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PART VII

Measuring German National Income
in Wartime

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This paper attempts to summarize the discussion in the German literature of the last decade, partly on problems peculiar to income measurement in wartime, partly on more general issues. As it is restricted to national income proper, no attention is paid to broader *tableaux économiques* describing inter-industrial relationships by means of a flow-chart, though one example deserves mention.¹ In 1935 the *Statistisches Reichsamt* engaged in what it called 'laboratory tests', to combine various 'partial national balance sheets'—the balance of payments, estimates of agricultural income and expenditures, and similar comprehensive measures—with sales tax data, corporate balance sheets and income accounts, and similar information into a national input-output chart.² No complete synthesis was achieved, owing to gaps in the material and methodological differences in the make-up of the parts. The project has probably been discontinued since the outbreak of the war.

Annual national income data through 1938 have been published in the *Statistisches Jahrbuch* and *Wirtschaft und Statistik*.³ Otto Donner has covered 1938 through 1941 but offers only totals, apparently following by and large traditional methods of calculation, although in the overlapping year, 1938, the two figures differ by as much as RM2 billion.⁴ For 1942 and later the only figures from German sources at hand are from newspapers,⁵ an analysis of the German national income running through 1942 is presented in the *Review of Economic Studies*.⁶ The official methodology, pre-Nazi in origin yet retained under Nazi rule, is explained in *Einzel-schriften zur Statistik des Deutschen Reichs*, Bd. 24 (Berlin, 1932).

¹ Ferdinand Grünig, *Der Wirtschaftskreislauf* (Munich, 1933). Grünig later cooperated with the leader of the Reich Economic Chamber, Albert Pietsch, to develop the scheme into a tool for broad economic planning.

² See Robert von Keller, *Volkswirtschaftliche Bilanzen in Die Statistik in Deutschland nach ihrem heutigen Stand* (Ehrengabe für Professor Friedrich Zahn, Berlin, 1940), p. 793.

³ The net value of mining and manufacturing output in 1936 is given in *Die Deutsche Industrie, Schriftenreihe des Reichsamts für Wehrwirtschaftliche Planung*; Heft 1 (Berlin, 1939).

⁴ *Grenzen der Staatsverschuldung, Weltwirtschaftliches Archiv*, Sept. 1942, Heft 2, pp. 201-4. The gap can be explained by differences in the geographical coverage after adjustment of the 'omitted tax' item (see note 24).

⁵ E.g., *Essener Nationalzeitung*, Feb. 21, 1945. Net income, 1943: RM130 billion; 1944: RM135-140 billion.

⁶ W. H. Singer, *The Sources of War Finance in the German War Economy, Review of Economic Studies*, 1942-43, X, 2, pp. 113-4.

It is difficult to discover anything like a typical pre-Nazi German concept of national income. Wherever value judgments enter, unanimity is as frequent or infrequent as in other countries, and the official solution scarcely reflects a special German *Weltanschauung*. There were minor differences on such points as the controversy, long since settled, concerning the treatment of professional services: whether income from such sources is actually part of national income or is 'derived' income.⁷ A school of nihilists questions whether a national income concept has any meaning; they doubt the justification of singling out the final consumer for preferred treatment,⁸ or the possibility of combining individual product values into meaningful global figures, since the components are price, i.e., exchange, relations and therefore inapplicable to a magnitude not subject to an exchange.⁹ The 'entity' theorists, of whom the obscure writings of Gottl-Ottlilienfeld are representative, viewed national income and national wealth as primary, the genuine entity (*echtes Ganzes*), and individual wealth and income as artificial parts of it, meaningful only in relation to and within the framework of the global concept.¹⁰ But on the whole, criticism of national income concepts and estimates concern technical details rather than basic presuppositions.

It is even harder to find a typical Nazi concept of national income.¹¹ After Hitler's advent, methods of estimating national income did not change, except technically. Even the same officials were still in charge of income statistics. Recent textbooks have no more than conventional references to the subject and reveal no traces of Nazi taint. The most representative statement on the present status of German income statistics puts

⁷ For the latter attitude see Fr. von Fellner, *Das Volkseinkommen Oesterreichs und Ungarns* (Mainz, 1917); or F. von Philippovich, *Grundriss der Politischen Oekonomie* (Tübingen, 1922), Bd. 1, p. 375.

