FEDERAL GOVERNMENT BUDGET TRENDS, 1965-1975

By

Murray L. Weidenbaum
Department of Economics
Washington University
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I. INTRODUCTION

The purpose of this study is to analyze emerging developments in Federal Government finance during the coming decade. This report does not present any evaluations of the levels of governmental revenues and expenditures which, in any sense, are considered to be most desirable or optimum. However, the results of this analysis should help to illuminate the availability of funds for space and other national programs and the types of financial pressures which may influence the allocation of public funds to space, welfare, and other Federal Government programs.

The emphasis in this report is on estimating the budget results that are likely to occur during the 1965-75 time period, with particular attention to the future effects of existing statutory authorizations and commitments. Specifically, the report attempts to answer the following questions:

(1) What is total Federal revenue likely to be in 1975, under the existing tax laws?

(2) What changes in the composition of Federal revenues are likely to take place under the same assumption?

(3) What is total Federal expenditure likely to be in 1975, assuming the continuation of current programs and the fulfillment of current statutory commitments (e.g. payment of veterans pensions required by existing laws governing veterans benefits)?

(4) What changes in the composition of Federal expenditures are likely to take place under these conditions?

(5) How much discretion is there likely to be in Federal budgetary matters under such circumstances? That is, will there be a potential surplus in the budget, permitting choices between tax reductions and further expenditure increases? Or, will there be a potential deficit in the budget, requiring a different set of actions?

The term "potential" is used to denote estimated differences between Federal receipts and expenditures through 1975. For reasons to be described later, large and continuing potential budget deficits or surpluses are not likely to be self-fulfilling because of their adverse impact on the aggregate level of economic activity which, in turn, would alter significantly the projected levels of the budget.

By avoiding the presentation of any proposals, it is hoped that this report will serve as a useful input to the deliberations of thos who participate in determining the various types of policies involving questions of governmental finance and resource allocation.

II. FEDERAL BUDGET TRENDS, 1965-1975

The purpose of this chapter is to estimate Federal revenues and expenditures over the next decade under certain assumptions. These assumptions are (1) continued international tension, (2) an economic growth rate of 3 3/4 percent a year, (3) continuation of the current Federal tax structure, and (4) continuation of current Federal expenditure programs and existing statutory commitments.

It should be clear from these assumptions that no forecasts will be presented of probable government receipts or expenditures. It should also be clear that quite different estimates of Federal receipts and expenditures could be developed on other equally reasonable assumptions. Hence, no simple conclusions should be drawn from the Federal finance estimates developed here. The purpose is to provide some understanding as to the range of policy choices in Federal government taxes and expenditures over the next decade, starting with present tax rates and present expenditure programs.

A. Summary of Results

The main conclusion that emerges from this chapter is that, given the assumptions, there would be a continuing and increasing potential surplus of the Federal Government's cash receipts over expenditures during the next decade. This potential budgetary surplus is estimated at about $30 billion in 1975. The estimated cash receipts and expenditures are shown in Table 1 and are compared with recent budget experience.

Table 1

Projections of the Gross National Product and the Federal Budget

(Fiscal years; in billions of dollars)

Category	1955	1960 Actual	1965	1975 Projected
Gross National Product at 3 3/4 percent annual growth rate	378.6	495.2	648.7	981.9
Federal Revenues under present tax structure	67.8	95.1	119.7	201.3
Revenues as percent of GNP /1	17.9	19.2	18.5	20.5
Federal Expenditures under present programs	70.5	94.3	122.4	171.2
Expenditures as percent of GNP	18.6	19.0	18.9	17.4

/1 Revenues decline as a percentage of GNP between 1960 and 1965 because of the legislative and administrative changes which reduced the effective Federal tax rate.

It can be seen that total receipts are likely to be an increasing percentage of the Gross National Product, indicating that revenues will be rising faster than the general level of economic activity. This, of course, results from the overall progressivity of the Federal income tax structure (technically, the income elasticity of the revenue structure is greater than unity). Were the structure proportional, total revenues would tend to rise at the same rate--which would constitute unitary elasticity.

Federal expenditures are estimated to increase 40 percent between the fiscal years 1965 and 1975, which is significantly lower than either the 51 percent rise in GNP or the 68 percent rise in revenues. It should be kept in mind that the estimates of Federal expenditures presented here are based on the relatively conservative method of estimating future requirements of <u>current</u> programs, rather than indicating any recommended level or even an evaluation of what new or additional programs are likely to be incorporated into the budgets of future years. Nevertheless, this may be one of the fundamental, although quite simple, results that emerge from this study: given the restrictive nature of the assumptions made, revenues are likely to increase faster than the national economy and expenditures more slowly. The relationships may be visualized as follows:

$\frac{\Delta T}{T} > \frac{\Delta Y}{Y} > \frac{\Delta G}{G}$, where T is Federal tax and other cash receipts, Y is the Gross National Product, and G is Federal Government cash payments (Δ means increase).

Hence, despite the current experience of a series of budgetary deficits, the future result of the current program and revenue structure of the Federal Government is likely to be to reverse the situation. The budget results which will actually be obtained, of course, will be determined by the incremental decisions to be made during the coming decade.

The projected gap between revenues computed on the basis of existing tax law and expenditures estimated on the basis of continuation of current programs mainly signifies the amount of discretion that may be exercised by policy-makers in the future. First of all, past experience indicates that it is most unlikely that an entire decade will go by without important changes in both tax legislation and governmental program authorizations.

Moreover, economic analysis has increasingly pointed out the adverse affects of a potential large surplus in the governmental budget. In effect, such potential net inflow to the Federal Government may be self-defeating if it exercises a depressive influence on the level of economic activity, thus, reducing governmental revenues from their potential, and preventing the actual realization of a large budgetary surplus. [1]

On the other hand, during a period characterized by strong consumer industrial demand, such potential surpluses may be needed to offset inflationary pressures that may be present in the private sector of the economy.

This report does not presume to determine what the allocation of the growth in federal revenues should be as between increases in various categories of governmental expenditures, reduction in income taxes and other revenue sources, and decreases in the national debt. Hopefully, the estimates presented here will be useful to those concerned with this larger question of economic policy formulation.

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[1] For an exposition of the development of the concept of the "full employment surplus", see Norman F. Keiser, Macroeconomics, Fiscal Policy, and Economic Growth, New York, John Wiley & Sons, 1964, pp. 311-326.

B. Composition of Expenditures

On the basis of the detailed estimates presented below, a significant shift would occur in the composition of Federal expenditures during the 1965-75 period. This would be mainly a reallocation from the national security categories to the individual welfare areas, such as education, social security, housing, and community development. The broadly developmental functions--natural resources, and commerce and transportation--would tend to maintain close to their current proportional share of the budget.

A review of past experience reveals that not all categories of government expenditure continue to rise indefinitely, and certainly that there are significant differences in their growth rates over time. For example, with the essential completion of the World War II GI Bill program, veterans services and benefits are currently being funded at rates far below those of the early period. Similarly, economic foreign aid is being conducted at lower levels than during the time of the Marshall Plan. The variations in the change in the various budget categories projected here for the 1965-75 period are shown below.

Category	Percentage Change 1965-75
Education	433%
Housing	106%
Health, Labor, and Welfare	91%
TOTAL CASH RECEIPTS	68%
TOTAL CASH EXPENDITURES	40%
General Government	36%
Commerce and Transportation	35%
Veterans	31%
Interest	28%
Natural Resources	21%
National Defense	14%
International	0%
Space	-2%
Agriculture	-7%

To avoid any misunderstanding about the nature of these expenditure projections it seems important to reemphasize the limitations of this study. These estimates are not the result of the exercise of judgment as to what are the most desirable or even likely levels of future government spending, but an evaluation of the future financial dimensions of current programs and commitments. The text contains examples of possible new budgetary items which could involve large expenditures in subsequent years. Some possible programs of this nature, which are not included in the estimates contained here, are the following:

1. Mobilization expenditures for a limited war.
2. Large scale exploration of Mars and other planets.
3. Transforming the Department of Agriculture into a rural affairs agency.
4. An operational salt and brackish water desalinization program.
5. Federal financing of a civil supersonic transport aircraft program.
6. Construction of a substitute for the Panama Canal.

