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Chapter Author: Gerhard Colm, Manuel Helzner

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**PUBLIC FINANCES: NEEDS, SOURCES,  
AND UTILIZATION**



# Financial Needs and Resources Over the Next Decade: At All Levels of Government

GERHARD COLM and MANUEL HELZNER  
NATIONAL PLANNING ASSOCIATION

## 1. *Projections and Forecasts*

MAKING economic projections is fraught with great occupational hazards. Therefore, self-preservation of the practitioners in this field makes it necessary to emphasize that projections are hypothetical estimates and to state with all possible clarity the hypotheses on which they are based. This applies with particular force to projections in the public sector.

In this introductory section of our paper we will state the assumptions made in estimating government expenditures for the next decade. These assumptions are not meant to be arbitrary or merely for the sake of experiments in economic arithmetic. They are meant to be "life hypotheses" and therefore must be related to the present and foreseeable historical situation.

By insisting that our projections are only hypothetical and will not become reality unless our assumptions happen to become reality, we are protecting ourselves. On the other hand, by selecting those assumptions—the "life hypotheses"—which are believed relevant for this particular period, the projectors of necessity stick their neck out. They cannot entirely avoid the hazards inherent in any effort which tries to provide some light, dim as it may be, for groping our way through an uncertain future.

As an analytical device we have prepared alternative projections based on different assumptions. However, we are also presenting a "judgment" model which is based on what we regard as the most plausible assumption, or more precisely as the assumptions most suitable for the use for which the projections are designed.

The assumption that no major war or major economic depression will occur during the next decade does not imply any statement about the improbability of such events. A major war would have such drastic consequences that entirely different kinds of emergency programs would have to be considered than those discussed in this paper. The topic of this session—a reappraisal of the financial needs

of the various levels of government—seems to imply the assumption that a major international crisis can be avoided. However, this assumption is entirely compatible with assuming that international tension and the struggle of “competitive coexistence” will be continued or even aggravated.

In our judgment model we have assumed not only that war will be avoided but also that the national security programs will develop approximately in line with present plans. This assumption has been made not because it is believed to be most probable or militarily adequate. Rather, it appeared that, in the absence of convincing evidence to the contrary, the most prudent operating assumption was that defense programs would proceed as currently planned, fully recognizing the uncertainty implied in this assumption. To assume as a working hypothesis a drastic increase or a substantial reduction in defense would be to anticipate major changes in other government programs and private plans. The high and low defense models have been added in order to demonstrate the problems which would be involved in major changes in defense—up or down.

We also assume the absence of a major economic depression but not the absence of economic fluctuations. In our program discussion no specific antidepression programs are included. Programs are discussed solely on the ground of their own merits. However, it may well be considered that the speed with which these programs are carried out may be changed in line with an anticyclical government policy. We assume that such changes in pace would not affect the average rate of expenditures over a number of years.

### *Projections and Economic Growth*

We assume that the present concern with *economic growth* is not merely a passing fad, but a challenge which will influence government decisions during the next decade. By assuming a continuing concern with economic growth, we do not necessarily assume that the United States will engage in a GNP race with the Soviet bloc. We only mean that the people will be aware of the many public and private needs and will seek to provide for these needs by expanding productive capacity and by operating at levels of economic activity approximating the growth potential of the economy. The fact that our way of life is challenged by a communistic rival system will heighten the determination to succeed in this endeavor and to overcome obstacles.

Projections of the public sector are conceived as part of general

projections which reflect a 4 to 5 per cent annual growth rate for the American economy as a whole.<sup>1</sup> The anticipated increases in the labor force of close to 1.75 per cent per year would raise our production potential while still allowing for some continued reduction in the standard work week.

In addition, the continued high research effort, particularly for national defense, is likely to yield a continuing stream of technological advances for peacetime application.

There is an interrelationship between economic growth and activity in the public sector. On the one hand, government programs will be needed to support economic growth; on the other, economic growth will make it possible to finance additional programs without sacrificing other wants. The need for government programs in support of economic growth will influence the selection of programs and the priority which determines the sequence in which they are undertaken.

An example may illustrate what we mean when speaking of growth consciousness. Recent advances in air transportation have outgrown the available ground facilities. In such a situation two possible courses of action may be followed. One course of action would put the brakes on or delay further advances in air transportation until in the course of time more adequate ground facilities are provided. In support of such a course some may argue that with more use of railroads and road and water transportation we could get along without jets for many years just as we have in the past. In contrast, a growth-conscious policy will make an effort to speed up the modernization of ground facilities in order to remove an obstacle which is in the way of a particular development. Unlike most other times and cultures, the public attitude in our present culture strongly favors the second course of action.