⁸ Ernst Schuster, *Das Volkseinkommen* (Tübingen, 1929).

⁹ Alfred Ammon, *Die Begriffe 'Volkseinkommen' und 'Volksvermögen' und ihre Bedeutung für die Volkswirtschaftslehre (Schriften des Vereins für Sozialpolitik, Bd. 173, I; Munich, Leipzig, 1926)*, p. 25.

¹⁰ Fr. von Gottl-Ottlilienfeld, *Volkseinkommen und Volksvermögen* (Jena, 1928), p. 25.

¹¹ Rhetoric, such as Hitler's "People talk of woods, meadows, fields, mines, buildings, and believe that these are our national wealth. The national wealth of a people is its great men" (quoted by Konrad Heiden, *Der Führer*, Houghton Mifflin, 1944, p. 360), has had no effect on German income methodology.

the case in the same terms as the *Einzelchriften* without shift in emphasis or changes except in technicalities.¹²

Inasmuch as German national income is calculated as the sum of incomes going to ultimate recipients (including corporate profits and employers' social insurance contributions), market place valuations are accepted. Government contributions, representing a net addition to national income, are measured by expenditures. By and large the valuation rules determining taxable income are in harmony with those of other countries.

Owing to the prevalence of cartels and of state interference in the play of the free market, the valuation of national income never fully reflected the free choice of the consumer. But it did reflect the judgment of the market within the social framework.¹³ National income for 1937 and since has been computed under the conditions established by the 'price stop decree' of November 1936 and subsequent legislation. The complex control system consists fundamentally of price ceilings with October 18, 1936 as the reference date, adjustments in certain hardship cases, and enforced price reductions when the profit situation seemed to justify them. To the extent that prices are kept at the ceiling level there is no problem of deflation.

National income in wartime was thus measured by a system of prices that roughly corresponded to prewar conditions. In some respects prices were brought closer to the competitive ideal through rules on cartel pricing, which shifted the basis on which prices were determined from high cost to medium and later to low cost concerns, through the removal of some minor market imperfections, and through more and more strict rules concerning the price of military goods. But no attempt was made to estimate national income from a set of values other than permitted market prices. 'Social costs' were not

¹² Paul Jostock, *Volkseinkommen und Volksvermögen in Die Statistik in Deutschland*, pp. 766 ff.

¹³ There are various estimates of consumers' extortion by monopolies: in *Magazin der Wirtschaft*, 7 Jahrg., p. 944; 5 Jahrg., p. 1836; *Deutscher Volkswirt*, 6 Jahrg., p. 217; in the official volume, *Die Deutsche Eisenerzeugende Industrie (Ausschuss zur Untersuchung der Erzeugungsbedingungen)*, etc., Berlin, 1930), p. 118. But no over-all revaluation of national income on the basis of imputed competitive prices has been undertaken.

acknowledged and the value of armament production recorded does not reflect Nazi views on the overwhelming importance of military might.¹⁴

In technical details modifications have been continuous. In the *Einzelchriften* estimates were preponderantly based on income tax statistics. At present, entrepreneurial income from industry and trade is almost the only item based on tax statistics.¹⁵ Tighter controls have reduced the amount allowed for adjustments for undeclared taxable incomes.¹⁶ Rearmament and war conditions necessitated more fundamental modifications because (1) the old controversy over the role of public expenditures in national income was revived, (2) territorial changes and the new relation with the outside world had to be acknowledged, and (3) the preponderance of armaments and the phenomenon of disinvestments taken care of.

1 PUBLIC EXPENDITURES

The outstanding difference between the measurement of national income in Germany and in most other countries in peacetime lies in the treatment of the government sector of the economy. Owing to the recent expansion of public expenditures an old discussion has been resumed. The *Reichsamt* is not too confident of its own solution¹⁷ which, according to its spokesman, Jostock, "reaches into metaphysical grounds".¹⁸ The method consists, briefly, in dividing both public revenues and expenditures into two parts. In the *Einzelchriften* the major taxes are classified as direct or indirect ('cost' taxes), the criterion being whether the income tax law permits deduction of that specific tax from profits. Unlisted taxes can be classified readily.