7. A major Federal effort to raise the quality of education, such as increasing teacher-student ratios and applying technological improvements to classroom instruction.
8. Expanding Federal assistance to research and development, particularly to the "underresearched" industries catering to nondefense markets.
9. General pensions to all World War I veterans.
10. Massive Federal efforts to subsidize cultural and artistic activities.

C. Methodology

The following is the essential methodology utilized in this study.

1. Choice of Budget Concept. Because the amount of money raised and expended by the Federal Government during any given period is a matter of political controversy as well as economic analysis, several different methods of measuring the levels of governmental revenues and disbursements have come into use. The three most widely utilized measures of Federal fiscal activity are budget receipts and expenditures, cash receipts from and payments to the public, and Federal receipts and expenditures on national income and product account.

The most comprehensive of the three series is computed on the basis of what has come to be called the consolidated cash budget. Essentially this measures the total flow of cash, exclusive of borrowing and the repayment of borrowing, between the government and the public. The public in this sense includes business firms, individuals, state, local, and foreign governments, and international agencies. Cash receipts and expenditures include the operations of the many trust funds and the government-sponsored enterprises in which the Federal Government has had a share of ownership from time to time.

Primarily because the cash budget is the most inclusive of the three available series, this report uses the cash concept for all budget figures presented here. The totals and the breakdowns used in this report for the years 1955-67 are taken from the data in the 1967 Budget prepared on the consolidated cash concept

2. Estimating Revenues. In the past, the yields of the major categories of governmental revenues have been closely associated with fluctuations in the level of economic activity. For example, the revenue from the corporate income tax has been primarily influenced by the level of corporate income (aside from changes in tax laws, which are assumed constant in this study). Similarly, the dollar magnitude of personal income has been the key determinant of the yield of the individual income tax.

The various standard categories of Federal revenues have been projected in this report on the basis of extrapolating their past relationships to Gross National Product, and such related series as personal income and corporate profits, on the basis of assumed future levels of these measures of economic activity. In a manner of speaking, Federal revenues are projected as an element which is endogenous to our economic model, that is, determined primarily by the level of economic activity. As is shown below, the expenditure estimates, in contrast, are in general exogenous--they influence the level of economic activity, but are not significantly affected by it.

3. Estimating Expenditures. A combination of approaches was found necessary in projecting the various functional categories of Federal expenditure. For one category of programs, actuarial estimates are available of future expenditure requirements. The largest single example of this nature

is the old-age and survivors' insurance trust fund, the receipts and disbursements of which have been carefully estimated by the Department of Health, Education, and Welfare on the basis of detailed examination of the U.S. population distribution, the coverage of the social security system, the life expectancy of the beneficiaries of the system, and the benefit rates established by legislation. Other programs for which some actuarial projections are available include the disability insurance trust fund, medicare, veterans pensions, veterans compensation, and the Civil Service retirement and disability trust fund.

Another category of expenditures consists of those for which relatively firm program estimates are available. The major example here is Federal grants to states under the Federal-aid highway legislation (although some adjustments were necessary). For still another category of expenditures, statistical extrapolations were utilized. Because, in the past, annual Federal outlays for public assistance were closely associated with the number of persons in the United States over 65 years of age, these expenditures were projected on the basis of the future age distribution of the Nation's population, as projected by the U.S. Bureau of the Census. Similarly, the group of expenditures classified as General Government (essentially the overhead functions of government) has varied in close relationship with total Federal Government expenditures, excluding General Government, and was assumed to continue to move in that fashion.

However, a very large group of government expenditure programs remains, those whose size is determined each year primarily through relatively subjective decision-making processes, or at least those which cannot be projected

in an objective manner. These include national defense, agriculture, and housing outlays. Nevertheless, an attempt is made in each case to indicate the factors that will influence program and budget decisions and also what reasonable estimates of expenditures in 1975 may be. An example of such relevant factors is the likely future relationship of farm output to demand for agricultural commodities and, hence, the general magnitude of imbalances in agricultural production which give rise to farm subsidy payments.

Table 2 is an attempt to show visually the extent to which the various categories of government expenditures were estimated through relatively objective or subjective methods. A subsequent section of this report describes in some detail the basis for projecting the expenditures of each major Federal budget category.

4. Underlying Assumptions. It was necessary to make numerous assumptions in preparing the estimates contained in this report. The key assumptions are the following:

General. It is assumed that there will be a high degree of continuity in the political, social, and economic institutions that set the pattern of life in the United States.

The reasonableness of this assumption can be seen by examining recent experience. Despite several shifts in national political administrations during the past decade, the basic pattern of governmental programs and activities has continued. The long-term trend of rising expenditures for domestic-civilian programs as a whole, and particularly for those in the health-education-welfare area, has persisted through all recent administrations, Democratic as well as Republican.

Table 2

Nature of the Estimates

Total cash Revenues /1 /2

National defense /3

International

Space /3

Agriculture

Natural resources /2

Commerce and transportation /3

Housing

Health, labor, and welfare /1

Education /3

Veterans /1

Interest /2

General government /2

Adjustments /1

Total cash payments

/1 Actuarial estimates

/2 Statistical relationships

/3 Some agency program workload estimates

International. It is assumed that the present high level of U.S. military expenditure in Viet Nam will decline substantially prior to 1970. This is essentially an economic assumption and various military outcomes are consistent with it. Nevertheless, it is also assumed that the underlying tensions between the United States and the Communist Nations will continue, and that no major disarmament agreement will be achieved. Thus, a continued high level of military preparedness is assumed for the coming decade.

Gross National Product. GNP is assumed to increase between 1965 and 1975 at the average rate of 3 3/4 percent a year, measured in constant dollars. This growth rate is slightly higher than the 3 1/2 percent estimated for the GNP of the American economy during the 1955-62 time period because the most recent estimates of labor force growth over the coming decade indicate that a major acceleration is likely to take place.

Should GNP expand at a rate other than 3 3/4 percent, the departures from the estimates presented in this chapter would be significant but not fundamental on the revenue side and marginal on the expenditure side. Two alternate assumptions, 3 1/2 percent and 4 percent, are explored in subsequent sections.

No attempt is made to forecast cyclical fluctuations over the coming decade. Hence, the values shown for 1975 are points on long-term trend lines. That is, these are assumed to be years characterized neither by recession nor above-average expansion.

Aggregate Price Level. Projections for future years are made in terms of the average price level prevailing in the fiscal year 1965 (so-called "constant 1965 dollars"). This does not signify that the author believes

that no further inflation will occur in the next decade. All that this assumption is intended to convey is that "real" rather than monetary changes in governmental budgets are here projected. The use of constant dollar comparisons is the general practice in making long-term economic projections.

Personal Income. It is assumed that proportionate increases in personal income will accompany the growth of GNP. The 1975 personal income figure used here was estimated at 80 percent of GNP, following the relationships of recent years.

Corporate Profits. Corporate profits, before taxes, were estimated to rise from 9 percent of GNP at the present time to 10 percent in 1975. This assumes that corporate profits will regain the relative position they held during the 1950's.

Tax Rates. The rates of Federal taxation are assumed to be those provided by legislation as of June 30, 1966. Thus, already scheduled increases in social security taxes will take place, but no allowance is made for further legislative changes in the revenue structure.

Expenditure Programs. It is assumed that legislation on the statute books, as of June 30, 1966, authorizing governmental expenditure programs will continue in force through 1975. In some cases, this would require specific Congressional action to extend expiring legislation (e.g. the annual authorization for military procurement.)