### *Method of Projections*

The projections of government expenditures are based primarily on direct estimates for major government programs. Only for a few minor programs has it been assumed that they will expand in proportion to the GNP. In a few cases—e.g., in the field of metropolitan renewal programs, health (including mental health) and water development programs—it was assumed that by 1970 the pressing

<sup>1</sup> The projections used in this paper are based on the NPA long-range projections for 1965 and 1970, prepared with the assistance of a Ford Foundation grant and continued on a self-supporting subscription basis.

need will result in essentially new and large programs for which only relatively small expenditures are being made at the present time. In a few cases (e.g., agriculture) it was assumed that policy solutions will be found which make a substantial reduction in expenditures possible.

While recognizing the high social priority of public programs in support of economic growth, we have assumed that these programs will rise gradually. A prolonged period of international tension and "competitive coexistence" requires not only continuously large and possibly rising military programs, but also large nonmilitary programs, both for implementing the government's foreign economic policy and for promoting domestic economic growth and welfare. We have assumed that a wasteful policy of alternately blowing hot and cold can be avoided and that heavy fluctuations in the relationship between the private and public sector will be absent. This means that changes in the tax rates—upwards or downwards—would be of limited size and that rising government expenditures would be largely financed by the additional yield resulting from an expanding tax base rather than from rising tax rates. We assume, therefore, that in the case of the need for substantially higher defense expenditures, other government programs will rise somewhat more slowly. However, should a drastic reduction in defense expenditures become possible, a somewhat enhanced rise in nondefense programs plus a substantial reduction in tax rates is assumed.

### *Scope of Projections*

The projections of needs for public programs presented in this paper define public programs in a very broad way. They include programs irrespective of whether they would be financed or administered by the federal government, state and local government, or by any kind of public authorities or other public agencies set up for specific purposes. Only after needs and resources in the aggregate have been projected is it possible to examine whether the needs can be met if the traditional division of functions and resources among the various levels of government are continued or whether some modification in these relationships is needed.

Another question of definition arises in cases in which the borderline between the private and public sector of the economy is blurred. Our projections of government goods and services purchases use the consolidated national income and product accounts as a frame of

reference. Therefore social security, veterans' benefit payments, and other transfer, interest, and subsidy payments are accounted for as receipts of individuals and businesses and the use of these receipts appear in the account as spending or saving of individuals and business. In this paper we show both government purchases of goods and services and transfer payments of the government.

Another such "borderline" case is the following: Does a FHA or VA housing program belong to the public or private sector of the economy if the houses are financed by private funds protected by government guarantee or insurance? We have in these projections excluded privately financed but publicly guaranteed or insured programs and have regarded them as part of the private sector of the economy. The proper method would probably be to allocate these programs in part to the private, in part to the public sector. NPA has a special study of these programs under way and it is hoped that the result of that study may provide some meaningful guide line for distinguishing between private and public aspects of these programs. For the present, we recognize that the exclusion of these programs from the public sector results in some underestimate of the relative significance of the public sector. Also, industries supervised and regulated by the government are regarded as purely private for purposes of our projection. Therefore, the ratio between the size of the public and private sector in our projections does not give a full picture of the actual significance of government for the economy as a whole.

#### COMPARATIVE PROJECTIONS—A SUPPLEMENT<sup>2</sup>

In Table 1 an attempt has been made to compare our own estimates with those of Dick Netzer<sup>3</sup> and Otto Eckstein.<sup>4</sup> The possibility of a comparison is limited by the fact that Netzer has dealt only with state-local expenditures while Eckstein has selected a different target period for his projection. Netzer uses the Census Bureau concept of government expenditures; Eckstein combines the budget concept for federal programs with a national income and product concept for state-local programs. Both sets of estimates are on a fiscal year

<sup>2</sup> This section incorporates supplementary material not included in the original manuscript but presented at the conference session.

<sup>3</sup> Dick Netzer, "Financial Needs and Resources Over the Next Decade: State and Local Governments," in this volume. (Data have been converted to 1958 dollars.)

<sup>4</sup> Otto Eckstein, *Trends in Public Expenditures in the Next Decade*, Committee for Economic Development, April 1959.

