not all the rest damaged, the actual damage to buildings, including depreciation resulting from lack of repairs during the occupation (estimated by the French Supreme Council of Industry at 80 billion prewar francs[2]) will probably amount to one-half of its prewar value, i.e. some 250 billion prewar francs. If we add the damage caused to other properties, such as railroads, ports, movables, and machinery the total figure may well reach the 300 billion level. This estimate of some 170 billion prewar francs, or four billion dollars, for the damage to real estate seems rather high, when compared with British figures. According to official data, about 3,500,000 properties were damaged in Britain, including 1,400,425 in the London region alone. The total cost is estimated at 4.88 billion dollars.

9. Pour la Victoire, August 4, 1945. The report lists, among other losses, 120,000 industrial establishments destroyed; 250,000 farms damaged; 40,000 completely destroyed; 1,100 bridges destroyed, and so on.

1. N. Mnogolyet, "French Economy in the Conditions of Occupation," Mirovoye Chozyaistvo i Mirovaya Politika, Moscow, 1944, Nos. 7–8, p. 58.

The figure of 500 billion francs represents one-fourth of the total French wealth. This percentage would seem to be rather high, if we consider that, according to an estimate by M. Théry for the year 1912, the value of all buildings was only some 20 per cent of the total wealth. (See Sir Josiah Stamp, Studies in Current Problems in Finance and Government, London, 1924, p. 313.)

2. Mnogolyet, loc. cit.

The "blitz" of 1940 may not have wrought such tremendous destruction in Belgium, but the damage declared up to March 31, 1943, was said to amount to 10 billion francs.[3] It must be remembered, however, that the losses suffered by emigrants and refugees were probably not included, and that other persons had probably not all made full declarations. The damage to public property in Belgium (exclusive of the losses inflicted during the von Rundstedt offensive), i.e. to railways, ports, highways, and public buildings, was reported to amount to some 4,500,000,000 francs, or over 100 million dollars.[4] Somewhat earlier reports[5] set the damage done to railways alone by December 31, 1944 (i.e. including part of the losses suffered during the von Rundstedt offensive) at 4,926 million francs, or 113 billion dollars. If we assume that in Belgium the value of public property is about 10 per cent of the total national wealth,[6] and that private property suffered proportionally almost the same amount of damage as inflicted on public property,[7] and if we consider the damage suffered during 1940 and the Rundstedt offensive, and assume that the franc of today is worth only a little more than one-half of the franc of 1939, we may arrive at an estimated property damage of 30–35 billion prewar Belgian francs, which would seem to be low in comparison with over 10 billions worth of damage done in 1940.

Similar material losses must have been suffered by other war-stricken countries. For instance, the Netherlands Statistical Bureau has estimated the losses suffered through destruction and

3. Le Drapeau Rouge, November 7, 1944, quoted in News Digest, No. 1605.

4. News from Belgium, June 30, 1945, which contain a detailed account of the losses.

The von Rundstedt offensive and the flying bombs are reported to have inflicted three billion francs of damage. Damage to personal property was unofficially estimated at 15 billion francs of prewar value (ONA, September 1, 1945).

5. News from Belgium, June 16, 1945.

6. According to Corrado Gini, "Quelques chiffres sur la richesse et les revenus nationaux de quinze états," Metron, July, 1923, the ratio of public to private wealth was 1:11.

7. M. Pauwels, Minister of war victims, gave the figures of 14,392, 25,534, and 56,219 for houses totally destroyed, to be razed, and damaged but reparable (News from Belgium, May 26, 1945). The extent of destruction may be gauged from figures on wrecked and destroyed houses published by Le Soir (see News from Belgium, July 21, 1945). For instance, of the total number of 31,088 houses in Liège, 21,687 were wrecked and 2,067 destroyed; the figures for Antwerp are 43,778, 13,669 and 2,369, respectively.

inundation of the harbors of Rotterdam and Amsterdam alone at 2.2 billion prewar guilders.[8] A computation made for Rotterdam shows that 240 million dollars are needed to rebuild 30,000 houses and factories and 2,300 stores; the damage to the port of Amsterdam alone is reported to amount to 37 million dollars.[9]

According to Russian accounts,[1] in the occupied regions of RSFSR alone about one million dwellings and over 850,000 other buildings were destroyed; while an AP dispatch from Moscow dated July 8, 1945, reported that a petition signed by citizens of White Russia revealed the destruction there of 1,215,000 houses and village buildings. According to official figures made available to the Reparations Commission, the Germans totally or partially destroyed in all of Russia 1,710 towns, more than 70,000 villages and 6,000,000 buildings; industrial losses include 31,000 industrial enterprises and certain coal mines, power stations and oil wells destroyed. In Greece, about 401,000 buildings out of a total of 1,730,000 (i.e. 23 per cent) were destroyed.[2]

Requisitions and Other Exactions

Physical destruction of property is not the only damage the war has wrought. The enormous costs of maintaining armies in the field have everywhere resulted in great wear and tear of industrial equipment and the using up of stockpiles accumulated in the course of years and even decades preceding the war, and, in many cases, in enormous foreign indebtedness or, at best, in a considerable reduction of foreign holdings. The fact that many countries were knocked out of the war as early as 1940 did not change the situation for them, since Germany has waged her war in part at the expense of the occupied and subjugated nations. A German Foreign Office spokesman has admitted that the annual tribute from countries under Nazi control approximated seven billion dollars.[3] The actual sums must have been much greater.[4]

8. New York Times, June 25, 1945.

9. Netherlands News, June 1, 1945.

1. Pravda, July 18, 1945. In some districts, of 6,000 houses only 32 remained; of 3,450, 8; and of 8,679, 577.

2. "War Ravages in Greece," The Statist, May 5, 1945, which contains a detailed account of the losses.

3. F. N. Brewer, "War Reparations," Editorial Research Reports, II, No. 14, October 19, 1944, p. 245.

4. The Neue Zuercher Zeitung, of January 19, 1944, estimates the German "income" from "occupation costs" in the fiscal year 1942–43 at 20 billion marks, or about eight billion dollars.

One of the methods used by Germany to finance the war at the expense of the occupied countries was the outright removal of armaments and stocks accumulated by these countries for war and industrial purposes and of railways and shipping equipment. In France, according to the above-mentioned report of M. Lapie, only 5,157 locomotives out of 17,058 and 253,345 cars out of 455,000 remained;[5] France lost 61.9 per cent of her merchant marine. Of the 460,000 vehicles which France possessed in 1938, only 88,000 small trucks remained in 1945.[6] In Belgium, of the prewar total of 3,500 locomotives some 1,000, and of 100,000 cars some 55,000, remained.[7] In Holland the Germans are reported to have stolen in 1940 alone 32,000 cars and 907 locomotives.[8]

There were two other main designations for German exactions. The first was "occupation costs," imposed on the occupied countries far in excess of the actual costs of armies of occupation. The second was the "one-way goods traffic," instituted by way of barter "agreements" between Germany and the subjugated or dominated countries. Even before the war the Germans had developed a system assuring them import surpluses in their barter trade with foreign nations; now the export from these countries without counter-balancing imports grew enormously in volume, the administrative machinery of these nations being in German hands. The sums derived from these two sources are given in columns 1 and 2 of Table I. Up to August 31, 1944, they aggregated 26.4 billion dollars for the countries enumerated. The actual amounts must have been much larger, however, since certain figures are lacking, and not all the countries are listed; besides, as may be seen from the footnotes, the governments of the countries concerned assume much higher figures than those given in the table. There was a third source of income for Germany, namely, the sale of German government bonds and the issue of occupation marks. According

5. Other reports (Free France, March 1, 1945) speak of the loss of 50 per cent of locomotives and 75 per cent of railroad cars. M. Dautry estimates that rolling stock, locomotives, and cars have been reduced to one-fifth of the prewar figure (Ibid., January 15, 1945).

6. Ibid., February 15, 1945.

7. News from Belgium, May 12 and June 16, 1945.

8. Netherlands News, July 15, 1945. Representatives of the Dutch Railways are reported to have declared that the Germans had sent into the Reich all but 1,100 of the country's 30,000 freight cars and all but 230 passenger cars, of which the Netherlands had 2,000. (The New York Times, June 13, 1945.)

TABLE I

Occupation Costs, Credit Balances and Other Pertinent Data[a]

Country	Occupation Costs (in Million Dollars) up to August 31, 1944	Credit Balance in Favor of the Occupied Country (in Million Dollars) up to August 31, 1944	Note Circulation (in Millions of Local Currency Units)		Public Debt (in Millions of Local Currency Units)		Bank Deposits (in Millions of Local Currency Units)		Price Indices (September, 1943) 1938 = 100	
			End 1938	1934	1939	1943	1939	1943	Wholesale	Retail
France	10,500[b]	2,300[c]	109,000	468,000[d]	414,000	1,260,000[e]	60,000	180,000	249	209
Belgium	1,700	1,440[f]	23,000	81,000[g]	57,000	128,000[h]	14,600	33,700	172	162
Netherlands	2,500[i]	2,300[i]	993	3,041[j]	3,986	9,800	1,063[k]	1,973[k]	165	140
Norway	2,200	.....	504	2,000	1,450	10,000	......	......	176	151
Denmark	540	39[l]	.....	1,658[m]	.....	.....	.....	.....	198[n]	..
Bohemia and Moravia	540	1,260[o]	.....	34,879[p]	.....	.....	.....	.....	.....	..
Serbia	270[q]	.....	8,000	35,000[r]	.....	.....	.....	.....	.....	..

a The first two columns are from a report by the British Ministry of Economic Warfare published in The New York Times, October 11, 1944; the rest from The Economist, June 10, 1944, unless otherwise indicated. Figures on these items can also be found in the Fourteenth Annual Report of the Bank for International Settlements, Basel, End of 1944.

b According to official French estimates, the French Government paid Germany and Italy a war indemnity totaling 964 billion francs (18,920 billion dollars at the present rate of exchange) during the four years of occupation (The New York Times, October 20, 1944). The Statist, January 20, 1945, reports an official estimate of 860,000 million francs. Up to the end of 1943, this was supposed to amount to 642 billion francs, or 32.1 billion marks, and the Vichy budget for 1944 provided for additional 197.4 billion francs (Vnyeshnyaya Torgovlya, No. 6, 1944, p. 13).

c The Neue Zuercher Zeitung, January 19, 1944, estimated this amount for the end of 1943 at 98.5 billion francs, or 4.9 billion marks. A report from Paris put the amount at 3.2 billion dollars (The New York Times, March 21, 1945).

d The amount was 632 billions on October 5, 1944 and 589 billions on May 8, 1945 (The Economist, June 9, 1945).

e The Statist, January 20, 1945, estimated the national debt, as of August, 1944, at 1,523,000 million francs.

f According to the League of Nations Monthly Bulletin, May, 1945, the reichsmark balance was 68,443 million francs in August, 1944.

g According to Le Peuple, December 7–8, 1944, the amount was 63 billions in 1940 and over 150 billions in August, 1944. The League of Nations Monthly Bulletin puts the last figure at 100,319 millions.

h According to Le Peuple, December 7–8, 1944, the amount was 66 billions in 1940 and 183 billions in August, 1944. It is now over 200 billions (News from Belgium April 7, 1945).

i The Dutch estimated that they have paid four billion dollars in occupation costs and have a credit of two billion dollars in "commercial" relations with Germany (Knickerbocker Weekly, April 17, 1944). The foreign credits of the Bank of Netherlands on July 1, 1944, were 4,212 million florins, or 2,310 million dollars (Berliner Boersen-Zeitung, July 10, 1944). The League of Nations Monthly Bulletin gives the figure 4,518 million guilder foreign assets, consisting almost wholly of reichsmark.

j The amount was 5,078 million in December, 1944 (The League of Nations Monthly Bulletin).

k Part of banks only.

l This figure is too low. At the end of July, 1944, the clearing credit of the Danish National Bank was 2,500 million kroner, or 560 million dollars; the greatest part of this amount refers to Germany (Berliner Boersen-Zeitung, August 12, 1944). The League of Nations Monthly Bulletin gives the figure 2,762 million kroner for December, 1944.

m As of December, 1944 (The Economist, January 27, 1945).

n The Economist, January 27, 1945.

o According to The Statist, June 9, 1945, the claims of the Prague National Bank against Germany amount to about 100,000 million crowns; the League of Nations Monthly Bulletin puts its reichsmark balance in December, 1944 at 56,851 million.

p As of December, 1944 (The League of Nations Monthly Bulletin).

q Serbia and Banat paid 22.3 billion dinars contribution in cash, apart from expenses for the maintenance of occupation troops (4.3 billions) and labor service (6.2 billions). Borba, November 23, 1944, cited in News Digest, January 2, 1945.

r According to a report by the official Yugoslav Agency, the note circulation consisted at the beginning of 1945 of 35,000 million Serbian dinars and 120,000 million Croation kunas (in addition to the currencies of the occupants). (The Statist, June 9, 1945).

to German sources,[9] these two means of exploitation had, by the end of 1942, yielded to Germany 20.5 billion marks from the Protectorate and Holland alone. Since the amounts collected for "occupation costs" were, as stated above, used only in part for their declared purpose,[1] very considerable sums remained to buy up stocks and other goods, in addition to swallowing up many economic and financial enterprises.[2] The amounts of unpaid-for goods, a large part of the "occupation costs," the "loans" and notes thus represent to a very high degree actual losses in goods and other assets sustained by the countries concerned.[3]

The results of direct looting, forced exports, and other means of draining all available reserves can at present be tabulated only provisionally and tentatively; this is due to lack of authentic data and in part to inevitable overlappings among the different "titles" of exactions, as well as the fact that certain "acquisitions" by the Germans have been invalidated, e.g. participations in the country's banking, industrial, and commercial enterprises. We may obtain some idea of the extent of this from German reports[4] that the amount of raw materials and consumer goods available in Denmark declined through exports within a year of German occupation by about 600 million kroner. The French Institut de Conjoncture published "official" figures on German agricultural "pillage"; they include 254,500 horses, over 67 million tons of iron ore, almost 3.5 million tons of cast steel, over 28 million quintals of wheat, and so on.[5] In Holland, the Germans are reported to have shipped to Germany during the first two years of the occupation, among other items, 170,000 pigs, 35,000 cows, 57,000 tons of butter; while the "exports" during 1942–43 included, among other

9. Die Bankwirtschaft, 1943, No. 5.

1. According to Russian estimates (see R. Levin and J. Goldstein, "Peculiarities of the Economic and Political Expansion of the German Fascist Imperialism," Mirovoye Chozyaistvo i Mirovaya Politika, 1945, No. 1, p. 52), the actual expenses of the armies of occupation amounted to one-quarter of the sums levied for that purpose.

