

U.S. National Income and Product Statistics

Born of the Great Depression and World War II

By Rosemary D. Marcuss and Richard E. Kane

THE story of the first U.S. national income and product statistics illustrates how scholarly debates about the definitions of ideal measures gave way to the compromises required to produce real-world economic statistics when the need for such statistics had become critical. Then, as the workings of the economy became better understood—in part, through the use of statistics—economic theory advanced. And, as improved sources of data on incomes, production, and sales were provided, the statistics were improved in turn. The gross domestic product (GDP) statistics of today continue to exemplify the balance between theory, real-world data, and the economic questions of the day. The story of the creation of the first U.S. national income and product statistics shows how that process got started.

In 1934, the first in the series of continuing Department of Commerce U.S. national income statistics was issued to meet the need to describe consistently and in detail the economic toll taken by the depression that had begun more than 4 years earlier.¹ In keeping with the “income equals production” identity, national income would serve as an indicator of both U.S. income and output during the 1930s.² In 1942, the first in the series of U.S. gross national product (GNP) statistics was issued to meet the need to assess the economic feasibility of President Franklin Roosevelt’s original war production program, which required national mobilization of an unprecedented scale.³ In 1947, the first U.S. double-entry national income and product a-

counts (NIPAs) were issued to meet the need to provide a comprehensive picture of the workings of the economy. The accounts presented a framework for classifying and recording the economic transactions among major sectors: Households, businesses, government, and international (termed “rest of world.”) Today, the records of all developed economies and most developing economies are characterized by like accounts. The United States was an early developer of those, although not the first.

National income to measure the Great Depression by

The proposition that, for a country as a whole, goods and services produced must equal incomes earned is old. It was explicated by William Petty as early as the seventeenth century. By the early twentieth century, U.S. national income was being measured periodically by certain individuals and organizations, but the concepts were murky, methods varied, and the estimates came long after the fact. It took the crisis of the Great Depression to create the demand for the U.S. Government to develop a continuing, timely measure of national income.

In June 1932, Senator Robert LaFollette introduced a resolution in the Senate stipulating that the Secretary of Commerce report statistics on economy-wide income in the United States from 1929 to 1931.⁴ At that time, the Great Depression had been deepening for more than 2 years. Fully 24 percent of U.S. workers were unemployed, and many of those employed were only working part-time or on shortened weeks. Asset values had plummeted, the banking system was breaking down, deflation was reversing the gears of the economy, and sales were insufficient to keep businesses going. Farm income, on which one-fourth of the population depended, had fallen by a half. Neither the public nor elected officials understood the workings of the economy that seemed to be perpetuating the crisis, nor did they know quantitatively its scale and scope. The most up-to-date estimates of national income—that is, economy-wide income—were for 1929, a boom year for the most part, marred by the October stock market “crash,” after which the economic slide had begun.

The most prominent national income estimation

1. In 1926, the Federal Trade Commission produced national income statistics for a series of years, but it did not persist in that work. The Economic Research Division of the Bureau of Foreign and Domestic Commerce, in the Department of Commerce, produced the 1934 statistics and retained responsibility for them. The Division was renamed the Office of Business Economics in 1947 and the Bureau of Economic Analysis in 1971.

2. The proposition that for a country as a whole, goods and services produced must equal incomes earned by its residents is precisely true only for a closed economy. In the 1930s, when statistical measures were being formulated and international flows were relatively small, the identity was retained by using a measure of production derived from labor and capital supplied by U.S. residents wherever the production takes place—that is, gross national product rather than gross domestic product.

3. GNP measures production by labor and property supplied by U.S. residents whether the production takes place in the United States or abroad. In 1991, GDP replaced GNP as the featured measure of U.S. production. GDP measures production by labor and property located in the U.S. regardless of who supplies those. The reasons for the change were that the coverage of GDP is closer to the coverage of other statistics, such as employment and industrial output, and its use facilitates international comparisons because it is the production measure emphasized by the United Nations *System of National Accounts*.

4. U.S. Congress, Senate, Resolution 220 (1932).

work undertaken during the 1920s was by the National Bureau of Economic Research (NBER) and the National Industrial Conference Board. The NBER estimates, produced by Willford King, were the most comprehensive, although various aspects were controversial, such as the inclusion in national income of household production and the services of consumer durables.⁵ The Conference Board estimates were more timely, but they consisted of only aggregate measures moved forward by extrapolation.