III. THE FEDERAL REVENUE PROJECTIONS, 1965-1975

As pointed out earlier, the estimates of each category of Federal cash receipts were made on the basis of projecting their historical relationships to the Gross National Product or the relevant derivative series. Hence, the results are very sensitive to the assumed GNP growth rate. Table 3 shows the resultant differences in estimates for 1975 obtained from using, alternatively, assumed rates of 3 1/2, 3 3/4, and 4 percent average annual increases in U.S. Gross National Product. Although all other revenue tables in this report are based on the 3 3/4 percent assumption, the two alternatives should not be ruled out as unreasonable. The 3 3/4 figure is presented as an estimate of the pace of economic growth required to maintain about the current rate of utilization of the Nation's labor force (96 percent unemployment). However, should the labor force expand at a slower (or more rapid) rate than implied in the 3 3/4 percent assumption, one of the other alternatives might become reasonable. Also, as pointed out earlier, the actual rate of growth of the American economy may be below the full potential possible.

Under the 3 3/4 percent GNP growth assumption, total revenues are shown to rise at the average annual rate of 5.3 percent between 1965 and 1975.

A. Individual Income Tax Receipts.

The estimate of Federal individual income tax revenues were made by assuming that this source of receipts would obtain a slightly rising portion of the projected levels of personal income, from 9.3 percent in 1965 to 10 percent in 1975. This has been a tendency in past years where the statutory tax rate has been held constant. This changing relationship reflects the tendency for a progressive tax structure to yield a rising proportion of the

Table 3

Estimates of Federal Government Cash Receipts in 1975

(In billions of dollars)

Category	Assumed GNP Growth Rate		
	3 1/2%	3 3/4%	4%
Individual Income Taxes	76.9	78.6	80.3
Corporate Income Taxes	41.3	42.2	43.1
Excise Taxes	20.0	20.4	20.8
Employment Taxes	34.5	36.0	37.5
Estate and Gift Taxes	4.6	4.8	4.9
Customs Receipts	2.4	2.4	2.5
Unemployment Insurance Deposits	5.0	5.5	6.0
Other Receipts	11.1	11.4	11.7
TOTAL	195.8	201.3	206.8

income base, but makes no allowance for further reductions in Federal personal income tax rates. Under the 3 3/4 GNP growth assumption, this category of revenues is projected to rise at the average annual rate of 4.9 percent between 1965 and 1975.

B. Corporate Income Tax Receipts.

The estimate of corporate income tax revenues was taken at 43 percent of the assumed level of corporate profits. This is lower than the current statutory rate of 48 percent and represents a downward adjustment made to allow in the effective rate for the effects of the tax credit for new investment in producer durable equipment, the liberalizations of depreciation allowances, and the lower rate of 22 percent on the first $25,000 of a corporation's net income. Using the 3 3/4 GNP growth rate, corporate income tax revenues are estimated to increase, on the average, at 5.2 percent a year between 1965 and 1975.

C. Excise Taxes.

Excise taxes were projected by means of a regression equation based on personal income. The average annual increase in yield between 1965 and 1975 is estimated at 3.4 percent.

D. Employment Taxes.

Estimates of employment taxes were taken from actuarial projections supplied by the Department of Health, Education, and Welfare. These projections were prepared on the basis of the existing social security legislation governing contribution rates and taxable income, with employment increasing steadily, and the average total earnings of each covered worker rising at the average rate of 3 percent a year. In addition, allowance was made for the increased receipts which will be obtained from the Social

Security Amendments of 1965, which established the "medicare" program and increased social security tax rates. Railroad retirement fund receipts were assumed to remain at their current level of about $1 billion a year.

E. Estate and Gift Taxes.

The revenues from estate and gift taxes were projected by use of an estimating equation based on personal income.

F. Customs Receipts.

Tariff revenues were projected in a similar fashion as estate and gift taxes, but by using GNP, rather than personal income, as the independent variable.

G. Unemployment Insurance Deposits.

State government deposits to the unemployment insurance trust fund were assumed to continue the historical upward trend. The underlying factors are the projected increases in the labor force and civilian employment, plus the relationship between total and covered employment. No major shift is assumed to occur in the portion of the labor force covered by unemployment compensation systems.

H. All Other Receipts. Projections of all other receipts were made by use of an estimating equation based on GNP. This category includes all sorts of miscellaneous items, varying from voluntary contributions to the Treasury's conscience funds to repayments of foreign loans.

I. Alternative Estimates. The revenue estimates described above are generally based, directly or indirectly, on an assumed average growth rate in GNP of 3 3/4 percent a year over the coming decade. Should the American economy expand at a more rapid rate, each category of receipts would tend to

exceed these estimates. At a 4 percent average yearly rise to 1975, GNP would be above $1,003 billion instead of the $982 billion used here, or about 2 percent higher. As shown in Table 3, the resultant increase in Federal revenues would be $5.5 billion above the estimate of $201 billion derived above. As indicated below, the response of governmental expenditure programs would tend to be much smaller. Hence, the potential gap between Federal resources and expenditures would widen substantially by the end of the decade. The reverse results would be obtained from a slower pace of economic growth.

IV. FEDERAL EXPENDITURE PROJECTIONS, 1965-1975

This section presents the details of the projections of Federal expenditures or payments to the public, on a functional basis, for 1975.

In comparison to the revenue estimates, few expenditure programs would be directly affected if the national economy were to grow somewhat more rapidly, or more slowly, than is assumed in this report. Certainly unemployment compensation outlays would be lower and possibly public assistance payments and farm price supports. The relatively inelastic demand for farm products, however, would limit reductions in the latter area. A more buoyant economy might alter currently held views on the level of Federal spending which the Nation desires. However, given the focus of this study on the expenditure implications of current laws and commitments, the effect of a higher growth rate on expenditures would be far less than on revenues. Hence, the potential net revenues available for discretionary utilization would rise above the figures developed here.

A. National Defense

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	45.9	50.8	57.4	61.4	58.0
Percent of Budget	48.7	41.5	42.4	42.4	33.9

In the short-run, defense expenditures are likely to be maintained at their current and very high level in order to support adequately the United States military commitment in Viet Nam. For the purposes of the present analysis, it is assumed that the magnitude of U.S. defense spending will

start to decline some time prior to 1970, reaching a low point of about $55 billion in 1970. A variety of military outcomes is consistent with this assumption, ranging from complete victory against the communist forces to unilateral U.S. withdrawal from Viet Nam.

Considering the cyclical nature of previous defense spending, a renewed upward trend is clearly possible during the early or middle 1970's as new military weapon systems are put into quantity production to replace existing equipment which would tend to be obsolescent by then.

This would also represent a more or less long term increase in the U.S. armed forces above the pre-Viet Nam level, reflecting the continued level of military and international tensions.

Although it is extremely difficult to forecast the specific weapon systems which will be funded over the coming decade, continuation of the underlying communist threat and the degradation of all systems merely over time (as potential agressors learn to offset our weapons) point to a continued high level of defense spending.

Many careful projections of defense expenditures show a basic stability for the coming decade. /2 Any upturn in defense spending in the 1970's (assuming no additional Korea or Viet Nam-type of hostilities) would tend to be relatively slow. Even if a major new generation of weapon systems, such as an anti-ICBM, a third generation ICBM, or an operational military space vehicle, were ordered into production, it would take several years before heavy expenditure rates were reached.

/2 See J. Fred Weston, editor, Defense-Space Market Research, Cambridge, The M.I.T. Press, 1964.

The 1967 Budget and supporting statements indicate that various potentially large programs are being considered, but that decisions will not be made for some time. For example, the 1966 military budget contains funds sufficient to carry on component development work that will permit the Department of Defense to proceed with the full development of a new manned bomber to replace the B-52's, if that should later appear to be desirable. The Pentagon has stated that it would cost about $10 billion to develop and procure "perhaps two hundred" such aircraft.

Also, the 1967 military budget contains funds for continuing the Nike-X anti-missile system. The Department of Defense has estimated that it would cost something on the order of $20 billion to develop, produce, and deploy the Nike-X anti-ICBM in sufficient quantity to protect about 35 percent of the U.S. population. A companion shelter program would cost about $5 billion in addition, some of which would be borne by state governments and private non-profit organizations.