2. For example, Germany is reported to have bought 4.5 billion florins worth of Dutch assets and to have paid in marks (statement by Mr. Houwing of the Directorate of the Amsterdam Bank, Netherlands News, July 1, 1945).

3. The Germans frankly admitted that the subjugated agricultural and industrial nations were forced to export large parts of their accumulated stocks, thereby causing a decrease in national wealth ("Exportvorschuesse," Das Reich, November 9, 1941).

4. "Land in der Umstellung," Das Reich, January 4, 1942.

5. Free France, May 1, 1945.

things, 50,997 head of cattle, over 77 million electric bulbs.[6] A Government Economic Commission reported that the Germans had "stolen" from the Netherlands 220,000 cows, 105,000 horses, 80,000 automobiles, 50,000 trucks, 24,000 busses, and nearly 4,500,000 bicycles.[7] The general situation created through such action was briefly but very eloquently characterized by Dr. Menton, chairman of the Netherlands Foundation for Reconstruction, in the following words: "If I were to describe Holland as it is today in a phrase, I would say that it is empty. There is almost nothing left."[8]

The Over-All Losses

Although no exact computations are available of the over-all losses suffered by the countries involved in the war, certain figures have already been published. Professor Atwood Townsend estimated the damage done by Germany to the United Nations at £127,000 million; of this amount, £58,000 millions are credited to Russia, the rest to other United Nations. Professor Townsend puts the damage to homes, factories, railways and ships at £28,250 million, the theft of plants and machinery, objets d'art, furniture, cattle, etc. at £25,000 million, and the actual war expenditures at £73,750 million.[9] Other unofficial estimates[1] put the amount of destruction of land and property in Europe at $100 billion; loot, official and private, $100 billion; war expenditures, $295 billion. These figures were published before the conclusion of the European war and in advance of official estimates by various nations; they will, therefore, hardly prove to be near the actual losses.

The special government commission charged with computing the war damage sustained by France estimated it at 4,893,000,000,000 francs, or $97,860,000,000 at the current rate of exchange.[2] On the basis of the 1939 price level, this figure would amount to

6. Netherlands News, July 15, 1945.

7. New York Times, July 28, 1945.

8. Ibid., July 25, 1945.

9. "The Reparations Problems," The Statist, March 31, 1945. Research experts of the American University were reported to have estimated Axis loot from other countries at about $80,600,000,000 and the war expenditures of the United Nations at $558,090,000,000. (New York Times, May 31, 1945.)

1. New York Times, March 18, 1945. It is probable that the source is the same in both cases.

2. Earlier, M. Raoûl Dautry, Minister of Reconstruction, had set the total losses at 3,000 billion francs. (French Press and Information Service, January 9, 1945.)

1,439,000,000,000 francs, or $28,765,000,000. Of the total amount in current francs (in addition to the figures given above), 359 billions are said to be the minimum outlay necessary to cover pensions and allocate relief and other grants to war victims; 2,342,000,000,000 francs represent spoliation; and 102,000,000,000 francs are for special levies by the Germans during the occupation.

The figures presented for other countries are of the same magnitude. Mr. Trip, head of the Netherlands Bank, estimated the cost of the German occupation, civil administration, and the money necessary to liquidate the conditions created by the Germans and their helpers at 18 billion guilders.[3] Mr. Huysman, Dutch Minister of Finances, put the cost of the occupation in the narrowest sense at eight billion guilders, of which some two billions are extraordinary war damages.[4] Rough figures issued by the Netherlands Statistical Bureau estimate the total war damage (excluding robberies from railways, factories and individuals amounting to several billions) at more than 15 billion guilders in terms of 1938 price levels; of this figure, 2.2 billions represent material damage; 1.5 billions, fines; 1.5 billions, worn-out equipment; three billions, depleted stocks; 5.6 billions, actual occupation costs; and 1.6 billions, increased exports to Germany in Reichmarks. However, the actual cost of rebuilding will amount, according to the estimate, to only 10–12 billion guilders, inasmuch as some of the figures may overlap at certain points.[5]

According to a dispatch from Rome dated March 18, 1945, war damage in Italy up to that date was estimated at over one trillion lire, or about 10 billion dollars. However, the Ministry of Reconstruction later estimated the over-all Italian war damage at

3. Knickerbocker Weekly, May 28, 1945.

4. Netherlands News, June 15, 1945; see also ibid., July 1, 1945, for an account of the expenses during the occupation.

5. New York Times, June 25, 1945.

According to Knickerbocker Weekly, September 3, 1945, the damage inflicted on Holland consists of 7.7 billion prewar guilder worth of property destroyed, damaged and looted, and of 2.8 guilder worth of foreign assets and gold stolen. The property losses consist of a reduction in the "production plant" value, divided as follows:

Agriculture, 20 per cent of the value in 1939.
Industry, 40 per cent of the value in 1939.
Commerce, 58 per cent of the value in 1939.
Transport, 56 per cent of the value in 1939.
Public works, 20 per cent of the value in 1939.
Houses, 20 per cent of the value in 1939.

two trillion lire, or $20 billion.[6] In the Ukraine alone the damage done was estimated by the Red Star at 100 billion dollars,[7] although the magazine Bolshevik put the total damage in the Soviet Union at only 50 billion.[8] Official Russian estimates[9] put the total damage to the Union and its citizens at 679,000,000,000 rubles, or about 135 billion dollars at the official rate of exchange. This figure takes no account of the value of food supplies confiscated, war expenditures and indirect losses. Included in the value are 7,000,000 horses, 17,000,000 cattle and equally large figures for other animals, as well as the losses suffered by railways (among them, 13,000 bridges, 15,800 locomotives and 428,000 cars). It must, however, be remembered that the purchasing power of the ruble is much lower than its exchange rate would suggest. Reduced to the real value of the Russian currency, the amount of 679 billion rubles would hardly exceed the amount of 50 billion dollars. The cost of occupation in little Norway is estimated at 10 billion kroner,[1] while accumulated clearing credits and various enforced contributions to Germany's war economy may have amounted in Denmark by the end of occupation to about eight billion kroner.[2]

War Losses and National Wealth

The gravity of the losses a country has suffered can be properly measured only by comparison with the amount of its wealth and income.[3] The private wealth of France at the beginning of 1939 was estimated at 1,400 to 1,450 billion francs,[4] and the national

6. New York Times, July 26, 1945.
7. Dispatch from Moscow dated May 26, 1945.
8. New York Times, April 21, 1945; the same figure was given by M. Pierre Cot (Edgar Snow, "The Ukraine Pays the Bill," Saturday Evening Post, January 27, 1945).
9. New York Times, September 14, 1945. The losses were computed on the basis of the 1941 prices (Information Bulletin of the Embassy of the Union of Soviet Socialist Republics in Washington, September 18, 1945).
1. The Economist, June 2, 1945. It is now reported that Norway's Foreign Minister declared his county would present a bill of four billion dollars as its claim against Germany. It may be well to recall that in 1927 the national wealth of Norway was estimated at some $3.7 billion (The Economic Forces of the World, Dresdner Bank, Berlin, 1930).
2. New York Times, May 12, 1945.
3. Although the figures on national wealth are of relative value only, in view of the uncertainties in their computation, it may be useful to cite them here in order to arrive at an approximate evaluation of the losses suffered.
4. P. Sauvy and T. Rivet, "Fortune et revenu national," Revue d'Économie Politique, January-February, 1939, p. 385, footnote 1.

income in 1938 at 250–260 billion francs.[5] Now, the French war damage commission estimates the wealth in 1939 at two trillion francs, and the prewar national income at 300 billion francs. Obviously, the huge damage and exactions hit partly the national wealth and partly the national income. The income during the war could not be so large as in prewar times, simply because of the detention by Germany of French war prisoners, estimated at 1.5 million, and the deportation of over a million French laborers to Germany. These factors, together with the stoppage of imports,[6] the German economic policies and dislocation of production, caused a sharp reduction of economic activity there. According to German sources,[7] the output of French agriculture decreased by some 40 per cent in comparison with the prewar period. Figures available on the extent of industrial production show even larger decreases. For instance, in 1942 only 9.95 million KW electric energy were produced, as against 18 million in 1938,[8] while the production of pig iron in 1941–42 constituted only 16 per cent of that in 1929. No wonder the Germans, themselves,[9] had to admit that from the standpoint of French national economy French industry produced no value whatsoever; on the contrary, its capital was decreasing by five billion francs annually.

In view of these facts, we may safely assume that the French national income during the occupation must have been reduced at least 40 per cent, as compared with prewar figures; that is, it may be put at 170–180 billion francs of the 1938 price level, even if the higher income figure of 300 billions is accepted. The French war damage commission estimates that of 1,439 billion francs (1939 value) total losses, about 540 billions were covered out of national income, while the remaining 900 billions were paid out of the national wealth. This would represent a decrease of wealth by 45 per cent.[1] Actually, the payment of 540 billions in four years of occupation would represent 135 billions annually, or about

5. World Economic Survey, 1938–39; Sauvy and Rivet, loc. cit., p. 372.

6. According to Pariser Zeitung, November 20, 1943, France had in 1942 only 25 per cent of the textile raw materials she had consumed in 1938; in 1943 the percentage fell to 10–15.

7. Frankfurter Zeitung, August 19, 1943, cited in Mnogolyet, op. cit.

8. Pariser Zeitung, June 6, 1943, cited in Mnogolyet, op. cit.

9. Frankfurter Zeitung, February 16, 1943, cited in Mnogolyet, op. cit.

1. Ministère de la Reconstruction et de l'Urbanisme. Direction du Plan. Survey as of August 1, 1945. Files of the French Press and Information Service.

three-fourths of the probable income — hardly a possible task for a nation with a greatly reduced income. It must, furthermore, be considered that national income consists not only of the industrial and agricultural output, but also of revenues from commerce, transportation, services, rents, dividends, and so on, which income groups could be used for purposes of German spoliation to a smaller degree only, if at all. But even if we put the actual value of destruction and depreciation at only 350 billion francs of 1939 value, instead of the 615 billions accepted by the Commission, and consider only the approximately 900 billion francs of "occupation costs" and unpaid-for goods (instead of 689 billion francs of 1939 value "spoliation," as estimated by the Commission), the losses will still be very high. We may assume that of the 900 billion francs some 650–700 were used to "buy" goods from France (including in this figure direct removals), and that the bulk of them were "bought" at lower prices than those prevailing in 1945; the loss France suffered in these commodities must then have amounted to some 450–500 billion francs of prewar value. The reduced volume of current production, as indicated above, could hardly have provided a "surplus" to be shipped to Germany of more than some 25 per cent of the total national income; this would bring the exportable "surplus" during the four years of the occupation to about 180 billion prewar francs, while the national wealth would have been reduced by some 300 billion francs. Adding the value of the destruction, we arrive at a total of 650 billion francs of prewar value, which at this conservative estimate constitutes about one-third of France's total wealth in 1939.

It may be useful to compare these losses with the damage France suffered during the First World War. According to Professor Charles Gide,[2] if an inventory had been taken of France in the shape of its private fortunes, only about one-half would have been left at the end of that war. This estimate obviously refers not to war losses alone but to the total cost of the war. In fact, Mr. Dautry has declared that in 1918 French financial losses were estimated at 78 billion francs;[3] this is the amount of claims recognized as well founded.[4] Now, M. Réné Pupin[5] estimated the value

2. Charles Gide and William Oualid, Le bilan de la guerre pour la France, Paris and New Haven, 1931, p. 77.

3. French Press and Information Service, January 9, 1945.

4. Gide and Oualid, op. cit., pp. 170ff.

5. Réné Pupin, La richesse de la France devant la guerre, Paris, 1916, p. 103.

of French private wealth in 1911 at 285.5 billion francs. Even if there were no increases in prices during the war, the financial losses would have amounted to about 25 per cent of the original wealth.

The loss of one-third of the national wealth may be regarded as quite high in comparison with other countries, although the per capita amount of the "occupation costs" and balance of trade was much greater in Holland, Belgium, and Norway than in France, amounting in Holland, for example, to about $700 as against only $320 in France. War-torn and ravaged Greece claims only that 30 per cent of its wealth was lost during the war.[6] The national income of Holland in 1938 was 4.7 billion guilders, or 2.6 billion dollars,[7] and the national wealth in 1939 was estimated by the Netherlands Statistical Bureau at 30 billion guilders.[8] Proceeding on approximately the same assumption as in the case of France, we arrive at the conclusion that of Holland's losses, estimated at 10 to 12 billion guilders in terms of the 1938 price level, only some three billions could have been covered by current production, the remainder of seven to nine billion guilders representing a decrease of some 25–30 per cent in the country's wealth.

Effect on Currency and Economic Recovery

Nowhere have the tremendous costs of war and occupation been met out of taxes and other current revenues, the result being an enormous increase in the public debt (see Table I, col. 4). A very large part of these costs must have been covered by loans and extensions of credits granted to the state by the banks of issue.

6. New York Times, October 26, 1944. Cf., however, the above given figure on Norway.

Unofficial estimates put the total damage to Belgium at 92 billion prewar francs or 230 billion postwar francs. Industrial damage represents 20 billion prewar francs; renewal of industrial equipment, 17 billion; soil exhaustion, 5 billion. Other items are indicated above.

The national wealth of Belgium was estimated at 10,710 and 10,769 million dollars in 1926 and 1928, respectively (Dresdner Bank, op. cit. and World Almanac, 1932). For 1939 an amount of some 400 billion francs might be accepted. The above given unofficial total would represent a loss of some 20 per cent of the national wealth, if the income is taken into consideration.

7. World Economic Survey, 1938–39.

8. Verriju C. A. Stuart (see "Volksvermoegen und Volkseinkommen in den Niederlanden," Bulletin de l'Institut International de Statistique, XXV, livr. 3) gives the amount of 21.713 billion guilders for 1927.

The Dutch estimate their national income in 1939 at three billion guilders and the income in 1945 (at the May level) at some 40 per cent of this amount (Knickerbocker Weekly, September 3, 1945).

