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National Income Accounts Budget

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The national income accounts budget is a relatively recent way of analyzing the effects of actual and prospective budgets on the income stream of an economy. Such an analysis supplements those based on the more familiar devices of an administrative budget and a cash accounts budget.

Two recent discussions of the national income accounts budget in the United States may be of interest in this connection.

The Annual Report of the Council of Economic Advisers (January 1962), published together with the Economic Report of the President, describes the national accounts budget in discussing U.S. budget policy for 1958-63. This description (pp. 77-78) is attached as Annex I.

A good but considerably longer discussion of the national accounts budget, entitled "Federal Receipts and Expenditures--Alternative Measures," was published in August 1961 in the Monthly Review of the Federal Reserve Bank of Kansas City, a copy of which is attached. It is understood that the principal author of this article is Mr. Samuel Chase of the staff of the Kansas City Bank.

Budget Policy, 1958-63

The Federal budget has influenced economic activity in recent years in two ways: through the workings of the built-in stabilizers, and through discretionary changes in the budget program. It is not easy to separate these two influences. In order to do so, it is necessary, first, to view Federal fiscal transactions in the same accounting framework used to describe the whole economy. The national income accounts budget is a way of measuring and classifying Federal transactions which accords with the national income and product accounts for the economy. . . .

The National Income Accounts Budget

The effects of Federal receipts and expenditures on the income stream are most accurately represented when the budget is viewed in the framework of the national income accounts. These accounts present a consistent record and classification of the major flows of output and income for the entire economy, including the transactions of the Federal Government. There are three major differences between the Federal budget as it is conventionally presented (the so-called "administrative budget") and the accounts of the Federal sector as they appear in the national income. The major differences between these two budgets, and between both of them and the consolidated cash budget, are schematically summarized in Table 7. There are other, less significant differences among the budgets, such as the treatment of intragovernmental transactions.

First, the national income accounts budget, like the consolidated cash budget, includes the transactions of the trust funds, which amount currently to about \$25 billion per year and have a significant impact on the economy. Highway grants-in-aid, unemployment compensation payments, and social security benefits are examples of trust fund transactions. Because the traditional budget--or administrative budget--is primarily an instrument of management and control of those Federal activities which operate through regular congressional appropriations, it excludes the trust funds, which have their own legal sources of revenue.

Second, transactions between government and business are, so far as possible, recorded in the national income accounts budget when liabilities are incurred rather than when cash changes hands. This adjustment in timing affects both government purchases and taxes, shifting them to the point in time at which they are likely to have their principal impact on private spending decisions. The choice of an accrual, rather than a cash, basis for timing is particularly important for the highly volatile corporate income tax. Since these taxes are normally paid more than six months after the liabilities are incurred, payments of corporate income taxes, as recorded in the administrative budget, run substantially below accruals in a period of rising economic activity. For fiscal year 1962, this difference is estimated at about \$3 billion.

Finally, unlike the administrative budget, the national income accounts budget omits government transactions in financial assets and already existing assets. The largest omission is the volume of loans extended by the

Federal Government. This volume is estimated at \$4 billion net of repayments in fiscal year 1962. While these loans have important effects on economic activity, they are properly viewed as an aspect, not of fiscal policy, but of monetary and credit policy, and are so discussed later in this chapter. Borrowers from the Federal Government, like borrowers from private financial institutions, acquire cash by incurring debts. They add thereby to their liquidity, but not directly to their incomes.

Table 7. Major differences among three concepts of the Federal budget

	Budget concept		
	Administra- tive	Consolidated cash	National in- come accounts
Timing of receipts	Collections	Collections	Accruals
Treatment of net loans and other credit transactions	Included	Included	Excluded
Treatment of trust fund transactions	Excluded	Included	Included

Source: Council of Economic Advisers.

August 1961



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Federal Receipts and Expenditures - -

Alternative Measures

SWINGS IN the magnitude of Federal budget deficits and surpluses can, if properly timed, provide a potent offset for economic instability. The converse is also true—poorly timed variations in Federal surpluses and deficits can seriously aggravate economic instability.

As the awareness of the strategic role of Federal surpluses and deficits has heightened, fiscal policy analysts have devoted considerable attention to the choice of appropriate measures of the budget's impact.

Early in the postwar period it was recognized that the conventional—or Administrative—budget provided only a partial, and often misleading, measure of Federal spending and revenues. Increasingly, analysts turned their attention to the consolidated cash budget. The cash budget figures cancel out certain intergovernmental transactions which appear as both expenditures and receipts in the conventional budget. More importantly, they include the receipts and expenditures of the Federal trust funds. Inclusion of the trust funds in measures of Federal surpluses and deficits has become imperative, both because of rapid growth in the magnitude of trust fund operations and because of the important stabilizing role of unemployment compensation payments, which are financed through a trust fund.

Recently, many students of fiscal policy have been turning to still a third measure of Federal fiscal activity, one which differs importantly from the cash budget series. This third measure is Federal receipts and expenditures as they are carried in the National In-

come accounts, prepared by the Commerce Department. The importance of choosing carefully between the cash budget figures and the Commerce version may be illustrated by the striking differences between them in fiscal 1959. In that year the Federal cash deficit reached \$13.1 billion, a peacetime record. But in the same fiscal year the deficit shown in the National Income accounts amounted to only \$4.8 billion. Clearly, any assessment of the impact of budget policy on economic activity during fiscal 1959 is bound to be highly colored by the choice between these two measures.

The purpose of this article is to explain some of the major differences between the cash budget and Commerce series on Federal receipts and expenditures, and to show how these differences have led to substantially different assessments of the influence of fiscal policy during recent years.