It is not surprising that the Economic Research Division of the Department of Commerce's Bureau of Foreign and Domestic Commerce (BFDC) was assigned the task of producing national income statistics in 1932. The head of the office, Frederic Dewhurst, had testified before Senator LaFollette's committee about the meager economy-wide data at hand.⁶ And the Department of Commerce was already in the data provision business. For more than a decade, it had been reporting to the public, weekly and monthly, what economic statistics there were—several thousand market-, commodity-, and industry-specific notes and indexes. Taken together, the available data painted a picture of economic activity but not a broad one. And they measured production and trade but not income. This journal, the SURVEY OF CURRENT BUSINESS, began publication

in 1921 for the purpose of providing those data to the public.⁷

Senator LaFollette had Dewhurst in mind for the job, but Dewhurst left BFDC in 1932, and the Department fell short on staff. So the NBER was asked to contribute manpower and expertise to the project. Simon Kuznets of the NBER accepted the responsibility for producing the first statistics with Robert Martin and Robert Nathan of the Commerce Department as collaborators. Kuznets took charge in January 1933. He left Commerce a year later when the statistics were reported to the Senate.

Kuznets was a seminal theoretician of economic growth, an early estimator of GNP as well as national income and, for decades, an adviser on national income and product statistics. He had joined the NBER

5. Household production, referred to as "services of housewives and other members of the family," included services such as the preparation of meals, cleaning, and child care. Consumer durables included goods such as automobiles and home appliances.

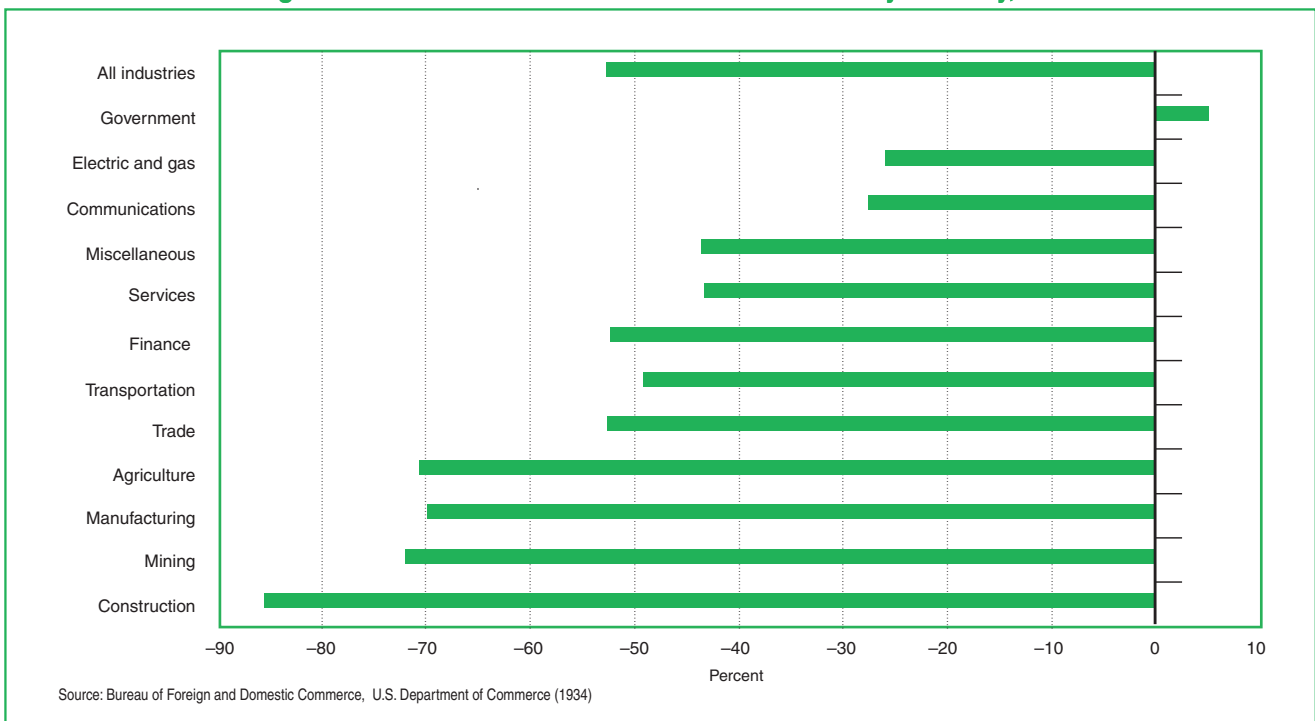
6. U.S. Congress, Senate, Committee on Manufactures (1931).

7. Those who published the SURVEY appreciated the importance of the statistics to the business community. A celebratory note in 100th edition of the SURVEY, published in December 1929, stated with unfortunate timing: "While it may be too soon to say that the utilization of business data has entirely eliminated the business cycle, there is agreement today among business leaders everywhere that the wider use of facts will mitigate in a large degree many of the disastrous effects of the one-time recurrent business cycle."

