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THE NEW FEDERAL BUDGET

In late January, the President presented Congress a budget for fiscal year 1969 that is radically different in format and in some concepts from all other Federal budgets. The new budget statement (The Budget) is designed to replace the administrative budget, the consolidated cash budget, and the national income accounts (NIA) budget.

The new budget format was recommended by the President's Commission on Budget Concepts, which was the first Presidential group to review basic budget concepts since the Budget and Accounting Act was passed in 1921. The Commission was established in March 1967 and submitted its proposals in late 1967. The Administration accepted nearly all of the Commission's recommendations.

This article examines the format of the new budget, including the coverage and accounting basis. The conversion to the new budget format will be a two-stage process. The first stage, representing the reclassification of items, is introduced in the fiscal 1969 budget. The second stage, involving a change in accounting methods, will occur in about two years. This article also provides some historical comparisons of the figures in the new and old Federal budgets and briefly discusses the Federal budget for fiscal year 1969.

THE BUDGET AND FINANCIAL PLAN

The new Federal budget is part of an overall financial plan comprising a set of comprehensive and integrated accounts, which are summarized in Table I. The accounts consist of four major subdivisions: (1) budget authority; (2) budget receipts, expenditures, and net lending; (3) the means of financing a budget deficit (or disposing of a surplus); and finally, (4) outstanding Federal debt and loans.

The new format gives special attention to legislation and budget authority.[1] The first section ("Budget authority") begins with a statement of the new appropriations requested by the President, and then presents figures on appropriations that will become available automatically in the coming fiscal year because of past Congressional action. The sum of new and past appropriations becomes the "total authority" for the relevant fiscal year (see Table I, Section I).

The "Budget receipts, expenditures, and lending" section is the heart of the new budget and financial plan. The section is divided into two subaccounts — the expenditure subaccount and the loan subaccount — that separate loan activities from other receipts and expenditure programs (see Table I, Section II).

Within the expenditure subaccount, receipts consist of all tax receipts, fees, trust

[1] The term "authority" is redefined in The Budget as "an authorization by an Act of Congress to incur obligations and make payments out of the Treasury for specified purposes."

TABLE I
Summary of the President's Budget and Financial Plan

I. Budget authority
  Proposed for action by Congress
  Not requiring action by Congress
    Total authority

II. Budget receipts, expenditures, and lending
  Expenditure account
    Receipts
    Expenditures (including net lending)
      Expenditure account surplus or deficit

  Loan account
    Loan disbursements
    Loan repayments
      Net lending

  Total budget
    Receipts
    Expenditures and net lending
      Budget surplus or deficit

III. Means of financing
  Borrowing from the public
  Reduction of cash balances, etc.
    Total budget financing

IV. Outstanding Federal securities and Federal loans, end of year
  Federal securities
    Gross amount outstanding
    Held by the public
  Federal credit programs
    Direct loans outstanding
    Guaranteed and insured loans outstanding

Source: Bureau of the Budget

fund receipts, and receipts derived from sovereign authority; expenditures include all nonloan expenditures and trust fund payments. The difference between total receipts and expenditures is the "expenditure account surplus or deficit." The loan subaccount of The Budget provides a separate treatment of the Government's lending activities. The section shows gross loan disbursements during the fiscal year and deducts loan repayments (and actual sales of loans) to arrive at "net lending."

The separation of expenditure and loan activities provides the Executive Branch, Congress, and the public with a useful measure of the economic or fiscal policy impact of The Budget. That is, the size and direction of the "expenditure account surplus or deficit" indicates whether The Budget is acting to restrain or stimulate the economy. Government lending programs are excluded from the impact measure because such programs involve the exchange of financial assets rather than direct income payments. Although a Government loan increases the purchasing power of the private sector of the economy, borrowers simultaneously assume liability for ultimate repayment. Consequently, the economic impact of a loan is held to be different from a direct expenditure.

The total budget includes both the expenditure subaccount and the loan subaccount, and reflects the whole range of Government activities that require Congressional approval; the total surplus or deficit is the amount to be financed. The term "budget surplus or deficit" refers *solely* to the total budget. Consequently, the new budget eliminates the confusion previously generated by numerous budget concepts and their often conflicting surplus or deficit figures.

The third section of the new Federal budget and financial plan covers the *means of financing* a budget deficit (or disposition of a surplus). This section (see Table I, Section III) shows the amount of deficit to be financed by borrowing from the public and the amount by other means, such as the drawing down of

cash balances. Both Treasury and Federal agency borrowing from the public are included as a means of financing the deficit.

The fourth section of the new budget and financial plan presents data on the level of Federal borrowing and lending at the end of the fiscal year. It shows the gross volume of Federal securities expected to be outstanding and the amount held by the public,[2] as well as the anticipated status of the various Federal credit programs.

BUDGET COVERAGE AND ACCOUNTING BASIS

Coverage. The new Federal budget is designed to be a comprehensive accounting of the full range of Government activities — regular agencies, the trust funds, and Government corporations. Table II presents the highlights of differences between the new budget and other budget concepts.

The major difference between The Budget and the administrative budget is the inclusion of trust funds in the new budget. Since the consolidated cash budget and the NIA budget include trust funds, the differences between the new budget and the cash and NIA budgets involve the treatment of loans, participation certificates, and seigniorage.

The first difference is that Government loans will be divided into two categories in the new budget. The amount of any subsidy element in the loans[3] will be treated as an expenditure item in the expenditure subaccount. In this way, the "pure" lending activity of the Government will be isolated in the loan subaccount. By including loans, the new budget differs from the NIA budget, which excludes lending activities and other financial transactions.

The second, and in terms of dollar magnitude the most important, difference between the budgets is the handling of sales of participation certificates.[4] In the new budget, participation certificates appear as a debt operation in the "means of financing" section. In

[2] "Public" is defined as outside Government agencies and trust funds. Holdings of Government debt by the Federal Reserve System are included in public holdings because Federal Reserve receipts and expenditures are not included in The Budget.

[3] A considerable number of Federal loans include a subsidy element that reflects lending at more favorable interest rates than the cost of money to the Government (or the even higher cost of money obtained through private sources). For example, if the Federal Government lends $100 for 40 years on an amortized basis at an interest rate of 2 percent when it has to pay 5 percent to borrow the money from the public for the same term of years, the "loan" is worth only about $63 — not $100. (The same annual repayments would be required by a loan of $63 for 40 years at 5 percent as a loan of $100 at 2 percent for the same period of time.) That is to say, the borrower is receiving an asset worth $100, but the Government is getting an asset in return worth only about $63. The difference of about $37 represents a Federal payment to the borrower, which is comparable to an ordinary Government expenditure rather than a loan.

[4] Participation certificates are sold to the public and are interest-bearing instruments representing shares in a pool of Government-held loans. For example, the Federal National Mortgage Association (FNMA) sells beneficial interests, or participations, in mortgages owned by the Association. FNMA also has the responsibility for managing and coordinating the pooling of assets and sale of participation certificates in the capacity of trustee for the Farmers Home Administration, the Office of Education's academic facilities loan program, the college housing and other programs of the Department of Housing and Urban Development, and the Small Business Administration.

TABLE II
Budget Concepts: The New and The Old

	The Budget	NIA Budget	Consolidated Cash Budget	Administrative Budget
I. Coverage				
Receipts				
Regular taxes	Included	Included	Included	Included
Trust fund taxes	Included	Included	Included	Excluded
Receipts from market-oriented activities	Excluded from receipts, netted against expenditures or outlays	Excluded from receipts, netted against expenditures	Includes some in receipts	Includes some in receipts
Expenditures				
Regular agencies	Included	Included	Included	Included
Trust funds	Included	Included	Included	Excluded
Loans	Excluded from expenditure account; included in total budget outlays	Excluded	Included (net on expenditure side)	Included (net on expenditure side)
Other				
Participation certificates	Treated as borrowing	Excluded	Treated as reduction of payments	Treated as reduction of expenditures
Seigniorage	Excluded from receipts, treated as a means of financing the deficit	Excluded	Excluded from receipts, treated as a means of financing the deficit	Treated as receipt item
Federal home loan banks and land banks	Excluded	Excluded	Included	Excluded
District of Columbia	Excluded	Excluded	Included	Excluded
II. Accounting Basis				
Receipts	Accrual*	Combination, cash and accrual	Cash collections	Cash collections
Expenditures	Accrual†	Deliveries	Cash payments—checks cashed	Cash payments—checks issued

* Presently on a cash collection basis, but are expected to be on an accrual basis in the future.
† Presently on a checks issued basis, but are expected to be on an accrual basis in the future.

Source: Federal Reserve Bank of Cleveland

other words, sales of participation certificates are given the same treatment as direct borrowing by the Treasury. In the cash and administrative budgets, participation certificates are considered negative expenditures, while the NIA budget excludes them.