CONVENTIONAL DISTINCTIONS: FISCAL POLICIES VS. CREDIT POLICIES

In the study of relationships between the private and the Federal sectors of the economy, analysts have found it desirable to distinguish clearly between two broad kinds of policies that influence private spending and economic activity in significantly different ways. Policies that directly affect private disposable incomes are conventionally termed fiscal policies, while those that influence private ability to spend indirectly through the financial markets fall into the category of credit-debt management policies. A clarifica-

tion of this distinction is helpful in evaluating the cash budget and the Commerce series as alternative measures of Federal fiscal policy. As discussed below, certain elements of the cash budget have an influence on the economy akin to that of credit-debt management policies, and these elements account for the major differences between the cash budget and the Commerce version.

Fiscal Policy and Private Income

The effects of budgetary imbalance, either surplus or deficit, on private spending are commonly traced to the relationship between Federal spending and revenue and private disposable (aftertax) income. The theory of fiscal policy which underlies the use of the budget as a stabilizing device is based on the notion of the budget as the summation of all Government transactions on current account. The major current account transactions of the Federal Government include spending on new goods and services, of which defense spending bulks largest; Federal transfer payments to the private sector, such as Social Security benefits and various subsidies; and taxes. Federal purchases and transfer payments add to private incomes and Federal budget receipts reduce disposable incomes. The net Federal surplus or deficit therefore measures the drag or stimulus to private disposable income provided by the budget.

Analysts pay close attention to the effect of the Federal budget on private disposable income because income is considered to be a primary determinant of private spending. Federal deficits, which augment the disposable incomes of private households and businesses, are thus thought to provide a direct and powerful stimulus to both consumption spending and business outlays. Conversely, Federal surpluses dampen private spending power. It has become a commonplace tenet of fiscal policy that if the Federal budget is to provide a stabilizing force, the magnitude of the drag or stimulus resulting from Federal

surpluses or deficits should vary in such a way as to moderate (or, in the ideal case, help to eliminate) business cycles.

Credit-Debt Management Policies

The second major class of policies employed by Government to assist in maintaining economic stability—credit and debt management policies which involve exchanges of financial assets—influences private spending indirectly through its effects on the financial markets. Treasury debt operations and Federal Reserve policies are the most important examples. It is primarily through their impact on interest rates and on the availability of credit that these activities have a bearing on demands for goods and services, and hence upon employment and income.

The effects of such policies on private spending stem from the fact that they alter the composition of financial assets and liabilities in the private sector of the economy. A lengthening of debt maturities by the Treasury, for example, reduces the liquidity of the outstanding debt and tends to raise long-term rates of interest, thereby exerting a restrictive influence on private expenditures for goods and services. It is not always recognized that Federal Reserve operations influence aggregate demands through similar changes in the structure of financial claims. Thus, some discussions of monetary-credit policy seem to imply that the Federal Reserve can add to or reduce the bank deposits of the public without inducing any corresponding change in other financial assets or liabilities. But the process of monetary expansion through the banking system requires that the public relinquish other financial assets, such as Government securities, or add to its own indebtedness to the banking system in return for additional money balances. Such changes in the composition of financial assets and liabilities are intimately tied to the cost and availability of credit and hence to the strength of credit-financed demands.

It frequently has been argued that, dollar for dollar, credit-debt management transactions have a weaker and less certain influence on over-all economic activity than do fiscal policies because the influence of private disposable income on spending is stronger and more reliable than is the influence arising out of asset exchanges. Assessing the merits of this proposition is not essential for the purposes of this article. It is important to recognize that the means by which these two types of policies stimulate or restrict private expenditures are fundamentally different. That is sufficient reason to distinguish carefully between current account transactions of Government and those which involve asset exchanges.

ASSET EXCHANGES IN THE CASH BUDGET FIGURES

The differences between the cash budget figures and those shown in the Commerce series on Federal receipts and expenditures turn largely on the distinction discussed above. It is often assumed that the cash deficit or surplus measures the net impact of the Government's current account transactions. However, cash budget figures contain substantial elements of what are actually asset exchange transactions. Among these are Treasury-financed special assistance lending of the Federal National Mortgage Association, and portions of the lending operations of several other Federal credit agencies.

Another class of asset exchanges enters into cash budget figures more subtly. Since most tax liabilities are not paid to the Treasury immediately as they accrue, cash payments of taxes often lag behind accruals by several months. Conventional accounting methods treat income on an accrual basis and involve the deduction of tax liabilities from aftertax income as the tax liabilities accrue. When budget figures are used for fiscal policy analysis, the treatment of tax revenues on a cash-

received basis in the Treasury accounts mistakenly implies that the bite of taxes into private incomes does not occur until payment is made.

Timing of Tax Receipts

Such lags between accruals and cash payments show up most importantly in corporation income taxes. It seems reasonable to suppose that most corporation managements keep accurate books and are sufficiently sophisticated to think of income in accrual terms. They are not likely to confuse unpaid tax liabilities with net income. The fact that corporations tend to cover their accrued tax liabilities with holdings of short-term liquid assets, such as Treasury bills, reinforces the belief that unpaid taxes are not viewed as disposable income.

Therefore, it seems reasonable to treat the inroads of corporation income taxes into disposable corporate incomes on an accrual basis for fiscal policy analysis. Unpaid tax liabilities are in effect a short-term loan from Government to the taxpayer. Net increases in accrued tax liabilities constitute an increase in this form of Government credit, while pay-downs represent a decrease in the net debt of taxpayers to the Government.

Thus, whenever cash payments of taxes over any period fall short of accruals of tax liabilities, there is a net increase in private debt to Government, and the cash budget figures do not fully reflect the impact of taxes on disposable private incomes. For example, in fiscal 1959, cash collections of corporation profits taxes were about \$18 billion, the lowest figure since fiscal 1953, but accruals of corporation tax liabilities over the year amounted to more than \$21 billion, far from a record low level. Unquestioning acceptance of the cash budget figures for fiscal policy analysis leads to a serious underestimation of the impact of corporate taxes on aftertax business income in fiscal 1959.