¹⁴ The *Reichsamt* deflates the income series by the cost of living index (basis 1913-14). Even if the composition of the index were beyond doubt for its proper purpose, its application to a total containing other than cost of living items is inadmissible. During recent years changes in methods of pricing armaments have probably created a new scissors movement between the cost of living and prices of military goods which further reduces the usefulness of the index. The series have not been adjusted for the small changes in the cost of living index since 1938.

¹⁵ Paul Jostock, *Die Statistik in Deutschland*, loc. cit., p. 768.

¹⁶ Paul Jostock, *Über den Umfang der Besteuerung des entgehenden Einkommens*, *Weltwirtschaftliches Archiv*, 1943, Heft 1, p. 46.

¹⁷ *Einzelchriften*, p. 15.

¹⁸ Quoted by Otto Pfeleiderer, *Das Erkenntnisziel der Einkommensstatistik*, *Bankarchiv*, 1942, p. 277.

Expenditures are divided into those which serve ultimate consumers directly (consumption services) and those which do not (cost services). As no inherent relation is assumed between government services to ultimate consumers and taxes paid by them, or between government expenditures for purposes of production and taxes paid by business, neither expenditure item could be substituted for the corresponding cost item. *Volkseinkommen* is defined rather as net income (in the conventional terminology) minus direct taxes plus public contributions to consumption.

Because of the technique of computing taxable income, cost taxes do not appear in net income. Critics have argued unconvincingly that they nevertheless are included. If they really are not in the income of the producer—there is agreement on this point—they “must” be in consumers’ income because “they must appear somewhere”;¹⁹ like all costs of production they are ‘recompensated’ out of consumers’ income. Actually either profits or wages, depending upon their incidence, are correspondingly smaller, and they ‘appear’ nowhere in net income. For the point at issue, the differentiation between producers’ and consumers’ income is meaningless. The two taken together constitute total net income, which is a total of net returns from the use of capital and gross returns from the use of labor, not of entrepreneurial cost items. The inclusion of ‘cost’ taxes in national income is not meaningless and leads to a concept of income at market prices. But it is not *Volkseinkommen* as defined by the *Reichsamt*.

On the expenditure side the technique of the *Reichsamt* is more open to criticism. The *Reichsamt* includes in national income only government services for final consumption. Other expenditures (net of transfer payments) consist of two parts: (1) obvious services for purposes of production (cost expenditures) and “thus contained in the value of the final product”; (2) services “in the interest of state purposes”. The latter constitute a special category and are left out in income calculations “in order not to burden the quantitative results of the investigation with controversial items”.²⁰ Thus the most typical govern-

¹⁹ Otto Pfeleiderer, *Das Deutsche Volkseinkommen*, *Finanzarchiv*, 1932, p. 29; *Das Erkenntnisziel der Volkseinkommensstatistik*, *Bankarchiv*, 1942, p. 275.

²⁰ *Einzelschriften*, p. 15.

ment expenditures are excluded, not because they are for intermediate consumption but owing to lack of proper analysis and classification.

Certainly armament expenditures are not useful to enterprises in the same sense as consular trade intelligence is. The analogy to the services of a private nightwatchman breaks down as soon as foreign policy takes an aggressive turn in a military way. It is highly doubtful that these services can be argued away as 'national costs of production' necessary to secure the very existence of the nation, which in turn is the first precondition for all economic activity.²¹ This view would be valid only if the net output of civilian goods (after compensation for any multiplier effect of the omitted armament expenditures) would have been impaired had the production of planes and tanks been cut in half in 1937.

To count such state activities as national general overhead costs, however, is artificial. Internal and external security are enjoyed by the population not merely because they are a prerequisite to the undisturbed production of goods. Ultimate and final values, they are more like consumer goods than intermediate products. While government services for the direct furtherance of production must necessarily be treated as intermediate consumption it seems preferable to exclude only them from total government expenditures than to exclude everything that is not final consumers' services beyond doubt and to forget about armament expenditures, in the expectation that they will somehow 'appear' in the value of goods. Aggressive foreign policy, imperialism, and preparation for war would then be valued at their real worth to such a nation and would swell national income figures.