The third difference between budgets is that in the new budget the Government's "profits" on coinage operations (seigniorage) are a means of financing the budget deficit. In contrast, seigniorage is a form of revenue in the administrative budget and is excluded in the cash and NIA budgets.

The new budget does not differ from other

budget concepts with respect to the treatment of the Federal Reserve System. The payment of "interest on Federal Reserve Notes" to the Treasury by the Federal Reserve continues as a revenue item in the new budget, while other receipts and expenditures of the Federal Reserve Banks are excluded.

Government-sponsored enterprises are omitted from the new budget whenever they are completely privately owned. Consequently, the Federal Home Loan banks and the Federal Land banks are excluded from the new budget. The Federal Intermediate Credit banks, Banks for Cooperatives, and the FNMA secondary market operation fund are included since they are not 100 percent privately owned. Activities of the Federal Deposit Insurance Corporation are also included in the new budget. Receipts and expenditures of the District of Columbia are excluded from the new budget, which is the case in both the NIA and administrative budgets.

Accounting Basis. The use of accrual accounting for all Government receipts and expenditures is perhaps the most important innovation to be introduced in the new budget. Broadly speaking, accrual accounting records a receipt of expenditure at the time a credit or liability arises. On the expenditure side, accrual accounting "times" spending when the actual liability is incurred. Use of accrual accounting for spending is particularly significant for goods with long production times, such as planes, missiles, and warships; spending will thus be recorded as work progresses.

In the case of receipts, the new budget will use the accrual method to record corporate profits taxes, and will be similar to the NIA budget in this procedure. The feasibility of introducing the accrual method for personal income and employment taxes is still under study. If a satisfactory accrual accounting basis cannot be developed for these taxes, they will be reported on a cash basis. The use of a cash basis for personal income and employment taxes would probably not impair the usefulness of the new budget, because it is doubtful that individuals keep accrual accounting records or that tax accruals have much, if any, influence on individual behavior. In practice, receipts of the new budget may approximate the NIA budget insofar as the treatment of taxes is concerned.

Because of the lack of historical data on accrual expenditures and the problems involved in establishing an accrual accounting system, it will be at least two years before the new budget can be recorded on an accrual basis. Government agencies will have time in the interim period to develop the necessary accrual accounting records. In addition, loan subsidies will not be included in expenditures for at least two years so that record-keeping methods can be developed.

FEDERAL BUDGET RECEIPTS AND EXPENDITURES, 1965-1969

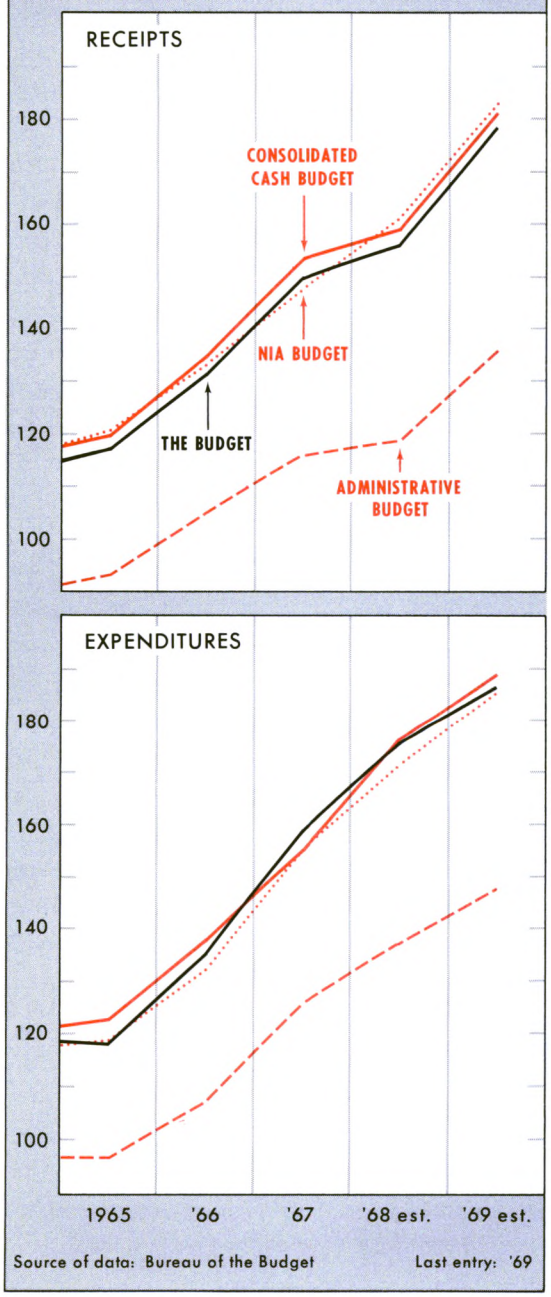
A comparison of Federal receipts and expenditures under different budget concepts for fiscal years 1965-1969 is shown in Chart 1. Total receipts in The Budget are somewhat smaller than in either the cash or NIA budgets because there is more netting of items

Chart 1.

FEDERAL BUDGET RECEIPTS and EXPENDITURES

Fiscal Years 1965—1969

Billions of dollars



Source of data: Bureau of the Budget

Last entry: '69

in the former.[5] That is, receipts of a particular program or agency, such as the post office, are subtracted from the expenditures of the program or agency, and the net figure is recorded as an expenditure. Administrative budget receipts are much smaller than those in The Budget because trust fund receipts are excluded from the administrative budget.

Total expenditures in The Budget are roughly similar to those in the cash budget, but are slightly greater than in the NIA budget and much greater than in the administrative budget. Spending figures in the new budget are higher than in the NIA budget because lending programs and other financial transactions are included in the former. In the new budget, spending figures are much larger than in the administrative budget, chiefly because participation certificate sales are removed as an offset against expenditures and the trust funds are included.

[5] The greater use of netting in the new budget reflects the view that "... receipts from activities which are essentially governmental in character, involving regulation or compulsion, should be reported as receipts. But receipts associated with activities which are operated as business-type enterprises, or which are market-oriented in character, should be included as offsets to the expenditures to which they relate." *Report of the President's Commission on Budget Concepts,* Washington: U. S. Government Printing Office, 1967, p. 65. The following categories of receipts are offsets to expenditures in the new budget: receipts of Government enterprises and enterprise funds; permits and fees; hunting and grazing licenses and fees; interest, dividends, rents, and royalties; sales of products; fees and charges for services and benefits of a voluntary character; sales of Government property; repayments of loans and advances; and recoveries and refunds of earlier expenditures. However, the new budget also presents gross figures on receipts and expenditures for those agencies whose receipts are offset against expenditures.

FEDERAL BUDGET SURPLUSES AND DEFICITS, 1965-1969

In The Budget, total receipts are generally smaller than those in the cash and NIA budgets and total outlays are generally larger. As a result, deficits in The Budget are usually larger (or surpluses smaller) than in the cash or NIA budgets. In fact, in each fiscal year from 1961 through 1969, the total deficit in The Budget exceeds the deficit in the NIA budget; the same is true in comparison with the cash budget, with the exception of fiscal year 1965. (See Table III.)

Chart 2 shows the respective surpluses or deficits under the various budget concepts for fiscal years 1965-1969. In fiscal years 1965 and 1966, the expenditure account of The Budget was virtually in balance (surpluses

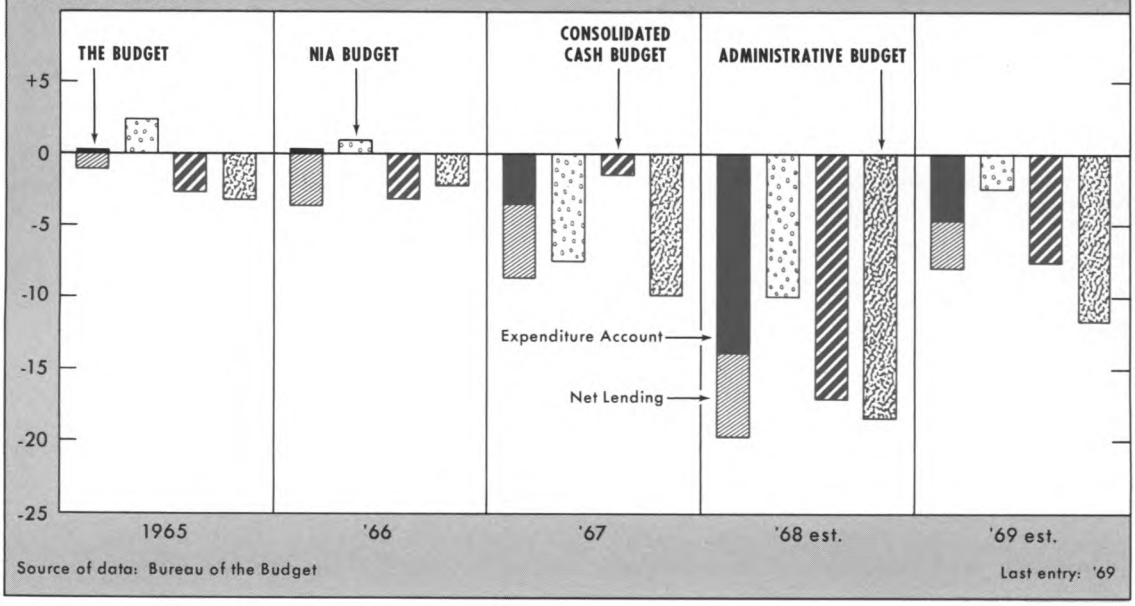
TABLE III
Four Budget Concepts
Fiscal Years 1961-1969
(billions of dollars)