The expenditures of the Atomic Energy Commission are estimated to continue to decline slowly. The reduction in outlays for procurement of uranium concentrates and for production of nuclear weapons will be partially offset by expanding research and development work geared to the peaceful uses of atomic energy.

B. International Affairs and Finance

	1960	1965	1966	1967	1975
	Actual		Estimated (Fiscal Years)		Projected
Total amount (billions of dollars)	2.8	4.6	4.1	4.4	4.6
Percent of Budget	3.0	3.7	3.0	3.1	2.7

Economic and technical foreign aid programs account for about half of the expenditures in this category. The remainder goes primarily to the Food for Peace Program, with smaller amounts to the U.S. Information Agency and the traditional State Department functions.

The foreign aid programs comprise the lending, technical cooperation, and other assistance activities of the Agency for International Development (including the Alliance for Progress), the Peace Corps, the Export-Import Bank, and U.S. contributions to such international financial organizations as the International Development Association and the International Monetary Fund. The economic foreign aid programs, other than the Peace Corps, have been experiencing increasing political resistance in obtaining their annual authorizations and appropriations. The shift in emphasis in recent years from outright grants to repayable loans may have merely helped to maintain the current level of funding, rather than bolstering the prospects for further expansion.

Other significant trends in the pattern of foreign aid spending have (1) included the shift to multilateral types of aid programs, such as the Inter-American Development Bank, rather than the unilateral programs like the original Marshal Plan, (2) restricting assistance to the developing nations, with major emphasis on the areas under greatest Communist pressure, (3) greater emphasis on assistance in the areas of health and education, and (4) stressing agricultural production to help alleviate famine problems in several developing nations.

The foreign information and exchange activities, such as the voice of America, have been increasing their expenditures almost steadily over the past decade. The conduct of foreign affairs, which comprises the bulk of the historical State Department operations, has also tended to receive increasing amounts of funds, but in a more irregular pattern. These latter two subcategories are of much smaller magnitude than the economic and financial assistance programs.

Under the Food for Peace Program (Public Law 480), U.S. agricultural surpluses are made available to friendly nations overseas, mainly in exchange for local currencies. Almost all of these currencies are inconvertible and are used by the recipient countries to pay U.S. obligations, to finance loans to U.S. private enterprise, and to support local development projects.

There is little if any objective basis for making projections of expenditures for the International Affairs and Finance category. For the purposes of this report, it has been assumed that total outlays in this category will be maintained at the level of $4.6 billion, which corresponds to the actual disbursements during the most recently completed fiscal year, 1966.

C. Space Research and Technology

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	.4	5.1	5.6	5.3	5.0
Percent of Budget	.4	4.2	4.1	3.7	2.9

The space research and technology category consists entirely of--and is limited to--the disbursements of the National Aeronautics and Space Administration (NASA), the Nation's civilian space agency. The great bulk of NASA's expenditures in recent years--and likely through 1970--has been for the Apollo program to achieve a manned lunar landing by or before 1970. More than two-thirds of the fiscal year 1967 Budget is devoted to this program which includes the preliminary spacecraft such as Gemini to develop equipment and techniques for the actual landing, the Saturn V and similar boosters needed to send the Apollo vehicle to the moon, and the worldwide tracking network that will monitor the Apollo's movements in space. After extremely large and rapid increases in appropriations during the first several years following its establishment, NASA has experienced almost a plateau in its funding in recent years. New obligational authority requested of the Congress in fiscal 1967 was $163 million lower than the previous year. NASA's share of the total budget has been declining from 4.2 percent in 1965 to 3.7 percent estimated for 1967.

Simultaneously, however, NASA is making relatively small expenditures for the initial phases of other programs which may become rather significant in the 1970's. It has contracted for six studies to explore the feasibility of manned missions to Mars and Venus and to focus the longer-range research and development activities of the agency.

The 1967 Budget provides funds for continuing the program of unmanned planetary exploration by sending the Mariner spacecraft to Venus in 1967 and to Mars in 1969. The Mars mission is needed for the development of the larger

program, "Voyager," designed to land an unmanned capsule on Mars in the 1970's. The total cost has been estimated to be approximately $1.2 billion.

On the basis of currently authorized programs, it appears likely that total expenditures for the Space Research and Technology category will level off for the next several years after having reached the required level to sustain Apollo and related programs. The major systems required for the manned lunar landing are progressing beyond the most costly phases of the development cycle.

Thereafter, NASA expenditures for current programs are anticipated to decline somewhat as further lunar and planetary exploration is conducted with reduced deadline pressures. In his January 1965 message on space programs, President Johnson stated that the goal of the United States was to become the leading "spacefaring" nation and that the national goal was to explore the moon, not just visit it. In addition, the President indicated his desire that we "explore and chart the planets as well." Such programs would constitute strong pressures for maintaining the relatively high levels of NASA expenditures estimated here for the period beyond 1970.

In 1965, the National Academy of Sciences recommended that top priority in NASA's future planning be given to exploring Mars. The 1967 Budget refers to obtaining "additional vital information for development of the much larger Voyager spacecraft looking toward a landing on Mars in the 1970's."

In this connection, a recent Brookings Institution report states that an important determinant of the NASA budget over the next ten years will be its "record of success or failure during the period, because successes will

undoubtedly open up new vistas for the entire space field, while failures may result either in an increased effort or in disillusionment." /3

NASA Administrator, James E. Webb, recently stated that the major new space projects offering greatest promise in the late 1970's and 1980's in the manned area are systematic lunar exploration, large orbiting space stations, and the exploration of Mars. 'These, together with unmanned exploration of comets, asteroids, and the more distant planets and of the inner and outer reaches of interplanetary space, all portend a new era of understanding for man, particularly of the origin and evolution of the sun and the planets, about which he has conjectured for so many centuries." /4

Should the Nation lose interest in space exploration, possibly as a result of a letdown after the Apollo landing, NASA expenditures would decline rapidly after 1970. On the other hand, should spectacular success by a manned lunar landing excite another wave of public concern, NASA expenditures could rise significantly above the 1975 level shown here. There is a growing backlog of such potential programs being designed, such as a manned orbiting laboratory. Estimates of the cost of a manned landing on Mars range from $60-100 billion. /5 Clearly, this is an area of considerable

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/3 Gerhard Colm and Peter Wagner, Federal Budget Projections, Washington, D.C., The Brookings Institution, 1966, p. 100.

/4 U.S. Senate, Committee on Aeronautical and Space Sciences, National Space Goals for the Post-Apollo Period, Washington, U.S. Government Printing Office, 1965, p. 8.

/5 Ibid, p. 290.

discretion on the part of governmental decision-makers acting on future year budgets.

D. Agriculture and Agricultural Resources

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	3.6	5.4	4.6	3.6	5.0
Percent of Budget	3.9	4.4	3.4	2.5	2.9

About two-thirds of Federal expenditures for Agriculture has been devoted to the farm price support program and related agricultural income stabilization in recent years. The support of farm prices at levels determined by law is provided through loans, purchase agreements, and direct purchases from producers. As the loans are of a non-recourse type, they may usually be viewed as merely a preliminary step to the eventual government purchase of the commodity.

The Department of Agriculture and the Farm Credit Administration also maintain a variety of credit programs to assist in the financing of farm ownership and operation. The Department of Agriculture provides a great variety of other services to farmers, including the cooperative state experiment stations and Extension Service. Agricultural conservation activities include payments to farmers to cover a portion of their conservation costs as well as the operations of the Soil Conservation Service. The Rural Electrification Administration provides long-term, low-interest loans for electrification and telephones.

The farm price support program will be the major determining factor in the future size of the Agriculture budget. Political unwillingness to let the over-all costs of the program continue to rise at the rates recently experienced appears to be growing, and hence a tapering off in the growth rate of this major subsidy item may occur. Population shifts and Congressional reapportionment are gradually reducing the political support for farm subsidies.

A shift in emphasis is occuring in Federal farm outlays from supporting prices at high levels through commodity purchases and loans to direct payments to farmers as a means of maintaining farm income.