Similarly, when cash remittances of cor-

poration income taxes exceed current accruals of tax liabilities, the impact of Federal taxes on corporate income implied by the cash budget figures is overstated. For example, in fiscal 1958 Treasury collections of corporation income taxes exceeded corporate tax liability accruals by about \$3 billion. Use of the cash figures for fiscal policy analysis in this case tends to overstate strongly the impact of taxes on corporate income.

Timing of Expenditures

Just as tax collections reported in the cash budget may not accurately reflect the timing of the pinch of Government revenues on private disposable incomes, cash outlays of Government may not properly register the timing of income generated by Federal spending. When business sells to the Government on credit, business income accrues as goods are produced and delivered, but the purchases do not show up in the cash budget until payment is made. By the same reasoning, when cash payments for goods and services sold to Government are made before actual production and delivery, they do not represent additions to current private income, but are a kind of short-term loan. Until the prepayments are worked off, they are carried as liabilities in the accounts of business firms. Thus, the stimulating effect of the Federal purchase on private income is improperly timed in the cash budget series.

To assess properly the timing of income earned from production for the Government, it is necessary to convert Federal cash payments for goods and services to an accrual basis by deducting net increases in Government prepayments and adding net increases in Government accounts payable. The net changes in Federal prepayments and in Government accounts payable, which measure the differences between Treasury cash outlays and accrued expenditures, can then be treated as aspects of Federal policies that affect the cost and availability of credit.

Elimination of Asset Exchanges from Commerce Series

The kinds of asset exchanges described above are largely eliminated from Commerce Department estimates of Federal receipts and expenditures on National Income account. Federal lending and borrowing operations, transactions in secondhand assets, and financial transactions with the International Monetary Fund are not included in the Commerce series on Federal receipts and expenditures. Corporation income taxes and excise taxes are carried on an accrual basis, as are Government purchases of goods and services.

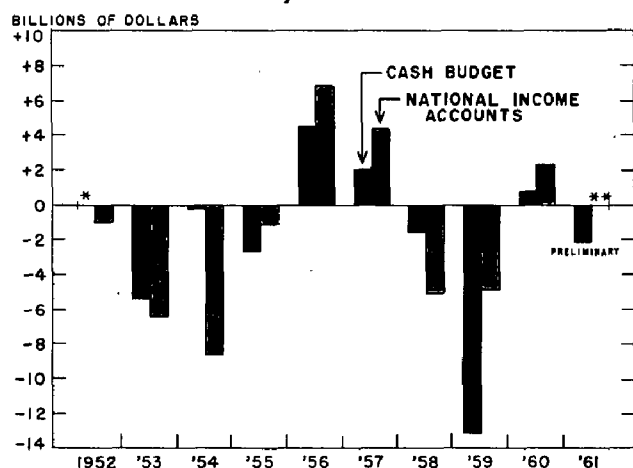
Taxes withheld from wages and salary income are recorded in the Commerce series at the time of withholding, rather than at the time of receipt by the Treasury. Since withholdings closely match accruals, the effect is to treat withheld taxes on at least a rough accrual basis. The one major element of Federal receipts that is not treated on an accrual basis is nonwithheld individual income taxes. These are recorded at the time of receipt by the Treasury, just as they are in the cash budget.

COMPARISON OF CASH BUDGET AND COMMERCE SERIES

The exclusion of large elements of asset exchanges from the Commerce series gives rise to substantial differences between the cash budget and the National Income account figures, especially when economic activity is unstable. This can be seen by examining Chart 1. The black bars show Federal cash surpluses and deficits for the fiscal years 1952-60, along with the officially estimated deficit for fiscal 1961, and the colored bars show surpluses and deficits in the National Income accounts. Clearly the timing of swings from surplus to deficit and back is markedly different in the two series.

These differences arise mainly out of cyclical developments, and are to be expected in

Chart 1
FEDERAL SURPLUS AND DEFICIT
Fiscal years 1952-61



* Less than \$50 million. ** No recent estimate available.
SOURCES: Federal Reserve Bulletin, Survey of Current Business, and Economic Indicators.

view of the different concepts employed in constructing the two series. The most volatile element in Federal receipts is corporation income tax receipts. This important source of revenue is tied closely to corporate profits, which in turn are highly sensitive to variations in over-all economic activity. Since corporations pay income taxes in quarterly instalments, with an average lag of about 6 months after accruals of tax liabilities, the resulting difference between cash payments and accruals of liabilities tends to be large whenever corporate income fluctuates. Similarly, cash remittances of indirect business taxes lag behind accruals of liabilities by about 3 months, so that changes in these revenues also show up later in the cash budget figures than in the Commerce series.

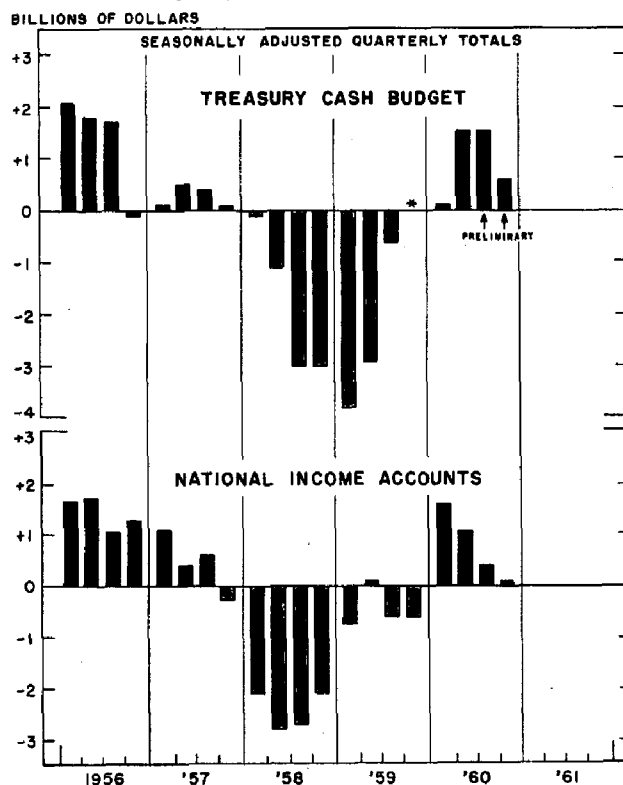
In addition, the extent of Federal lending operations that are included in the cash budget but not in the Commerce series increased during the period of recovery from the 1957-58 recession, partly because of the implementation of the special assistance program of FNMA, which was designed to bolster economic recovery.