The borderline between consumers' and other government services, if the *Reichsamt's* method is followed, is fluid, as all the oft repeated examples from road repairing to legal services, useful for both final consumers and business, indicate. The *Reichsamt* chooses to include in consumers' services those for education, for 'social' purposes, housing, 'hygienic institutions' (such as street cleaning and parks), and some preponderantly

²¹ Paul Jostock, *Volkseinkommen, Kriegsbedarf und privater Verbrauch*, *Bankarchiv*, 1941, p. 462.

consumption services such as street lighting and public capital formation. Some other items, such as the services of the law courts in non-business matters, are omitted because it is impossible to allocate them properly. Certain transfer payments not counted as wages, salaries, or pensions are added to it, but finally deducted again by an over-all correction for all transfer expenditures.

All together consumers' services contain a bare minimum. Yet doubts have been expressed regarding the legitimacy of including even some that are. Although school expenditures seem typical of the consumers' kind of government expenditures, it has been argued that knowledge, after all, is a fund similar to national capital and that a function of schools is to forestall deterioration in this asset.²² Therefore they appear as intermediate consumption. The argument is far-fetched. Were it valid, it could be applied as well to medical services and to street cleaning. The whole view is at odds with the accepted idea that education and health services directly serve ultimate consumers.

To repeat: according to the *Reichsamt* theory, public expenditure is either for final or for intermediate consumption. To the extent that it is for the former, it constitutes part of national income and must be added to net income after all taxes. Since net incomes as based on the usual sources are net of indirect taxes—when defined as those deductible for income tax purposes—but include other government receipts, the original net income figure must be made net by deducting direct taxes and additions to public debt. Subsequently this net amount must be raised by the value of public expenditures for final consumption. The data have merely been rearranged if instead the original net income figure is corrected by the difference between the value of these consumption services and government receipts other than cost taxes. This difference, called in German national income statistics 'taxes not included in private income', is equivalent to the part of indirect taxes necessary to cover all consumption expenditures not taken care of by other government receipts. Obviously it may be negative as well as positive. In fact in 1913 it was negative. During recent years, with the rise in loan and

²² Matyas Matolcsy and Stephen Varga, *The National Income of Hungary* (King, London, 1938), p. 6.

direct tax revenues and the reduction of public consumers' services to a minimum, it must have been negative again by many billions of Reichsmarks.²³

Figures for these various components of this item were published only until 1929 and for the total until 1938. During the last part of the period the total remained virtually unchanged. If the suspicion that it was not recomputed annually is justified, German national income was overstated in this respect. The assumption is supported by a comparison between the series of national income at constant prices and the index of industrial production. An addition of estimates of military expenditures and the value of intermediate services rendered by the government to this *Volkseinkommen* would perpetuate the mistake in the final aggregate. Apparently at least part of the armament expenditures in the 'thirties has been treated as government capital formation instead of intermediate production.

On the other hand, the difference between *Volkseinkommen* and 'omitted taxes' is always equal to national income at factor cost. This is true irrespective of all manipulations with the 'omitted taxes' item since subtrahend and minuend are off by the same amount.

What has been done about this item since 1938 is not too clear. Since the total is called private income net of indirect taxes, and since at a later stage indirect taxes, without qualifications, are added, it seems that the traditional method has been abandoned. But certain other statements in recent articles continue to refer to the former practice.²⁴ *Volkseinkommen* is thus neither income at factor cost nor net income at market prices in the customary definition; it is, however, basically a market price concept. It intends to measure the value of goods and services for final consumption plus the additions to the capital stock. It includes therefore only the part of the governmental contributions taking the form of final consumer goods.^{24a} It can be presented as net income at market prices minus the value of government services for purposes other than final con-

²³ As Pfeleiderer correctly points out; *Bankarchiv, loc. cit.*, p. 278.

²⁴ Jostock, *Bankarchiv, loc. cit.*, p. 462.