	Actual							Estimated	
Description	1961	1962	1963	1964	1965	1966	1967	1968	1969
The Budget:									
Expenditure account:									
Receipts	$94.4	$ 99.7	$106.6	$112.7	$116.9	$130.9	$149.4	$155.8	$178.1
Expenditures	96.7	104.7	111.5	118.1	116.7	130.7	153.2	169.9	182.8
Expenditure account surplus or deficit	— 2.3	— 5.0	— 4.9	— 5.4	0.1	0.2	— 3.6	— 14.0	— 4.7
Net lending	1.2	2.4	— 0.1	0.5	1.2	3.8	5.2	5.8	3.3
Total budget:									
Receipts	94.4	99.7	106.6	112.7	116.9	130.9	149.6	155.8	178.1
Expenditures and net lending	97.9	107.0	111.3	118.7	118.0	134.6	158.4	175.6	186.1
Surplus or deficit	—$ 3.5	—$ 7.4	—$ 4.7	—$ 6.0	—$ 1.1	—$ 3.7	—$ 8.8	—$ 19.8	—$ 8.0
Consolidated Cash Budget:									
Receipts	$97.2	$101.9	$109.7	$115.5	$119.7	$134.5	$153.6	$158.8	$181.2
Payments	99.5	107.7	113.8	120.3	122.4	137.8	155.1	176.0	188.7
Surplus or deficit	—$ 2.3	—$ 5.8	—$ 4.0	—$ 4.8	—$ 2.7	—$ 3.3	—$ 1.5	—$ 17.2	—$ 7.6
National Income Accounts:									
Receipts	$95.3	$104.2	$110.2	$115.5	$120.6	$132.9	$147.6	$161.1	$182.5
Expenditures	98.0	106.4	111.4	116.9	118.3	131.9	155.1	171.1	185.0
Surplus or deficit	—$ 2.7	—$ 2.1	—$ 1.2	—$ 1.4	$ 2.3	$ 0.9	—$ 7.5	—$ 10.0	—$ 2.5
Administrative Budget:									
Receipts	$77.7	$ 81.4	$ 86.4	$ 89.5	$ 93.1	$104.7	$115.8	$118.6	$135.6
Expenditures	81.5	87.8	92.6	97.7	96.5	107.0	125.7	137.2	147.4
Surplus or deficit	—$ 3.9	—$ 6.4	—$ 6.3	—$ 8.2	—$ 3.4	—$ 2.3	—$ 9.9	—$ 18.6	—$ 11.8

NOTE: Details may not add to totals due to rounding.

Source: Bureau of the Budget

Chart 2.
FEDERAL BUDGET SURPLUSES and DEFICITS
Fiscal Years 1965—1969
Billions of dollars

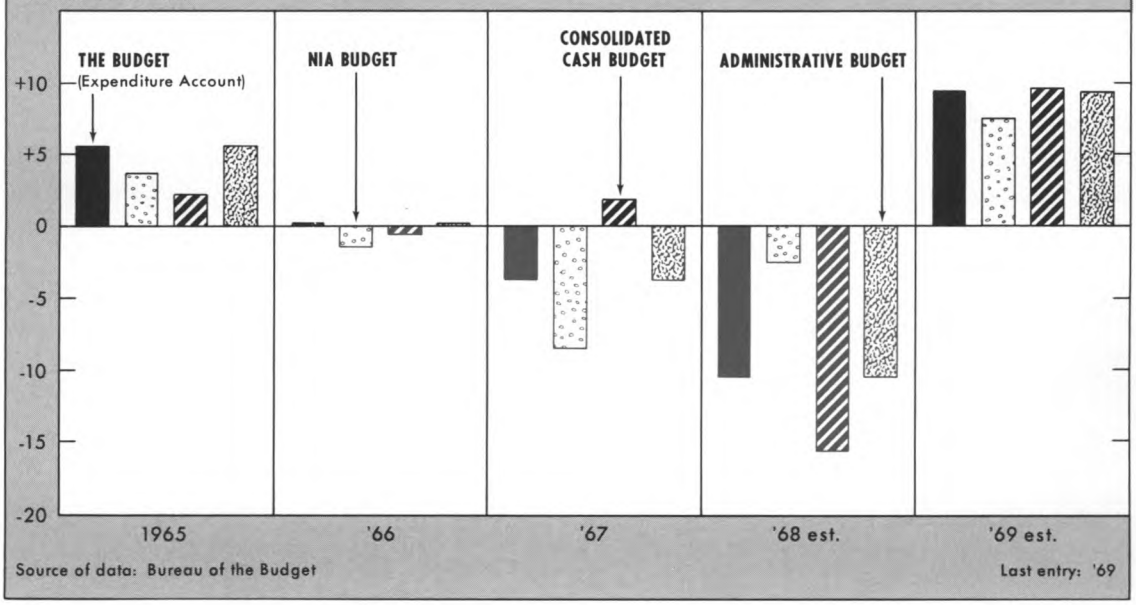


Source of data: Bureau of the Budget
Last entry: '69

of $0.1 and $0.2 billion, respectively), but the Government's net lending activities resulted in a total budget deficit in both years. In fiscal years 1967, 1968, and 1969, deficits in the expenditure account combined with net lending activity to yield total budget deficits in The Budget greater than those in either the NIA or consolidated cash budget (see Chart 2).

Irrespective of the budget concept used, the economic or fiscal policy impact of the Federal Government on the economy is best measured by changes in net budget position rather than by the amount of budget surplus or deficit in any fiscal year. Thus, an increase in the amount of budget deficit (or a decrease in the surplus) has a stimulative effect on the economy, while a reduction in the deficit (or an increase in the surplus) has a restraining effect. The fact that The Budget provides a better indication than the other budgets of the impact of the Federal Government on the economy, makes The Budget an important tool of economic analysis. Since Federal lending programs are excluded, the focal point of The Budget in measuring economic or fiscal policy impact is the "expenditure account surplus or deficit." As shown in Chart 3, the "expenditure account" moved in the direction of surplus (restraint) in fiscal year 1966, while the NIA budget moved in the direction of deficit (stimulus). In fiscal years 1965, 1967, 1968, and 1969, the two budget deficits moved in the same direction, but the magnitude of change was greater in the expenditure account of The Budget than

Chart 3.
NET CHANGES in FEDERAL BUDGET SURPLUSES and DEFICITS
Fiscal Years 1965—1969
Billions of dollars



Source of data: Bureau of the Budget
Last entry: '69

in the NIA budget in three of the four years, indicating a greater impact on the economy due to Federal activities than suggested by the NIA budget.[6]

When the changes to an accrual basis have been made, the new budget totals, as well as the year-to-year changes in the totals, should eventually provide a better gauge of the fiscal impact of the Government on the economy than that of any other budget concept. Nevertheless, the complexity of the Federal Government's activities should still preclude the use of only one budget number, such as the amount or change in the amount of surplus or deficit, to measure the effect of the Government on the economy. Instead, The Budget should be thought of as a broad financial plan that covers (1) the various ways of channeling the economy's resources to the Federal Government through use of an assortment of taxes and forms of borrowing, and (2) programs designed to serve national objectives.

THE BUDGET FOR FISCAL YEAR 1969

Expenditures. As proposed in The Budget, total Federal outlays are estimated at $186.1 billion in fiscal year 1969, an increase of $10.4 billion over fiscal year 1968. Because total Federal outlays consist of the sum of

[6] These differences are due largely to the treatment of corporate taxes on an accrual basis in the NIA budget; hence, the NIA budget presently gives a better indication of impact. Eventually, both measures will be closer in treatment, and the new budget will be better when expenditures are placed on an accrual basis.

expenditures and net lending, Federal expenditures are budgeted at $182.8 billion, an increase of $12.8 billion over fiscal year 1968. The difference between the $10.4 billion increase in total outlays and the $12.9 billion increase in total expenditures occurs because net lending activities in fiscal year 1969 are budgeted to decline $2.5 billion from fiscal year 1968, mainly reflecting a $1.9 billion decline in mortgage acquisitions.