Some of the other areas of Federal agricultural activities, notably assistance to low income families living in rural areas, have been increasing steadily and show promise of continuing such trends. For example, the 1967 Budget provides funds to expand the recently reconstituted Rural Community Development Service. This agency assists rural areas by providing advice and information on the various governmental assistance programs available to local communities. The Department of Agriculture is establishing pilot multi-county development districts to provide area-wide planning of health, educational, and other programs effecting people in rural areas.

Because of slackening political support and the prospects of some improvements (or at least no further worsening) in the supply-demand relationships for major farm products, total Federal expenditures for agriculture are estimated to fluctuate within the range recently experienced. The estimate of $5.0 billion for 1975 is intended to be a long-term trend projection. For individual future years, weather or other conditions may result

in substantial over-or under-production and hence, in atypical crop years. The underlying assumption of course is that the general problem of over-production and low incomes in agriculture will not be eliminated in the coming decade.

The estimate of Federal agriculture expenditures for 1975 does not provide for a really substantial program of assistance to low-income farmers and others living in rural areas which would make a major dent in urban-rural income differentials. Such a large-scale rural anti-poverty effort would both transform the present Department of Agriculture and result in extremely large increases in its budget, at least for the long transition period.

E. Natural Resources

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	1.8	2.8	2.9	3.0	3.4
Percent of Budget	1.9	2.3	2.2	2.0	2.0

About 70 percent of Federal spending for Natural Resources is devoted to construction work on projects for flood control, navigation, irrigation, water supply, hydroelectric power, and similar land and water conservation and development purposes. Approximately two-thirds of these projects are financed by the Army Corps of Engineers and one-third by the Bureau of Reclamation of the Department of Interior and other Federal agencies.

The other areas in which natural resource programs are carried on by the Federal Government include forests (the Forest Service), recreation

(the National Park Service), animal life (Fish and Wildlife Service), minerals (The Bureau of Mines), and general support (Geological Survey).

The potential growth in the entire area of natural resource programs is essentially limited only by budgetary constraints, rather than by any absolute requirements and possibilities. More realistic or rigorous cost-benefit analysis undoubtedly also would serve as a restraining influence, particularly if the horizons of budget reviewers were broadened to consider alternative uses.

Numerous plans and schedules may be cited for estimates of future expenditures for various natural resource activities (some of these documents may be in the nature of 'wish lists"). One well-publicized example is the report of the Senate Select Committee on National Water Resources which contained proposals requiring approximately $65 billion of Federal expenditures up to 1980 (plus non-Federal outlays of $173 billion). These plans would cover water development for navigation, flood control, power generation, irrigation, water supply and waste disposal, recreation, and wildlife and fisheries. [17]

The various Federal agencies have developed more specific projected programs, including ones for construction of public highways through national forests, and development of Federal range lands and the National Park System.

As is the case with Federal programs discussed earlier, these long-range planning documents are not in the nature of firm commitments of public funds, but rather indicate possible selections and choices which may be made. The following quotation from correspondence with a member of the Resources Program Staff in the Office of the Secretary of the Interior may be illuminating. The writer is explaining why that Staff had not made any projections of Federal expenditures for Natural Resources:

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[17] U.S. Senate, Select Committee on National Water Resources, Senate Report 29, 87th Congress, 1st Session, January 31, 1961.

> "Manipulation of the figures for past expenditures would surely have little relevance. One Administration may decide that a vast expansion of public works expenditure is the most effective way to stimulate national economic growth--in that case a surge of expenditures in the natural resources area would be expected. Another Administration may decide that a substantial tax cut is the most effective way to stimulate national economic growth--in that case expenditures in the natural resources area are likely to be held stationary or even curtailed."

The estimates presented in this report for Federal expenditures on Natural Resource programs were developed with the above limitations in mind. It is clear that the continuation of current types of programs will likely result in a rising absolute level of outlay. The more traditional programs each have relatively large backlogs of authorized projects which will result in sizeable expenditures in future years (see Table 4).

The newer activities are in the early stage of what may be considered a normal growth of development pattern. For example, the 1967 Budget requested $31 million of new obligational authority (NOA) for the Office of Saline Water. In comparison, that office's expenditures, which reflect previous grants of NOA, were estimated at $22 million for the year and were only $16 million in 1966 and $11 million in 1965. The Bureau of Outdoor Recreation provides an even more striking growth pattern (NOA of $114 million in 1967 and expenditures of $77 million in 1967, compared with $68 million in 1966 and $4 million in 1965.

Federal expenditures for Natural Resources are assumed to maintain the relationship to the Gross National Product evidenced in the past decade. On that basis, such spending would rise to $3.4 billion in 1975, and represent a slightly increasing share of the Federal Budget.

Table 4

Reserve of Authorized Natural Resource Projects

Projected Status of Plans as of June 30, 1967
(In billions of dollars)

Agency	Planned To Stage Where Contract Could Be Let	Plans In Process	Plans Not Started	Total
Corps of Engineers-Civil	1.4	2.3	2.5	6.2
Forest Service	.2	1.2	---	1.4
Tennessee Valley Authority	.4	.5	.2	1.1
Bureau of Land Management	/1	/1	.6	.7
Bureau of Reclamation	.1	/1	.2	.3
Bonneville Power Administration	--	.3	.2	.5
TOTAL	2.2	4.2	3.8	10.2

/1 Less than $50 million.

Source: Special Analyses of the United States Budget, 1967, Washington, U.S. Government Printing Office, 1966, p. 72.

The enactment of new major programs in this field, such as eradicating air pollution, could raise Natural Resource expenditures far beyond the levels estimated here. Similarly, if the salt and brackish water desalinization program were to move from the research stage to the status of a going operational program, total resource outlays would rise more rapidly than here estimated, unless compensating reductions were made in other programs. It has been estimated that if the recommendations of the Senate Select Committee on National Water Resources were adopted, Federal expenditures in this field alone would rise to an annual rate of about $4 billion for a decade.

F. Commerce and Transportation

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	4.8	7.4	7.0	6.6	10.0
Percent of Budget	5.1	6.1	5.2	4.6	5.8

The improvement of highway, air, and water transportation facilities accounts for most of Federal expenditures for Commerce and Transportation. This category of government spending also covers the deficit of the Post Office, the area redevelopment program, the business service functions of the Department of Commerce, and a host of regulatory agencies such as the Federal Trade Commission and the Tariff Commission.

The highway program--which accounts for about three-fifths of the total expenditures for Commerce and Transportation--covers the grants to state governments under the Federal-aid Highway Act. Present authorizing legislation assures continuing Federal highway grants at a high level at least through 1972.

Long-term projections of other items in the Commerce and Transportation category involve, to a far greater extent, questions of political determination. For example, the Post Office deficit is not primarily a result of projecting postal volume (which appears to be fairly closely related to growth in national income). Rather, it is a question of evaluating the extent to which the Congress is willing to increase postal rates, and hence reduce subsidies to identifiable elements of the population, rapidly enough to meet rises in pay rates and other elements of cost.

Similarly, expenditures for regional and area development primarily reflect a political determination of the specific benefits that will be channeled to individual communities or regions. This is quite different from estimating either the cost of completing an already authorized construction program, such as is financed through the highway grants, or providing standard navigation service to the nation's aircraft fleet, as is provided by the FAA.

Total expenditures for Commerce and Transportation are here estimated to rise from $7.4 billion in 1965 to 10 billion in 1975. This reflects the normal pattern of cost increases for existing activities, rather than the addition of new programs. The main reason for the slower rate of increase compared to the previous decade is the fact that the highway program has attained just about its sustaining annual level of expenditures. It is assumed here that the cost overruns currently projected in this program will be met mainly by stretching out the completion of the program to 1975, rather than substantially raising the yearly disbursement level.

In the case of the Post Office, it is assumed that both pay and postal rates will be increased over the coming decade in such a manner as to maintain fairly constant the proportion of total postal expenses which is borne by the Treasury. Hence, in absolute terms the amount of the postal deficit will rise. Admittedly, this is a borderline case between the extension of existing legislation and the enactment of totally new legislation. The assumption used here was designed to present usefulness and realism.