NEEDS AND RESOURCES: ALL LEVELS OF GOVERNMENT

TABLE 1  
Projections of Government Activity—A Comparison  
(billions of 1958 dollars)

	ECKSTEIN PROJECTIONS MEDIUM MODEL (FISCAL YEAR- BUDGET CONCEPT)		NETZER PROJECTIONS (FISCAL YEAR-CENSUS BUREAU CONCEPT)		COLM-HELZNER PROJECTIONS JUDGMENT MODEL (CALENDAR YEAR GNP CONCEPT)	
	1964	1968	1970, <i>Moderate Substantial</i> (constant costs)		1964	1970 <sup>a</sup>
GNP	554	624	(736-784)		602	790
Total govt. expend. <sup>b</sup>	153.6	171.4	-	-	159.9	204.7
Federal	106.2	117.7	-	-	101.9	124.2
State-local	47.4	53.7	65.8	78.4	64.6	90.0
Federal						
National security	50.7	56.0	-	-	50.9	54.6
Other	55.5	61.7	-	-	51.0	69.6
State-local						
Education	22.4	25.9	23.9	30.3	24.0	30.7
Highways	8.0	9.1	11.9	14.1	11.4	13.1
Health and Hosp.	2.9	3.0	5.0	5.7	7.1	9.8
Housing and Community redevelopment	.7	.8	.8	1.1	2.7	7.9
Other	13.4	14.9	24.2	27.2	19.4	28.5
Federal grants-in-aid	-	-	8.2	10.7	6.6	9.5
Govt. expenditures as a % of GNP						
Total	27.7	27.5			26.6	25.9
Federal	19.2	18.9			16.9	15.7
State-local	8.5	8.6	(8.4-8.9)	(10.0-10.6)	9.7	10.2

<sup>a</sup> Projections for 1970 incorporate revisions made since preparation of original manuscript.

<sup>b</sup> Federal grants-in-aid are excluded from total government expenditures to avoid duplication. Eckstein has excluded federal grants-in-aid from state-local government expenditures, as well.

basis. Our projections follow the GNP concept on a calendar year basis. Nevertheless the comparison, limited as it is, may be useful.

In substance, the main difference between our projection and that of Eckstein is that in our judgment model we anticipate a higher rate of economic growth. Our estimates of state-local expenditures are very similar to those of Netzer, except for the extraordinary increase we have allowed for new programs in the field of metropolitan renewal, health (including mental health) and water development. The same is the case also in the comparison of our state-local estimates with those of Eckstein.

Various studies show that there already is a great need in these program areas and that the need will increase with further development. It seems to us only reasonable to assume that over the next decade more nearly adequate programs in these fields will be initiated. All economic projections, whether they show a 3 or 4 or 5 per cent rate of GNP growth imply that technological advances which are now only in the drafting board stage will be adopted in the private sector of the economy. It would be wholly inconsistent if we assumed that in the field of government only *present* programs would grow but no new programs adopted for which an urgent demonstrable need can be shown. We believe that our estimates may be regarded as conservative because they do not assume adoption of programs which are not yet in the discussion stage. On the other hand, our estimates for agricultural support programs imply substantially lower expenditures than those given by Eckstein. We have assumed that over the coming decade an agricultural policy will be formulated which gives effective support but with reduced expenditures.

## 2. *Projected Public Needs and Resources*

### *Government Programs and Economic Resources*

Economic growth in the coming decade will create a multiplicity of economic and social needs requiring private and government action. The role of government programs in meeting these needs will in large part be influenced by the requirements for defense, both military and civilian. But regardless of defense requirements economic growth will be accompanied by rising nondefense needs. Expanded programs will be required to meet the increased demands for public services traditionally performed by government (e.g., education, highways and skyways, public health and hospital care). In addition, economic progress would be stifled unless substantial improvement is made in such areas as urban renewal, research and development (particularly basic research), and conservation and utilization of our natural resources (including air and water resources).

Since it cannot be assumed that all of the needs for government services can or will be met simultaneously, a projection of government programs should be viewed in the context of trends and developments in other sectors of the economy and in the perspective of the growth potential for the economy as a whole. Economic projections provide a frame of reference for appraising the role of government programs over the next ten years.