Acknowledgments

The authors would like to thank the following for their contributions: Carol S. Carson, Robert P. Parker, C. Lowell Harriss, and at BEA: J. Steven Landefeld, Brent R. Moulton, Dennis J. Fixler, Carol E. Moylan, Arnold J. Katz, Bruce T. Grimm, and Samantha H. Schasberger.

Chart 1. Percent Change in Current-Dollar National Income Produced by Industry, 1929–32



in 1929 to continue King's work on national income and arrived at the Commerce Department with a plan for improvements. In 1971, he received the Nobel Memorial Prize in economics for theoretical and empirical contributions to the measurement of economic growth.

The report delivering the first statistics to the Senate in January 1934 fulfilled the request for national income broken out by industry of origin and type of income.⁸ It showed that between 1929 and 1932 national income had dropped by more than 50 percent.⁹ Incomes in manufacturing had dropped by 70 percent, and incomes in construction had dropped by more than 80 percent. Government was the only industry that had grown over the period. Although the Federal Government remained relatively small—Federal tax receipts claimed only 3 percent of GNP in 1932—Federal, state and local governments accounted for 14 percent of income (chart 1).

Measured by type of payment, the income of wage earners had fallen more than those of salaried workers—60 percent, compared with just over 40 percent.¹⁰ In terms of income shares: The labor share remained fairly constant, the “entrepreneurial” (business-owner) share fell, and the property share rose as interest payments held their own while dividends fell by half (chart 2). The finding that the Great Depression was less rough on salaried workers than on wage earners, that “payments to property holders formed a relatively increasing cost to the economic system as a whole,”¹¹ and that those who operated their own businesses lost

ground relative to property holders had public opinion and policy implications at a time when government work relief programs were being planned and “big business” was a target for criticism by the Roosevelt administration.¹²

Two measures of national income were featured in the report—*national income produced* and *national income paid out*. The practice of presenting both persisted for most of the 1930s. National income produced was the broader measure. It comprised the net value of goods and services produced in the United States or, in other words, current production. It was net in the sense that it was measured after deducting depreciation, the decline in value associated with the aging of an asset. National income paid out was the income from current production actually received by individuals as workers and owners of capital. It consisted of wages and salaries, income from unincorporated businesses, dividends, interest, and rental income.¹³ It was estimated using available data on industrial production, business payroll and income tax returns.

A statistic, *business savings*, was introduced to approximate the financial state of businesses given the limited amount of information available at the time. It was defined as the difference between the gross margin of businesses (the margin between revenues and costs)

12. The importance of the new statistics to the economic debate of that time, near the bottom of the Great Depression, and the dangers of misinterpretation were understood by Kuznets, the author of the report. He warned, “The valuable capacity of the human mind to simplify a complex situation in a compact characterization becomes dangerous when not controlled in terms of definitely stated criteria. With quantitative measurements especially, the definiteness of the result suggests, often misleadingly, a precision and simplicity in the outlines of the object measured. Measurements of national income are subject to this type of illusion and resulting abuse, especially since they deal with matters that are the center of conflict of opposing social groups where the effectiveness of an argument is often contingent upon oversimplification.”

13. The term *entrepreneurial withdrawals* was used to characterize income from unincorporated businesses—later called proprietors' income.

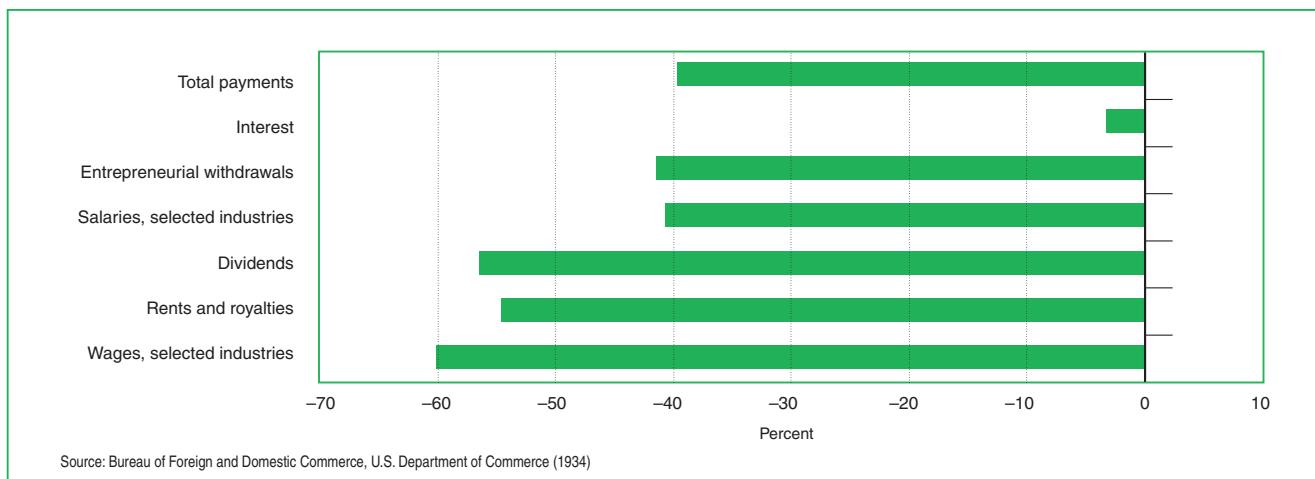
8. U.S. Congress, Senate (1934): 10.