Two potentially additional transportation programs could raise the overall level of spending for this category substantially above the estimates presented here. These are a substitute for the Panama Canal and Federal financing of a civil supersonic transport aircraft. For the first of these two items, the 1967 Budget included an appropriation of $6 million for continuing research by the Interoceanic Canal Commission. This agency was authorized by legislation in 1964 to undertake a four year study of the feasibility of a sea level canal between the Atlantic and Pacific Oceans. Should the Commission's evaluations of the probable costs and other factors lead to undertaking the construction of such a Canal, the aggregate costs undoubtedly would be substantial.

Recent Congressional hearings have reported preliminary cost estimates ranging from $620 million for a canal through San Blas, Panama, excavated by nuclear methods to $13 billion for one at Tehuantepec, Mexico, using conventional digging operations. According to the Atomic Energy Commission, the nuclear approach probably could not be used under the present test ban treaty limitations. /8

With reference to the supersonic transport project, the FAA has been sponsoring for the last several years governmental and private studies of the cost, market, and technical aspects of such an undertaking. These uniformly indicate that none of the private airplane or airline companies are in a position to bear the full costs of development, which have been estimated in the neighborhood of $1 billion or greater. Considerable disagreements have been reported concerning the share of the development costs which the Federal Government should bear. The range appears to be within 75 and 90 percent of the total.

/8 U.S. Senate, Committee on Commerce, Provide for an Investigation and Study to Determine a Site for the Construction of a Sea-Level Interoceanic Canal Through the American Isthmus, Hearings on S. 2428 and S. 2497, 88th Congress, 2nd Session, 1964.

G. Housing and Community Development

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	1.4	.9	2.0	1.2	3.5
Percent of Budget	1.5	.7	1.5	.8	2.0

The Housing and Community Development category consists of a variety of programs for the benefit of urban areas, including financial aids to both public and private housing, slum clearance and urban renewal, and such emerging activities as Federal grants and loans to mass transit systems in the major metropolitan areas.

The aggregate expenditure trends for the Housing category tend to be rather erratic because of the presence of several programs which at times generate revenues in excess of their current expenditure rates. For example, unusually large secondary market operations by the Federal National Mortgage Association (Fanny Mae) accounted for the estimated peak Housing expenditures of $2.0 billion in 1966; all other housing programs netted out to about $600 million in that year.

Other Housing programs which, at least in some years, generate large amounts of revenues include the operations of the Federal Home Loan Banks, the Federal Savings and Loan Insurance Corporation, and the Federal Housing Administration.

There are, in addition, several Housing programs whose expenditure levels have been growing quite steadily in recent years. These are urban renewal, public housing assistance, expenditures for the District of Columbia,

and the new program of aid to urban mass transportation systems. In the 1967 Budget, the combined outlays of these four activities come to over $1 billion and underlying trends indicate continued expansion.

This trend is indicated by such factors as the Housing and Urban Development Act of 1965 and the 1966 Supplemental Appropriation Act which have already provided $725 million for new urban renewal grant approvals in 1967, as compared to the $675 million provided in 1966. Also in this area, the 1967 Budget recommends new obligational authority of $25 million to aid in the construction of social service facilities in low income neighborhoods, while estimated expenditures for 1967 are $12 million. Expenditures for water and sewer facilities are estimated to increase from $1 million in 1966 to $51 million in 1967.

For the urban mass transportation program, the new budget requests appropriations of $131 million, compared to estimated expenditures in 1967 of $68 million. Among other proposals in the Budget, $27 million is provided to continue development of the authorized rail rapid transit system for the District of Columbia.

The substantive Federal programs in the Housing category show every evidence of a marked upward trend in expenditures in the coming years. The future financial condition of the lending and related institutions, such as Fanny Mae and the Federal Home Loan Banks, is far more difficult to assess. One guide is the substantial reduction in the loan portfolios of some of these agencies, reflecting the substantial revenues already received, but reducing the likelihood of future inflows of this magnitude. For example, Fanny Mae's holdings of direct loans are estimated to decline from $2.1 billion in the fiscal year 1965 to $1.0 billion in 1967.

For the purposes of this study, it is estimated that Housing expenditures rise to $3 billion in 1975. This is based on the assumption that the existing programs, particularly urban renewal and urban mass transportation aid, will continue to gorw, but that no new programs will be established during the coming decade.

There is no clear range of alternative expenditure projections for the Housing function. In the long run, the Congress has relatively complete discretion and few implied or express restraining commitments to either curtail or even eliminate major housing programs. Also, the "needs" for revitalizing our metropolitan areas have no firm upward ceiling either. Should operating subsidies be required to maintain the solvency of the new metropolitan transit systems that the Federal Government is helping to finance, Housing expenditures could rise substantially above the levels here estimated.

H. Health, Labor, and Welfare

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	19.1	28.3	34.1	39.3	54.0
Percent of Budget	20.3	23.1	25.3	27.1	31.5

The social insurance and retirement systems--old age and survivors insurance, disability insurance, civil service retirement and disability, and railroad retirement--account for the greatest part of Federal Expenditures for health, labor and welfare. The expenditures for these programs by and large have been determined through Congressional legislation specifying

benefit rates and eligibility of recipients. Hence, the long-term actuarial projections prepared by the respective administering agencies such as the U.S. Department of Health, Education, and Welfare, constitute a good guide as to future levels of outlays under existing law.

Table 4 summarizes such actuarial projections which have been made available by Federal agencies for three major social insurance programs. The Department of Health, Education, and Welfare has advanced two primary reasons for the substantial increases in future receipts and expenditures under these programs:

1. The U.S. population will become relatively much older on the average, because the present aged population is made up of the survivors from past periods when death rates were much higher than they are now.
2. The proportion of the aged population eligible for and receiving benefits will increase. Some of the present persons aged 65 and over were not in covered employment long enough to obtain benefits, particularly since many jobs were not covered until 1951 or 1955.

The HEW projections are based on the assumption that employment will be steadily rising and the average total earnings of each covered worker will increase 3 percent a year. Allowance is made for the Social Security Amendments of 1965 which provide for "medicare" and a general seven percent increase in average benefit payments under the old-age and survivors insurance system.

Table 5

Operations of Selected Federal Social Insurance Funds
(Selected Fiscal Years. In billions of dollars.)

Year	Cash Receipts			Cash Payments		
	OASI	Disability Insurance	Medicare	OASI	Disability Insurance	Medicare
1965	15.9	1.2	-	15.2	1.4	-
1970	26.4	2.3	3.0	21.7	2.0	2.9
1975	35.0	2.6	4.3	26.0	2.4	4.1

Source: Social Security Amendments of 1965, Report of the Committee on Ways and Means on HR 6675, House Report 213, March 29, 1965; The 1966 Annual Report of the Board of Trustees of the Federal Old-age and Survivors Insurance and Disability Insurance Trust Funds, Washington, U.S. Government Printing Office, 1966.

Of the remainder of the Health, Labor, and Welfare category, three programs currently involve significant levels of expenditure: public assistance grants to the States, unemployment trust fund disbursements, and health services and research. Public assistance expenditures (deflated) have shown a strikingly close association to the movements of total U. S. population over 65 over the past decade. This at first may appear surprising, since the social security program has been covering a rising proportion of this age group. Apparently, increases in average benefit payments--representing both expansions in the Federal share as well as rising benefit rates--have been completely offsetting. According to the latest available estimates of the Bureau of the Census, the number in the over 65 age group is estimated to rise from 18.2 million in 1965 to 21.2 million in 1975.

Unemployment trust fund expenditures in the short run fluctuate in response particularly to cyclical developments and temporary liberalization of the unemployment compensation system. In the longer run, the influencing factors are (1) the growth of the total labor force and, indirectly, of the absolute level of unemployment (2) the proportion of the unemployed who are covered by the system, and (3) average benefit payments and their duration. Under almost any reasonable assumption as to unemployment rates, the resultant of these three factors is likely to be an absolute long run increase in unemployment trust fund receipts and expenditures.