NEEDS AND RESOURCES: ALL LEVELS OF GOVERNMENT

TABLE 2  
Projected Patterns of Economic Growth—1970  
(billions of 1958 dollars)

	<i>Disposable Receipts</i>	<i>Percentage of GNP</i>	<i>Purchases of Goods and Services</i>	<i>Percentage of GNP</i>
1970 JUDGMENT MODEL				
Consumers	566.0	71.6	514.5	65.1
Domestic investment	77.0	9.8	115.1	14.6
Net international	1.1	.1	5.7	.7
Total government	195.9	24.8	204.7	25.9
Less: transfers, interest, subsidies				
Government	49.9	6.3	49.9	6.3
	146.0	18.5	154.8	19.6
GNP	790.1	100.0	790.1	100.0
1970 LOW GROWTH, LOW GOVERNMENT MODEL				
Consumers	550.9	74.7	523.3	71.0
Domestic investment	75.7	10.3	92.4	12.5
Net international	1.1	.1	5.7	.8
Total government	149.1	20.2	155.4	21.0
Less: transfers, interest, subsidies				
Government	39.4	5.3	39.4	5.3
	109.7	14.9	116.0	15.7
GNP	737.4	100.0	737.4	100.0
1970 HIGH GROWTH, HIGH GOVERNMENT MODEL				
Consumers	581.4	71.8	524.9	64.8
Domestic investment	75.6	9.3	102.4	12.7
Net international	1.1	.2	5.7	.7
Total government	205.1	25.3	230.2	28.4
Less: transfers, interest, subsidies				
Government	53.8	6.6	53.8	6.6
	151.3	18.7	176.4	21.8
GNP	809.4	100.0	809.4	100.0
1970 HIGH DEFENSE MODEL				
Consumers	572.0	70.1	517.8	63.4
Domestic investment	77.3	9.5	112.4	13.8
Net international	1.1	.1	5.7	.7
Total government	206.6	25.3	221.2	27.1
Less: transfers, interest, subsidies				
Government	40.6	5.0	40.6	5.0
	166.1	20.3	180.6	22.1
GNP	816.5	100.0	816.5	100.0
1970 LOW DEFENSE MODEL				
Consumers	573.2	72.9	529.8	67.4
Domestic investment	77.1	9.8	113.6	14.5
Net international	1.1	.2	5.7	.7
Total government	188.5	24.0	190.9	24.3
Less: transfers, interest, subsidies				
Government	54.2	6.9	54.2	6.9
	134.5	17.1	136.8	17.4
GNP	785.9	100.0	785.9	100.0

(continued)

NEEDS AND RESOURCES: ALL LEVELS OF GOVERNMENT

TABLE 2 (concluded.)

	1958 ACTUAL			
Consumers	311.6	71.2	290.6	66.4
Domestic investment	45.0	10.3	54.4	12.4
Net international	1.3	.3	1.4	.3
Total government	114.4	26.1	124.6	28.5
Less: transfers, interest, subsidies	33.3	7.6	33.3	7.6
Government	81.1	18.5	91.2	20.9
Statistical discrepancy	-1.2	-.3		
GNP	437.7	100.0	437.7	100.0

Note: Details may not add to total due to rounding.

Source: Department of Commerce and National Planning Association, Economic Projections Series (1959).

In this section attention will be given to the growth prospects in a number of specific program areas. In deriving these projections it was recognized that alternative patterns of economic growth would be possible under full employment conditions. These would have different implications for the size and character of government activities. Thus, projections of government activity should take into account possible differences in the rate of economic growth and possible alternative patterns of resource distribution among the various economic sectors.

For these reasons, Table 2 presents five economic model projections for 1970, all in 1958 dollars. The first two alternative models postulate conditions of low and high rates of economic growth and low and high levels of nondefense government programs. National defense expenditures are assumed in these models to remain close to current levels. The high defense model considers the possibility that expenditures for military purposes will increase and will represent a slightly higher per cent of GNP than currently. A fourth model explores the implications of a significant easing of international tensions that would permit a substantial reduction in defense outlays. Finally, a fifth model represents what in our "judgment" is the most likely pattern for economic growth in the coming decade assuming no substantial change in the international situation. These models are presented together with the most recent data for 1958.<sup>5</sup>

Although the focus of this paper is on government needs and resources, a few brief general observations would be in order before examining specific government programs. First, compared to 1958,

<sup>5</sup> Program expenditures for 1958 represent a breakdown of government purchases of goods and services using Census Bureau function categories.

the 1970 Judgment Model implies a growth rate for the economy of 5 per cent per year. However, since economic conditions in 1958 fell considerably below full employment levels, the long-term growth trend implied by our judgment model is 4.2 per cent per year. Second, total government revenues and expenditures in the judgment model account for a smaller percentage of GNP than in 1958. Although 1958 may not be a suitable base period for comparison purposes, nevertheless, the relationship of projected government activity to GNP in the judgment model does not represent a significant change from recent levels. Government purchases of goods and services relative to GNP would account for only a slightly higher proportion than in the 1955-57 period. Third, the projected excess of government expenditures in 1970 in the judgment model does not necessarily imply government operating deficits throughout the period. The "deficit" allows for the financing of authorities which might be set up for dealing with large scale urban renewal and other capital outlay programs. Government revenues are projected assuming a moderate reduction in the over-all tax burden.