9. Figures cited are for national income produced measured in current-dollar terms. Adjusted for the drop in prices, national income produced had fallen by between 30 and 40 percent.

10. Salaries were distinguished from wages in only selected industries, mostly industrial ones, that accounted for less than half of national income.

11. U.S. Congress, Senate (1934): 5–6.

Chart 2. Percent Change in Current-Dollar National Income Paid Out by Type of Payment, 1929–32



and income payments to individuals (wages, salaries, interest, dividends, and other payments). In other words, it was the income retained by businesses from current production after purchasing materials, maintaining equipment and structures, paying taxes, interest, and compensation, and distributing dividends—or the sum of undistributed corporate profits and the savings of unincorporated businesses. For corporate business savings, tax return data on after-tax profits were adjusted for capital gains and losses, and dividend payments were subtracted from the total.¹⁴ Tax-based depreciation was used as a rough approximation of the national income concept. For savings of unincorporated businesses, tax return data were also used, and an effort was made to distinguish business savings from income withdrawn by the owners.

National income produced was defined as the sum of national income paid out and business savings. In the Senate report, it was described conceptually as the value of “all commodities produced and all personal services rendered, . . . added together with their market values, . . . [minus] the value of goods, raw materials, and capital equipment expended in producing this total.”¹⁵ The broader of the two income statistics, national income produced is conceptually equal to the economic accounting concept of net national product, which is a comprehensive measure of the income that is available for either consumption or net investment and sometimes called sustainable income. Over the 1930s, BFDC raised the prominence of national income produced, eventually featuring it and referring to it simply as national income.¹⁶

Over 1929–32, when national income produced fell by over 50 percent and national income paid out fell by 40 percent, business savings became negative in 1930, and they remained negative through 1935 (chart 3). Businesses drew down financial reserves or borrowed in order to stay in operation when fixed costs and wages and salaries exceeded revenues. In terms of the new statistics, national income paid out exceeded national income produced. Even though business savings was only an approximate measure, it was an informative addition to the picture of the economy under duress.

The statistic ultimately sought for capturing the economic state of the nation over time is income adjusted for changes in the price level, but the business and tax records used to compile national income sta-

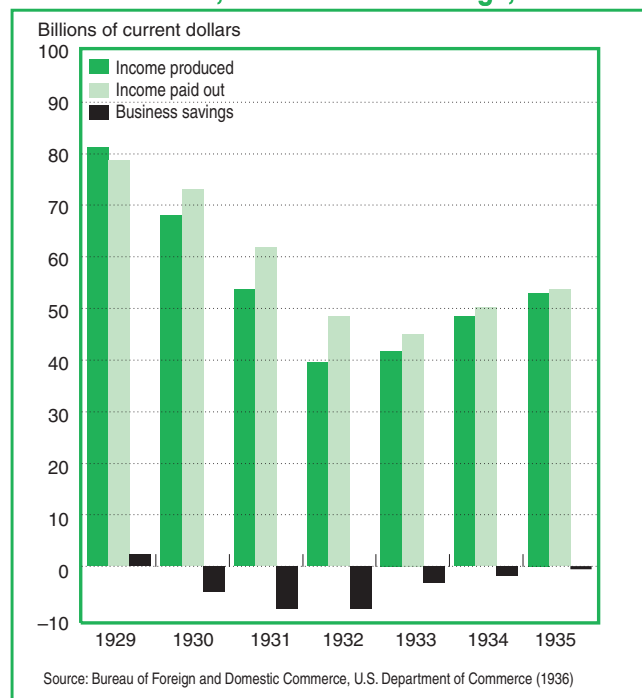
tistics were not so adjusted. Like other business accounts, they recorded actual market transactions, so a means of adjusting those data for price changes was needed. By 1934, the Bureau of Labor Statistics was producing cost-of-living and wholesale price indexes, but those indexes were not sufficiently comprehensive to fully adjust the national income statistics to produce a set of price-adjusted measures. Nevertheless, because depiction of the evolving state of national income adjusted for price changes was deemed crucial, the 1934 report offered an approximate price adjustment to the national income statistics by comparing the current-dollar reduction in incomes to the reduction in the cost-of-living index. That produced an estimated drop in price-adjusted national income produced in 1929–32 of 30–40 percent.¹⁷ Approximate aggregate adjustments for changes in the prices at the national income level continued while the full set of statistics was reported in current dollars.