Extensions of various forms of Federal credit to the private sector explain most of the

increase in the cash deficit during fiscal 1959, a period when the deficit in the National Income accounts fell. In view of the marked differences of the figures for fiscal 1958-59, it is not surprising that analysts who use cash budget figures take a much dimmer view of the budget's stabilizing role than do those who rely on the Commerce series.

The point at issue can be examined more carefully if the figures are presented in greater detail. The top panel of Chart 2 shows the seasonally adjusted cash surplus or deficit on a quarterly basis. For reference, periods of economic decline are shaded. During the first such period, the major move toward deficit developed after the end of the decline of 1957-58, and the move toward surplus culmi-

Chart 2
FEDERAL SURPLUS AND DEFICIT
Seasonally adjusted quarterly totals, 1956-61



*Zero.

NOTE: Shaded areas show periods of economic contraction defined according to cyclical reference dates of the National Bureau of Economic Research except for the 1961 February turning point, which was estimated by the Federal Reserve Bank of Kansas City.
SOURCES: Federal Reserve Bulletin, Survey of Current Business, and Economic Indicators.

nated in the third quarter of 1960, after the most recent downturn had begun. The strong shift from deficit in early 1959 to surplus in mid-1960 has been regarded as an important deterrent to continued recovery in 1960.

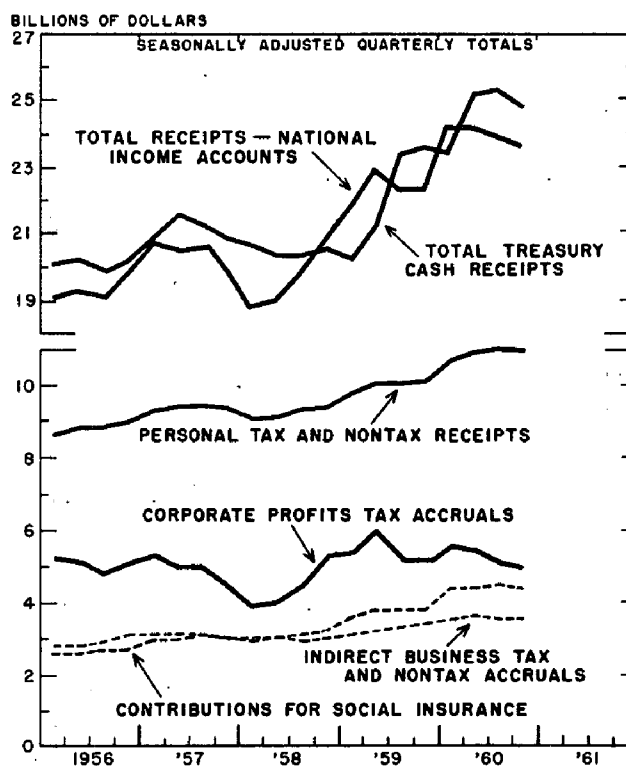
The bottom panel of Chart 2 shows seasonally adjusted quarterly Federal surpluses and deficits as they appear in the Commerce series for calendar years 1956-60. As far as timing is concerned, the turns in the surpluses or deficits shown by the Commerce series have been closely in accord with standard prescriptions for fiscal stabilization policies, and analysts relying heavily on the National Income series have given the budget rather high marks for the timing of swings toward surplus or deficit during recent business fluctuations. With regard to the earlier recession, it is evident that much of the move toward fiscal surplus occurred by the first quarter of calendar 1959, when the cash budget was just beginning to move toward surplus.

Importance of Corporation Taxes

Chart 3 is designed to bring out the crucial nature of differences in the timing of tax receipts as they are carried in the two accounts. The top black line shows seasonally adjusted Treasury cash receipts, while the top colored line shows seasonally adjusted Federal receipts in the National Income accounts. The lower portion of the chart shows seasonally adjusted quarterly figures for the major component groups of Federal receipts as they are carried in the National Income accounts. Unfortunately, separate components of Treasury cash receipts are not available on a seasonally adjusted basis, and comparisons of unadjusted figures are extremely difficult because of the high degree of seasonality in tax payments.

The decline of total receipts during the 1957-58 downturn was distinctly more impressive in the Commerce series than in the Treasury cash budget. The bottom portion of the chart shows that the sensitivity of Federal receipts in the National Income accounts

Chart 3
FEDERAL GOVERNMENT RECEIPTS
1956-61



NOTE: Shaded areas show periods of economic contraction as explained in note to Chart 2.

SOURCES: Federal Reserve Bulletin and Survey of Current Business.

during the period of decline was due mainly to falling corporation profits tax accruals. Quarterly accruals of corporation profits taxes fell by nearly \$1.2 billion, or about 23 per cent, from the third quarter of 1957 to the first quarter of 1958. On an annual rate basis, the decline in corporation profits tax accruals amounted to \$4.7 billion.

Subsequently, as recovery set in, quarterly accruals of corporation profits taxes rose \$2.2 billion, or more than 50 per cent, between the first quarter of 1958 and the second-quarter 1959 high. On an annual rate basis, this represented an upsurge of \$8.6 billion. After mid-1959, corporate profits tax accruals declined for two quarters, showing both the effect of that year's prolonged steel strike on business profits and the narrowing of profit margins that generally characterizes the later stages of

an economic recovery. A mild increase in early 1960 was followed by a further decline in response to the onset of recession. Accruals of corporate profits taxes probably continued to decline through the first quarter of this year, when pretax corporate income apparently reached its lowest point of the recession.