In projecting Federal expenditures for the Public Health Service and related activities there is no actuarial or activity guides to rely upon, as is the case in the programs discussed above. According to HEW, a projected total of $3 billion in national expenditures for medical research in 1970 "has been widely accepted." In part, this projection may be self-fulfilling, as it "has been used as a reasonable and feasible basis for estimating research manpower needs." [19] The projection takes into account such factors as prior growth rates, anticipated increases in GNP, total research and development as a percentage of GNP, and medical research as a component of total R&D.

The newest and fastest growing area of Health, Labor, and Welfare expenditures is the anti-poverty program (the so-called Economic Opportunity activities). From a first year level of expenditures of $211 million, this program is estimated at $1.6 billion in the 1967 Budget.

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[19] U.S. Department of Health, Education, and Welfare, New Directions in Health, Education, and Welfare, 1963, p. 140.

Of the remaining expenditures in the Health, Labor and Welfare category, the manpower training and development program is the largest at the present time. This relatively new activity was undertaken and has been expanded to meet the changing labor force requirements resulting from the rapid rate of technological change (often referred to as "automation").

Total expenditures for Health, Labor, and Welfare are estimated to account for an expanding share of the Federal Budget and, in absolute terms, to increase from $28.3 billion in 1965 to $54.0 billion in 1975. This would continue recent experience, where health-labor-welfare spending rose from 20.3 percent of the budget in 1960 to an estimated 27.1 percent in 1967. The actuarial estimates of the social insurance programs presented above account for over half of the $25 billion rise.

Statistical projections of public assistance grants and unemployment trust fund expenditures, which are based on population, labor force, and related estimates, account for much of the remaining increase. Also, the expenditure estimates assume that the anti-poverty program still is in its early growth period and that significant additional expansions will occur in the coming decade.

There are numerous possibilities for departures from the future pattern of health-labor-welfare expenditures shown here. Most of these would require increased Federal disbursements. If the maximum taxable earnings base for old-age, survivors, and disability insurance were to be amended periodically to cover about the same proportion of total earnings as is now covered, total expenditures in 1975 for this purpose would be more than $10 billion higher than the figures shown here.

The addition of new anti-poverty programs could require sharp accelerations in the rate of expenditures in this category. There is much less opportunity for substantial reductions in expenditures, aside from eliminating or sharply curtailing existing benefit programs to identifiable groups of the population. Examples of the latter which are not protected by trust funds or similar commitments are water pollution control, labor and manpower activities, the economic opportunity program, and health services and research.

1. Education

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	.9	1.5	2.3	2.8	8.0
Percent of Budget	.9	1.2	1.7	1.9	4.7

Education has been the most rapidly expanding portion of the Federal Budget in recent years. Even in the absence of Congressional approval of general aid-to-education legislation, the Office of Education has obtained funds for a widening array of activities. In addition, the National Science Foundation, the other large Federal agency in this budget category, has experienced major growth in its funding level. Total Education expenditures rose 396 percent between the fiscal years 1955 and 1965.

To date, the major Federal expenditures in the Education category have been for relative special-purpose programs, such as assistance to schools in Federally-impacted areas, loans and fellowships under the National Defense Education Act, college housing loans, research grants, and promotion of vocational education.

In contrast, the recently enacted legislation providing Federal aid to elementary, secondary, and college education--although the current emphasis is on children in low-income areas--is a major step toward general Federal aid to education. The basic determinant will of future funding levels be the essentially political decision as to what share of total payments for public education should be made at the national level, as opposed to state and local financing.

In this connection, a recent set of projections by the U.S. Office of Education provides some useful parameters. Total public expenditures for elementary and secondary schools and college and universities almost doubled between 1955 and 1965. On the basis of rather conservative assumptions concerning enrollments, additional classrooms needed, financing charges, and similar items, such disbursements are shown to rise by a little over 50 percent in the coming decade, from $27 billion in 1965 to $41 billion in 1975. /10 Were the Federal Government to finance a significant portion of this increase, this could easily involve tripling or quadrupling the level of the Education category in the Budget.

The estimates of Federal expenditures in the Education category are based on the assumption that no additional programs of significance will be enacted. The 1975 projection of $8 billion takes account of the substantial increases in student enrollments which are anticipated by the Office of Education, as well as most private researchers.

The recently-enacted Federal aid to education legislation has some built-in growth factors. The major one is the provision for state assistance

/10 U. S. Department of Health, Education, and Welfare, Office of Education, Projections of Educational Statistics to 1973-74, 1963 Edition, Washington, U.S. Government Printing Office, 1964.

on the basis of one half of the average expenditure per pupil in the state for each child between ages 5 and 17 coming either from families with annual incomes of less than $2,000 or families participating in the Aid to Dependent Children relief program even if their incomes exceed $2,000.

The sizeable increases in total public education expenditures estimated here do not allow for any sharp jump in the quality of American education. They are limited to continuation of recent trends. Should a major quality improvement become an important objective of the Administration's Great Society concept, potential expenditures on education at all levels of government could repeat in the coming decade the rapid growth rate of the last ten years.

In addition, the National Science Foundation represents another area of possible expansion. Since 1955, this agency's expenditures have risen from $11 million to 420 million in 1965 and are estimated at $425 million in 1967. This rapid growth might look insignificant in retrospect if the Nation decided that the anticipated level off or decline in defense R&D should be offset by an expansion of civilian-oriented scientific effort.

J. Veterans Benefits and Services

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	5.9	6.1	5.6	6.4	8.0
Percent of Budget	6.3	5.0	4.2	4.4	4.7

The largest element of Federal expenditures for veterans is the payment of compensation for those with service-connected disabilities and pensions for eligible veterans without service-connected disabilities. Medical care and veterans life insurance are the other items of significance in this expenditure category at the present time.

Total expenditures for veterans programs have declined substantially with the essential completion of the G.I. Bill benefits for World War II veterans. For the next few years, expenditures will be incurred for the Viet Nam veterans education benefits. Moreover, demographic studies by the Veterans Administration point, however, to a rising trend in the average age of veterans and particularly in the number of veterans aged 60 and above. This latter category contains a large proportion of the veterans who receive medical and income-maintenance assistance. The average age of veterans is estimated to rise from 45.8 in 1965 to 53.9 in 1975. The number of veterans aged 60 and over is projected to increase from 2.7 million in 1965 to 4.0 million in 1975. /11

The 1966 Budget appears to have represented a low point in Federal outlays for veterans. The total was unusually low because of an essentially short-term development, the receipts from the sales of certificates of participation in a pool of mortgages now held by the Veterans Administration. The amount of such offsetting revenue from private investors is declining as the inventory of VA-held housing loans becomes depleted. The amount of direct new loans is being reduced as World War II veterans entitlement runs out.

/11 Veterans Administration, Veteran Population Projections, 1962-2040, July 1962.

The largest category of veterans expenditures--compensations and pensions--can be projected by taking the VA's estimates of case loads for future years and applying to them assumed average payment rates. This is done in Table 5 for 1975.

Increases in medical care and hospital services account for the bulk of the remaining increase in total Veterans outlays to 1975. The difficulties with the Congress currently being experienced by the Administration in attempting to consolidate medical facilities and otherwise economize show the limitations to any downward move in the level of spending in this category.

Table 6

Projected Expenditures for Veterans Compensation and Pensions, 1975

	Caseload /12	Average Payment /13	Expenditures (millions)
Compensation			
Disability benefits	1,939,000	$1,000	$1,939.0
Death enefits	342,000	1,500	1,513.0
Pensions			
Disability benefits	1,097,000	1,100	1,206.7
Death benefits	1,220,000	820	1,000.4
TOTAL	---------	------	$4,659.1

A few years ago it seemed that considerable pressure would develop for general pensions for all World War I veterans. However most of these veterans have now attained the age of 65, which has become the normal age

/12 Based on statistical extrapolation by the author of recent trends in average payments.