National income becomes established

During the 1930s, national income became a regular product of the Department of Commerce. Accepted as the broadest reading on U.S. economic conditions, it was followed by the public and was used by the Roosevelt administration and the Congress to plan and

17. U.S. Congress, Senate (1934): 1.

Chart 3. U.S. National Income Produced, National Income Paid Out, and Business Savings, 1929–35



14. Unincorporated businesses were assumed to have net profit ratios similar to corporations.

15. U.S. Congress, Senate (1934): 1.

16. Bureau of Foreign and Domestic Commerce, U.S. Department of Commerce (1938) and Nathan (1939).

evaluate fiscal policy. By the time GNP was first provided by Commerce in 1942, national income had become the most cited U.S. macroeconomic statistic.¹⁸

In January 1934, when the national income statistics were first provided, it was not apparent that the worst of the depression was over. The industrial recovery begun in the summer of 1933 had petered out, and cooperation among industrial companies on prices under the National Industrial Recovery Act had raised the fear of inflation. The Roosevelt administration realized that the new measure provided an authoritative means of describing the dire economic conditions that its proposed New Deal programs were designed to address. For example, within two weeks of the release of the report, the Secretary of Commerce, Daniel C. Roper, cited the greater than 50-percent drop in national income between 1929 and 1932 in a speech explaining those programs.

In 1935, Robert Nathan began writing a series of annual SURVEY articles presenting the national income statistics for the preceding year and analyzing them in detail.¹⁹ The next year, the Department of Commerce published a statistical compendium, *National Income in the United States, 1929–35*, presenting revised and extended statistics and explaining the concepts.

President Roosevelt was citing national income statistics in speeches as early as 1935—for example, in his statement of September 1935 on the state of the economy and the Federal budget. In April 1938, in his message to the Congress requesting additional spending for the new Recovery Program to address problems caused by the 1937 recession, the President described economic developments over 1929–1937 in national income terms. And, he described the goal for the program in national income terms as well: “We must start again on a long, steady, upward incline in national income.”²⁰ Starting with the annual budget message to the Congress in January 1939, which presented his fiscal year 1940 budget, the President cited national income statistics as the primary measures of the state of the economy. In the 1939 message, he also highlighted the importance of these measures to economic policy making by showing how different levels of national income would generate different levels of Federal tax receipts.

Shortly after the annual income statistics had been

18. During the 1930s, work was underway formulating and estimating national product and expenditure concepts such as consumption, investment, and the government's contribution to output. For example, Simon Kuznets, then at NBER, and Clark Warburton, at FDIC, published early estimates of gross capital formation.

19. Robert Nathan was head of national income measurement from 1935 to 1941. Milton Gilbert took charge when Nathan left to join the National Defense Advisory Commission and served until 1949.

20. Roosevelt (1938): 12.

established, work began on monthly measures that could track income developments quicker. Those statistics were first published in 1938 in response to the pressing need for monthly, rather than annual, statistics. Incomes had dropped 11 percent from a post–Great Depression peak in August 1937 to the recession trough in March 1938. By the end of 1938, about half that loss had been recouped in the recovery. Annual income statistics could not track such developments.

When the monthly income statistics were first provided early in 1938, the measure provided was national income paid out. Almost immediately, it was apparent that the measure was too narrow to answer the economic questions of the day. Information on the purchasing power of families was important for assessing the effects of income support programs, and a broader measure would be needed for that. So a few months after the initial release, the measure was expanded to include income other than that arising from current production. Those sources of income were rapidly becoming substantial props to family income. For the most part, they were the products of New Deal legislation or other programs of the 1930s aimed at fighting economic hard times and increasing income security for the retired. In particular, the new monthly income measure, referred to as “income payments to individuals,” included the unemployment benefits enacted in the Social Security Act of 1935—retirement benefits under the act were first provided in 1940—veterans bonuses, direct relief payments, and Federal Government employee pension benefits. It excluded components of national income that did not provide current purchasing power: Employer and employee social security and unemployment insurance contributions and government employee pension contributions. In 1947, income payments to individuals was renamed *personal income*.

The U.S. economy gears up for World War II

Gross national product (GNP) statistics, like the national income statistics 8 years earlier, were launched by the Department of Commerce to answer pressing national policy questions for which analytical tools were inadequate. In 1942, the questions were, “Can President Roosevelt's World War II economic mobilization program be met and, if so, at what costs to the civilian standard of living and price stability?” As was the case for national income in 1934, the GNP concept by 1942 was not new, having been discussed and partially formulated during the 1930s. While progress had been made in developing theoretical and statistical standards for GNP, it took the policy need to call forth from the U.S. Government an authoritative, consensus-based statistic.