The two other major components of Federal receipts, personal income taxes and contributions for social insurance (mostly Social Security levies), are not importantly involved in explaining the differences between the cash and Commerce figures on Federal receipts.

Nonetheless, the chart does show that individual income tax receipts (together with certain miscellaneous nontax receipts) as they are carried in the National Income accounts turned down slightly during the two quarters embracing the major part of the decline of 1957-58, and then rose until the third quarter of 1960. The decline during the recession of 1957-58 was only \$1.5 billion on an annual rate basis, or about 4 per cent, and available evidence indicates that a similar development has occurred during the latest recession. The strength of individual income tax receipts in recent periods of economic contraction is due primarily to the relative stability of personal incomes during recent recessions.

Differences in the timing of Federal expenditures generally are less important than those of the receipts side in explaining differences in the surplus and deficit figures recorded in the two series. However, increases in Federal lending included in cash budget expenditures do explain a significant portion of the large deficits in the last two quarters of calendar 1958.

EVALUATION OF ALTERNATIVE MEASURES

The wide divergence between swings in Federal surpluses and deficits shown by the two series indicates the importance of choosing carefully between alternative measures of Federal spending and receipts. There is no

reason for flatly rejecting either the cash budget or the National Income account figures as appropriate measures of Federal finance. Each has distinct usefulness in helping to provide answers to certain questions.

The cash budget retains the comprehensive coverage of Federal cash transactions with the public that first led analysts to use it rather than the conventional Administrative budget for purposes of assessing the Federal Government's financial impact on the private sector. However, because it includes elements that are properly considered asset transactions, the cash-flow perspective gives an imperfect measure of the direct influence of Government finances on current private disposable income. These asset transactions, whether they represent lending activities of Federal agencies or the extension and pay-down of private tax indebtedness, are best treated by separating them carefully from the factors influencing accruals of private income and tax liabilities. Just as it is useful to eliminate public debt operations from budget figures, so it is useful to exclude asset exchanges generally from measures of fiscal policy, and to consider them in terms of their influence on private liquidity and the cost and availability of credit.

The developments of fiscal 1961 and 1962 no doubt will be similar in many respects to those of fiscal years 1958 and 1959. The Federal cash deficit is expected to rise in the present fiscal year from the estimated \$2.1 billion deficit of fiscal 1961. But this will reflect in part the lag of corporate tax payments behind accruing liabilities which, if economic recovery persists, should grow substantially between fiscal 1961 and fiscal 1962. As a consequence, the cash budget may greatly overstate the impact of the Federal budget on private disposable income during the current fiscal year, thereby giving a misleading impression of the stimulus to the private economy arising from fiscal policy.

STRUCTURAL CHANGE AND

UNEMPLOYMENT

AT THE CENTER of much recent economic discussion is the problem of unemployment. While the belief remains widespread that expansionary monetary and fiscal policies provide the appropriate environment for solution to the problem, increasing attention is being directed toward the behavior and characteristics of unemployment. Awareness of these characteristics, which has been encouraged by the expanded availability of data in the last two decades, has given rise to and supported a growing interest in developing a broader appreciation of the employment problem. Important as it is to know whether total unemployment is high or low, it is recognized increasingly that such knowledge by itself is insufficient to determine appropriate public policy. Rather, this knowledge may profitably be augmented by a greater understanding of particular characteristics of the labor force and of the unemployed.

In calling attention to the growing recognition of the significance of more specific knowledge on unemployment behavior, it should not be assumed that all of the required information on characteristics is available. On the contrary, much of what is necessary to assess the significance of particular hypotheses remains unknown. Additional information of better quality still is needed. And of equal and perhaps even greater priority is the need for more useful definitions and concepts. Thread- ing through some of the complexities surrounding manpower utilization, it becomes evident that logical and analytical considerations require considerably greater development and, in turn, substitution for some of the pragmatic concepts evolved over time.

Nowhere, perhaps, has this lack of attention to concepts and operationally meaningful definitions been more apparent than in the structural unemployment issue. Since automa-

tion, shifts in demands, and other changes in the structure of production and demand affect manpower utilization, various statistical measurements have been developed recently with a view toward isolating the magnitude of some of these structural elements in unemployment. While such efforts are laudable, their interpretation must recognize, as is always true, the restrictions on generalizations imposed by underlying assumptions. Particularly in the case of structural unemployment, careful identification is required of the assumptions relating to the equilibrating forces operating through wage adjustment and substitution in labor markets and to the institutional restrictions imposed upon those forces. In this way, some of the current misunderstandings concerning the structural problem may be resolved.

This article, while seeming to paint with a broad brush, has been shaped by a specific objective. It has been aimed at the identification and measurement of major structural shifts in the growth and utilization of manpower resources since the end of World War II. Differential rates of growth among components of the labor supply, resulting from changes in the proportions of population groups engaged in labor force activity and from past variations in the birth rate, contain structural elements. Similarly, changing patterns of employment — reflecting not only shifts in consumer demands, but also shifts in producer demands through new technologies, product substitution, and the like — have structural implications. Upon these considerations and their relation to the unemployment problem, the burden of the case for this investigation rests.