^{24a} There remains, however, a difference. The value of intermediate goods in the private sphere appears in the price of the final product. The value of intermediate government services disappears completely in this calculation.

sumption. It coincides with net income at market prices if all government services are of the consumption expenditure type and all receipts are indirect taxes. It is equal to national income at factor cost if all government services are of the intermediate type and government receipts consist of indirect taxes only; and also if government receipts consist exclusively of direct taxes (and loans) and government services are intermediate. It is equal to net income at factor cost minus direct taxes if the government is financed by direct taxes only and government services are limited to intermediate services. Depending upon the kind of government services and government financing, *Volkseinkommen* may take all values between net income at factor cost minus direct taxes on the one hand, and net income at market prices on the other.

To avoid double counting, the calculation outlined above is made net of transfer payments. About the basic items in this category (public support of needy people, social insurance checks, subsidies for large families, government marriage loans, usually also payments to family members of the armed forces, social activities of the Labor Front, the Winterhelp, the German Red Cross, and similar institutions) there is agreement. Soldiers' pay is also treated as a transfer expenditure.²⁵ Actual receipts of service men's families are much higher than those included under transfer payments since civil service salaries continue after induction, and private salaries are frequently continued, at least in part. In these amounts national income contains elements that do not represent real contributions.

Interest on war loans is also classified as a transfer payment. Civil service pensions, however, are regarded as postponed payment of regular salaries and as part of the national income.

The *Reichsamt's* attitude toward subsidies is somewhat ambivalent. Theoretically, subsidies are put in the 'consumption sphere'; later it is claimed that they serve 'purposes of production'.²⁶ But however classified, they are not counted as an item in national income. No information exists on the treatment of subsidies for price stabilization purposes, which have played a growing role since the establishment of the *Reichsnährstand*.

²⁵ Pfeleiderer, *Bankarchiv*, loc. cit., p. 277; Jostock, *Bankarchiv*, loc. cit., p. 463.

²⁶ *Einzelchriften*, pp. 15 and 57.

Until 1938, the last year of official national income statistics, the totals apparently excluded 'cost' services in the broadest sense, and armament expenditures. Since 1938 the new problem posed by the huge scope of government activities in wartime is how national income should be adjusted so that meaningful comparison with public expenditures could be made.²⁷ This adjustment, it is argued, requires the inclusion of indirect taxes. More correctly, the item in question should be total taxes minus direct taxes as well as taxes 'not included in private incomes'.

2 WAR CONTRIBUTIONS

If national income is defined as the net value of all economic goods produced by a nation it is not necessarily identical either with the value of all goods accruing to residents or of all goods produced by or accruing to citizens. The difference between the first and second disappears when income from abroad is reckoned as part of national output.²⁸ To reconcile the first and third definitions one would have to disregard completely the value of goods produced by or accruing to aliens within a country and include the net value of goods produced by or accruing to nationals residing abroad. Evidently there are two criteria: residence versus nationality, and the concept of income produced versus that of income enjoyed by a group. The merits of the three approaches depend upon the purpose for which the income figures are used. The first measures best the technical productivity of the resources within a territory; the second, welfare. The third is a highly nationalistic concept, very much in accord with Nazi philosophy, but does not play any role in German national income statistics.

Between residence and nationality, the *Einzelchriften* favored residence "in view of the economic issues involved" (p. 29). For practical purposes the difference was negligible and concerned only 'borderline cases' as long as nationality was defined in the pre-Nazi way. The coverage of the income tax laws roughly favored residence too. When foreigners could no longer dispose of their property freely, the criterion of residence acquires added justification.

²⁷ Jostock, *Bankarchiv. loc. cit.*, p. 462.

²⁸ Hero Moeller, *Das Volkseinkommen als Verbrauchseinkommen, Weltwirtschaftliches Archiv*, 1943, p. 83.

National income estimates have not been undertaken according to the *Volksdeutschen* principle because the Nazis were interested primarily in the volume of goods available in Germany for armament and consumption purposes. Consequently, they cared how much forced foreign labor in Germany produces but not how much persons of German origin in South America produce.

It is admitted that the old income statements fail to do justice to tributes.²⁹ The concept of 'contribution', introduced in more recent unofficial income statements, is restricted to certain payments and deliveries from countries outside the Reich's boundaries. Income from territory fully incorporated into the Reich at various stages, beginning with the acquisition of the Saar region, becomes automatically part of German national income. Thus national income is for an expanding area, comprising finally the Sudetenland, Austria, Danzig, Alsace-Lorraine, Luxembourg, and sections of the Eastern conquest. The number covered exceeds the total Reich population. The wages received by several million foreign compulsory workers seem to be included in German national income.