GNP makes up the other side of the national income equation—the production side to match the income-earned side (approximated by national income) of what would later be the double-entry books of the national economic accounts that would provide a complete picture of the economy. The publication of GNP in 1942 preceded the specification of those fuller accounts by 5 years.

In January 1940, 4 months after Germany had invaded Poland and Britain had declared war on Germany, President Roosevelt in his budget message to the Congress asked for a modest defense supplemental appropriation for fiscal year 1940 and a like increase in defense spending in fiscal year 1941, “in view of the current world situation.”²¹ In 1940, defense expenditures were more than \$1 billion, about 14 percent of the budget. In his January 1941 budget message, Roosevelt asked for \$25 billion in defense expenditures, 62 percent of the budget, reflecting “a world at war.”²² In his January 1942 budget message, President Roosevelt asked for \$53 billion for defense, 90 percent of the budget, reflecting “a nation at war in a world at war.”²³

The week before that budget message and shortly after the attack on Pearl Harbor, the President had announced the goal of increasing the share of national income spent on war production from the current 17 percent to 50 percent by 1943.²⁴ The speed and scale of the mobilization program were beyond experience: “A national effort of gigantic magnitude,” according to the President.²⁵ The U.S. rearmament program, begun in 1940, had boosted income and brought national income above the 1929 level for the first time—almost 25 percent above that level. The rise was steep: In December 1941, national income was 40 percent above its level of less than 2 years earlier. Putting the country on full war footing was going to boost income even more, but purchases of consumer goods and services, which had boomed in 1941, would be stymied because production for civilian purposes would need to be cut back to make way for the war program. Rationing, wage and price controls, and other consumption-dampening regulations were on the table.²⁶

Statistics measuring the total amount and the composition of goods and services being produced were requisites for the evaluation of the risks of shortages of civilian goods and services and the bidding up of

prices, but those statistics were not available in the United States at the beginning of 1942.²⁷ National income sufficed at that time as an informative measure of the size of the economy, but it was not up to the task of evaluating production constraints and tradeoffs because it measured only the income earned in production and not the greater market value of the goods and services produced. Milton Gilbert and George Jaszi of BFDC later described the early days of war-mobilization planning like “bidding on a contract without knowing . . . the capacity of your plant or the financial facilities at the disposal of your business.”²⁸

GNP to measure mobilization by

Within 2 months of the January 1942 budget message, the Department of Commerce produced the first GNP statistics. Those distinguished only among major categories of expenditures, but they succeeded in bringing the war-production tradeoffs into the picture.

Statistical analyses of the day tended to provide overly grim assessments of the risks of shortages of civilian goods and inflation because, among other errors, they underestimated U.S. productive capacity. When GNP was first published in March 1942, it was offered as a new framework for assessing the feasibility of the 1943 war program by comparing it with 1941 national output. Two months later, historical GNP statistics for 1929–41 were provided.²⁹ The January 1942 budget message had foreshadowed the new statistical terms presented in the GNP, mentioning for the first time in a fiscal policy context “consumer durable goods” and “industrial plant and equipment” because the BFDC staff was at the time doubling as a research arm of the war agencies, which were formulating the war program.

Understanding the pressures of the huge proposed war expenditure program required consideration of competing expenditures in the economy, most simply, expenditures for the war and expenditures for everything else. The expenditure components of GNP provided the material for that comparison. Because GNP is measured in market prices and therefore includes

27. The development of national income and product statistics benefited from collaboration among experts in several countries. The United Kingdom began providing expenditure estimates in 1941. Australia, Canada, and Ireland began providing them within a few years. Richard Stone of the United Kingdom was awarded the 1984 Nobel Memorial Prize in economics for the “epoch-making innovation” of creating the United Kingdom national income and product accounts while working in the British cabinet office under John Maynard Keynes.

28. Gilbert and Jaszi (1944). George Jaszi served as Chief of the National Income Division of BFDC from 1949 to 1959, Assistant Director of the Office of Business Economics from 1959 to 1963, and the Director of that office, subsequently renamed the Bureau of Economic Analysis, from 1963 to 1985.