/13 Correspondence with the Veterans Administration.

for retirement from the labor force, and the political pressures seem to have subsided. The fundamental expansion in both public and private insurance, retirement, and welfare systems in recent years seems to be meeting the essential needs of the elderly, veteran as well as non-veteran.

By 1975, a modest portion of World War II veterans will have reached the normal retirement age of 65 (any who were over 35 at V-J Day). However, the generally prosperous levels of economic activity here assumed and the considerable coverage of retirement and welfare systems are likely to restrain any pressures that might arise for general pensions for World War II veterans.

K. Interest

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	7.2	8.6	9.3	10.2	11.0
Percent of Budget	7.7	7.0	6.9	7.0	6.4

Federal cash interest payments, almost all of which go to servicing the national debt, have risen substantially over the years in response both to the increasing amount of publicly-held debt and the upward trend in interest rates. There are a number of factors which tend to indicate that there will continue to be upward pressures on the level of interest payments. These include the following:

1. The continuing concern with the deficit in the U.S. balance of international payments and the resultant emphasis on at least maintaining the current level of interest rates in order to minimize capital outflows to other nations.
2. The present low interest rates on a substantial portion of the national debt that will require refunding prior to 1975. All issues of public debt due before 1973 bear an interest rate of 4 percent or less, which is below the current average yeild of 4.14 percent on Treasury bonds due or callable 10 years and after. Over $10 billion of the marketable debt due after 1972 already bears an interest rate in excess of 4 percent.
3. The continued budgetary deficits which are in prospect at least for the next several years. However, several factors are likely to offset some of these upward pressures. By late in the 1960's Federal budgetary deficits could be eliminated (as they would be under the program assumptions used in this report) and even some debt reduction could be undertaken. Moreover, as the social insurance trust funds build up their reserves for future benefit payments, they would increase their holdings of Treasury securities, thereby reducing the amount of Federal debt available to public investors. Only interest paid on publicly held debt, and not total interest payments on the national debt, shows up as cash payments to the public.

It is assumed that continued increases in the average interest rate in the national debt will result in some slight further rise in the level of

of cash interest payments to the public. A more fundamental assumption underlying the interest payment estimates is that the large potential surplus in the Federal budget will, in practice, be utilized--without prejudging the choice between tax reductions and expenditure program increases; hence, large-scale debt reduction would not be attempted during the coming decade.

L. General Government

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	1.6	2.3	2.4	2.5	3.0
Percent of Budget	1.6	1.9	1.8	1.7	1.8

The Federal Budget includes numerous overhead or government-wide activities that are financed under the category General Government. These cover the Congress, the Federal Courts, the Executive Office of the President, the fiscal operations of the Treasury Department, the General Services Administration, and the Department of Justice.

In the aggregate, these activities have been increasing in cost at about the same rate as total Federal cash payments, excluding General Government. The estimate for 1975 shown here was derived by applying the 1966 proportion of General Government to the rest of the budget--1.8 percent.

M. Adjustments

	1960	1965	1966	1967	1975
	Actual		Estimated		Projected
			(Fiscal Years)		
Total amount (billions of dollars)	-1.2	-.9	-.7	-1.7	-2.3
Percent of Budget	-1.3	-1.1	-1.7	-1.2	-1.3

Outlook and projections. This category contains a number of items which cannot be assigned to any of the functional categories, such as deposit funds and allowances for contingencies. The largest components are negative amounts--expenditures by the government agencies, as employers, for Federal employees' retirement and deductions from Federal employees' salaries for retirement. Both of these are intragovernmental transactions which must be netted out in arriving at the grand total of Federal Government cash payments to the public.

The estimate for 1975 is based on the projections for the latter two items by the Civil Service Commission. In view of their erratic nature, other adjustment items are assumed to net out for future years.

Table 7

Federal Government Cash Receipts, Dollar Breakdown

(Fiscal Years. In billions of dollars)

Category	1960	1964	1965	1966	1967	1975
		Actual		Estimated		Projected
Individual Income Taxes	40.7	48.7	48.7	51.5	56.2	78.6
Corporate Income Taxes	21.5	23.5	25.5	29.7	34.4	42.2
Excise Taxes	11.7	13.7	14.6	13.0	13.3	20.4
Employment Taxes	11.1	16.8	16.9	18.8	24.3	36.0
Estate and Gift Taxes	1.6	2.4	2.7	2.9	3.3	4.8
Customs Receipts	1.1	1.3	1.4	1.7	1.8	2.4
Unemployment Insurance Deposits	2.2	3.0	3.1	2.9	2.9	5.5
Other Receipts	5.2	6.1	6.8	7.7	9.3	11.4
Total	95.1	115.5	119.7	128.2	145.5	201.3

Table 8

Federal Government Cash Receipts, Percentage Breakdown

(Fiscal Years. Percent of Total)

Category	1960	1964 Actual	1965	1966 Estimated	1967 Estimated	1975 Projected
Individual Income Taxes	42.8	42.1	40.8	40.0	38.6	39.0
Corporate Income Taxes	22.6	20.3	21.3	23.2	23.6	21.0
Excise Taxes	12.3	11.9	12.2	10.2	9.1	10.1
Employment Taxes	11.6	14.6	14.1	14.7	16.7	17.9
Estate and Gift Taxes	1.7	2.1	2.3	2.3	2.3	2.4
Customs Receipts	1.2	1.1	1.2	1.3	1.3	1.2
Unemployment Insurance Deposits	2.3	2.6	2.5	2.3	2.0	2.7
Other Receipts	5.5	5.3	5.6	6.0	6.4	5.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 9

Federal Government Cash Expenditures, Dollar Breakdown

(Fiscal Years. In billions of dollars)

Category	1960	1964 Actual	1965	1966 Estimated	1967 Estimated	1975 Projected
National Defense	45.9	54.5	50.8	57.4	61.4	58.0
International Affairs and Finance	2.8	3.5	4.6	4.1	4.4	4.6
Space	.4	4.2	5.1	5.6	5.3	5.0
Agriculture	3.6	5.8	5.4	4.6	3.6	5.0
Natural Resources	1.9	2.7	2.8	2.9	3.0	3.4
Commerce and Transportation	4.8	6.5	7.4	7.0	6.6	10.0
Housing	1.4	1.7	.9	2.0	1.2	3.5
Health, Labor, and Welfare	19.1	27.3	28.3	34.1	39.3	54.0
Education	.9	1.3	1.5	2.3	2.8	8.0
Veterans	5.9	6.1	6.1	5.6	6.4	8.0
Interest	7.2	8.0	8.6	9.3	10.2	11.0
General Government	1.6	2.2	2.3	2.4	2.5	3.0
Adjustments	-1.2	-3.4	-1.4	-2.3	-1.7	-2.3
Total	94.3	120.3	122.4	135.0	145.0	171.2

Table 10

Federal Government Cash Expenditures, Percentage Breakdown

(Fiscal years. Percent of total)

Category	1960	1964	1965	1966	1967	1975
		Actual			Estimated	Projected
National Defense	48.7	45.3	41.5	42.4	42.3	33.8
International Affairs and Finance	3.0	2.9	3.7	3.0	3.1	2.7
Space	0.4	3.5	4.2	4.1	3.7	2.9
Agriculture	3.9	4.8	4.4	3.4	2.5	2.9
Natural Resources	1.9	2.1	2.3	2.2	2.1	2.0
Commerce and Transportation	5.1	5.4	6.1	5.2	4.6	5.8
Housing	1.5	1.4	.7	1.5	.8	2.0
Health, Labor, and Welfare	20.3	22.7	23.1	25.3	27.1	31.5
Education	.9	1.1	1.2	1.7	1.9	4.7
Veterans	6.3	5.1	5.0	4.2	4.4	4.7
Interest	7.7	6.7	7.0	6.9	7.0	6.4
General Government	1.6	1.8	1.9	1.8	1.7	1.7
Adjustments	-1.3	-2.8	-1.1	-1.7	-1.2	-1.3
Total	100.0	100.0	100.0	100.0	100.0	99.8

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