As shown in Table IV, the 1969 budget proposes increased spending in every major function, except space research and technology. The largest dollar increase in spending is proposed for the health, labor, and welfare function, up $5.5 billion over 1968. The bulk of the increase ($4.2 billion) in that function is for expanded social security and medicare

TABLE IV
Federal Expenditures, by Function
Fiscal Years 1967-1969
(billions of dollars)

Function	1967 Actual	1968 Estimate	1969 Estimate	Change 1968-1969
Expenditures:				
National defense	$ 70.1	$ 76.5	$ 79.6	+$ 3.3
International affairs and finance	4.1	4.3	4.5	+ 0.2
Space research and technology	5.4	4.8	4.6	— 0.2
Agriculture and agricultural resources	3.2	4.4	4.5	+ 0.1
Natural resources	2.1	2.4	2.5	+ 0.1
Commerce and transportation	7.3	7.7	8.0	+ 0.3
Housing and community development	0.6	0.7	1.4	+ 0.7
Health, labor, and welfare	39.5	46.4	51.9	+ 5.5
Education	3.6	4.2	4.4	+ 0.2
Veterans benefits and services	6.4	6.8	7.1	+ 0.3
Interest	12.5	13.5	14.4	+ 0.9
General government	2.5	2.6	2.8	+ 0.2
Allowances:				
Civilian and military pay increase	—	—	1.6	+ 1.6
Contingencies	—	0.1	0.4	+ 0.3
Undistributed intragovernmental payments				
Government contribution for employee retirement	— 1.7	— 1.9	— 2.0	— 0.1
Interest received by trust funds	— 2.3	— 2.7	— 3.0	— 0.3
Total expenditures	$153.2	$169.9	$182.8	+$12.9
Net Lending:				
International affairs and finance	$ 0.5	$ 0.7	$ 0.7	—
Agriculture and agricultural resources	1.2	0.9	1.1	+$ 0.2
Housing and community development	1.7	3.3	1.4	— 1.9
All other	1.7	0.9	0.1	— 0.8
Total net lending	$ 5.2	$ 5.8	$ 3.3	— 2.5
Total outlays	$158.4	$175.6	$186.1	+$10.4

NOTE: Details may not add to totals due to rounding.

Source: Bureau of the Budget

TABLE V
Federal Receipts, by Source
Fiscal Years 1967-1969
(billions of dollars)

Source	1967 Actual	1968 Estimate	1969 Estimate	Change 1968-1969
Individual income taxes	$ 61.5	$ 67.7	$ 80.9	+$13.2
Corporate income taxes	34.0	31.3	34.3	+ 3.0
Employment taxes	27.8	29.7	34.2	+ 4.5
Unemployment insurance	3.7	3.7	3.6	— 0.1
Premiums for other insurance and retirement	1.9	2.0	2.3	+ 0.3
Excise taxes	13.7	13.8	14.7	+ 0.9
Estate and gift taxes	3.0	3.1	3.4	+ 0.3
Customs	1.9	2.0	2.1	+ 0.1
Other receipts	2.2	2.4	2.7	+ 0.3
Total receipts	$149.6	$155.8	$178.1	+$22.3

NOTE: Details may not add to totals due to rounding.

Source: Bureau of the Budget

benefits passed by Congress last year. As proposed in The Budget, the national defense function shows the second largest increase, $3.3 billion.

All but $400 million of the $10.4 billion increase in total outlays is accounted for by higher social security benefits, additional defense costs, higher military and civilian pay scales, scheduled to become effective July 1, 1968, under existing law, and higher interest payments on the Federal debt. Increases in other types of expenditures are offset by the reduction in planned mortgage lending, as mentioned earlier.

Receipts. As shown in Table V, total Federal receipts in fiscal year 1969 are estimated at $178.1 billion, an increase of $22.3 billion over 1968. In addition to revenue throw-off associated with expanding economic activity, the revenue estimates assume the adoption of a temporary 10 percent income tax surcharge, the extension of excise tax rates on telephone calls and automobiles, an acceleration of corporate tax payments, and certain transportation user charges. These measures are estimated to yield about $13.1 billion in fiscal year 1969. The surtax and acceleration of corporate tax payments are expected to increase revenues $2.7 billion in fiscal year 1968 and $10.2 billion in fiscal year 1969. Extension of the excise taxes would prevent a drop in revenues of $0.3 billion in fiscal year 1968 and $2.7 billion in fiscal year 1969. The user charges are expected to provide $0.3 billion in fiscal year 1969.

Economic Impact of the Budget. As indicated earlier, under the new budget format, the best measure of the economic impact of the Federal Government is the expenditure account surplus or deficit, i.e., the difference

between direct expenditures and total receipts, excluding lending activity. As shown in Table VI, the expenditure account deficit would amount to $4.7 billion in fiscal year 1969 if all of the proposed tax measures were adopted. As compared with fiscal year 1968, the expenditure account deficit would be reduced by about $9.3 billion, and the reduction would exert a restraining influence on the economy. On the other hand, failure to adopt the income tax surcharge, combined with the approval of all expenditure programs, would yield a sizable expenditure account deficit, forcing the Government to borrow in the nation's credit market an amount of funds comparable to that in fiscal year 1968. In short, even if all the proposed spending programs were approved, adoption of the surtax would increase revenues appreciably, reduce the budget deficit, and work toward restraining the economy in fiscal year 1969 (compared with 1968), as well as reduce the financing needs of the Treasury. On the other hand, if the proposed spending programs were approved without the surtax, the result would be an excessively large budget deficit, further stimulus to economic activity, and continued heavy Treasury demands in credit markets.

TABLE VI
The Federal Budget
Fiscal Years 1967-1969
(billions of dollars)

	1967 Actual	1968 Estimate	1969 Estimate
Receipts, Expenditures, and Net Lending:			
Expenditure account:			
Receipts	$149.6	$155.8	$178.1
Expenditures	153.2	169.9	182.8
Expenditure deficit	—$ 3.6	—$ 14.0	—$ 4.7
Loan account:			
Loan disbursements	$ 17.8	$ 20.9	$ 20.4
Loan repayments	— 12.6	— 15.1	— 17.1
Net lending	$ 5.2	$ 5.8	$ 3.3
Total budget:			
Receipts	$149.6	$155.8	$178.1
Outlays (expenditures and net lending)	158.4	175.6	186.1
Budget deficit	—$ 8.8	—$ 19.8	—$ 8.0

NOTE: Details may not add to totals due to rounding.

Source: Bureau of the Budget

CONCLUDING COMMENTS

The new Federal budget presents, for the first time, a comprehensive and interrelated set of accounts that summarize the Federal Government's activities more completely than any other budget concept. As a result, the new budget to some extent eliminates the confusion generated by the three or more different formats presenting various concepts of the budget, in terms of both composition and totals. The new budget format goes a long way in improving understanding of the activities of the Federal Government and should enable the Administration, Congress, and the public to exercise more informed judgments concerning not only Government activities, but also the impact of those activities.

EMPLOYMENT PERFORMANCES OF CLEVELAND, PITTSBURGH, AND CINCINNATI, 1950-1966

PART III: UPDATING AND CONCLUSIONS

The first two parts of this study, which is concerned with comparative employment performances of Cleveland, Pittsburgh, and Cincinnati during 1950-1966, appeared in the November 1967 and January 1968 issues of the *Economic Review*. This article, which is the third and final article, updates the findings of the first two articles by addition of data for 1964 to 1966, as well as a comparison of performances for the three periods.

Although strictly comparable data are not available for the 1964 to 1966 period, a third set of data[25] can be drawn from to derive some partial conclusions. Employment data (the payroll series) supplied by the Bureau of Labor Statistics of the U. S. Department of Labor, based on information gathered by the various state agencies, are used for the 1964-1966 period. Such data are on an establishment (place of work) basis rather than on a residence basis and, in this respect, parallel data used for the 1959-1964 period, but not the data used for the 1950-1960 period.[26] (Implications of the differences between the two types of reporting base were noted earlier.)

For the 1964-1966 period, 14 rather than 28 industry and service groups are used. "Transportation equipment," for example, is a combination of the "Motor vehicles and equipment" and "Aircraft and parts, ships, etc." categories. Similarly, "Textile mill products" and "Apparel" are combined into one category. Although "Finance, insurance, and

[25] Data for the 1950-1960 period were drawn largely from *Growth Patterns in Employment by County, 1940-1950 and 1950-1960*, by Lowell D. Ashby, Office of Business Economics, U. S. Department of Commerce. Data for the 1959-1964 period were drawn from *County Business Patterns*, Bureau of the Census, U. S. Department of Commerce.

[26] Although BLS data are available on a current basis, the breakdowns of industry or service categories are not as detailed as those used in Parts I and II of this study. In addition, the industry classifications used by the various states in this series, although broadly comparable, are not in all instances identical, which explains in part why these data were not used uniformly throughout the study.

real estate" continues to appear as a separate category, various other service categories are consolidated into the group designated as "Services." (See footnote, Table VIII.) Altogether, about two-thirds of total nonfarm employment is included in Part III, compared with the four-fifths of total employment included in Parts I and II.