Since virtually all Continental Europe has worked for Germany, the entire inventory of Europe and its output above the minimum that went to the natives of each country are in the last analysis sources of German war output. If German national income is defined as the annual value of goods and services accruing for consumption and new capital formation, the spoils of all Europe can be included. A narrower definition might exclude assets confiscated without compensation. The case is clear in the outright seizure of all Polish government property in the 'General Government'. Economically, the situation is the same when a puppet government controls these assets. Finally, one might decide to limit the items to those which under normal circumstances would be carried in the international balance of payments on income account.

Another principle, followed in some respects in German statistics, is to distinguish between goods acquired legally (e.g., against payment of occupation money or in a businesslike manner through clearing accounts) and goods confiscated outright.

²⁹ *Ibid.*, p. 77.

Unduly minimizing contributions received from abroad, it has no intrinsic merit; making transactions appear legal does not alter their economic character.

A similar distinction is that between contributions in the form of foreign credit and contributions without counterbalancing items, such as tax payments by a satellite country. For the time being, however, the two types augment the goods available for civilian and public consumption.⁸⁰

Regardless how compensated, foreign contributions appear either as payments of money or as surrender of goods. After the initial period of territorial conquest, and the accompanying opportunity for plundering large stockpiles, money payments seem to constitute a growing share of the total. They take the form of compensation for occupational costs, compulsory taxes paid by the Polish General Government (*Wehrbeitrag*) and by Czechoslovakia (*Matrikularbeitrag*), and of fines imposed upon municipalities when disturbances occur. Since the money is currently exchanged against other assets, this difference would not affect the national income accounts even if normally it would require special scrutiny.

Foreign contributions are included in the German Treasury statements (such as tax revenues from abroad) or they are not, though they could be because they would have meant government expenditures had the goods been acquired in the regular way (confiscation of war material in conquered territories); or they are properly kept outside the government accounts (e.g., private plunder by members of the armed forces). Sometimes a mere technicality determines the classification. Prevailing investment regulations place foreign trade clearing debits under 'other loans' in the Reich's debt statement, though normally the item would be carried in the private sector of the economy.

Obviously it depends upon the purpose for which estimates of national income are to be used how much German booty should be included. If they are intended as an index of consumption plus changes in the stock of capital accruing to the nation, irrespective whether from its own economic resources, then the widest definition of foreign contributions is appro-

⁸⁰ Günter Keiser, *Volkseinkommen und Kriegsfinanzierung*, *Bankarchiv*, 1942, p. 78.

priate. It might require deducting reparations from current income even though paid entirely in the form of a transfer of the debtor country's foreign assets to the reparation creditor. Subsequent returns of the appropriated assets to their original owners might make German national income for the transition years to that extent negative.

If, on the other hand, the purpose is to measure the scope of current civilian and government consumption, national income should contain all items that contribute directly and fully to civilian consumption and to armament. Every foreign contribution should be subjected to the test whether it helps, more or less directly, to increase the current supply of armament or to feed the German population. Confiscated guns and automobiles do, as do the Norwegian 'Crisis Reserve' of potatoes and most of the products imported from the Balkans, payment for which is postponed with the official advice that the creditors "have a positive belief in the future".³¹ Loot from museums does not qualify, nor do concerns acquired abroad or foreign property at home. The output of these plants, if it meets the test, would have to be included in national income. In general, contributions deemed eligible for inclusion comprise finished goods as well as raw materials that are transformed into finished goods and equipment used in the process, during the accounting period, and producer goods whose acquisition would free domestic resources for the production of such finished goods.

As far as valuation is concerned, German prices would be the proper basis. Actual prices paid by Germany abroad might be seriously undervalued. Trade agreements with satellite countries about delivery of supplies are not contracts between equal partners. Moreover, exchange rates under clearing agreements and for occupation money used to be fixed at a level originally unduly favorable to Germany.

German national income estimates tend to understate grossly foreign contributions. The figures vary and occasionally are not in agreement.³² In general the items are tax contributions

³¹ As Dr. Grävell of the *Statistische Reichsamt* recommended in an article in *Wirtschaftsring*; see *The Statist*, Jan. 23, 1943, p. 62.