In France, for instance, the Bank of France advanced to the state 426 billion francs for this purpose.[9] The result was an ever-growing note circulation in all countries, as is evident from the figures given in column 3 of Table I. On the other hand, the vast sums of money paid to the "sellers" of products and property shipped to Germany, as well as to the owners of enterprises "bought" by German interests, have, in consequence of the scarcity of goods and other investments (except government bonds), swollen the bank accounts in all the countries concerned; this increase is reflected in the figures given in column 5 of Table I. It must be stressed that the increase in the public debt, note circulation, and bank deposits has been much greater on the continent than in Great Britain, despite the fact that England has spent up to 60 per cent of her total income to finance the war.[1] A comparison of these items in France and Great Britain by the end of 1943 (note circulation) or May, 1943 (public debt and bank deposits) show that they had increased, as compared with the end of 1939, by the following percentages:

	France Per Cent	Great Britain Per Cent
Increase in note circulation................	230	90
Increase in commercial bank deposits	133	49
Increase in the public debt................	162	100[2]

This increase in the public debt, note circulation and bank deposits represents a very great rise in potential purchasing power. Actually it produced, when liberation came, much greater price

9. New York Times, January 12, 1945. The National Bank of Belgium loaned the State 11,477 million francs during occupation, mainly to finance German occupation (The Economist, February 10, 1945, p. 189).

1. It must be remembered, however, that Great Britain has been obliged to contract huge foreign debts, estimated for the end of 1944 at 12 billion dollars, in the sterling area alone, and received lend-lease goods for a probably even larger amount. This in addition to £2 billion of prewar capital assets abroad drawn upon or destroyed (The Economist, July 28, 1945).

2. The Economist, February 5, 1944. The figures for Germany, in millions of marks, are as follows:

	1939	1943
Note circulation (Reichsbank only)	11,798	31,772 (November)
Clearing	125,000	319,000 (May)
Public debt (official data)	34,100	227,900 (August)

The foregoing data are taken from the Neue Zuercher Zeitung, January 4, 1944, and Vnyeshnyaya Torgovlya, Moscow, 1944, No. 6. The note circulation in October, 1944, was 44,700, according to the Hamburger Fremdenblatt, November 17, 1944, and 73,500 at the end of the war, according to computations by American military government officials (New York Times, August 29, 1945).

increases than is reflected in the price indices given above. It is reported, for instance, that prices in France have increased threefold since April, 1940;[3] that salaries in Belgium have had to be augmented 60 per cent, but that this increase has already been absorbed by a rise in living costs.[4] No doubt prices for certain goods are even higher than these figures reveal and are bound to increase further, unless effective measures are taken immediately. The situation is much worse in other countries, especially those less developed economically, and, possibly, even worse exploited by Germany. The Greek currency was inflated to such an extent that the Greek Minister of Reconstruction had set the value of the drachma at 15,000,000 to the dollar, whereas, before the war, the rate of exchange was only 125 drachmas for one dollar.[5] In the parts of Poland liberated in 1944, workers received about 5,000 zlotys a month,[6] whereas the average wage in the Lublin region before the war was 23.15 zlotys a week; [7] this would indicate a fifty-fold increase in the cost of living. Actually, the cost-of-living index in May, 1944, was 70 times greater than in 1938; 210 times greater in January, 1945; 120 times greater in June, 1945.[8]

In Italy note circulation rose in 1943 to 96 billion lire, but increased by the end of 1944 to 233 billions in the Allied-occupied zone and to a similar amount in the German-held part.[9] Obviously, the lowering of the exchange rate (100 lire to the dollar, as against about 20 in 1938) is not sufficient to make up for these increases.[1] Prices of all commodities have risen accordingly.[2] Conditions are hardly better in Yugoslavia,[3] Rumania and Bulgaria.

3. New York Times, January 12, 1945.
4. Franc-Tireur, December 12, 1944.
5. New York Herald-Tribune, October 9, 1944.
6. New York Times, January 8, 1945.
7. Concise Statistical Yearbook of Poland, 1938, Warsaw, p. 255. According to a statement by the Lublin Minister of Finance, the depreciation of money has reached a stage in which barter has become almost the only form of trade transactions (The Economist, January 27, 1945).
8. Figures given by representatives of the Polish Provisional Government (New York Times, July 13, 1945).
9. The Statist, June 30, 1945.
1. On Rome's "official" black market the rate is about 300 lire to the dollar (New York Times, July 27, 1945).
2. An ordinary automobile, which used to cost 40,000 lire new, now costs 600,000 to 650,000 lire used; shoes from $50 to $70 a pair; a suit of clothes sells at $150 to $300 (New York Times, January 21, 1945).
3. There were eight different kinds of currency circulating in Yugoslavia (Borba, November 23, 1944, cited in News Digest, January 2, 1945,

The bearing of inflation upon the economic recovery of the countries affected is evident. In countries with a large middle class living on savings, this decrease in the value of the currency means a considerable decline in the purchasing power of a very important section of the population and economic ruin for thousands of them. It also means a drop in savings — so essential in time of reconstruction — once confidence in their stability is gone. Inflation will also greatly complicate imports and exports, as well as financial transactions with foreign countries. In those cases where the old exchange rate is maintained,[4] strict currency control will be necessary, but this will not suffice to solve the problem of reducing export prices to competitive levels, nor that of adjusting import commodity prices to the high domestic prices.[5] Hence all international exchange of goods will have to be brought under governmental control, subsidies for exports and levies on imports will have to be introduced, and these measures will not fail to reduce both of them, to disrupt the normal functioning of the price system, and to jeopardize the whole reconstruction scheme, so dependent on the flow of foreign goods. If the fate of the currency should be left to itself, we must expect ever growing devaluation in relation to foreign currencies, with consequences only too well known from past experience.

Deflationary Measures

The menace of inflation has been long since recognized by the various governments, and some of them prepared plans for meeting it while still in exile. Drastic deflationary measures have been put into effect in Belgium and Luxembourg. In Belgium the financial decrees of October 6, 1944, declared invalid all notes in denominations of more than 100 francs. These notes had to be exchanged for new ones, but only amounts not exceeding 2,000 francs were actually exchanged, the rest being retained for the time being;

col. 44). The amount of money circulating in Croatia in 1944 was eight times greater than in 1941, and the increase in prices was several times that in money (Berliner Boersen-Zeitung, July 26, 1944).

4. In 1943, Belgium, Luxembourg, and Holland concluded a monetary agreement fixing the exchange value of their currencies with respect to one another and in relation to the pound sterling (New York Times, September 18, 1944). France also maintains the exchange rate of 50 francs to the dollar. It is believed, however, that the exchange rate of the franc will have to be changed eventually (New York Times, August 2, 1945; October 13, 1945).

5. France has been forced to apply such drastic measures as granting every American soldier there a bonus of 850 francs monthly.

bank accounts were also frozen. Only sums of 3,000 francs per household have been generally made available.[6] Taxes on excess profits ranging up to 100 per cent are contemplated, and stabilization of all salaries and fixed prices has been introduced.[7] Luxembourg has followed the same pattern. The situation there was even more complicated, however, since the German mark had been the sole legal tender during occupation, and only the first RM 100 were exchanged at the German fixed rate of 1 RM for 10 francs, the rest being evaluated at only half this rate.[8] France has also issued new notes with a profit of some 50 billion francs (not exchanged) to the Treasury;[9] mobilization of French capital abroad and heavy taxation of wealth has been put into effect; the first internal loan has already been launched;[1] and a decree, published on January 9, 1945, provided for the confiscation of illicit profits.[2] In Poland the situation was more complicated, since there were in circulation prewar notes, 15 billion zlotys printed by the Germans, those printed by the Provisional Government, and Russian rubles. In order to reduce the amount of money in circulation, the zlotys printed by the German occupation authorities have been declared invalid and individuals permitted to exchange only 500 zlotys at par for other notes; larger amounts were to be exchanged for firms and institutions. No agreement to redeem the balance has been reported.[3] A new Polish National Bank has been established.[4]

6. An official statement of the Belgian National Bank, corrected as of May, 1945, shows that there were 57,300 million francs on free or freed accounts, about 36,000 million on not yet freed, and 58,700 million on frozen accounts (Belgium, June, 1945, p. 213).

7. New York Times, March 30, 1945.

8. La Dernière Heure, Brussels, December 13, 1944.

9. Report of the National City Bank of New York, August, 1945.

1. The total amount of the loan was 164.5 billion francs. Cf. The Economist, January 13, 1945.

2. The war profits were expected to yield 12 billion francs and the levy on wartime increment 100–125 billion in three years (The Economist, April 14, 1945).

According to the statement of the Bank of France for September 27, 1945, the circulation of bank notes is continuing to rise at a rate of more than a thousand million francs a day. Prices are rising despite the Government's effort and sometimes with its approval.To ameliorate the situation somewhat, premiums to producers are envisaged (New York Times, September 16, 1945).

3. New York Times, January 11, 1945. The Economist of January 27, 1945, reports that, according to a statement by the Lublin Minister of Finance, the Germans issued "tens of milliards" of zlotys.

4. The Statist, June 9, 1945. Although the legal rate is five zlotys to the dollar, the Government has introduced a special rate on foreign transac-

In Yugoslavia all eight currencies have had to be exchanged for new dinars at various fixed exchange rates, but nobody has received more than 5,000 new dinars.[5] In Greece a new drachma has been issued at the rate of 50 billion old drachmas for one new, and the exchange rate has been fixed at 600 new drachmas for the pound sterling.[6]

In Italy seizure of property of high Fascist officials, higher direct taxation, increased taxes on wines, food and spirits, launching of a "National fund" loan and the abolition of the subsidy for bread have been undertaken to ease the inflation.[7] The issuance of new notes on the French pattern is contemplated.[8] The Dutch are also calling in their currency for re-issue, the prices of goods on the black market having soared to such heights that the guilder became almost worthless.[9]

The drastic price curbs and rationing have prevented the inflation from showing its full effects. The black market prices and the prices of unrationed goods, however, afford some indication of things to come, provided no substantial increase in available goods is forthcoming soon. In Belgium, for instance, the prices of rationed goods are only 60 per cent higher than in May, 1940, but those for non-rationed articles are so much higher that the over-all cost of living is nearly 200 per cent more than it was before the war.[1] The black market prices in France and other countries are so exorbitant that almost nothing can be purchased by those in the lower income brackets. A case in point is Greece. Soon after the stabilization of the drachma, a break-down in prices forced the Government to devaluate the currency to 2,000 drachmas for the pound sterling.[2] It seems, however, that the adoption of the economic plan of Vice Premier Varvaressos did not prevent "wild inflation"

tions equal to 100 zlotys to the dollar. But even this higher rate is an overvaluation of the purchasing power of the zloty (see New York Times, October 11, 1945).

5. Ibid.

6. Ibid., March 24, 1945.

7. The Economist, February 24, 1945.

8. The Statist, June 30, 1945.

9. New York Herald Tribune, July 25, 1945. See Knickerbocker Weekly, October 1 and 15, 1945, on the measures taken to put Holland's financial house in order.

1. New York Times, August 4, 1945.

2. The Economist, June 9, 1945.

and skyrocketing of prices,[3] the main reason probably being the lack of goods.

The Present Outlook

It is impossible to forcast what the results of the various measures will be. Too drastic restrictions may ultimately hamper reconstruction no less than the absence of deflationary measures. It is clear to all that the only effective solution lies in a rapid increase of available goods, extensive production at the earliest possible moment, and greater savings. Unfortunately, conditions in Europe at the moment are not very favorable to an increase in imports and production. The situation in certain liberated countries is worse now than before liberation, since the Allies do not possess enough shipping to replace the German deliveries, and the liberated countries have been left, not only without productive facilities and stocks,[4] but also, as shown above, without adequate means of transportation even for the limited domestic possibilities.

The amount of French industrial production during December, 1944, and January and February, 1945, in percentages of the monthly averages of 1938, was as follows:[5]

	December, 1944	January, 1945	February, 1945
Coal	70	71	69
Pig Iron (exclusive of Moselle)	10	9	10
Crude Steel (exclusive of Moselle)	16	15	17
Finished Steel	22	17	17
Rubber (consumption)	3	5	..
Paper	7	10	11

The over-all rate of industrial activity, which last spring was estimated at about 30 per cent of the 1938 figure, has apparently

3. ONA, August 29, 1945. Food prices went up in Greece 123 per cent from August 15, 1945, to October 15 ("Greek Tragedy, 1945," The Nation, November 3, 1945).

4. According to a statement by M. Lacoste, French Minister of Industrial Production, there is almost no cement, no glass, no tiles, no gasoline, no tires. (Paris-Presse, November 14, 1944.) French stocks of cotton were put at 300 tons.

5. The Economist, June 2, 1945. Glass production, maintained at 60 per cent of normal during occupation, is now reported to have been halted almost entirely. (Free France, August 15, 1945.)

French production figures for July and August, 1945, were in percentages of 1939 as follows:

Cast iron	21
Steel	26
Finished products	32

(Free France, October 15, 1945).

not risen appreciably since then, mainly because of shortages of coal and raw materials.[6] As a result, France had at the beginning of 1945 an army of 600,000 unemployed,[7] in March, 1945, almost 400,000,[8] and recently 183,000.[9]

Similar conditions prevail in Belgium. Steel works producing 300,000 tons a month before the war produced only 10,000 tons in February, 1945, and expected to reach 57,000 tons in the ensuing months.[1] The production of steel and iron is now about 20 per cent of prewar figures, with 12 blast furnaces working, as against 44 before the war. In May, 1945, only 750,000 tons of coal were produced, as compared with a monthly average of 2,500,000 before the war, while the cotton industry turned out only 17 per cent of the prewar monthly average.[2] In general, Belgian industry was reported to have operated in March, 1945, at not more than a fifth of normal,[3] and in July, 1945, at one-third of its capacity.[4] True, the number of unemployed dropped from 310,000 in January, 1945, to 128,000 in May, 1945, but the reduction was mainly due to the fact that the Allied armies employed some 250,000 Belgian workers, not to an increase in industrial production.[5] Similar conditions seem to prevail in other countries. In Holland, for instance, industry is only one-fourth productive.[6]

Wherever military exigencies permit, the reconstruction of means of communication and bridges, the repair of locomotives, cars, and trucks and their importation from abroad, the importation of goods, raw materials, and other capital goods must all be started at once in order to enable local production to achieve the largest possible activity at the earliest moment. Since sufficient shipping space will hardly be available for some time to come, the problem of priorities for the various countries and as between these goods and the necessary foodstuffs will have to be solved.

6. Report of the National City Bank of New York, August, 1945. According to a statement made by General de Gaulle in Ottawa, French manufacture is still less than fifty per cent of the prewar figure, and in some industries much less. (New York Times, August 30, 1945.)
7. New York Times, January 8, 1945.
8. The Economist, June 2, 1945.
9. Pour la Victoire, August 4, 1945.
1. News from Belgium, May 26, 1945.
2. Belgium, August, 1945.
3. New York Times, April 1, 1945.
4. Ibid., August 4, 1945.
5. Belgium, August, 1945, p. 295.
6. New York Herald Tribune, July 25, 1945.