The percent changes in employment between 1964 and 1966 and relative growth indicators[27] for Cleveland, Pittsburgh, and Cincinnati are shown in Table VIII for the 14 industry and service categories. The relative growth indicators, applying to the two-year interval, are measured against the 13-city totals and computed by the same method as used in Parts I and II.

RELATIVE GROWTH INDICATORS — CLEVELAND, PITTSBURGH, AND CINCINNATI, 1964-1966

Cleveland. The most interesting feature of the Cleveland pattern in 1964-1966 is the relative comeback of "Machinery." With a relative growth indicator of plus 4,220, the machinery industry heads Cleveland's list of gains for 1964-1966, compared with the 13-city aggregate. In terms of percent change, also shown in Table VIII, "Machinery" showed a 22-percent employment gain over the two-year interval, contrasted to a 16-percent gain for the 13-city aggregate. Moderately large plus figures for relative growth indicators in Cleveland are shown for the combined "Transportation, communications, and utilities" category and for "Printing and publishing." Other plus showings for relative growth indicators include: "Textile mill products and apparel" and "Chemicals and allied products."

Cleveland's unfavorable 1964-1966 list is headed by "Trade," followed by "Fabricated metal products," "Transportation equipment," and "Services." (For all four groups there was a percent gain in employment over the two-year interval, but the percent gains fell considerably short of those of the 13-city aggregate.) The "Transportation equipment" group, a major industry in Cleveland, includes both the motor vehicle and the aircraft groups, which together registered a relative growth indicator of minus 1,223, in marked contrast to the 1950-1960 performance. "Fabricated metal products" represents another important Cleveland industry with a large negative indicator in the 1964-1966 period. Minus relative growth indicators also appeared for five additional industry or service categories, including "Primary metals."

Cleveland had an 8.6-percent increase in employment for the "Total of covered industries," while the aggregate of 13 cities showed an 8.7-percent increase (see Table VIII). For "Total nonagricultural employment," Cleveland's growth rate for the two years also trailed the 13-city aggregate.

[27] Relative growth indicator refers to a measure of employment change in a given area, for a given industry. Relative growth indicator shows the excess or deficit in number employed that would have been added if the local industry had exactly kept pace with the nationwide percent rate of gain for that industry. The measure reflects both percent change over time and the number of employees in the starting period. See also "Employment Performances of Cleveland, Pittsburgh, and Cincinnati, 1950-1966, Part I: Comparison with the United States," *Economic Review*, Federal Reserve Bank of Cleveland, Cleveland, Ohio, November, 1967.

TABLE VIII
Percent Change in Employment and Relative Growth Indicator
Cleveland, Pittsburgh, and Cincinnati Compared with 13 Cities
1964-1966

	Total-13 Cities	Cleveland		Pittsburgh		Cincinnati	
	Percent Change in Employment	Percent Change in Employment	Relative Growth Indicator	Percent Change in Employment	Relative Growth Indicator	Percent Change in Employment	Relative Growth Indicator
1. Contract construction	+ 9.0%	+ 8.8%	— 61	+13.8%	+1,669	+10.6%	+ 277
2. Food and kindred products	— 0.5	— 1.4	— 133	— 0.6	— 14	+ 2.7	+ 590
3. Textile mill products and apparel*	+ 1.8	+ 4.5	+ 359	+17.9	+ 449	+ 2.1	+ 13
4. Paper and allied products	+ 6.6	+ 6.1	— 25	+11.8	+ 174	+11.5	+ 296
5. Printing and publishing	+ 7.5	+10.9	+ 537	— 3.7	— 904	+ 5.5	— 255
6. Chemicals and allied products	+10.2	+10.4	+ 29	+ 4.1	— 446	+13.3	+ 439
7. Machinery	+15.7	+21.8	+4,220	+ 1.3	—6,936	+14.6	— 297
8. Transportation equipment†	+17.2	+13.9	—1,223	+25.4	+ 515	+18.1	+ 208
9. Primary metals	+ 4.5	+ 3.1	— 554	+ 3.6	—1,091	—14.3	— 788
10. Fabricated metal products	+11.5	+ 7.0	—1,906	+17.5	+1,466	+ 9.8	— 233
11. Transportation, communications, and utilities‡	+ 4.4	+ 6.5	+ 996	+ 3.1	— 686	+ 5.6	+ 399
12. Trade#	+ 8.9	+ 5.9	—4,427	+ 7.6	—1,872	+ 5.9	—2,570
13. Finance, insurance, and real estate	+ 3.9	+ 3.4	— 180	+ 4.6	+ 230	+ 0.4	— 813
14. Services§	+ 9.6	+ 8.6	—1,028	+ 9.2	— 472	+10.7	+ 629
Total of covered industries	+ 8.7%	+ 8.6%	—3,396	+ 6.7%	—7,918	+ 8.1%	—2,105
Total nonagricultural employment	+ 8.9%	+ 8.5%	—	+ 6.8%	—	+ 8.8%	—

* Industry 3 is an aggregation of industries numbered 4 and 5 in Tables I to VII applying to the 1950-1960 and 1959-1964 periods
† Industry 8 corresponds to industries numbered 12 and 13 in Tables I to VII.
‡ Industry 11 corresponds to industries numbered 17-21 in Tables I to VII.
# Industry 12 corresponds to industries numbered 22 and 23 in Tables I to VII.
§ Industry 14 corresponds to industries numbered 25-28 in Tables I to VII.

Sources: U. S. Department of Labor, Bureau of Labor Statistics and special reports supplied by departments of employment security of various states

Pittsburgh. Table VIII indicates that Pittsburgh showed signs of comeback in some areas during 1965 and 1966; however, in other areas, there was a further deterioration in Pittsburgh's relative scores. Overall, Pittsburgh's performance for the two years cannot be considered competitively favorable.

Among the various industry and service groups, Pittsburgh's performances in "Contract construction" and "Fabricated metal products" were the best. The relative growth indicator for "Fabricated metal products" was plus 1,466, and the industry registered an employment gain of 17.5 percent in Pittsburgh, compared with a gain of 11.5 percent for the 13-city aggregate. Other plus showings for relative growth indicators appeared for "Transportation equipment," "Textile mill products and apparel," "Finance, insurance, and real estate," and "Paper and allied products."

On the unfavorable side, sizable negative relative growth indicators appeared for

"Machinery," "Trade," and "Primary metals," although the latter continues to be Pittsburgh's leading industry. Table VIII shows five additional categories, including "Services," for which Pittsburgh's relative growth indicators were moderately negative.

Overall, Pittsburgh had a relatively unfavorable performance for the two years. The relative growth indicator for the "Total of covered industries" was minus 7,918, and the percent increase in employment for all covered industries was 6.7 percent as against a 13-city aggregate of 8.7 percent. The positive percent changes in employment in the 1964-1966 period in Pittsburgh reflect in part the area's share in the accelerated pace of economic activity in the United States during the period.

Cincinnati. Cincinnati's experience during 1964-1966 was more like Cleveland's than Pittsburgh's. In some respects, Cincinnati's showing was the most favorable of the three cities. On the favorable side, Cincinnati had significant positive relative growth indicators for "Services," "Food and kindred products," "Chemicals and allied products," "Transportation, communications, and utilities," "Paper and allied products," "Contract construction," and "Transportation equipment." Several of these groups are of major importance to Cincinnati's economy.

On the unfavorable side, negative relative growth indicators appeared for: "Trade," "Finance, insurance, and real estate," "Primary metals," "Machinery," "Printing and publishing," and "Fabricated metal products." (In terms of percent change, employment in "Machinery" in Cincinnati was up 14.6 percent over the two-year interval, while the gain for the 13-city aggregate was 15.7 percent.)

Cincinnati's relative growth indicator was minus 2,105 for the "Total of covered industries." In terms of percent change for both total covered and total nonfarm employment, Cincinnati gained 8.1 percent and 8.8 percent, respectively, slightly less than the percent changes for the 13 cities.

AN ADJUSTED COMPARISON OF PERFORMANCES FOR THREE PERIODS

In order to compare the Cleveland, Cincinnati, and Pittsburgh showings in the three periods included in this study, two adjustments are made in the data. First, the findings for the two earlier periods (1950-1960 and 1959-1964) are rearranged with respect to industry and service categories to match the consolidated listings used for the third period. (The 14-industry list used for 1964-1966 becomes the least common denominator.) Second, an adjustment is made for the different time spans covered by the three periods (the 1950-1960 period covers cumulative changes over ten years, while the 1959-1964 period is a five-year span, and the 1964-1966 period is only a two-year span).

Adjusted data for the three cities are shown in Table IX. The relative growth indicators shown in Table IX are all expressed on an annual change basis. The data in Table IX reveal where the showing during the 1964-1966 period tends to confirm previous performance. The data also indicate in which employment categories a change in direction of performance may have been in progress (at least tentatively, insofar as two years is a very short span).