³² A figure by Ferdinand Fried (quoted in *The Statist*, Jan. 23, 1943, p. 60) of RM30 billion for 1941 or 1942 can hardly be reconciled with Keiser's figure of RM15-17 billion for 1941 (*Bankarchiv*, *loc. cit.*, p. 78). Some inconsistencies appear also in the government revenue item containing financial contributions

by Czechoslovakia, payments for occupation costs, sales of German government securities to foreign banks, increases in clearing indebtedness, and issues of occupation currency. Confiscation and undervaluation continue to be disregarded. On the other hand, payments for occupation costs exceed actual expenses; and the excess is used chiefly to acquire foreign property and could be omitted from a statement of the scope of current resources.

3 CONSUMPTION VERSUS WAR EXPENDITURES

Recent discussion about German national income tries to reconcile a net income estimated according to traditional methods of RM115 billion in 1940 with government expenditures of more than RM100 billion. The figures are not comparable. They are useless for any impact ratio, though this is not especially serious since no great interest has been shown in such ratios. Much attention, however, has been given the volume of private consumption. Since there is a lack of direct information on that point, the task is to determine how the total must be adjusted to yield an estimate of private consumption after government expenditures have been deducted.

Total government expenditures are of course larger than war expenditures, and not all war expenditures appear in the statement of government expenditures. According to an article in the *Finanzarchiv*, total public expenditures during the first four years of the war were RM367 billion, of which 75 billion were for civilian purposes excluding relief payments to soldiers' dependents.³³ How this proportion varied is unknown. It probably tended to decline. A considerable portion of war expenditures does not appear in government accounts, inasmuch as, under strong government pressure, the major part of the synthetic rubber and oil plants and the low grade ore facilities were financed by private concerns. It is not known whether the costs of transplanting factories into more protected regions were borne by business or government.

The valuation of the various war expenditures frequently

Note 32 concluded:

from abroad. It jumps in 1943 to an unexpectedly large amount compared with the budget estimate and seems to contain items formerly carried outside the budget. For the figures see *Neue Züricher Zeitung*, Jan. 19, 1944.

³³ O. Schwartz, *Finanzarchiv*, 1942, p. 258.

differs from current market prices in that the same resources would have received a different remuneration under the ceilings set for the civilian sector. Armament pricing rules left a lower profit margin. For this, German national income statistics are unadjusted. The old controversy concerning the treatment of armed forces' pay reappears here; whatever adjustments have been suggested do not aim at its revaluation.³⁴ Nor has it been proposed to include an item for unpaid services of civilian defence workers. Whether relief work for victims of bombing should be similarly treated is more doubtful since it is mainly the function of the women's organizations of the Party. Usually housewives' services do not appear as a component of national income, and the inclusion of other services rendered by housewives outside the household would tend to inflate national income relatively.

How much German war expenditures are undervalued is unknown. The existence of these and similar discrepancies is acknowledged, and for lack of detailed information Jostock has recommended that they be borne in mind and the total interpreted "symptomatically rather than statistically".³⁵

As stated above, government expenditures are about equal to unadjusted national income. To reconcile the two in order to get information on the volume of goods available for civilian consumption, several adjustments have been suggested. They consist in appropriate provisions for indirect taxes, foreign contributions, and disinvestment. One way reduces government expenditures by deducting contributions from abroad and 'consumption of capital'.³⁶ The other way is to inflate the net national income to an aggregate (*Gesamtguterfonds*) that includes also contributions from abroad and from domestic disinvestment.³⁷ The concept corresponds closely to 'total resources' as used in the British White Paper and seems to have been adapted from it. The concept of gross national product is hardly known and the addition of replacements or normal depreciation is rejected on vague grounds.³⁸

³⁴ Pfeleiderer, *Bankarchiv, loc. cit.*, p. 279.

³⁵ *Bankarchiv, loc. cit.*, p. 462.

³⁶ *Ibid.*, p. 461.

³⁷ Keiser, *Bankarchiv, loc. cit.*, p. 77.

³⁸ Jostock, *Bankarchiv, loc. cit.*, p. 462.