Obviously, in many cases such importations will be possible only if the suppliers are content to sell the goods on long-range credit or if such credits are granted for use elsewhere; in certain instances, restriction of domestic consumption or use of these commodities in the exporting countries will be necessary, and the lowering of living standards for a given period inevitable. Since the need will be very great and the supply limited, an international organization will have to be set up to direct the flow and use of goods and credits and to regulate prices and other conditions. Every government will of necessity be forced to regulate, at least for a time, all economic activity in its devastated areas, to eliminate obstacles, mobilize all available resources, and foster investments at the expense of consumption.

Even if economic conditions improve and all the necessary measures are taken, the task of reconstruction will certainly not be an easy one. In France, the average rate of savings in 1927–30 was 11.2 per cent of the national income.[7] In Holland, the annual savings in 1925–30 averaged 1,052 million florins; the average national income being 5,590 million florins,[8] savings were at the rate of 17.5 per cent. These figures for the most thrifty nations of Europe would constitute from two to three per cent of the national wealth.[9] In times of distress and reduced living standards, the rate of savings out of the national income can be raised, but only if this income is high enough. Consequently, even under the best possible conditions it may take decades to make up the losses caused by the present war. Yet the fact that so many people have been underfed and underclothed for an extended period and are now without shelter will necessitate for some time to come greater production of consumer goods than would seem proper in view of the urgent

7. Marschark and Lederer, Kapitalbildung, London, 1936.

8. According to the annual figures by Lindahl quoted in Colin Clark, The Conditions of Economic Progress, London, 1940, p. 175.

9. These figures are comparatively very high, since, according to the statistics on national wealth in the United States compiled by the National Industrial Conference Board for the years 1919–30 on the basis of the 1913 price level (World Almanac, 1934, p. 302), the average annual increase in national wealth was about two per cent. The same figure is given for the prosperous Germany of the period preceding the First World War. (See E. Fuhrmann, Das Volksvermoegen und Volkseinkommen des Koenigreichs Sachsen, Leipzig, 1914, and A. Steinmann-Bucher, Das reiche Deutschland, Berlin, 1914, p. 61.) German savings after the First World War were estimated as aggregating about 10 per cent of the national income. ("Wie gross ist das Volkseinkommen?" Das Reich, February 15, 1942.)

reconstruction needs. The position of the formerly occupied countries is in certain respects worse than that of some of the actual belligerents. The latter have production in full swing and their transportation system intact; and while reconversion from war goods to peace goods will certainly entail temporary dislocations in production, it will do so on a much smaller scale in their case than in that of the occupied countries, where production will have to start practically from scratch under great hardship, and will be forced, not only to adapt itself to the new techniques developed during the war, but also to revert to the "natural" requirements and needs.

Reconstruction in countries formerly under Axis domination will undoubtedly be retarded by several additional factors. In the first place, it takes time to repatriate the hundreds of thousands held in Germany under various "titles." These persons will be in very bad condition physically and morally, having been deprived of their economic positions, thrown out of their habitual employment, and rendered destitute. They will require special treatment and care, food and clothing, which is bound to divert part of the national effort to the production of consumer goods. In the second place, the wholesale deprivation of certain groups (Jews everywhere, Frenchmen in Alsace, Poles in the annexed regions, political foes in the Southeast) of their properties will present a major problem, since the first condition for economic reconstruction is stable property rights. The confiscated property was in part transferred to new owners, who will have to retransfer it to the legal proprietors or their heirs; the property rights of those slain by the Germans and their satellites or those who died during or after deportation will also have to be settled, since the illegitimate possessors of the goods cannot be allowed to retain them. The deported owners of agricultural and other holdings will have to be brought back and helped to resume their vocations. Many professionals were likewise forced out of their professions; they, too, will require help in reëstablishing themselves. Persons who sustained damage at the hands of the occupying power or through acts of war must be compensated; this will strain the resources of the state and other public bodies to the utmost and render readjustment more difficult. Special measures to remedy these consequences of the war and occupation will have to be adopted and enforced with the greatest speed possible, since uncertainties concerning the ownership of a large part of the national wealth will hamper economic activities far beyond the actual number of persons directly involved.

II. Reparations

The devastated countries of Europe naturally expect some relief through the restitution of stolen property and the payment of reparations. At first it was generally assumed, at least in the United States and Great Britain, that the postwar settlement would not involve a reparations problem,[1] except for some kind of restitution.[2] This assumption was based largely on the alleged mistakes made after the last war,[3] and even now there are some opponents of reparations of any kind, especially in the labor movement;[4] but by and large it had become generally accepted before the end of the war that Germany and her allies would be forced to pay reparations to their victims. Financial reparations were regarded as excluded,[5] reparations in goods and services generally accepted, those in labor advocated by some [6] but rejected by others.[7]

1. See "Restitution," The Economist, November 6, 1943.

2. To mention only a few, see Herbert Hoover and Hugh Gibson, The Problem of a Lasting Peace, New York, 1942, p. 247; C. I. Hambro, How to Win the Peace, New York, 1942, p. 368; P. Lamartin Yate, "The Future of Germany," Fabian Quarterly, Autumn, 1941; James B. Reston, Prelude to Victory, New York, 1942, p. 46; Oswald Dutch, Economic Peace Aims, London, 1941, pp. 240–241; E. H. Carr, Conditions of Peace, London, 1942, pp. 234, 271.

3. See, for example, "Reactions to a Defeated Germany," The Fortnightly, December, 1940; J. B. Condliffe, Agenda for a Postwar World, New York, 1942, pp. 162ff; Jacob Viner, "German Reparations Once More," Foreign Affairs, July, 1943, p. 659.

4. See, for example, The Trade Union World, September, 1944, and the postwar program adopted by the United Automobile Workers in June, 1944. (Brewer, loc. cit.)

5. See the Armistice Agreements with Bulgaria, Finland, Hungary and Rumania; "What Should Germany Pay?" Fortune, February, 1944; Eugene Varga, "Indemnification of Damage by Hitler Germany and Her Accomplices," War and the Working Class, No. 10, Moscow, October 15, 1943.

6. The Russians seemed to rely largely on this method of payment. See Varga, loc. cit.; New York Times, September 2 and December 1, 1943, and February 2 and 5, 1945.

Britain's Trade Union Congress, 1944, was reported to have decided that German forced labor should be used for the rebuilding of Nazi devastated Europe. (Time, October 30, 1944.)

7. See the Christian Science Monitor, March 14, 1944; New York Times, November 26, 1944, and February 5, 1945. For examples of partial rejection, see H. N. Brailsford, Making Germany Pay? London, 1944, and Our Settlement with Germany, New York, 1944; Karl Keith, "The Permanent Pacifi-

The Crimea Conference produced, for the first time, an official statement by the "Big Three" on this problem. It was declared to be "an inflexible purpose" of the Allies to "exact reparation in kind for the destruction wrought by the Germans." The Declaration amplified this statement by adding that Germany would be "obliged to make compensation for this damage in kind to the greatest possible extent." A Reparations Commission was established and instructed to consider the question of the extent and methods of compensating the damage caused by Germany to the Allied countries. The Declaration used the term "in kind," without indicating whether it refers to deliveries of goods alone or to the transplantation of German factories and machinery and to reparations in labor as well. James F. Byrnes, then Director of War Mobilization and Reconversion, who took part in the Yalta Conference, clarified this point to some extent by declaring that "the use of German manpower in the rebuilding process was discussed by the Big Three, perhaps even to the eventual use in Europe of German prisoners of war."[8] Nothing was said on the question of restitution of stolen goods still available in Germany and compensation by similar commodities for non-returnable equipment and goods, despite the fact that the French were reported to have officially declared that they would demand full restitution of, and compensation in kind for, all rolling stock, locomotives, barges and other shipping taken away from them or used by the Germans,[9] and that similar demands had been made by Czechoslovakia and the Netherlands.[1]

The Potsdam Agreement

The Potsdam Agreement has not clarified the difficulties involved in the problem of restitution and reparations. Its main accomplishment consists in a clear-cut division of the over-all

cation of Germany," World Economics, July–October, 1943; The Problem of Germany, The Royal Institute of International Affairs, London, 1943; Hiram Motherwell, "The Three R's of Postwar Europe," Harper's Magazine, December, 1943; The American Labor Committee on International Affairs, Studies on Postwar Reconstruction, No. 4, by Hans Neisser et al.; Sidney B. Fay, "When will G. I. Joe Come Home?" Current History, November, 1944; New York Times, February 10, 11 and 17, 1945.

8. The New York Herald Tribune, February 14, 1945. Cf. also the statement made by President Roosevelt on March 2, 1945. (New York Times, March 3, 1945.)

9. New York Times, November 21, 1944.

1. Ibid., March 20, 1945.

problem into two parts: Russia and Poland, on the one side, and the rest of the Allies, on the other. Russia has obviously received a free hand in exacting reparations from German territories under her occupation and German assets in Bulgaria, Finland, Hungary, Rumania and Eastern Austria; Great Britain and the United States have been left to decide what reparations shall be taken from other German territories and German assets in other countries. An exception from this rule is the delivery of a certain specified amount of surplus capital equipment from the Western zones to Russia.

The Agreement does not say whether the term "removals" refers to capital equipment only or to other goods at the pleasure of the victors, and whether the question of labor reparations was considered or decided upon. Paragraph 19 of the part "Germany," although not very clearly conceived, apparently means that reparations, other than "surplus" equipment, will be made only from such goods as remain after payment for imports and setting aside the resources necessary to enable the German people to subsist without outside assistance.[2] President Truman disclosed in his Report to the People on August 9, 1945, that no fixed amount of reparations was accepted at Potsdam, but that it was decided that Russia and Poland would receive approximately one-half of the total exactions. Speaking of reparations, he mentioned "property" as their object, thus presumably indicating that he did not refer to capital goods only. The Russo-Polish agreement on reparations[3] seems to support this conclusion, since it speaks simply of "reparation deliveries from the Soviet zone of occupation." All in all, the question of what, how, and when the Western victims of German aggression will receive restitution and reparation must be considered as far from decided. It is not known how much the United States and Great Britain will demand for themselves, nor what their shares will be. The same applies to the question of assigning German laborers to nations desiring to use them in rebuilding the devastated areas, although a high American official who participated in the Potsdam Conference is reported to have disclosed a sanction by the "Big Three" for the use of German labor

2. The New York Herald Tribune, August 30, 1945, carried a report from Paris that certain materials (coal, lumber, potassium) were already being delivered from Germany to France on account of reparations. (Apparently after the French had refused to pay for them. Ibid., August 17, 1945.)

3. New York Times, August 18, 1945.

by the Russians.[4] Other nations were also reported to be planning the use of such labor. The French Ministry of Labor, for example, is said to want 1,750,000 German prisoners of war for reconstruction work. These prisoners will obtain small pay only, the French Treasury receiving the difference between normal wages and those actually paid to the prisoners.[5] Pursuant to Pauley's statement of August 30, 1945,[6] fifteen nations were invited to present their reparations bills. A conference of these nations was called for November 9, 1945, to fix the share of each participant in the total amount of reparations.

Even less progress seems to have been made on the question of what will be done with properties from former occupied countries shipped to Germany during the occupation. The nations concerned are in dire need of means of transport and any other equipment and goods they were deprived of in this way, but nothing seems to have been undertaken to restore to them at least the goods available *in natura*. Particularly outspoken in this respect are the Dutch. A report by a special government commission charges that great amounts of Netherlands machinery, railway cars, locomotives and livestock are still in Germany, but that the Allies have made no effort to return them and have even refused to permit Dutch officials to locate them.[7] In fact, according to their charges, this equipment helps German recovery at the expense of Holland, as well as other nations.[8] The delay in solving the restitution and reparations problem can be explained to some extent by the difficulties involved in a condominium, the lack of precise data and the preoccupation of the Allied Military Government with local (German) problems, as well as by the natural desire of all authorities not to complicate their own tasks.[9] It is evident, however, that

4. New York Herald Tribune, August 8, 1945.
5. Pour la Victoire, August 11, 1945.
6. The Department of State Bulletin, September 2, 1945, pp. 308–309.
7. New York Times, July 28, 1945.
8. New York Herald Tribune, August 12, 1945.

Netherlands News, September 1, 1945, reported that the British and American missions in Holland had promised Holland help in ameliorating the situation. So far only stolen art treasures and some special machinery seem to have been ordered returned (ONA, September 1, 1945, and New York Times, September 20, 1945).

9. An indication of how American Military Government officials feel about it may be found in the words of General Clay: "Our difficulties will increase when the reparations program gets under way, and the Germans

as time passes it will become more and more difficult to uncover the loot and to remove it from the present location. Besides, the goods are particularly needed at this time and cannot be acquired elsewhere. The consequences of delay may well be a great retardation in the economic recovery of the nations involved.

The Outlook for Reparations

The amount of surplus industrial equipment to be used for reparations is as yet unknown. The total amount of usable equipment in Germany has not yet been made public, nor has it been announced what will finally be considered "excess" capital goods. There are certain data on German foreign assets, but the problem is complicated by counterclaims of the countries where these assets are located,[1] by uncertainty as to how the various nations will use them, and by changes in the value of currency. According to the Potsdam Agreement, the Control Council is directed to exercise control and the power of disposition over German-owned external assets not already under the control of United Nations which have taken part in the war against Germany; but this decision is not binding upon the sovereign nations harboring German assets,[2] and it cannot be predicted how much of these assets will finally be acquired for reparations purposes. The assets within the former occupied countries are not of great extent. Reparations in finished goods and raw materials, even if admitted in principle, cannot be

begin to see their capital assets removed." (New York Times, August 28, 1945.)

1. The Foreign Economic Administration estimated German foreign assets in Switzerland at $300 million, but admitted that there are $445 million Swiss investments in Germany and that the German clearing debt to Switzerland amounts to $232.1 million. However, in evaluating these figures it must be considered that investments and debts are probably made in different currencies, and that the reichsmark will be greatly inflated when the account of credit and debit is made.

Mr. Pauley is reported to have stated that probably less than one billion dollars in United States value will be available for reparations. (New York Times, August 16, 1945.)

2. Reports from Colombia and Guatemala speak of the expropriation of German assets there for local needs. (New York Times, August 11 and 13, 1945.)

The Allied Control Council adopted on October 30, 1945, in accordance with the Potsdam Agreement, a law providing for the marshalling and vesting of German foreign assets. It is reported, however, that assets in neutral countries might be used to pay for imports to Germany rather than reparations. (New York Herald Tribune, November 5, 1945.)

high under the conditions prevailing, and will fall very short of previous expectations.