TABLE IX
Relative Growth Indicators
Cleveland, Pittsburgh, and Cincinnati Compared with 13 Cities
1950-1960, 1959-1964, 1964-1966
Annual Change Basis*

	Cleveland			Pittsburgh			Cincinnati		
	1950-1960	1959-1964	1964-1966	1950-1960	1959-1964	1964-1966	1950-1960	1959-1964	1964-1966
1. Contract construction	— 154	+ 373	— 31	— 298	— 786	+ 835	+ 227	— 246	+ 139
2. Food and kindred products	+ 303	— 467	— 67	+ 159	— 44	— 7	+ 37	+ 101	+ 295
3. Textile mill products and apparel	— 8	+ 411	+ 180	+ 29	+ 137	+ 225	— 27	— 286	+ 7
4. Paper and allied products	+ 76	— 6	— 13	+ 25	— 245	+ 87	— 156	+ 3	+ 148
5. Printing and publishing	+ 154	+ 137	+ 269	+ 107	— 368	— 452	— 44	— 209	— 128
6. Chemicals and allied products	— 111	— 267	+ 15	+ 15	— 6	— 223	+ 153	— 313	+ 220
7. Machinery	—1,083	— 364	+2,110	— 676	— 582	—3,468	— 594	— 69	— 149
8. Transportation equipment	+1,043	— 378	— 612	— 712	— 99	+ 258	+1,645	— 603	+ 104
9. Primary metals	+ 50	— 899	— 277	— 842	— 3,446	— 546	— 185	+ 24	— 394
10. Fabricated metal products	— 520	— 203	— 953	— 74	— 782	+ 733	+ 96	+ 149	— 117
11. Transportation, communications, and utilities	— 75	+ 242	+ 498	— 428	— 710	— 343	+ 151	+ 61	+ 200
12. Trade	+ 391	— 423	—2,214	— 542	— 3,830	— 936	— 139	— 878	—1,285
13. Finance, insurance, and real estate	+ 73	+ 264	— 90	— 79	— 732	+ 115	+ 63	+ 47	— 407
14. Services	+ 43	— 189	— 514	— 213	— 2,108	— 236	— 332	+ 456	+ 315
Total of covered industries	+ 182	—1,778	—1,699	—3,529	—13,601	—3,958	+ 895	—1,763	—1,052

* Converted to annual change basis, as follows:
1950-1960 Relative Growth Indicator ÷ 10
1959-1964 Relative Growth Indicator ÷ 5
1964-1966 Relative Growth Indicator ÷ 2

Sources: *Growth Patterns in Employment by County, 1940-1950 and 1950-1960*, Office of Business Economics, U. S. Department of Commerce, 1966; unpublished estimates for selected industries from U. S. Department of Commerce; *County Business Patterns*, Bureau of the Census, U. S. Department of Commerce, 1959 and 1964; Bureau of Labor Statistics, U. S. Department of Labor; unpublished estimates by U. S. Railroad Retirement Board; special reports supplied by departments of employment security of various states; Federal Reserve Bank of Cleveland (See Technical Note, Appendix.)

The following summarizes the implications of the data in Table IX for Cleveland, Pittsburgh, and Cincinnati.

Cleveland. These results appeared outstanding on the favorable side: "Printing and publishing" registered significant plus indicators for all three periods, with some acceleration in the third (1964-1966) period. "Machinery," Cleveland's largest manufacturing industry, had a notable comeback in the 1964-1966 period, compared with a sharp relative loss in the 1950-1960 period and a smaller relative loss in the 1959-1964 period. The combined "Transportation, communications, and utilities" group showed an even larger gain in the 1964-1966 period than in the 1959-1964 period, after having been slightly on the minus side in the 1950-1960 period.

On the unfavorable side, selected items in the three-period comparison for Cleveland are as follows: "Transportation equipment" (including motor vehicles and the aircraft group) registered a decline in the relative growth indicator in the 1964-1966 period. The decline, when measured on an annual basis, was nearly twice as large as that in the 1959-1964 period; the latter followed the favorable surge in the 1950-1960 period. "Fabricated metal products," one of Cleveland's leading industries, had a negative growth indicator in all three periods, with the largest competitive loss in the third period (1964-1966). The weaknesses in "Trade" and "Services" that had emerged in the 1959-1964 period were accentuated in the 1964-1966 period. "Contract construction" in the 1964-1966 period was moderately minus, after showing a positive relative growth indicator in the 1959-1964 period.

Cleveland's performance during the 1964-1966 period for the "Total of covered industries" was similar to that in 1959-1964, and showed little indication of ending the relative losses in comparison with the 13-city total.

Pittsburgh. The combined "Textile mill products and apparel" group registered moderate plus indicators for all three periods in Pittsburgh (see Table IX), which is interesting since these industries are neither large nor traditional in Pittsburgh. "Fabricated metal products," unlike the experience in Cleveland, was strong in Pittsburgh in the 1964-1966 period, with a relative growth indicator of plus 733, compared with minus figures for the first two periods. A similar pattern emerged for "Transportation equipment" and "Contract construction," although data for the latter industry are more volatile, and are subject to larger errors and revisions than is the case in most manufacturing industries. "Primary metals" had a smaller decline in the 1964-1966 period, although the relative growth indicators for all three periods were negative. Following negative performances in the first two periods, "Finance, insurance, and real estate" had a plus score for the relative growth indicator in the 1964-1966 period.

As shown in Table IX, the unfavorable aspects of Pittsburgh's performance are more impressive than the favorable ones. "Machinery," which is an important industry for Pittsburgh, showed a large negative indicator for the third period, in fact, substantially

larger than in either preceding period. "Printing and publishing" had a larger minus relative growth indicator in the third period than in the second period. "Trade," the combined "Services" group, and "Transportation, communications, and utilities" showed negative relative growth indicators for all three periods. There was, however, a marked deceleration of the minus tendency in the 1964-1966 period in each of the three cases. Pittsburgh's scores for "Trade" and "Services" were less unfavorable than Cleveland's in the third period.

For "Total of covered industries," it appears that Pittsburgh's shortfall, as measured by relative growth indicators on an annual basis, continued to be large in the third period, although not as large as in the second period (see Table IX).

Cincinnati. The favorable aspects of Cincinnati's performance include: "Food and kindred products," an important industry that had progressively larger positive relative growth indicators in each of the three periods. "Chemicals and allied products," also an important industry in the area, had a plus showing in the 1964-1966 period, contrasted to a minus in the 1959-1964 period. The "Transportation equipment" group, which includes aircraft as well as motor vehicles, also had a partial comeback in the 1964-1966 period, although the competitive loss of the 1959-1964 period was not fully recouped.[28] "Paper and allied products" showed a plus indicator for the third period, as contrasted to a minus for the 1950-1960 period and a small plus for 1959-1964. "Contract construction" had a favorable turnaround in the 1964-1966 period. The "Services" group scored favorably in the second and third periods, following an unfavorable performance in the first period.

Unfavorable aspects of Cincinnati's showing, as shown in Table IX, appear to outweigh the favorable developments. "Machinery" and "Trade" showed negative growth indicators for all three periods. "Fabricated metal products" had a positive relative growth indicator in the first period and second period; in the third period, however, this industry switched to a clearly negative showing. "Primary metals" and "Finance, insurance, and real estate" were clearly negative in the third period, following positive scores in one or both of the first two periods.

For the "Total of covered industries," it appears that Cincinnati's competitive losses in the 1964-1966 period, on an annual basis, were somewhat less than those of the 1959-1964 period — with both periods standing in marked contrast to the favorable showing of the 1950-1960 period. Relative weakness in the trade sector seems to have played a large part in producing these results. The overall stemming of competitive losses in the final period, however, was more marked in Cincinnati than in Cleveland.

CASE STUDY OF DETROIT AND PITTSBURGH

Some interesting comparisons of experiences in the metropolitan areas of Detroit and

[28] The comeback, however, was significant for Cincinnati's prospects as it largely took the form of a resurgence of output of jet engines by the company that accounted for the earlier expansion and now holds major contracts for the future.

Pittsburgh may be drawn from the findings in Part II. Detroit and Pittsburgh have certain basic characteristics in common, but their experiences since 1950 have differed markedly. Both cities have one overshadowing industry — auto manufacturing in Detroit and steel manufacturing in Pittsburgh. With the partial decentralization of the industries (planned by central office headquarters, but responsive to changing market and geographical factors), employment in the auto industry has declined in Detroit and employment in the steel industry has declined in Pittsburgh. Such declines have occurred in actual numbers employed, as well as in "relative growth indicators."

Between 1950 and 1960, Detroit had large gains, both absolutely and relatively, in total employment, despite the auto industry reduction. During the same period, Pittsburgh had large relative declines in employment (along with a very small outright gain in actual numbers) accompanying the sharp decline in employment in the steel industry.

As shown in Table X, Detroit had a relative growth indicator of minus 42,608 (compared with the 13-city total) for 1950-1960 in the automotive industry. However, the positive relative growth indicators for only three industry or service groups in Detroit, "Machinery," "Professional services," and "Retail trade," were sufficient to offset the large minus figure for the auto industry. The favorable performance of other industry or service groups, including "Fabricated metal products" and "Primary metals" (along with other industries not listed in Table X), served to move Detroit into a favorable overall position.