POSTWAR UNEMPLOYMENT EXPERIENCE

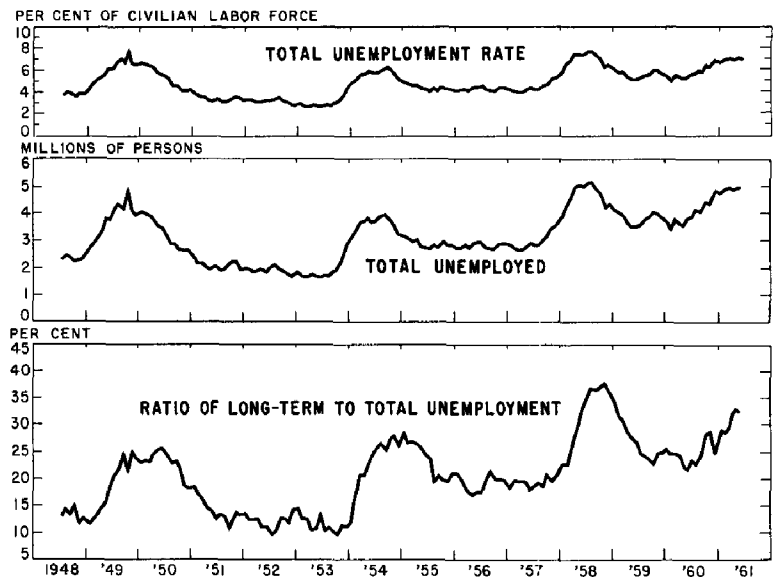
As background for investigating these structural changes, it is useful to consider the postwar record of the volume and incidence of unemployment. During four postwar recessions, the over-all unemployment rate never has exceeded 7.5 per cent of the civilian labor force. At its lowest level, the rate held near 2.5 per cent for several months in 1953. (All data used in this section are seasonally adjusted.)

While it is often pointed out that the unemployment rate has been higher at successive peaks of postwar cycles, interpretations of that progression may well profit by recognition of the particular circumstances prevailing at specific times. The decline in unemployment during 1951-53 is associated in a substantial way with partial mobilization for the Korean War. The meaning of the low levels of unemployment in those years in relation to other periods, therefore, needs to reflect that wartime environment. During the cyclical expansion covering 1955-57, the unemployment rate declined to a level approaching 4 per cent of the civilian labor force and compared favorably with conditions in 1948. Only in the last period of cyclical expansion, 1958-60, did the rate of unemployment hold at a distinctly and meaningfully higher level. In not falling below 5 per cent during that period, unemployment conditions reflected the premature termination of the economic expansion in early 1960.

Tracing the levels of unemployment at successive recession troughs reveals no systematic tendency toward higher rates. In 1949, with the first postwar adjustment, the rate reached a high around 7 per cent. Following the Korean truce, another economic adjustment carried unemployment upward, reaching a peak around 6 per cent. It was during the following recession period, 1957-58, that overall unemployment conditions were the most severe of the postwar period. The unemploy-

TRENDS IN UNEMPLOYMENT

Seasonally Adjusted



NOTE: October 1949 rate exaggerated by coal miners on strike who reported they were seeking other jobs.

SOURCE: U. S. Bureau of the Census.

ment rate held above 7 per cent for several months and mounted to a postwar peak rate of 7.5 per cent. That the experience of 1958 was not a step toward progressively higher levels, however, was borne out during the first half of this year in which the peak recession rates held steady on the lower side of 7 per cent.

Estimates of the total number unemployed each month may be viewed as being comprised of two elements. One is the number of persons entering the ranks of the unemployed during the month. This represents new idleness. The other element is the number of persons experiencing continuing unemployment, which reflects the duration of individual spells of idleness. These components of unemployment may develop different patterns relative to each other because they are associated with different labor market factors.

Long-term unemployment is often associated with structural developments arising from changes accompanying growth in the economy. While the impact of such changes may be confined to a relatively small proportion of the labor force and to particular geo-

graphical areas, the duration of the idleness may very well be long term because of the inability of those idled to shift readily into new occupations or to move their residences to areas of greater employment opportunities.

Inspection of the trends in total and in long-term unemployment during the postwar period reveals two significant characteristics of the long-term element—commonly identified as comprising those out of work for 15 weeks or more. First, long-term unemployment rises and falls with the business cycle, and its swings have considerably greater amplitude than in total unemployment. Second, the incidence of long-term unemployment has mounted. The proportion of the total idle for longer periods has tended to increase from one cycle to the next. Tracing through the postwar recessions, the ratio of long-term to total unemployment rose to a high of about 25 per cent in the first adjustment. During the following recession, the proportion advanced to about 28 per cent, even though the over-all unemployment situation was not as severe in 1954 as it had been in 1949. Again during the economic downturn of 1958, the long-term proportion mounted to a high of about 38 per cent of total unemployment. The 1958 experience represented the most severe unemployment situation of the postwar period. During the last recession, the ratio of long-term to total idleness was highest in the spring of this year when it amounted to about one third.

Thus, at their respective peaks in 1949 and 1961, over-all unemployment rates, *i.e.*, the proportion of the civilian labor force unemployed, were about equal at approximately 7 per cent. With a substantially larger labor force in the latter year, however, the number of persons idle rose about 750,000 to a total of approximately 5 million. The long-term component, meanwhile, advanced to a level of more than 1.5 million and accounted for a major portion of the increase in the total. This

growth in the proportion experiencing long-term idleness may explain in part the more plateau-like highs in unemployment during the last two recessions.

These estimates of long-term unemployment, it should be noted, understate the seriousness of the problem. Based on monthly surveys of the labor force which relate to a particular week each month, the estimates fail to record the cumulative amount of idleness for those persons who experience more than one spell of unemployment during a calendar year. In 1959, for example, 39 per cent of those having any unemployment were without work two or more times, according to the annual survey of work experience. The cumulation of these spells of idleness for that year resulted in 34 per cent of the unemployed experiencing long-term idleness compared with a 27 per cent average measured by the monthly survey.

INFLUENCE OF LABOR FORCE PATTERNS

The most striking change in the labor force within the past several years has been the sharply rising rate of labor force participation among women. Between 1949 and 1960, for example, the annual average size of the civilian labor force increased by 8.5 million persons. Women were the major factor in the gain and accounted for about two thirds of the expansion. Major increases were centered among women in the age groups from 35 to 54 years. All female age groups in the labor force increased more rapidly than the total, however, except those in the 20-24 and 25-34 age groups. In the younger category, the number of workers, male as well as female, declined. Among men, only the 45-54 age group increased more rapidly than the total labor force. All other male age groups represent smaller proportions of the current labor force than a decade ago.