29. Gilbert (1942b) and Gilbert and Bangs (1942).

21. Roosevelt (1940).

22. Roosevelt (1941).

23. Roosevelt (1942).

24. Kluckhorn (1941).

25. Roosevelt (1942).

26. For example, gasoline rationing went into effect in the eastern United States in May 1942.

taxes paid and depreciation allowances taken, which are not included in national income, it exceeded national income in 1941 by 25 percent (\$23 billion)—and provided a better approximation of aggregate U.S. productive resources. National income does not include taxes and depreciation because it values output at costs paid or, put another way, as the income accruing to individuals in their capacities of workers and owners of capital, sometimes referred to as “factors of production.” Taxes and depreciation are also charges against business revenues that are reflected in market prices, but they do not accrue to factors of production.³⁰

The inclusion of business taxes and depreciation resulted in a production measure that was more appropriate for short-run analysis of the war program’s burden on the economy in part because those flows were potential sources of program funding (chart 4). For example, in wartime, reserves for the replacement

of capital goods might be delayed to free up resources for other pressing needs.³¹

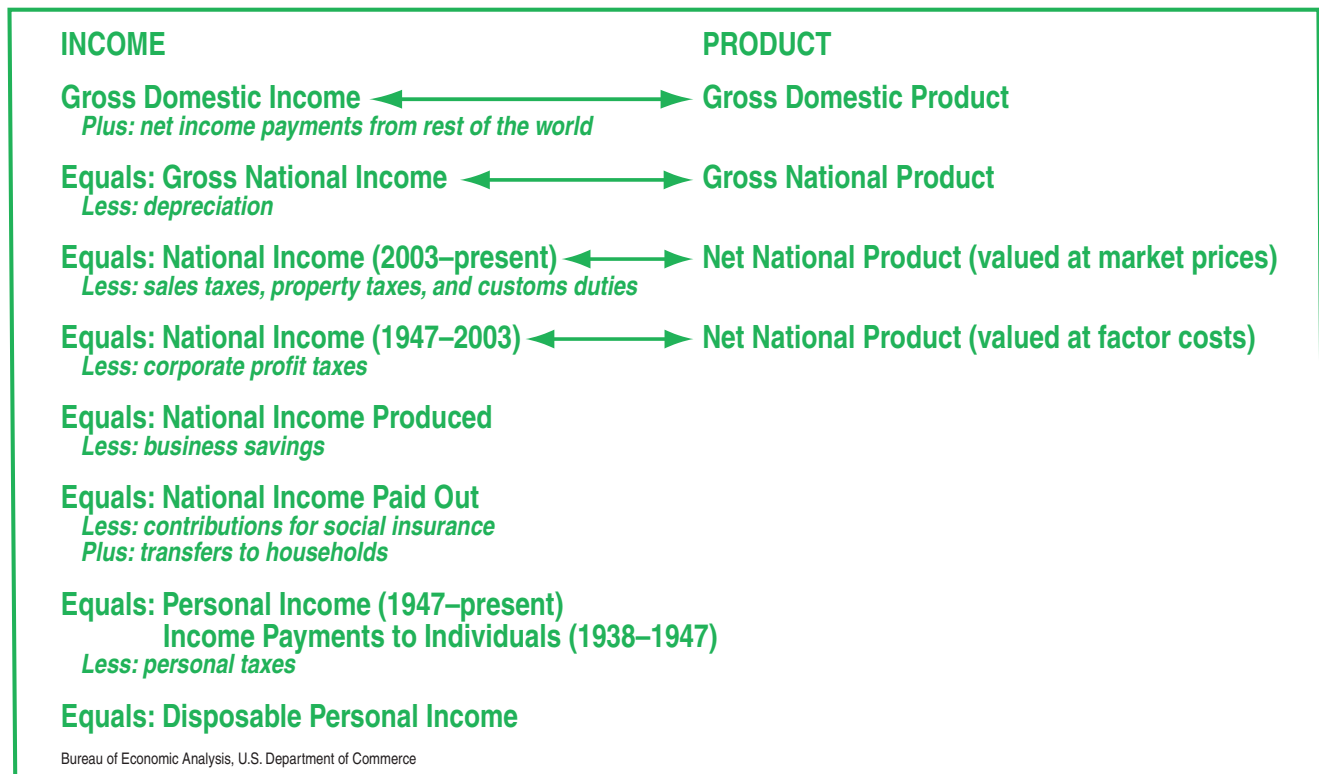
GNP is defined as a comprehensive measure of the production of goods and services in the U.S. economy valued at market prices. In addition to being measured as the sum of production components, GNP can be measured as the sum of expenditures on goods and services for final uses (investment in structures and equipment, and household and government consumption) plus the change in business inventories. The ultimate consumers purchase products for consumption or investment after all stages of production of goods and services are complete. Put in other economic terms, GNP is defined as the sum of value added by all industries in the economy. Data available in the United States have generally provided more comprehensive measurement of expenditures than of industry value added; therefore, expenditure composition was adopted from the start for the U.S. GNP statistic.