The Russians[3] set the total reparations claims of all the belligerent Allied nations at 800–1,000 billion gold rubles, but did not expect full compensation. They assumed that approximately the same annual sum could be applied to the payment of reparations as was spent on the average for armaments in 1933–39, namely 15 billion marks a year. Others would take as a measure of Germany's ability to pay reparations her annual expenditures for military purposes during the war — some 20 billion dollars a year,[4] or set the reparations in goods at one-third of her industrial output.[5] "Specialists of the United Nations" seemed to advocate that half of the increase in German "productive capacity" (i.e. production) since 1933 be applied to the production of goods for the payment of reparations in kind.[6]

In these calculations several crucial factors have been overlooked. First, the extent of production. As everywhere else, industrial production in Germany varies with the economic conjuncture. In percentages of 1928 it was:[7]

1926	1927	1928	1929	1930	1931	1931	1933
78.7	101.2	100.0	100.9	88.9	72.8	58.7	65.5

The net value of Germany's industrial output in 1928 was about 34 billion marks; in 1929, 33 billions; in 1930, 30 billions; in 1931, 22 billions; in 1932, 16–17 billions.[8] Hence the Allies would have to be able to maintain high production figures if the "surplus" over a certain, even quite low, standard is to be sufficiently high. Second, it is assumed that Russia, Poland and possibly other

3. Varga, loc. cit.

4. According to George Creel, "What Will We Do with Germany?" Collier's, November 25, 1944, this was the view of competent officials of the United States Government. Apparently, the expenditures of the fiscal year 1939–40, amounting to 52.6 billion marks, are meant here. The expenditures of the following fiscal years (without exactions from the occupied countries) were 71.9 billion, 88.1 billion, and 97.6 billion marks, respectively. (Vnyeshnyaya Torgovlya, 1944, No. 6, p. 12.) It must be borne in mind that the occupied countries contributed a fourth of this amount, and that millions of foreign slaves were put to work to achieve this goal.

5. Walter Lippman, New York Herald Tribune, April 23, 1943.

6. New York Times, February 2, 1945. It is not clear whether this increase is considered equivalent to the expenditures for war preparations, as is stated in the dispatch.

7. Statistisches Jahrbuch, 1935, p. 50*; 1938, p. 55*.

8. Vierteljahreshefte zur Konjunkturforschung, 1932, fasc. 2A, p. 98.

nations will insist on the transfer of large numbers of skilled German workers to reconstruct destroyed homes, factories, bridges, etc. This transfer would greatly reduce German industrial production, especially in view of the losses in life and limb which Germany suffered during the war, unless they are offset by an effective distribution of manpower or by transfers of Germans living abroad to Germany. Thirdly, all these calculations were based on the productive capacity of Germany as of 1939, or even as it was in 1943 or in 1944. Since quite extensive regions in the East have been lost to Russia and Poland, the productive capacity of the truncated country must have decreased. In addition, the results of the destruction from the air, the scorched-earth policy, the devastation wrought by land warfare, the millions of homeless people,[9] the wear-and-tear during the war must also be taken into consideration.[1] But most important of all is the curtailment of German industrial activity through the announced policy of the Allies as embodied in the Potsdam Agreement, as well as the necessity of maintaining a certain level of subsistence for the Germans under such conditions and to pay occupation costs.

We must also consider Germany's prewar exports. Before this war these aggregated (in million marks):

	Nominal[2]	On the Basis of Average Prices in 1928[3]
1928	12,301	12,276
1929	13,483	13,669
1930	12,036	12,957
1931	9,599	11,771
1932	5,739	8,123
1933	4,871	7,627

9. Their number was estimated some time ago at 23,000,000. (New York Times, February 5, 1945.)

1. For these reasons, some students of the problem did not believe that Germany would be able to deliver sizable amounts of reparation goods before several years after the cessation of hostilities. Sturmthal, loc. cit.; Heinz Soffner, "Winning the Peace with Germany," Survey Graphic, July, 1943; Harry Lewis Braham, Permanent Peace for Europe, Spring Lake, 1943. For contrary views see Grant S. McClellan, "Financial Challenge of the Postwar Period," Foreign Policy Reports, September 1, 1944.

2. Statistisches Jahrbuch, 1929, p. 186; 1938, p. 628. Until 1933, one dollar was equal to approximately 4 marks; after that year, to about 2.5 marks. The export figures for the following years (with Austria included) were (in billion marks): 1938, 5.6; 1939, 5.2; 1940, 4.9; 1941, 6.8; 1942, 7.6; 1943, 8.6. Cf. Berliner Boersen-Zeitung, July 7, 1944.

3. Statistisches Jahrbuch, 1932, p. 172; 1938, pp. 257 and 629. The difference for 1928 is due to corrections made subsequently.

	Nominal[3]	On the Basis of Average Prices in 1928[3]
1934	4,167	6,810
1935	4,270	7,336
1936	4,768	8,092
1937	5,911	9,360

In "normal" years German industrial exports represented in value about 20 per cent of the total industrial production.[4] From the figures given above it is evident that, with an intact industry running full blast, as was the case in 1929, reparation deliveries as envisaged by Varga would amount to almost 50 per cent of the total net industrial output, but that a figure like 20 billion dollars (equal to 50 billion marks) would exceed by far the total net industrial production in the best peace-time years. Amounts of seven to eight billion marks, mentioned by the United Nations experts, may average slightly less than one-third of the industrial output of Germany and be roughly equal to total exports after 1932.

German exports in finished goods[5] depended to a large extent on imports. It was assumed that, in the interval between the two World Wars, 11–12 per cent of the value of every exported article consisted of imported goods.[6] Hence, in order to enable Germany to supply enough reparation goods, especially industrial products, the necessary raw materials must either be bought by her through free exports — i.e. sufficient exports allocated — or be delivered by the nations receiving reparations, unless their demands are restricted to goods made of German raw materials exclusively.

III. The Economic Disarmament of Germany

There can be no doubt that the first and most essential condition of economic reconstruction is political security and freedom from aggression. Hence the problem of rendering Germany incapable of launching, fifteen or twenty years hence, another war against her neighbors (who do not seem to believe in German reëducation)[7] is of the utmost importance in any scheme of eco-

4. The actual figures were as follows: 1925, 20.3; 1926, 25.6; 1927, 20.8; 1928, 21.0; 1929, 23.7; 1930, 25.8; 1931, 28.3; 1932, 23.6; 1933, 18.2; 1934, 12.1. (Vierteljahreshefte zur Konjunkturforschung, Sonderheft, 41, p. 32.)

5. They represent in value 72.9 per cent of the total exports in 1930; 76.9 in 1931; 78.2 in 1932, and 77.7 in 1933. (Statistisches Jahrbuch, 1933, p. 189; 1935, p. 205.)

6. Vierteljahreshefte zur Konjunkturforschung, Sonderheft 41, p. 56.

7. T. E. Utley, "French Views on the German Problem," International Affairs, April, 1944. For a review of the plans advanced, see, among others,

nomic rehabilitation in Europe. Some see a solution to this problem in reparations, which would curb Germany's economic recovery and the growth of her population,[8] but most students of the problem look to other solutions and remedies. Political control failed after the First World War and may, in their opinion, fail this time, too.[9] The scheme for a trusteeship over German industries to insure their complete conversion to, and use for, peaceful work[1] depends on long and smooth coöperation of the Allies in the supervision of Germany; it is felt that strict control can be maintained only so long as Germany is actually occupied and policed by the victors; even in regard to the lesser problem — reparations — it is an accepted assumption that they can be exacted only so long as the occupation by the Allies endures.[2] Some believe that the amputation of Germany in favor of Russia, Poland, France (and possibly Holland, as compensation for flooded land), plus the possible internationalization and occupation[3] of the Rhineland, Ruhr, and Westphalian regions, will suffice. However, this solution seems to many observers to be complicated by the problem of effective control for a long period and the question of removing millions of Germans living in the ceded areas and Czechoslovakia to the already densely populated remainder of Germany.[4]

Harold G. Moulton and Louis Marlio, The Control of Germany and Japan. The Brookings Institution, Washington, 1944; "Treatment of Germany After the War," Public Affairs Bulletin, No. 28B, Library of Congress, Legislative Reference Service, Washington, 1944; Winifred N. Handsel, "What Kind of Peace with Germany: Terms Proposed by Liberated Nations of Europe," Foreign Policy Reports, November 15, 1944.

8. See Institute of International Finance, op. cit.

9. As Leon Henderson has put it, the question comes down to this: whether you can actually control the war-making potential of a nation. A victorious nation has never before tried to impose complete economic control. New York Times, January 7, 1945.

1. A. Loudon, "Some Aspects of War and Post-War Problems," Netherlands News Digest, April 15, 1943; Walter Lippmann, New York Herald Tribune, April 22, 1943; N. P. L. Steenberghe, "Future Netherlands Economic Relations with Europe," Knickerbocker Weekly, September 20, 1943. The other solutions, such as the breaking up of Germany's autarchy ("The United States in a New World: IV. Relations with Europe," Part V, Fortune, April, 1943), control of her foreign trade, etc. cannot even be mentioned here for lack of space.

2. See "What Should Germany Pay?" Fortune, February, 1944; "Policy for Germany," The Economist, March 4, 1944; Viner, loc. cit.

3. This thesis is most strongly advocated by the French. See, for example, New York Times, January 24, 1945; February 6, 1945; March 2, 1945; August 6, 1945; September 4 and 10, 1945; New York Herald-Tribune, October 13 and 17, 1945.

4. This transfer has actually been sanctioned by the Potsdam Agreement.

For these and other reasons, such as the possibility of shorter occupation than anticipated,[5] there has always been a school of thought which advocates industrial or economic disarmament of Germany as the sole feasible and effective solution of the German problem.[6] The Dutch, Czechs, Belgians, and Poles are said to have discussed for a long time ways and means of curtailing Germany's industrial activity,[7] and this opinion has found support also among the French and others.[8] In this country, the Kilgore Subcommittee of the Senate has come out very strongly for a drastic plan in its report on Cartels and National Security:

> A real disarmament program [for Germany] requires not only the dismantling of all direct munitions industries, but also the dismantling and removal to the devastated areas of Europe of the primary indirect munitions industries, including metallurgical and chemical industries.[9]

5. A report from Frankfort has it that a three-year occupation of Germany was discussed by the "Big Three" and that this period may be shortened by as much as six months. (New York Times, August 20, 1945.) Difficulties in supplies for Germans may well account for such decisions.

6. A staunch proponent of economic disarmament is Paul Einzig, who has outlined his detailed program in three publications: Can We Win the Peace? London, 1942; Appeasement Before, During and After the War, London, 1942; "A Plan for Germany's Economic Disarmament," Economic Journal, June-September, 1942. Cf. also Lionel Gelber, Peace by Power, New York, 1942, p. 38; "The Future of Germany," Planning, a Broadsheet by PEP, No. 172, London, 1941, p. 12; Henry Morgenthau, Jr., Germany is Our Problem, New York, 1945.

7. "UNRRA Decides," The Economist, December 4, 1943; cf. also ibid., July 8, 1944, p. 38.

8. Henri Peyre, "The French Situation," Political Science Quarterly, September, 1944. Cf. the report from Paris on the problem of reparations, New York Times, March 21, 1945.

Norwegian experts believed that "it may seem appropriate to liquidate a certain part of German heavy industry and machine-tool industry" ("Norwegian Views on the German Problems," International Affairs, January, 1945). See also C. M. Cornell, "Some Dutch and Belgian Views on the German Problem," International Affairs, July, 1944.

9. Cartels and National Security, Seventy-Eighth Congress, Second Session, Senate. Subcommittee Report No. 4; Report from the Subcommittee on War Mobilization to the Committee on Military Affairs, Washington, 1944, p. 8. It is interesting to note that, according to the report of George Creel on the plans of the State and War Departments and the Foreign Economic Administration, the United States Government did not approve of deindustrializing Germany but believed, on the contrary, that the maximum production is imperative. (Collier's, November 25, 1944, p. 58.) However, a few weeks earlier it was reported from Washington that officials of the Administration seemed to favor small reparations which would permit keeping Germany weak. New York Times, September 23, 1944.

And as long ago as last fall President Roosevelt instructed Mr. Crowley, Foreign Economic Administrator, to carry forward "studies from the economic standpoint of what should be done to limit the power and capacity of Germany to make war in the future."[1]

Objections to Deindustrialization

Many objections to the economic disarmament of Germany have been raised. One is that decreases in productive capacities are of a temporary nature only. As a matter of fact, however, it takes decades to build up a high industrial capacity. In the case of Germany the comparatively slow process of building up the personnel of her heavy industries is shown by the figures for the number of employed workers[2] during the 50-year period 1875–1925:

1875	1895	1907	1925
123,170	138,126	200,240	270,211

This fact is of great significance, since it proves that, when deindustrialized, Germany may be unable, even after the restrictions are lifted, to build up a new war machine quickly.

Some contend that crippling German industries entails economic injury, not only to the Germans, but also to the rest of the world, and especially those countries which in normal times found Germany an important export market or source of imports.[3] These authors, however, seem not to take into account the fact that these alleged advantages are more than counterbalanced by the destruction and losses suffered by Germany's neighbors during the last two wars. In addition to the cost of warfare and the amount of destruction and loot, indirect costs — personal damage, broken lives and careers, and the cost of maintaining huge armies during the intervals between wars — must be considered. It must, furthermore, be borne in mind that the neighboring nations will acquire, through transfer of at least a part of German industries, industrial facilities not possessed before.

1. Statement submitted by Leo T. Crowley, Foreign Economic Administrator, before the Subcommittee on War Mobilization of the Senate Military Affairs Committee on the subject, "Germany's Economic Base for Aggression," June 26, 1945.

2. Statistik des Deutschen Reiches, Bd. 418, p. 17.

3. For instance, The Problem of Germany, The Royal Institute of International Affairs, London, 1943; "Germany in Peace," New Republic, October 30, 1944; Jacob Viner, "The Treatment of Germany," Foreign Affairs, July, 1945.

A redistribution of heavy and kindred industrial activities in Europe would generally equalize the economic structure of the various European countries and increase their industrial production, thus making up for possible losses through diminished German imports, and rendering many of them less dependent on exports (food and raw materials) to and imports (industrial products) from Germany, which in itself would greatly reduce the danger of future conflicts and the necessity of siding with Germany in that case. Should this goal be attained, a gradual reconstruction of some German industry might prove possible and unobjectionable.

Some believe that the damage inflicted upon German industry during and after the war will suffice to eliminate her as industrial power for decades.[4] Others, however, are more impressed by the possibility of a rapid recovery of German industry, once the opportunity for rebuilding it is given.[5] In fact, the experience of this war has shown that air power is unable to decrease the industrial activities of warring nations appreciably, and the potential left intact in Germany would probably suffice, under favorable conditions, to repair the damage in a comparatively short period of time.