The Pittsburgh performance, on the other hand, showed a marked divergence from

TABLE X
Relative Employment Scores for Detroit and Pittsburgh
Selected Industry or Service Groups
1950-1960

	Relative Growth Indicator (compared with 13 cities)		Percent Change in Employment	
	Detroit	Pittsburgh	Detroit	Pittsburgh
Motor vehicles and equipment	—42,608	+ 1,235	—26.5%	+39.8%
Primary metals	+ 2,573	— 8,418	+ 4.2	— 9.0
Machinery	+11,681	— 6,756	+51.1	+16.5
Professional services	+18,487	— 2,957	+71.9	+45.7
Retail trade	+12,696	— 5,890	+ 8.6	— 3.1
Fabricated metal products	+ 8,352	— 737	+55.6	+25.9
Total of all covered industries*	+31,305	—41,734	+ 7.4%	+ 0.7%

* Not all industries covered in this study are shown in this list.

Source: "Employment Performances of Cleveland, Pittsburgh, and Cincinnati, 1950-1966, Part II: Comparison with 13 Cities," Tables IV and V, *Economic Review*, Federal Reserve Bank of Cleveland, Cleveland, Ohio, January, 1968

Detroit's, even though its main-industry experience was similar. The established industry in Pittsburgh, "Primary metals" (mainly steel), scored a relative growth indicator of minus 8,418. Against this, there was at least one moderately favorable offset, "Motor vehicles and equipment." That industry, however, is not especially important in Pittsburgh. Thus, while other important manufacturing or service groups in Detroit served to offset the auto decline, the performance of other groups in Pittsburgh served to add negative growth indicators. In Pittsburgh, during 1950-1960, substantial declines occurred in "Machinery," "Professional services," "Retail trade," and a slight decline in "Fabricated metal products." (As shown in Table X, these industries did not all undergo outright employment declines, but employment gains were appreciably short of the 13-city average.)

Although the patterns were not identical to those of the first period, the relative experiences still favored Detroit for the 1959-1964 period (not shown in Table X). In the second period, the relative growth indicator for autos in Detroit was practically zero, meaning that changes in auto employment were about parallel to those of the 13-city aggregate, while the relative deterioration in steel employment in Pittsburgh was accentuated. In the overall totals, Detroit's performance in the 1959-1964 period was slightly more favorable than in the first period, both in percent change in employment and relative growth indicator (after allowance for the difference in durations of the two periods). Pittsburgh's total score was more unfavorable in the second period than in the first. (See Table Vg and l.)

Detroit's scores were outstandingly strong for the 1964-1966 period (not shown in tables), while Pittsburgh's continued to be unfavorable. During 1964-1966, which were superboom years for autos, Detroit's relative growth indicator for transportation equipment (mainly autos) was clearly positive, showing that decentralization of the auto industry was not occurring at that time, or was slowed down in response to especially strong demands for autos.

The above comparison suggests several problems that face Pittsburgh. For example, should a special effort be made to reestablish the position of Pittsburgh's steel industry, or should the efforts be directed to other industries? While there is no simple and clear-cut answer to these alternatives, it should be pointed out that local authorities are quite limited in their ability to influence (or run counter to) fundamental locational factors brought about by basic changes in the structure of a large industry. In the case of the steel industry, for example, imports of foreign ores, opening of the St. Lawrence Seaway, new pelletizing technologies, shifts in location of major steel-consuming industries, etc., have produced a situation that may be beyond the control of even an alert local authority. On the other hand, if attention is directed toward Pittsburgh's non-steel position, it is not clear whether, in view of Pittsburgh's own resources and potentialities, any of the "offset" groups that contributed to Detroit's favorable performance would

provide the same boost to Pittsburgh.[29]

CONCLUDING COMMENTS

Although there are obviously important differences among local settings, as well as among local goals for development, it is believed that materials of the type presented in this study could be useful to local area planners in developing industrial strategy.

One broad question may be raised. When local planners are equipped with the type of information presented in this analysis, what industries should they select for emphasis in promotion — those that show a relatively good growth record in the local area or those that show a relatively unfavorable performance? Perhaps the whole question is moot, because national forces influencing industrial location are too powerful for a city to do anything very significant about specific industries. According to this view, local authorities are most successful when they strengthen the human resources base and the quality of the urban environment as levers for community improvement. By so doing, local authorities would, in effect, spread a net for all industries simultaneously, with little selectivity in the process. There may be merit in this approach and, indeed, some competent regional analysts appear to endorse it. However, it would probably be unwarranted to close the door altogether on a selective approach, which, once undertaken, requires criteria of selection.

In grappling with the question of whether locally strong or weak industries should be selected for special attention, the problems are reduced if a distinction is made between two broad types of industries, for which the answers would not be the same. Regional analysts, especially in their local base studies, distinguish between "basic" or "export" industries, as distinct from "supporting," "service," or "derivative" categories. For example, steel, autos, and fabricated metal products are produced for national markets and these "export" industries provide payrolls as well as demand for local products and services. Examples of groups in the latter category are trade, services including finance, insurance, and real estate, and some commodity groups.

With this distinction in mind, the question can be answered in part along the following lines. In the case of export industries that are oriented to external markets, the degree of success already achieved (as measured by employment or other indicators) would suggest that underlying competitive factors are favorable and that efforts to expand such industries should be continued and intensified. Unfavorable showings in the same industries might suggest relative de-emphasis of efforts.

In the case of service-type industries serving local markets, the possibilities can be seen better by studies of structural composition than by previous growth rates. To the

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[29] A useful framework for considering such problems may be found in *Economic Study of the Pittsburgh Region*, conducted by the Pittsburgh Regional Planning Association, directed by Edgar M. Hoover, 3 volumes, University of Pittsburgh Press, 1963-1964.

The Detroit area has also given increasing attention to basic questions involving economic growth. One analyst suggests a three-way comparison of Boston, Pittsburgh, and Detroit with evidence of similar awakening to problems in each of the areas at successive stages. See *A Preface to Urban Economics*, by Wilbur R. Thompson, Resources for the Future, Inc., Johns Hopkins Press, Baltimore, 1965, pp. 18-21.

extent that possibilities are indicated by growth rates, they may be interpreted in a direction almost opposite to that indicated for the first group. That is, if service industries are slow to grow in support of established export industries, this, in itself, may suggest a need and an opportunity for expansion of such ancillary lines. In the case of Pittsburgh and Detroit, for example, the following observation about service employment was made:

> We do know that Pittsburgh is not up to par in employment in ancillary services. This is indicated by a calculation of local quotients based on the 1950 Census of Population. The Duncans, in their recent book, *Metropolis and Region*, also found that Pittsburgh had less than the national average per capita employment in service industries broadly defined. Only Detroit among the SMA's of 1,000,000 population or more shared this characteristic with Pittsburgh.[30]

Briefly, in 1950, employment opportunities in the service lines were quite large for *both* Detroit and Pittsburgh. The findings presented in this study indicate that, after 1950, Detroit was able to take advantage of the situation, while Pittsburgh was not. Underlying reasons for the difference are, of course, extremely complex and clearly beyond the scope of this study.

The choice of emphasis upon particular industries must depend upon broad goals or objectives. The degree to which such goals have been solidified varies greatly, of course, among metropolitan areas. One basic dichotomy that keeps reappearing is the necessity to choose between goals that emphasize "comparative advantage" and those that emphasize "diversification" or "balance." Should an area stick to its best industry pattern from the standpoint of comparative advantage, and try to maximize employment along that route? Or should it try to achieve more balance (perhaps at the expense of the total) in order to reduce vulnerability to fluctuations, cyclical or otherwise? Comparative advantage, in this context, is very close conceptually to the theory of comparative advantage developed in the eighteenth century by classical economists for application to the principles of international trade.

Finally, nothing has been said about the impact on national welfare of competitive local struggles to attract industry and employment. Obviously, there are offsets — a strong comeback for Pittsburgh could detract, say, from Chicago, Detroit, or Kansas City. Yet, there may be net gain to the nation accruing from the dynamic aspects of growing local competition.

Theoretical exploration of questions concerning the impact of local competition on national (as well as local) welfare has hardly begun. (The classical economists were not even aware of the problem. Furthermore, Great Britain, the seedbed of much contemporary economic theory, could hardly have been expected to offer much along this line, insofar as Britain's relative compactness is

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[30] "Contrasts in Agglomeration: New York and Pittsburgh," by Benjamin Chinitz, *Papers and Proceedings, American Economic Association*, December 1960 meeting, May 1961, pp. 288-289.