Since women rather consistently experience higher unemployment rates than men, the greater participation of women in the labor

force would tend to raise the over-all rate of unemployment, other things being equal. Without attempting to isolate the specific effect of the greater number of women on the total, however, it is apparent that they contributed substantially to the increased number of unemployed during the last decade. Four fifths of the increase between 1949 and 1960 represented increased jobseeking among women, who in the latter year accounted for about 35 per cent of the total unemployed. Idleness for all female age groups increased more rapidly than total unemployment, with the largest increments occurring in those groups which showed the largest labor force gains. Among men, unemployment rose less than proportionately in all age groups, except among teenagers and the 45-54 age group. Again, as a matter of perspective, the terminal dates selected—1949 and 1960—were generally similar in terms of labor force utilization. During both years, unemployment was advancing and the annual average rates were virtually identical.

The relationship between these changes in the composition of the labor force and unemployment does not seem to be positively related to the increasing incidence of long-term idleness, however. Long-term unemployment among adult women is relatively low and their increased importance thus tends to reduce the significance of long-term idleness. In the first quarter of this year, for example, 1.9 per cent of the women in the labor force were long-term unemployed, compared with 2.5 per cent for men.

Shorter periods of unemployment for women than men reflect in part the greater mobility of women into and out of the labor force. Arising from this mobility is an important difference for men and women in the relation between previous labor force status and unemployment. In recent years, an average of more than one half of the women who have been added to the unemployed each

month were in a nonlabor-force status, primarily housework, the previous month. Among males, additions to unemployment originate primarily in a previous status of employment.

Summarizing the influence of compositional changes accompanying labor force growth, two divergent implications for unemployment are apparent. First, with their increased participation in the labor force, women have become a more significant element in over-all unemployment. On the other hand, experiencing shorter periods of idleness than men, they have served to counter the influence of other factors making for longer periods of unemployment. Also, the absolute decline in the number of workers in the 20-24 age group, which tends to have high rates of long-term idleness, has reinforced the latter development.

INFLUENCE OF THE DEMAND FOR LABOR

Long-term changes in the composition of the demand for labor also have affected the rate of manpower utilization. Indeed, the impact upon unemployment and upon the duration of idleness stands out clearly in many industries and communities. As a matter of general classification, two kinds of changes may be readily identified. Shifts in the composition of consumer demand—reflecting the development of new products and services, changing tastes, and so forth—affect the pattern of employment. So also do technological advancement, rising productivity, and other factors which influence directly producer demand for manpower.

The recent shift in consumer demand from standard to compact cars, which reduced labor requirements per car as well as the need for steel and other materials, is a good example of the effect of changes in consumer tastes on a particular category of manpower. This also exemplifies in one way the continuing shift in outlays for goods relative to services. Outlays for services are rising faster

Structural Change

than those for commodities and are supporting a persistent and substantial shift in the industrial distribution of employment. The trend toward more rapidly rising employment in service-producing industries has been apparent for some time.¹ Even in the short period from 1949 to 1960, the proportion of the experienced labor force employed in goods-producing industries declined from about 51 per cent to 45 per cent. Migration from the farm played a major part in the development, but other goods-producing industries, especially in manufacturing, have not kept pace with the expansion in service activities.

The slow increase in employment devoted to goods production is not explained entirely by the trend of outlays for goods, however. Technological innovation and productivity, as suggested above, have vastly reduced manpower requirements per unit of output. Auto industry employment, for example, also has experienced the impact of rapid technological change as automation has led to labor displacement in recent years. Likewise, the bituminous coal industry has suffered reductions in employment largely due to competition from rival fuels and to technology, including both mechanization of coal mines and innovations in major coal-consuming markets. One of those markets was the railroad industry, where the introduction of the diesel locomotive contributed to the ability of the railroads to handle increased traffic and simultaneously reduce employment. Thus, the service-producing industries have not completely escaped changes dictating reductions in employment, but goods-producing industries have sustained the major impact.

Accompanying the changing industrial distribution of employment have been broad

changes in the occupational structure of the labor force. White-collar workers have increased substantially as a proportion of total employment, while blue-collar employment has failed to keep pace with the total.² The proportion of white-collar employees has been mounting since early in this century, but growth in their number has been particularly rapid in postwar years. White-collar employees outnumbered blue-collar workers for the first time in 1956, and in 1960 they represented 47 per cent of nonfarm employment.

During the 1950's, the number of professional and technical employees grew most rapidly at a rate more than three times greater than that of total nonfarm employment. Clerical employment grew at about twice the rate for the total, while the number of sales workers increased at about the same rate as overall nonagricultural employment. The rate of increase for managers, officials, and proprietors was much smaller.

Employment of blue-collar workers rose only 1 million during the 1950's—a gain of 4 per cent compared with the 27 per cent increase for white-collar employees. Nearly all of the expansion in blue-collar jobs was confined to skilled craftsmen and foremen. In total, blue-collar workers comprised 40 per cent of nonfarm employment in 1960. Rounding out the picture of nonfarm employment growth, service worker employment grew at about the same rate as the white-collar component. Expansion was due largely to the gain in general service worker occupations.

¹Goods-producing industries include agriculture, mining, manufacturing, and construction. Service-producing industries include trade, finance, transportation, public utilities, government, and other service activities.

²White-collar occupations include professional, technical, and kindred workers; managers, officials, and proprietors, except farm; clerical workers; and sales workers. Blue-collar occupations include craftsmen, foremen, and kindred workers; operatives and kindred workers; and laborers. A third category is comprised of service workers, which include those in private household service, and protective, personal, and institutional services. Farmers and farm workers compose a fourth occupational group.