Using the British pattern and replacing the negative item 'net investment abroad' by 'foreign contribution', the calculation starts from the equation: Net income (net expenditure) equals personal expenditures for consumption purposes and government expenditures on goods and services (net of transfer payments), both at market prices, minus indirect taxes, minus domestic private net disinvestment, minus contributions.

If the equation is rearranged to yield 'personal expenditure on consumption at market prices' the right side becomes 'net income plus domestic disinvestment plus contributions plus indirect taxes minus government expenditure'. The specific items requisite for the solution are available with the following serious qualifications:

- 1) Originally national income was the sum of individual net incomes and undistributed corporate profits plus 'taxes not included in private income'. There is some doubt about this third item in recent national income figures, and possibly national income may now be simply the sum of individuals' incomes, undistributed corporate profits, and employers' social security contributions.
- 2) Government expenditure equals total tax and administrative revenues plus changes in the Reich's debt. These figures, published sporadically, include also state and municipality revenues. Contributions of states and municipalities to the Reich's treasury (*Kriegsbeitrag*) must be excluded. Information is also available on the share of indirect taxes. Various writers, however, supply highly different figures, between "somewhat more than RM14 billion" and RM21 billion. Much depends upon how 'taxes not included in private income' were treated. Indirect taxes cannot be separated into those contained in personal consumer expenditure and in government expenditure, and are attributed in full to the former.
- 3) As far as the German studies under consideration are concerned, foreign contributions comprise only compensation for occupational costs, tax contributions of satellite countries, the issue of occupation money, and the sale of German treasury securities to foreign banks and to the clearing office (for the import surplus). The total remains far below the actual assistance received from abroad in any year. It disregards confis-

cation without compensation and understates the value of various other contributions. All foreign contributions taken into account, including clearing balances, reappear on government accounts.

4) Unlike the home disinvestment item in the British White Paper, German capital consumption is not a residual and must be estimated independently. Original estimates put it at 25-35 percent of total government expenditures. Closer analysis shows this to be an overstatement. Liquidation of assets in the form of postponed repairs and replacements of plants and unreplenished stocks contributes to the supply of goods beyond the limits of current income. From balance sheet statistics it appears that, until 1941 at least, the total value of industrial plants did not decline. New investments in the armament sector apparently counterbalanced failures to keep plants and equipment in other fields up to date. Major disinvestments were confined mainly to housing and agriculture (which in normal times account for one-third of replacement requirements).³⁹ Statistics on stocks of goods are incomplete. It is asserted that, again until 1941, reductions on that account have been moderate except in retail trade; that increases in stocks of raw materials and semi-finished goods in the armament production sector about offset the reductions in consumer goods industries, and that stock reserves in the hands of the import trade and the import control agencies might even have increased, as figures on import financing in bank balance sheets would suggest.

The use of consumer goods beyond the period of their normal and reasonable life is not allowed for. The lack of new durable consumer goods is to some extent made up for by stretching the services of the existing stocks. But since stocks of consumer goods are not regarded as capital, failure to replace them is not disinvestment in the customary sense. In human terms it means less personal consumption, such as living on bread and meat rations below the accustomed level.⁴⁰ Compensation for the destruction of assets through enemy action was a minor item

³⁹ The suggestion to discontinue depreciation altogether, advanced in 1941 (Noell von der Nahmer, *Abschreibungen im Kriege; Die Deutsche Volkswirtschaft*, 1941, p. 1379), was rejected.

⁴⁰ Pfeiderer, *Bankarchiv*, *loc. cit.*, p. 279; Keiser, *Problemstellung*, p. 172, and *Bankarchiv*, *loc. cit.*, p. 78.

until 1941. In general, the financial settlement of such claims has been postponed to peacetime.⁴¹ All together the estimate of disinvestment is reduced to 5-10 percent of governmental expenditures.

On the basis of the German figures without further adjustment, the ratio of government expenditures to total resources would be about 60 percent. But until the scope of foreign contributions and details of the war expenditure account are clarified, not much confidence can be attached to this ratio or to any survey of the sources of German war finance or of the real cost of the war to Germany.

⁴¹ *Bankwirtschaft*, Jan. 1, 1944.