Because data on expenditures were not fully available in 1942, GNP was estimated at first by adding business taxes and depreciation to the existing national

30. GNP terminology has changed over time, especially when new measures have been introduced. Beginning in 1942, to distinguish between the two measures of production, GNP was sometimes referred to as “national product valued at market prices,” and national income (referred to upon its introduction in 1934 as “national income produced”) was referred to as “national product valued at factor costs.”

31. Depreciation in GNP, however, does not record the decline in the productive capacity of an asset but rather the decline in its value.

Chart 4. National Income and Product Concepts



**Table A. Gross National Product and National Income, 1941
First Presentation of GNP in 1942**

[Billions of dollars]

Line	Relation of Gross National Product to National Income	
1	National income.....	94.7
2	Plus: Total business taxes.....	17.6
3	Depreciation and depletion charges.....	7.0
4	Income credited to other business reserves.....	1.6
5	Capital outlays charged to current expense.....	1.8
6	Less: Revaluation of business inventories.....	3.2
7	Equals: Gross national product or expenditure.....	119.5
Line	Gross National Product by Use of Product	
1	Gross national product.....	119.5
2	Less: Government purchases of goods and services.....	24.6
3	Federal Government.....	16.4
4	National defense.....	11.2
5	Other.....	5.2
6	State and local governments.....	8.2
7	Equals: Goods and services available for private use.....	94.9
8	Less: Gross private capital formation.....	19.1
9	Construction.....	5.2
10	Producers' durable equipment.....	8.9
11	Net export of goods and services.....	0.9
12	Net export of gold and silver.....	-0.6
13	Net change in business inventories.....	3.6
14	Net change in monetary stock.....	1.1
15	Equals: Goods and services sold to consumers.....	75.8
16	Durable goods.....	10.3
17	Nondurable goods and services.....	65.5
Line	National Income by Use of Funds	
1	National income.....	94.7
2	Plus: Transfer payments from government.....	2.4
3	Less: Corporate savings.....	2.6
4	Employment taxes.....	2.4
5	Direct personal taxes.....	3.8
6	Federal Government.....	2.1
7	State and local governments.....	1.7
8	Equals: Disposable income of individuals.....	88.3
9	Less: Consumer expenditures for goods and services.....	75.8
10	Equals: Net savings of individuals.....	12.5
Line	Gross National Expenditure by Use of Funds	
1	Gross national expenditure.....	119.5
2	Less: Total taxes.....	23.8
3	Business taxes.....	17.6
4	Federal.....	10.8
5	Corporate income and excess profits taxes.....	6.6
6	All other Federal business taxes.....	4.2
7	State and local.....	6.8
8	State corporate income taxes.....	0.3
9	All other state and local business taxes.....	6.5
10	Direct personal taxes.....	3.8
11	Federal.....	2.1
12	State and local.....	1.7
13	Employment taxes.....	2.4
14	Less: Total gross savings.....	22.3
15	Corporate.....	7.2
16	Net savings.....	2.6
17	Depreciation and depletion.....	4.4
18	Other business reserves.....	1.3
19	Capital outlays charged to current expense.....	1.5
20	Revaluation of inventories.....	-2.6
21	Noncorporate.....	15.1
22	Net savings of individuals.....	12.5
23	Depreciation and depletion.....	2.6
24	Other business reserves.....	0.3
25	Capital outlays charged to current expense.....	0.3
26	Revaluation of inventories.....	-0.6
27	Plus: Transfer payments of government.....	2.4
28	Equals: Total consumer expenditures.....	75.8

Source: "Preliminary Estimates of Gross National Product, 1929-41," Milton Gilbert and R. B. Bangs, SURVEY OF CURRENT BUSINESS (May 1942).

income statistic (table A). Government purchases were taken from the budget and other government sources. Investment ("gross private capital formation") was estimated from business records, including tax returns; and durable goods sold to consumers were estimated from Census Bureau and other government data.³² Those expenditures were subtracted from GNP, leaving the combined category of nondurable goods and services sold to consumers as the residual. Direct estimation of all consumption components started in 1947.

Before GNP was made available, projected defense expenditures were sometimes erroneously subtracted from projected national income, producing a residual that was interpreted as the amount of production left for nonwar goods and services.³³ For example, in early 1942, analysts had subtracted President Roosevelt's proposed 1943 defense expenditures of \$56 billion from projected 1943 national income of \$110 billion, leaving a residual of 54 billion. Comparison of the 1943 residual with the same residual for 1941, \$81 billion, indicated that income would have to be cut by a third if the resources required for the war program were to be made available. The assessment was overly grim because national income fell short of the total market value of goods and services produced, of which defense spending was a component.

32. Net exports were included in investment.

33. Gilbert (1942a).

Chart 5. Gross National Product, 1940 and 1941, Compared With War Program Objective for 1943