Another objection is that iron and steel industries are so closely connected with coal fields that there is hardly any prospect of developing them in countries which lack an adequate coal supply. The main reason for the development of heavy industries in regions rich in coal (Great Britain, Germany, Belgium, etc.) rather than in iron ore (Sweden,[6] Norway, Italy) is that it pays better to transport iron ore to coal than vice versa. But this factor may be overestimated. Even before the First World War, technological advances in the use of coke resulted in an exodus of the iron industry

4. See, for instance, the message of twelve American generals back from the European war, New York Times, June 25, 1945.

5. Cf. especially Elimination of German Resources for War (Hearing before a subcommittee of the Committee on Military Affairs, United States Senate, 79th Congress, First Session), Washington, 1945, containing a vast amount of data and other material; and an eyewitness account by a correspondent of the North American Newspaper Alliance in the New York Times, June 13, 1945. According to a statement by Colonel Boyd, chief of the industry division in the office of the American Military Government, some 75 per cent of Germany's industry is intact or in a reparable condition. (New York Times, October 11, 1945).

6. In 1938, Sweden produced 13.9 million tons of iron ore and exported 12.7 millions; the total production of pig iron was only 667,909 tons. Cf. The Statesman's Yearbook, 1940, p. 1316.

from the coal-rich Ruhr Basin to Lorraine, rich in iron ore; only reluctance to losing considerable investments and special profitable freight rates checked this trend.[7] There is little doubt, especially if, by international agreements, special privileges were granted for the transportation of coal to countries with iron ore deposits or to places where iron ore can be conveniently brought, that new heavy and allied industries could be built up there.[8] It is sometimes asserted that heavy and related industries can thrive only in countries with sufficiently large domestic markets. The experience of Luxembourg and Belgium would seem to militate against this assumption. Moreover, markets can be enlarged by means of customs unions and similar devices.

The Crimea and Potsdam Decisions

The Crimea "Charter" did not shed much light on this problem. It stated only that, in addition to purely military disarmament, it was agreed to "eliminate or control all German industry that could be used for military production." Since almost every industry works during war for that purpose, the definition contained in the Crimea Declaration did not indicate to what extent the Allies were willing to destroy German industrial might.

The Potsdam Agreement seems to have accepted the view that, in the words of President Truman (in his report to the people, August 9, 1945), German economic power to make war is to be eliminated. To this end the Agreement proposes to carry out a program of industrial disarmament by the methods described there, including decentralization of the German economy,[9] development of agriculture and peaceful industries, control of the production of metals, chemicals, machinery and other items that are necessary

7. Guenther v. Geldern-Crispendorf, Die deutschen Industriegebiete. Ihr Werden und ihre Struktur, Karlsruhe, 1933, p. 101.

8. Italy's coal output is only two to three per cent of her yearly needs. Despite this handicap, the steel output amounted to 2.25 million tons in 1938 and was expected to increase to four millions in 1940. (The Economist, January 20 and May 18, 1940.) The Government of Portugal has made public plans for the industrialization of the country, involving the development of heavy industries (Berliner Boersen-Zeitung, August 7, 1944.) Similar plans are attributed to Spain (ibid., August 4, 1944).

9. The Russians were reported to have stripped a considerable number of German plants of their equipment and to have started a decentralization program in their zone of occupation well in advance of the Potsdam Agreement. (New York Times, July 5, 8, 19 and 21, 1945, and New York Herald Tribune, July 18, 1945.) This was confirmed by Mr. Pauley. (New York Times, August 31, 1945.)

for a war economy and its restriction to a level essential to maintain in Germany average living standards not exceeding the average of the standards of living in European countries, excluding the United Kingdom and Russia. The Agreement sees in reparations one of the means of deindustrialization by removing surplus industrial equipment, and proposes to destroy such excess capital goods as will not be removed in this way. The terms of the Agreement remain to be clarified by action, especially by actual determination of what is useful for war economy, what is necessary to maintain the prescribed living standard, how high it should be, and what is surplus equipment. Under the conditions now prevailing in Europe, and in view of expected differences of opinion among the Allies on these definitions, this may take longer than the six months prescribed in the Agreement.

A recent plan devised by officials of the American Military Government calls for the following points: chemical and allied industries may be cut to cover only minimum domestic requirements, except for synthetic textile fibres (to avoid importing large quantities of textile raw materials); the synthetic petroleum industry is to be available for reparations; production of finished steel is to be limited to some 50 per cent of the prewar normal use, and all facilities above those necessary to maintain this level made available for reparations; fabricated metal goods, electrical and transport equipment is to be limited to levels consistent with domestic supplies of steel; facilities for producing locomotives (except for minimum domestic requirements), heavy steel forgings and machine tools, large central stations, heavy tractors, trucks and passenger cars, high-pressure and high-temperature equipment essential to the manufacture of synthetic materials and some others are to be completely removed.[1] It remains to be seen, however, whether this plan will meet with the approval of the higher authorities.[2]

The German War Potential

The sinews of modern war are two basic materials — coal and steel, coal being the basis of the chemical industry and an

1. New York Times, August 29, 1945.
2. See, *inter alia*, the controversy about the "Hoover report" submitted to the economic directorate of the Allied Council and dealing with the problem of disarmament, reparations and mimimum German standards of living. (New York Times, October 8, 1945 and New York Herald-Tribune, October 11 and November 4, 1945.)

essential means in iron and steel production. Hence the war potential of a country may be roughly calculated as proportional to its coal and steel output.[3] The engineering industries play a tremendous rôle in this war of machines, and will in all probability, together with the chemical and synthetic goods industries, play an even greater part in future wars and war potentials. New developments, such as new kinds of planes, radar, atomic bombs, will put ever growing stress on these industries. The engineering industries are based almost exclusively on steel output, and the use of substitutes has not as yet diminished the importance of steel for war.[4] A comparison of the output of iron, steel and coal in Germany, on the one hand, and the rest of Europe, on the other, shortly before the war is given in Table II.

The preponderance of Germany in iron and steel production becomes clearer when we consider that Poland, with a population about one-half that of Germany, produced in 1938 approximately five per cent as much pig iron as Germany and about seven per cent as much steel; Rumania, with a population slightly less than 30 per cent of Germany's, 0.7 per cent as much iron and one per cent steel; Spain, 2.5 per cent and two per cent, respectively; Yugoslavia, 0.3 per cent iron and hardly any steel; and Italy only five per cent and 10 per cent, respectively. But the contention that Germany produced 60 per cent of Europe's coal [5] is not wholly correct, though it may be true of continental Europe west of the USSR. The same applies to the assumption that Germany produced 50 per cent of Europe's iron and steel and even larger amounts of its aluminum.

3. The statement of Ferdinand Friedensburg (Kohle und Eisen im Weltkriege und in den Friedensvertraegen, Munich and Berlin, 1934, p. 9) that no nation dependent for its coal and iron on foreign countries will in the future be able to wage war independently against any great power, is no doubt true at the present moment, as is the observation made by Fritz Sternberg (Germany and a Lightning War, London, 1938, p. 153) that, throughout the First World War, "military superiority was seen hand in hand with superiority in the production of iron and steel."

4. According to Steel Facts, August, 1943, each man in the United States Army today requires 1,500 lbs. more steel annually than in the last war. The earlier contention that, "unlike the war of 1914–18, this is not a steel war" (R. W. B. Clark, Britain's Blockade, Oxford Pamphlets on World Affairs, London, 1941, p. 16) was based on the first period of the present conflict, the period of the so-called "phony war."

5. New York Times, February 18, 1945; H. J. Paton, "Truncation as a Means of Preventing German Aggression," International Affairs, April, 1945.

TABLE II

OUTPUT OF IRON, STEEL, ROLLING MILL PRODUCTS, COAL, AND ALUMINUM IN 1937 AND 1938

(Thousands of Tons)

Commodity		Europe	Germany[a]	Great Britain	Russia	The Rest of Europe
Pig Iron	1937	58,950	16,349	8,629	14,521	19,800
	1938	55,842	18,655	6,872	15,000	15,300
Steel Ingots	1937	73,910	20,037	13,455	17,824	23,100
	1938	69,653	22,991	10,561	18,200	16,800
Rolling Mill Products	1937	50,813	14,118	9,928	12,996	......
	1938	......	......	......	......	......
Coal	1937	......	225,000[b]	224,269	127,000	170,000[b]
	1938	......	186,406[c]	231,876	132,000	......
Aluminum	1937	294.3	127.2	19.4	45.0	......

The figures are computed from data on the various countries contained in Wirschaft und Statistik, 1939, pp. 55 and 172; 1940, p. 97; Statistisches Jahrbuch, 1938, p. 75 and 60 ff.; American Iron and Steel Institute, Annual Statistical Report, 1941, p. 107ff. If some of the figures do not wholly correspond, the reason lies in the different sources and the divergencies between European and American tons.

a Including Austria.

b German lignite is reckoned as equal to $\frac{2}{9}$ of coal per weight unit; Bohemian lignite, as $\frac{2}{3}$. Cf. Friedensburg, op. cit., p. 63, footnote 1.

c Without lignite.

In consequence of her unique position with regard to these basic productions, Germany's war potential as a whole was considered by competent authorities to be roughly equal to that of all other continental European countries combined, exclusive of the USSR; and the capacity of her metallurgical, engineering, and chemical industries was believed to be almost one-half that of these countries.[6] Germany's output of these commodities represented an important share of the world's production, as the following estimates[7] show:

	%
Synthetic Dyes	46
Electrotechnical Articles	20
Chemicals	17
Machinery	15
Steel	14
Pig Iron	13
Paper	13

6. Paton, loc. cit.
7. G. P. Adams, Facts About Germany, Cornell University, 1944, p. 86.

The overwhelming rôle of iron and steel in the German economy would seem to be borne out by the figures published in the Economic Journal, April, 1943, on the percentage of total output attributed to the principal industries in Great Britain, Germany, and the United States.

	Great Britain (1935)	Germany (1936)	United States (1935)	United States (1937)
Iron and Steel	9.9	16.5	11.2	13.6
Engineering, Shipbuilding, Vehicles	21.0	21.4	18.3	21.3
Chemicals	7.4	9.9	9.8	9.5
Textiles	13.3	11.0	8.0	7.2
Clothing	6.9	4.0	7.7	6.3

In evaluating these figures we must bear in mind, however, that in compiling them only enterprises with more than five employees were taken into account; that there may be certain differences in classification; and, most important of all, that the percentages vary greatly with the economic conjuncture in the country, since in times of depression the production of capital goods declines to a greater extent than that of consumption goods.[8] Inasmuch as the business situation was hardly the same in the periods indicated, the figures must be regarded as of relative value only.

It is important to note in this connection that the German output during the last period of war preparations represents a more efficient utilization of existing facilities rather than an increase in production facilities, and that during the war the steel output showed a decline rather than a rise. We should also bear in mind that the total steel production in 1938 was only 21.9 million tons, as against 20.0 in 1927 and 20.3 in 1929, and that although the output

8. In 1925, for instance, 3.7 per cent of all the industrially employed persons of Germany were engaged in iron and steel production, as against only 2.6 per cent in 1933. The corresponding figures for the machine and apparatus industry were 10 per cent and 6.8 per cent; for the electrical industry, 3.4 per cent and 2.8 per cent; mining, 6.2 per cent and 5 per cent; food and luxuries, 10.6 per cent and 15.5 per cent. (Statistisches Jahrbuch, 1935, p. 146.) Iron and steel constituted 8.1 per cent of the total gross production of Germany in 1927, as against 5.9 per cent in 1931; machines, 4.6 per cent in 1929 and 3.8 per cent in 1930; textiles, 9 per cent in 1929 and 11.6 per cent in 1931. In 1929 capital goods represented 58.5 per cent of the gross total; in 1931, only 45.2 per cent. (Vierteljahreshefte zur Konjunkturforschung, 1931, fasc. 3A, p. 36.)

in 1939 was 29.62 million long tons, as against 25.62 in 1938,[9] the increase was more than counterbalanced by the inclusion of Czechoslovakia (with a production volume of 2.55 million tons in 1937) and Poland (1.7 million tons in 1938).

TABLE III

German Output of Coal, Steel and Other Commodities During the War Years[a]

(Millions of Tons)

Year	Pig iron	Steel	Coal	Lignite	Aluminum	Copper
1913	19.3	18.9	....	....	....	....
1914	14.4	14.9	....	....	....	....
1915	11.8	13.2	....	....	....	....
1916	13.3	16.2	....	....	....	....
1917	13.1	16.6	....	....	....	....
1918	11.9	15.0	....	....	....	....
1938	18.6	22.4	186.2	195.3	166.0	69.0
1939	18.8	22.9	200.0	230.0	200.0	66.0
1940	19.0	22.9	200.0	230.0	240.0	45.0
1941	18.5	22.4	190.0	235.0	290.0	....
1942	18.0	22.0	175.0	243.0	300.0	59.0
1943	16.0	20.0	160.0	230.0	300.0	54.4
1944	13.0	18.0	140.0	220.0	250.0	....

a The figures for the First World War are from The Iron Trade Review of the British Iron and Steel Federation, "Statistics on Iron and Steel Industries," 1920–1921, pp. 55–56; those for the Second World War, from the Statistical Supplement to Myrovoye Chozyaistvo i Mirovaya Politika, January, 1945. The figures for 1939–1944 are approximate only; they are based on data in the Statistical Yearbook of the League of Nations, 1941–42; Minerals Yearbook Review, 1940; Metall Bulletin, September 5, 1944; and Deutsche Allgemeine Zeitung, March 9, 1944.