Professor Chinitz' specific reference may be found in *Metropolis and Region*, by Otis D. Duncan, W. Richard Scott, and others, Resources for the Future, Inc., Johns Hopkins Press, Baltimore, 1960, p. 213.

in sharp contrast to the sprawl and local diversity of the United States.) Nevertheless, faint beginnings of serious attempts to evaluate the impact of local competition on national welfare may be discerned in some quarters of academic research and government administration.[31]

[31] See, for example, some brief but suggestive comments, under the caption of "The National Interest and the Federal Role in Urban-Regional Development," contained in *A Preface to Urban Economics*, by Wilbur R. Thompson, *op. cit.*

APPENDIX

Technical Note

Geographical Coverage. Wherever the term "city" or "metropolitan area" is used in the text, it refers to the "Standard Metropolitan Statistical Area," composed of one or more counties as designated in the official list. The single exception is Boston, for which the official SMSA cuts across county lines, as is the case generally in the New England States. As a substitute for the Boston SMSA, this study uses a composite of data for the entire counties of Essex, Middlesex, Norfolk, and Suffolk. The resulting totals for "Boston," although not necessarily the percent changes, become somewhat larger than would be the case for the official SMSA. (See footnote of Table IV for the population differences involved.)

County composition of the SMSA's used here is that defined by the Bureau of the Budget in 1964. Data for earlier years were adjusted, where necessary, by addition of data for required counties. Thus, Cleveland, in this study includes Medina and Geauga Counties, as well as Cuyahoga and Lake Counties. Likewise, the Cincinnati SMSA includes Dearborn County, Indiana, in addition to three counties in Ohio and three counties in Kentucky.

Use of the SMSA unit has a particular drawback in the case of at least one of the covered industries for one of the SMSA's; that is, "Primary metals" for the Chicago SMSA. A large part of the steel industry of the greater Chicago area is located in the Gary-Hammond-East Chicago SMSA and, therefore, does not appear in our figures for the Chicago SMSA. This has the effect of seriously understating the Chicago performance for "Primary metals" for the 1950-1960 period. Thus, including Gary, etc., would have the effect of altering the percent change figure for Chicago shown in Table V from minus 14 percent to minus 4 percent, accompanied by a virtual elimination of the negative figure for the relative growth indicator. For the 1959-1964 period, however, use of the enlarged area would make little change in the Chicago scores for percent change or relative growth indicator.

As a supplement to the footnote shown in Table I, it may be noted that the data on numbers employed in 1950 and 1960, as shown in columns 1 and 2, and also the basic employment data used in Table V, were drawn from unpublished figures for the various SMSA's provided by the Office of Business Economics, U. S. Department of Commerce. With certain exceptions, these data could have been computed by adding the appropriate counties making up the SMSA's, as shown in the published volumes of *Growth Patterns in Employment by County*. (The exceptions are noted below in connection with the "Miscellaneous" problem.)

Basic data for our treatment of the 1959-1964 period were obtained from *County Business Patterns*, U.S. Department of Commerce and U.S. Department of Health, Education, and Welfare. For the 1959 data, as drawn

from that source, it was necessary to add figures for the individual counties in order to obtain SMSA totals. For the 1964 data, however, the published volumes of *County Business Patterns* provide data in SMSA form. In utilizing data drawn from this source, it was necessary by means of estimation to fill certain gaps occasioned by the "nondisclosure" rule. Figures on numbers employed that were derived from our own estimates are indicated in the appropriate columns of Table II by a notation of "e," although such notation is not carried through the succeeding computation columns. In the case of the estimates within the tables for Cleveland, Pittsburgh, and Cincinnati, it was possible to obtain sufficient supplementary information to warrant considerable confidence in the estimates. Estimates, wherever they occur, for the other areas are less fully documented.

Industry Coverage. The 28 industry or service groups used consistently in this study were selected to serve as a least common denominator, for purposes of comparability, between the breakdowns provided by the OBE study already identified (which provided the basic data for our 1950-1960 treatment) and *County Business Patterns* (which provided the basic data for our 1959-1964 treatment). Certain minor changes in the industry captions were effected for clarity; i.e., we use the caption "Aircraft and parts, ships, etc." in place of "Other transportation equipment," referring to transportation equipment other than "Motor vehicles and equipment." In the process of achieving comparability it was necessary to drop the category of "Public administration," as shown in the OBE study (an omission noted in the text); on the other hand, it was possible to include the category "Railroads and railway express," which is not contained in the *County Business Patterns* summaries, by obtaining special estimates for the SMSA's involved from the U. S. Railroad Retirement Board.

An important part of the data used in the 1950-1960 treatment represents certain special breakdowns in the form of unpublished data provided by the OBE. These breakdowns apply to the category entitled "Other and miscellaneous manufacturing" as published in *Growth Patterns in Employment by County*. The special breakdowns were needed because they include such important industries as "Primary metals," "Fabricated metal products," and others. Even with this aid, however, Category No. 16, "Manufacturing, n.e.c." in our standard list is undesirably large; unfortunately, it includes industries of considerable importance, such as rubber and rubber products, and stone, clay, and glass.

It should be noted that differences in sources of basic data mentioned above could give rise to a conceptual problem. Thus, data for the period 1950-1960, although drawn here from the OBE study as indicated, have their original source in Census of Population reports, in which employment is allocated to the place of residence of the employee. Data for the 1959-1964 period, however, are drawn from sources that assign employment to the place of work. In working with data for corporate cities or for individual counties, such a disjuncture may be serious, or even decisive, but it may be considered to be of relatively small importance in dealing with metropolitan areas embracing counties, as is the case here. That judgment is used widely as a working rule by regional analysts, despite the extensive commuting distances often traveled by the employee. Supplementary data for the 1964-1966 period contained in the third article are based on the place-of-work criterion, as in the case of the 1959-1964 period.

Meaning of Totals. In addition to the industry and service categories (which constitute the main focus of the study) the various tables also show a final line for totals, usually in the form of "Total of covered industries." In interpreting such totals, certain basic points

should be kept in mind: (1) "Covered employment" is not identical with "Total employment"; (2) for relative growth indicators, although not for percent change data, the relative sizes of the cities represent important underlying influences. Because of the nature of the computation, a relative growth indicator for a given industry in a large city may be larger (either plus or minus) than for a smaller city. At the same time, however, the variation among industries in this respect is so large as to render undesirable, and probably statistically indefensible, the use of any standard adjustment factor; and (3) statistical problems arising from levels of aggregation occur at certain points in the use of data for "totals" shown here.

The last-mentioned point is seen most clearly by reference to the final line of Table I, with accompanying footnote. It might be thought that the computation of total relative growth indicators could be done *either* by following through the computations in a horizontal direction, exactly as was done for the individual industries, *or* by summing the relative growth indicators for the individual industries as shown in the final column. In fact, the results obtained by the two methods will, and should, differ because the degree of aggregation has an effect on the summation of relative growth indicators. That, in turn, goes back to differences in industry mix between the city under consideration and the standard of comparison, whether the latter is the United States total or the aggregate of 13 cities. The method of obtaining the total of relative growth indicators, as shown in the lower right corner of Tables I-a-c, is the same as that used in *Growth Patterns in Employment by County;* that is, the total is obtained by a vertical addition of the individual industry entries rather than by the horizontal route of aggregate percentage computations.

APPENDIX TABLE I

Identification of Covered Industries by Standard Industrial Classification Code

Industry	SIC Code
1. Mining	10-14
2. Contract construction	15-17
3. Food and kindred products	20
4. Textile mill products	22
5. Apparel	23
6. Lumber, wood products, furniture	24-25
7. Paper and allied products	26
8. Printing and publishing	27
9. Chemicals and allied products	28
10. Petroleum and coal products	29
11. Machinery	35-36
12. Motor vehicles and equipment	371
13. Aircraft and parts, ships, etc.	37 (except 371)
14. Primary metals	33
15. Fabricated metal products	34
16. Manufacturing, n.e.c.	21, 30-32, 38-39
17. Railroads and railway express	40
18. Trucking and warehousing	42
19. Transportation other than rail and trucking	41, 44-47
20. Communications	48
21. Utilities and sanitary service	49
22. Wholesale trade	50
23. Retail trade	52-59
24. Finance, insurance, and real estate	60-67
25. Personal services including hotels	70, 72
26. Business and repair services	73, 75-76
27. Entertainment, recreation services	78-79
28. Professional services	80-82, 84, 86, 89

APPENDIX TABLE II

Components of Percent Changes in Total Nonagricultural Employment Cleveland, Pittsburgh, and Cincinnati 1950-1960

	Changes Related to:			
	National Growth*	Industry Mix	Regional Share†	Total Change
Cleveland	+22.9%	+1.6%	— 9.0%	+15.5%
Pittsburgh	+22.9	—2.0	—17.4	+ 3.5
Cincinnati	+22.9	+0.2	— 4.9	+18.2

*Total employment gain for United States, all nonagricultural industries; when combined with change in components shown in next two columns, the result is "total change" shown in final column.

†Same concept as "relative growth indicator" used in this study. Total United States change is the standard of reference.

Sources: Same as Table I, main text