Growth in the number of white-collar workers is related to the growth of service-producing industries. White-collar jobs are concentrated in the service sector and it has supplied the major source of expansion in recent years. However, white-collar employment has increased in every industry group and recent relative gains in goods-producing industries have been as large as in service-producing industries. White-collar employment in construction and in durable goods manufacturing increased 36 per cent between 1952 and 1960, equaling the combined increase in finance, service, and public education.³

In the goods-producing industries, the growth of nonproduction-worker employment mirrors rather closely the increasing importance of white-collar workers. In 1947, about 16 per cent of the employment in manufacturing and 10 per cent each of construction and mining employment were composed of nonproduction workers. By 1960, the respective proportions were 25 per cent, 15 per cent, and 22 per cent. Overall, 23 per cent of the employment in the nonfarm goods-producing industries was in the nonproduction-worker category in 1960. While several factors influence the proportion of nonproduction workers, technological considerations have become increasingly important and have contributed to rising demands for professional and technical workers. Through the innovations which attend their efforts, in turn, increased output is possible without corresponding additions to production-worker forces.

What implications do these changes in the patterns of employment have for unemployment and its duration? Other things being

equal, the larger proportion of the labor force in service-producing activities and white-collar occupations would tend to lower the over-all rate of unemployment. These activities and occupations customarily experience lower rates of unemployment. Among white-collar workers, unemployment rates have been remarkably stable. At the peaks of economic activity, they are considerably lower than rates of blue-collar and service workers and they advance less during periods of recession.

However, shifts in the composition of employment have not proceeded smoothly and have resulted in some disequilibrium in the allocation of labor resources. There has been a lag in the adjustment, with the composition of supply failing to keep pace with changes in the composition of demand. It is frequently difficult for unemployed blue-collar workers—whose work experience has been gained in manufacturing, mining, or railroading—to shift into new lines of work. Employers often are reluctant to hire such workers. The workers, in turn, face difficult decisions. If they are successful in finding new employment it is likely to be in trade or service activities, which pay considerably lower wages than they have been accustomed to receiving. Moreover, after several years with a particular organization, workers acquire vested interests in the form of seniority and pension rights, sick benefits, and so forth, which serve to attach them to that company, despite even prolonged periods of unemployment. These and other barriers, particularly financial, also tend to restrict their mobility to other areas.

Thus, workers who last worked in manufacturing, mining, or railroading, constitute the bulk of those unemployed for long periods of time. About 40 per cent of the long-term unemployed in 1960 came from those industries. The problem is most severe for the unskilled and semiskilled workers, because they are more likely to experience long-term idleness than those with greater skills.

³Data relative to occupations are derived largely from an extensive treatment of white-collar employment in the January and February 1961 issues of the Bureau of Labor Statistics *Monthly Labor Review*. The classification of occupation by industry from the monthly labor force survey is available only since 1952.

Structural Change and Unemployment

SUMMARY

Since World War II, cyclical peaks in the over-all unemployment rate have shown remarkable similarity. While this is not correspondingly true for the troughs in unemployment (peaks of business activity), the circumstances surrounding the upward progression in rates must be evaluated. The duration of unemployment, meanwhile, has lengthened as is indicated by the upward trend of the ratio of long-term unemployment to the total of those seeking jobs. This is clearly pointed out by the advance in the ratio between periods of essentially similar conditions in terms of over-all unemployment rates.

Women have supplied the great bulk of the additions to the labor force since World War II and they now comprise a larger proportion of the unemployed than in earlier

years. Their greater mobility into and out of the labor force, combined with a greater concentration in retailing, office work, and domestic service, however, yields lower rates of long-term idleness than for men.

The changing composition of industrial and occupational demands for labor is closely related to the increased duration of unemployment. Differences in skills and rates of pay and various institutional and individual barriers reduce the mobility of displaced workers in finding jobs in more rapidly expanding alternative industries and occupations. For certain groups of the work force who face severe competition for jobs under most conditions—older men, nonwhites, and the less skilled and educated—the transition is particularly arduous and their unemployment problem is difficult.

BANKING IN THE TENTH DISTRICT

District and States	Loans				Deposits			
	Reserve City Member Banks		Country Member Banks		Reserve City Member Banks		Country Member Banks	
	June 1961 Percentage Change From							
	May 1961	June 1960	May 1961	June 1960	May 1961	June 1960	May 1961	June 1960
Tenth F. R. Dist.	-1	+5	†	+11	+1	+7	+1	+8
Colorado	-1	+3	+1	+10	+1	+7	†	+8
Kansas	-4	+11	†	+15	-1	+4	+2	+9
Missouri*	+1	+11	-1	+3	+1	+5	†	+7
Nebraska	-1	+4	-1	+12	-1	+6	-1	+9
New Mexico*	**	**	-3	†	**	**	-2	+5
Oklahoma*	†	†	+1	+17	+2	+10	+2	+8
Wyoming	**	**	†	+8	**	**	†	+7

*Tenth District portion only.
†Less than 0.5 per cent.

**No reserve cities in this state.

PRICE INDEXES, UNITED STATES

Index	June 1961	May 1961	June 1960
Consumer Price Index (1947-49=100)	127.6	127.4	126.5
Wholesale Price Index (1947-49=100)	118.2	118.7 ^r	119.5
Prices Rec'd by Farmers (1910-14=100)	234	236	235 ^r
Prices Paid by Farmers (1910-14=100)	300	302	299

^r Revised.

TENTH DISTRICT BUSINESS INDICATORS

District and Principal Metropolitan Areas	Value of Check Payments		Value of Department Store Sales	
	Percentage change—1961 from 1960			
	June	Year to date	June	Year to date
Tenth F. R. District	+5	+6	+4	+4
Denver	+15	+13	+9	+6
Wichita	+8	+2	0	-3
Kansas City	+2	+5	+2	+1
Omaha	-2	+5	+18	+21
Oklahoma City	+7	+10	-17	-10
Tulsa	+4	+2	-4	-3