In general, the output of the most important war commodities during the two world wars did not increase in Germany (contrary to the experience of this country), at least not substantially, in comparison with the prewar period. This is evident from the data contained in Table III. It becomes even more obvious from the following figures on the volume of mining and the manufacture of iron and steel, in percentages of 1913, during the First World War.[1]

	1914	1915	1916	1917	1918
Mining	84	78	86	90	83
Iron and Steel	78	68	81	83	53

9. American Iron and Steel Institute, op. cit., pp. 110–111.

Effects of Deindustrialization

To get an approximate idea of the effect a reduction of industrial activity in Germany would have on that country itself, we must bear in mind that in 1925 the national income, amounting to 54 billion marks, was divided among the various economic groups as follows:[2]

Group	Income[3]	Percentage of Gainfully Employed in Total[4]
Agriculture and Forestry.......	ca. 10 billion = 18.5%	30.5
Industry and Handicraft.......	ca. 26 billion = 48.2%	42.1[5]
Commerce and Transportation..	ca. 12 billion = 22.2%	16.2
Public and Private Services....	ca. 6 billion = 11.1%	11.2

It is evident that the group "commerce and transportation" depends largely on industrial activity, and that it would be greatly affected by its decline. The backbone of German industry is mining, metalwork, chemical and textile production. According to the census of 1925, out of a total of 13,238,765 persons engaged in industry and handicraft, 3,468,300, or 26.2 per cent, were employed in metal-manufacturing industries; 847,400, or 6.4 per cent, in

1. Vierteljahreshefte zur Konjunkturforschung, Sonderheft 31, p. 22.

2. Although the situation has changed since then, the figures relating to that year are preferable to those resulting from the census of 1933, taken in the midst of the worst economic depression. There are only incomplete published figures of the 1939 census; they would hardly be characteristic of a peacetime economy. Besides, the situation after this war may be more similar to that in 1925 than that in any subsequent year. However, it must be noted that the extensive process of mechanization which took place in the years 1926–30 brought about a large increase in the productive capacity of German industry. Thus the increase per worker during this period in the various branches was as follows: machines, 25 per cent; metalwares, 25 per cent; mining, 18 per cent; heavy iron industry, 15 per cent; chemical industry, 13 per cent. Cf. Vierteljahreshefte zur Konjunkturforschung, 1936, fasc. 2 A, p. 117.

3. Absolute figures taken from Vierteljahreshefte zur Statistik des Deutschen Reichs, 1927, fasc. 4, p. 20, and Vierteljahreshefte zur Konjunkturforschung, 1928, fasc. 1A, p. 40.

4. Statistisches Jahrbuch, 1936, p. 17.

5. The contention that three-fourths of Germany's population is directly tied up with industry, and that 20 million workers would be affected by deindustrialization (Dorothy Thompson, The American Mercury, June, 1943) seems to be based on a misprint. The percentage of industrially employed persons in 1933 was lower than in 1925, viz., 40.4 per cent, while the proportion of Germans dependent for their living on industry and handicraft was 41.3 per cent in 1925 (Wirtschaft und Statistik, 1927, p. 571), and 41 per cent (in the "old Reich") in 1939 (ibid., 1940, p. 333). The total number of persons in the "old Reich" engaged in industry and handicraft in 1939 was 14,418,200 (ibid., 1941, p. 349).

mining; 1,206,000, or 9.1 per cent, in textile production; and 352,100 or 2.5 per cent, in the chemical industry. The rest were distributed as follows: the electrotechnical industry, 448,000; woodworking, about 970,000; production of stones and earths, about 700,000; wearing apparel, 1,400,000; foodstuffs and luxuries, about 1,400,000; construction, about 1,500,000, etc.[6]

The importance of any industry to the total economy obviously can not be measured solely by the number of persons engaged in it. The mechanical power employed and, especially, the output and the amount of capital invested are also of great moment. We therefore give in Table IV pertinent data for selected industries.

It is apparent from these figures that in terms of manpower the chemical industry is not very important; besides, it includes certain branches (soap and related industries) which are harmless. The mining industry would not have to suffer under any system of curtailed heavy industry and chemical production, since coal will be needed all over Europe and German iron-ore production was not very extensive,[7] except when the Nazis embarked on a policy of neglecting the profit factor.[8] In considering the production and manufacturing of metals and their products we must remember that only the production of iron and steel was in the hands of "big business,"[9] the manufacture of iron and steel wares being to a

6. The first four figures are from Wirtschaft und Statistik, 1927, p. 572, and the rest from Statistik des Deutschen Reichs, Bd. 466, pp. 187 and 197. The figures in the two sources are not wholly identical, since those in the first are based on a census of "working" units, and those in the second on "local" units, the difference lying in the computation of auxiliary and home workers.

The corresponding figures for 1939 (within the new boundaries of the Reich) were: 4,897,000 persons, or 29.7 per cent of the total, in metal-manufacturing industries; 796,200, or 4.9 per cent, in mining; 1,395,500, or 8.5 per cent, in textile production; 532,700, or 3.2 per cent, in the chemical industry; 692,100, or 4.2 per cent, in the electro-technical industry; 1,561,700, or 9.5 per cent, in the wearing apparel industry; 2,732,000, or 16.6 per cent, in construction. (Wirtschaft und Statistik, 1941, pp. 352ff.)

7. The percentages of native ores consumed by German blast furnaces (without the Saar) were:

1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
31.8	31.1	30.3	28.4	26.1	25.8	29.3	26.7	24.5	27.5	29.6

(Vierteljahreshefte zur Statistik des Deutschen Reichs, 1926, fasc. I, p. 23; 1926, fasc. IV, p. 5; 1927, fasc. IV, p. 4; 1928, fasc. IV, p. 4; 1929, fasc. IV, p. 4; 1930, fasc. IV, p. 5; 1931, fasc. IV, p. 6; 1932, fasc. IV, p. 6; 1935, fasc. IV, p. 7; Wirtschaft und Statistik, Sonderheft 13, p. 50.)

8. Vierteljahreshefte zur Statistik des Deutschen Reichs, 1934, Fasc. IV, pp. 39–40.

9. According to Iron Age, August 9, 1945, 80 per cent of Germany's total steel production was concentrated in nine large integrated trusts or

great extent the domain of small business[1] and handicraft.[2] The position of the machine industry was quite different. In 1928, out of 1,240,501 persons employed in this branch of the national economy, 997,754 (over 80 per cent) were working for large concerns and only 7.6 per cent for small concerns, 40.1 per cent of the total output being produced by firms with 51–500, and about 54 per cent by concerns with over 500 employees.[3]

Since artisans[4] and small concerns hardly constitute a war threat, these figures are important as showing to what extent elimination of the basic war industries could be carried out, without seriously impairing employment possibilities, and how far decentralization of certain basic industries could be achieved. They also show that, although the numbers of persons directly employed in these "critical" industries is large, their percentage in the total working population is not so overwhelming as may have appeared. In 1925 the total figure was 32,009,500; in 1933, 32,296,100.[5] The persons engaged in metal-manufacturing, engineering and

combines. In 1925, over 90 per cent of all persons engaged in the production or iron and other metals were employed in large concerns, i.e. those employing over 51 persons (Statistik des Deutschen Reichs, Bd. 418). The figure for 1933 was 93.8 per cent (Bd. 466, p. 14); 81.8 per cent were employed in concerns with over 200 workers, and 55.4 per cent in those with over 1,000 employees.

About 80 per cent of the personnel of the chemical industry was employed in large concerns.

1. In 1925, out of 863,140 persons engaged in manufacturing iron and metal wares, not more than 349,929 persons — a little over 40 per cent — were employed in large concerns (Wirtschaft und Statistik, Sonderheft 10, p. 92; Ausschuss, Vol. 11, pp. 66–67), although 77.6 per cent of the output was manufactured in concerns with over 80 employees.

2. In 1925, there were over 370,000 artisans in this branch. In 1933, out of a total of 587,000 persons engaged in manufacturing iron, steel and metal wares, around 275,000, or about 47 per cent, were blacksmiths, locksmiths, and tinsmiths. (Statistik des Deutschen Reichs, Bd. 466, p. 20.) According to the 1939 census, of the 39.8 million working persons, 16.5 million were engaged in industry and handicraft and 5.2 millions in handicraft alone. (Wirtschaft und Statistik, 1942, p. 99.) However, this figure includes large handicraft enterprises with up to 200 employees (mainly in the building trade and metal manufacturing). The number of persons employed in handicraft enterprises with over 50 persons represented only 12.3 per cent of the total. (Wirtschaft und Statistik, 1942, pp.362ff.)

3. Statistik des Deutschen Reichs, Bd. 418, and Wirtschaft und Statistik, Sonderheft 10, p. 78.

4. In order to appreciate the rôle handicraft plays in Germany, we may note that the total turnover of German industry in 1935 was 55.2 billion marks, as against 18.0 billions for handicraft. (Wirtschaft und Statistik, 1941, p. 123.)

5. Statistisches Jahrbuch, 1933, p. 34.*

TABLE IV

Relative Size of German Industrial Groups

(Values in Millions of Marks)

Industrial Group	Mechanical Power Per Cent of Total	Annual Production			Valuation of Group	
		1925	1928	1933	Gross	Net
Production of Iron and Steel	14.3	1,929[b]	2,220[b]	....	4,640	2,193
Production of Iron and Metal Wares	2.5	1,876[c]	2,907[c]	1,537	2,688	1,570
Production of Machines, Apparatus, and Vehicles	6.6	4,000[d]	3,700[d]	1,483	6,046	3,035
Production of Chemicals	6.2	2,400	....	....	4,915	2,890
Production of Electro-Technical Products	2.0	2,000	....	....	2,474	1,209[f]
Production of Textiles	6.0	5,600	4,800	-....	6,656	3,535
Mining	19.4	1,903[e]	2,200[e]	1,169[e]	5,411	2,915
Production of Food and Luxuries	10.5	4,000	....	....	9,470	5,024
Stones and Earths	5.0	....	....	....	2,392	1,430
Construction	....	5,000	....	....	2,811	992

a The figures are from Statistik des Deutschen Reichs, Bd. 365, 392, 418, 462 and 468; Wirtschaft und Statistik, Sonderheft 10; Statistisches Jahrbuch, 1933; Statistisches Jahrbuch fuer die Eisen- und Stahlindustrie, 1929 and 1932; Ausschuss zur Untersuchung der Erzeugungs- und Absatzbedingungen der deutschen Wirtschaft. Verhandlungen und Berichte des Unterausschusses fuer allgemeine Wirtschaftsstruktur (I Untersuchungsausschuss), 5. Arbeitsgruppe (Aussenhandel), 11 Band, Die deutsche Eisen- und Stahlindustrie (hereafter cited as Ausschuss), Berlin, 1930. The nomenclature is not the same in all sources; all figures are approximate.

Die deutsche Industrie, prepared by the Reichsamt für Wirtschaftliche Planung, Berlin, 1939, contains data on the situation of German industry in 1936.

The value of industrial plants is as of the tax period 1928–30. The total values of German industry and handicraft were 60,943 and 31,919 million marks, respectively.

b Blast furnaces and steel production. Foundries, 912 and 1,031 million marks, respectively.

c Iron and steel wares. Rolling mills — 1,876, 2,100. and 886 million marks, respectively.

d Without vehicles. Value of motor vehicles 771, 1.098, and 480 million marks, respectively.

e Coal alone.

f Inclusive of the fine mechanical and optical industries.

the chemical industry would therefore represent some 12 per cent of this total. But since a certain part of those engaged in the manufacturing of iron and metal wares and chemicals and all artisans would in no way be affected, the actual percentage would probably be about one-half of this figure. We must also bear in mind that, unless employment in light industries not capable of being converted into war industries be found, the elimination of these important industries would affect other branches of industry[6] and commerce[7] (through reduction of exports and otherwise) and to a lesser extent transportation.[8] Furthermore, this change in production must affect the export trade, since iron and steel wares, machines and apparatus, electrical equipment, metal wares and chemicals played an important rôle in this trade. Their growing importance in percentages of total exports is revealed by the figures given in Table V.

In appraising these export figures we should not lose sight of the fact that the various articles produce different export surpluses as a result of the necessary imports of raw materials and the relation of exports to imports in the same category. For instance, the textile and wearing apparel industry produced essentially a passive balance, because of the imports of raw materials, yarns and fabrics;[9] on the other hand, coal, chemicals, and metal products caused

6. Of 44 billion marks worth of finished goods produced by German industries in 1930, 18 billion marks (41.4 per cent) were absorbed by industry (one half in investments, the other for consumption), with agriculture consuming 5.1 to 5.5 billion marks worth of such goods. (Vierteljahreshefte zur Konjunkturforschung, 1932, fasc. 4A, p. 200 and 1933, fasc. 2A, p. 104.)

7. The German Institute of Business Research estimates that 230,000 persons were engaged in export branches of commerce and transport. (Vierteljahreshefte zur Konjunkturforschung, Sonderheft 41, pp. 56–57.)

8. Transportation (at least on railroads and waterways) would hardly be affected, since the bulk of the freight consists of other articles than the critical ones. This is evident from the following figures showing the percentage of this transport attributed to certain commodities:

	1931	1932	1933	1934	1935
Coal, coke, etc.	43.3	44.7	42.8	39.6	39.9
Iron ores	3.0	2.0	2.3	3.3	4.8
Iron wares	4.2	3.7	4.1	4.7	4.4
Machines	——	0.4	0.4	0.4	0.4

(Statistisches Jahrbuch fuer die Eisen- und Stahlindustrie, 1936, p. 43; 1937, p. 43.)

9. The passive balance amounted to about 1,400 million marks in 1925, 102 millions in 1932 and over 450 millions in 1935. (The export and import figures are from the Statistisches Jahrbuch of the years concerned.)

TABLE V

Export of Certain Goods in Percentages of Total Exports[a]

Year	(1) Iron and Steel Wares	(2) Machines and Apparatus	(3) Electrical Equipment	(4) Chemicals	(5) Metal Wares	(6) Fine Mechanical and Musical Instruments	Total of 1–6	(7) Textiles and Wearing Apparel	(8) Coal
1925.......	14.1	6.7	3.6	7.7	3.7	2.8	38.6	18.3	8.0
1926.......	13.6	6.5	3.5	7.3	3.5	2.1	36.5	15.7	11.2
1927.......	13.5	7.1	3.7	7.8	3.5	2.3	37.9	17.2	8.2
1928.......	13.6	7.7	4.1	7.5	3.6	2.3	38.8	16.8	6.2
1929.......	14.5	8.5	4.3	7.1	3.8	2.2	40.4	15.6	6.4
1930.......	14.4	9.7	4.8	7.2	3.9	2.1	42.1	14.5	6.3
1931.......	14.8	9.9	5.1	7.9	3.7	1.9	43.3	14.3	6.3
1932.......	14.6	10.9	5.6	9.9	4.0	2.0	47.0	12.9	6.3
1933.......	14.5	9.0	4.5	11.5	4.2	2.1	45.8	13.1	6.5
1934.......	15.4	8.6	4.8	12.9	4.5	2.2	48.4	11.7	7.8
1935.......	17.1	8.5	4.8	12.7	4.5	2.4	50.0	10.1	8.6

[a] The table is computed from the Statistisches Jahrbuch, 1926–36.

export surpluses, as shown in Table VI. No doubt, the decrease in exports and export surpluses caused by a decline in industrial

TABLE VI

EXPORT SURPLUSES OF SELECTED INDUSTRIAL GROUPS[a]

(In Millions of Marks)

Year	Iron Wares	Machines	Vehicles	Electro-technical Articles	Coal[b]	Chemicals[c]
1925.....	....	....	....	....	....	727
1926.....	....	....	....	....	....	885
1927.....	....	....	....	....	....	905
1928.....	....	....	....	....	....	1,087
1929.....	....	....	....	....	....	1,121
1930.....	....	....	....	....	....	915
1931.....	1,268.7	994.3	217.7	451.6	460.5	764
1932.....	740	672.8	81.8	298.3	269.3	564
1933.....	584.3	473.1	80.2	195.3	229.5	587
1934.....	463.2	377.8	66.9	173.2	227.2	508
1935.....	642.7	394.7	124.2	186.8	281.8	....
1936.....	780.9	526.2	171.7	217.6	304.0	....

a The figures for the first five articles are from Statistisches Jahrbuch fuer die Eisen- und Stahlindustrie, 1937, p. 37; for the sixth product, from W. Haeussler, Der Export der deutschen chemischen Industrie nach dem Kriege, Koeln, 1938, pp. 113 and 131.

b In the most unfavorable year (1925) imports of coal amounted to 23 per cent of the exports; they usually were less than 20 per cent.

c Their imports averaged up to about 14 per cent of the exports during 1929–35, according to the official statistics. However, Haeussler, op. cit., puts them at about 22 per cent.

activity would be very serious, and could not be remedied by an increase in the export of other items, in the first place coal, alone.[1] Extensive cuts in imports, especially of luxury articles and farm

1. The iron and steel and the chemical industries use up great amounts of the coal output. The amounts to be freed may be judged by the following figures on total production and the percentage consumed by these industries:

	1930	1931	1932	1933
Coal Production (1,000 tons)	142,698	118,640	104,740	109,692
Lignite Production	146,010	133,310	122,646	126,794
Consumption by Iron and Steel Industries	19.1%	15.2%	12.4%	13.9%
Consumption by the Chemical Industry	5.1%	4.6%	4.8%	5.1%

(Vierteljahreshefte zur Statistik des Deutschen Reichs, 1931, fasc. IV, p. 5; 1932, fasc. IV, p. 41, and 1933, fasc. IV, p. 39. Statistisches Jahrbuch, 1936, p. 139.)

products,[2] would be inevitable. This could be achieved by further strengthening agricultural production. This would involve, first of all, a splitting up of the larger estates.[3] The total area of all holdings over 50 hectares (excluding the large forest estates) in 1933 was about 11,870,000 hectares,[4] and if this area were divided into small farms, additional employment for several million persons would be created. Second, the tendency to increase forest areas at the expense of farm land[5] must be reversed. Third, a shift from animal to vegetable products, requiring smaller areas per unit of nutrition, might be necessary.[6]

The effect of the economic disarmament of Germany on the countries with which she trades may be judged from the data on exports and imports already given.[7] To complete these figures we

2. The two groups constituted the following percentages of the value of total imports:

	1927	1928	1929	1930	1931	1932	1933	1934
Selected Luxury Articles	7.7	9.4	10.1	11.7	13.6	14.2	13.9	13.2
Selected Farm Products	18.2	16.4	14.4	12.8	11.1	13.9	9.0	6.8

(Figures for the various articles in Statistisches Jahrbuch,1928–35.)

3. Contrary to popular belief, such estates are predominant not only in East Prussia, but also in Mecklenburg, Pomerania and even in Westphalia, Bavaria, Hannover, and other provinces (see Statistik des Deutschen Reichs, Vol. 459, fasc. 1, p. 41). The splitting up of large estates has already started in the Russian zone.

4. Statistik des Deutschen Reichs, Vol. 461, fasc. 1; Vol. 459, fasc. 1, and Vol. 460. Figures for 1939 in Wirtschaft und Statistik, 1940, No. 13.

5. In 1938 the area of tilled land diminished by 43,000 ha, whereas the afforested areas increased by 100,000 ha. (Wirtschaft und Statistik, 1938, p. 762.)

Karl Brandt ("The Reconstruction of European Agriculture," Foreign Affairs, January, 1945) contends that modern agriculture depends to such an extent on the output of industry that if more people are forced back to the farm (in Germany) the capacity of agriculture to feed people will not increase but decline. This contention can hardly be maintained in this general form, since farm production in Denmark, for instance, was undoubtedly on a higher level than in Germany, despite its smaller industrial capacity in relative figures. It may be recalled that agricultural machines represented in 1928 only 5.5 per cent of the total German production of machines and apparatus. (Vierteljahreshefte zur Konjunkturforschung, Sonderheft 41, pp. 56–57.)

6. According to German estimates (Das Reich, August 23, 1942, "Der Nahrungsraum"), Germany could produce food for 3.5 million additional persons, if the use of animal products were reduced by 10 kg. per capita and replaced by 12.5 kg. of vegetable products.

7. To give an idea of the importance of certain products for world markets, we may cite that in 1934 Germany's exports in chemicals represented 27–28 per cent of the world's total, as against 13–14 per cent from England, 13 per cent from the United States and 11.5 per cent from France (Die Chemische Industrie, March, 1935). In 1928 Germany exported 29.7 per cent of

give in Table VII the percentages Germany's exports constituted of the imports of some of her neighbors.

TABLE VII

PERCENTAGES OF TOTAL IMPORTS COMING FROM GERMANY[a]

	1931	1932	1933	1934	1935	1936	1937
Belgium-Luxembourg.......	17.0	16.9	16.6	14.6	12.5	11.6	11.4
Czechoslovakia............	28.1	26.3	20.7	19.4	17.2	17.5	15.5
Denmark.................	33.5	25.9	22.7	21.2	21.9	25.3	23.9
France....................	14.6	12.1	10.7	9.6	8.3	7.0	7.7
Great Britain.............	7.4	4.3	4.4	4.2	4.2	4.0	....
Holland..................	32.7	30.8	31.3	28.6	25.6	27.3	21.1
Italy.....................	13.1	13.3	14.6	15.8	18.3	26.8	18.6
Norway..................	23.0	21.3	21.0	19.1	16.9	17.6	16.9
Poland-Danzig............	24.5	20.1	17.6	13.6	14.4	14.2	14.5
Switzerland...............	29.7	29.1	29.6	27.4	26.8	24.8	22.3
Sweden...................	33.1	29.3	29.2	26.1	24.2	21.9	20.3

a Statistisches Jahrbuch, 1933, p. 100*; 1935, 113*; 1938, p. 127*. Cf. the figures in International Trade Statistics, 1934, 1935, 1936 and Hickmann-Ricker, Statistisches Handbuch des deutschen und internationalen Aussenhandels, Berlin, 1936.

If the largest part of these imports were to disappear, the articles would have to come in part out of newly established domestic industries or from Great Britain and the United States. In view of the increased industrial potential and the great development of the heavy iron and allied industries, the chemical, optical and electro-technical industries in these countries during recent years, there would hardly be a shortage of the main articles of German export anywhere. More difficult might be the problem of a substitute for the German import market in certain products, for example, dairy products. But German imports of these commodities have been decreasing anyway,[8] since Germany has striven to achieve autarchy in her food supply.[9] Imports of

the world's exports in tools; the United States, 31.2 per cent; Great Britian, 27.3 per cent. (Ausschuss, 5. Arbeitsgruppe, Vol. I, p. 390.)

8. These imports represented (in million marks):

1928	1931	1932	1933	1934	1935	1936	1937
553.2	284.7	149.2	119.2	106.8	116.0	128.5	156.7

(Statistisches Jahrbuch, 1929, 1932–38.)

9. If the average farm production of the years 1927–28 and 1928–29 was equal to 100, the production in 1933–34 was 111; in 1937–38, 119; in 1938–39, 120. (Vierteljahreshefte zur Wirtschaftsforschung, 1940–41, fasc. 1, "Die Ernaehrungswirtschaft Deutschlands im Weltkriege und heute," by Hans von der Decken und Hans Liebe, p. 15.)

foodstuffs declined from 1928 to 1936 in millions of marks in terms of prices current in 1928, i.e. by volume, as follows:[1]

	1928	1930	1932	1934	1936
Animal Food	1,494	1,489	1,180	856	887
Plant Food	3,380	2,701	2,420	2,107	1,494

As indicated above, an increase in industrial production in countries other than Germany would enlarge their domestic markets for agricultural products. It must furthermore be considered that the absorption of large areas in the East by the Soviet Union, growing Russian influence in the Balkans and Central Europe, and payment of reparations by Rumania, Bulgaria, Hungary and Finland to Russia will divert a part of their agricultural exports from the West to the East and, in later years, influence in the same way their industrial imports. The northern countries (Netherlands[2] and Denmark) were, even before the war, more and more obliged to look to Great Britain as an outlet for their dairy and animal products, and are not likely to experience greater difficulties after the war in their sale of these products to Great Britain or elsewhere.

IV. Conclusions

The principal difficulties in economic reconstruction, in addition to those depicted above, will arise from political unrest, which is likely to prevail in Europe for a protracted period, unless the victorious nations create adequate machinery for the ample supply of food and other urgently needed materials for the devastated areas, and help them in their political and economic difficulties, with due regard to the actual needs, in accordance with a generous plan.

The period between the two World Wars has generally been regarded as a time of political and economic instability, both within the various countries and internationally. Yet nothing else could have been expected. A sound economic structure cannot prevail when large areas, owing to the uncertainty of their political status, are almost totally excluded from the benfits of international financial and commercial help needed for the expansion of their

1. Wirtschaft und Statistik, 1938, Sonderbeilage 9, p. 10.
2. The amounts involved may not be very high. The average export surplus of agricultural products in the years 1937–39 was about 100 million fls. or 55 million dollars. (Berliner Boersen-Zeitung, July 1, 1944.)

economy; when a multitude of international financial problems (war debts, reparations) remain unsettled for decades; when the large economic units close their borders to imports by constantly raising their tariffs; when economically or financially weaker nations are left alone to struggle with their monetary or trade difficulties. World War I, by its duration and magnitude, had caused dislocation of production and consumption, immense destruction of property, changes in the financial holdings of the various nations and in their productive capacities, financial burdens in the form of vast debts to foreign nations and budgetary difficulties — in short, so many economic wounds and upheavals in every part of the world that no automatic return to stable economic relations within the countries and among them could have been expected.[3] Other consequences of that war may have been even more profound: economic units developed in the course of centuries succumbed to revolution or partition, and in their place emerged a number of new states with new boundaries, often composed of parts formerly belonging to states in different stages of economic development. Enormous investments, the fruit of decades, if not centuries, of work and toil, were lost. But no international coöperation in the financial and economic field of any importance was initiated. Whatever foreign borrowing took place was of a rather spontaneous character, without regard to the actual needs of the nations. Nobody tried to help the new units in knitting their various parts together, to combine them into broader custom unions, to combat the autarchy trends, to assist them in the matter of exports and imports, or (with few exceptions) to aid them in overcoming their budgetary difficulties or inflationary movements. In a word, no effort was made to solve the problems of the economic consequences of the war on an international scale.

This war is bound to bring even greater disturbances in every field described above, especially as the old wounds have not yet healed. Some governments have followed very attentively the new trends and have prepared plans for the economic reconstruction of their homelands.[4] Some plans are already taking shape, such

3. For a detailed review of the consequences of that war, see James T. Shotwell, What Germany Forgot, New York, 1940, especially Chapter IX, "Tracing the Consequences."

4. Cf. Lewis L. Lorwin, Post-War Plans of the United Nations, New York, 1944; The Central and Eastern European Planning Board (Czechoslovakia, Greece, Yugoslavia, Poland), Documents and Reports No. 2: Plan

as the nationalization of coal mines and certain large industrial enterprises, the proposed division of all economic activity into nationalized, controlled, and private, and the establishment of a state monopoly of foreign commerce by the "Impex,"[5] in France, and the large-scale nationalization proposed in Czechoslovakia,[6] Yugoslavia and Poland. In some cases nationalization will be the result of pressure on the part of certain economic groups; in others, of the behavior of big businessmen suspected of dealings with the enemy or of German ownership of their enterprises,[7] or of a general trend in consequence either of the impoverishment of the nation and its needs for reconstruction,[8] or of a political evolution. There can be little doubt that, if these plans involve a larger part of the national economy, they may tend to delay reconstruction in certain respects, rather than to further it, unless coupled with other measures of national importance.

Such far-reaching changes in internal economy may well affect international trade and financial coöperation among the countries. International plans designed to remedy the damage done and reverse the dislocation achieved will therefore be of even greater urgency than would have been the case otherwise. The plans for the International Bank for Reconstruction, the Monetary Fund of the United Nations, and the Economic Council are today only proposals, as they were months ago, when the plans were

for Research for Post-War Reconstruction of Central and Eastern Europe, prepared by the Polish National Study Group, New York, 1942.

5. Pour la Victoire, March 3, 1945.

6. Czechoslovakia in Post-War Europe, Czechoslovak Ministry of Foreign Affairs, London, 1942.

7. This is supposed to be the case in Czechoslovakia. According to a speech made on May 20, 1945, by the Czechoslovak Minister for Industry, factories and mines formerly owned by the Germans, Hungarians, traitors and collaborationists are already being put under state administration. Sixty to seventy per cent of the nation's industry will thus be under a national administration, with heavy and key industries and the entire banking system under a unified state direction. (News Flashes from Czechoslovakia, June 4, 1945.) In the meantime decrees expropriating the properties of Germans, Hungarians and traitors have been issued.

8. Statement by Robert Lacoste, French Minister of Production. (New York Times, February 11, 1945.)

Marshal Tito is reported to have stated that, because of the great destruction of the Yugoslav economic system, planned intervention in the organization and conduct of economic reconstruction, as well as in the regulation of the entire economic life, is the only way in which all available resources of the country can be organized and exploited. (New York Times, March 11, 1945.)

framed, and it will presumably take years before they are implemented. The only working international organization is the UNRRA, but none of the problems involved can be solved to any degree by relief, even in its broadest sense. The need for more far-reaching international coöperation is already urgent, but the actual help is very slow and small. The losses described above call for enormous financial help.[9] Neither the Export-Import Bank with its capital of over three billion dollars, nor private lending, which will be slow and probably scarce, could remedy the situation. In all probability only concerted large-scale assistance through the governments of those nations which have suffered no destruction could provide anything like adequate relief.

NEHEMIAH ROBINSON.

NEW YORK CITY

9. J. Tereshtenko ("American Soviet Trade," Soviet Russia Today, February, 1945) estimates the amount of the world's capital need for reconstruction and continuance of economic activity at 150 to 200 billion dollars.