### *Government Programs*

A. NATIONAL DEFENSE. (Table 3.) The outlook for defense expenditures by 1970 is largely conditioned by one's outlook regarding the state of world tension and turmoil. Nevertheless, certain conclusions

TABLE 3  
Projected National Defense Expenditures—1970  
(billions of 1958 dollars)

1970	
Judgment model	54.6
Low growth—low government	49.3
High growth—high government	49.3
High defense	87.6
Low defense	27.3
1958 actual	44.0

and implications for government programs would follow from adopting one or another assumption. Except in the cases of the low and high defense models, continuation of the present state of international tension and of approximately current levels of defense preparedness are assumed. Defense expenditure projections in all models include \$1.1 billion of foreign military cash grants (which under present national income and product accounting practices

appear as "Transfer Payments"). These cash grants are excluded in deriving government "Goods and Services Purchases."

In the two alternative models defense expenditures rise moderately. In our judgment model, we assume that recent structural changes in the defense establishment will continue. Modern weapons and military equipment (e.g., jet planes, missiles, atomic submarines, etc.) require heavier capital investment per military person than do conventional armaments. Thus, our projection of current levels of defense preparedness would not be inconsistent with a projection of somewhat smaller armed forces (estimated at 2.3 million) but higher total expenditures. In the event that a substantial reduction in expenditures for military preparedness becomes possible, additional resources would be available for expanding research and development activities and for overcoming some of the serious deficiencies in other nondefense areas.

B. EDUCATION. (Table 4.) A well-educated and properly trained

TABLE 4  
Projected Education Expenditures—1970  
(billions of 1958 dollars)

1970	
Judgment model	30.7
Low growth—low government	24.0
High growth—high government	36.8
High defense	29.6
Low defense	33.4
1958 actual	15.6

labor force has become a virtual *sine qua non* for continued economic growth and technological progress. Expenditures for education by government have experienced a significant spurt during the post-World War II period. Outlays for education in real terms have more than doubled; expenditures per school-age child (five to seventeen years) have been rising by 4.5 per cent per year. In part this increase represents an effort to overcome some of the deficiencies which accumulated during the prewar and wartime periods.

However, in spite of increased outlays, a substantial backlog of deficiencies in education still remains and needed improvements in our educational system are still delayed. In the years ahead the expected rise in student population and in the proportion enrolled in school (especially in institutions of higher learning) will create further inadequacies in our educational system unless adequate facilities

and sufficient qualified teachers are provided. Moreover, many workers whose skills will be made obsolete by the advance of technology will require reeducation and retraining. Thus, there is good reason to believe that government educational programs will have to expand appreciably over the coming decade. In our judgment model, the increase in per student educational outlays over the next ten years would proceed at approximately the same rate as during the past decade.

C. HIGHWAYS AND SKYWAYS. (Table 5.) Public road and highway expenditure programs will be greatly influenced by the provisions of the Federal Aid Highway Act of 1956. Outlays for interstate highway construction under this program are estimated to rise by roughly

TABLE 5  
Projected Expenditures for Highways—1970  
(billions of 1958 dollars)

1970	
Judgment model	13.1
Low growth—low government	9.8
High growth—high government	16.9
High defense	12.6
Low defense	14.2
1958 actual	8.4

50 per cent between 1958 and 1970. In addition, increased expenditures can be expected for improving the nation's primary and secondary road systems. Substantial outlays will also be required in areas not now covered under these programs. For example, improvements in our interstate and major road systems will create a need for adequate access and rural roads.

In the skyways, no less than on the highways, advances in transportation would be hindered by inadequate public programs. By 1970 the volume of air travel is expected to double. However, the age of the jet will find its growth prospects severely limited without adequate airport and ground facilities. In addition, more effective air traffic control systems will be needed if our skyways are to meet the increased demand for high speed air travel. Substantial investment in terminals, runways, control systems, etc. will be required over the coming decade if the anticipated growth in air transportation is to take place.<sup>6</sup>

<sup>6</sup> An allowance for an increase in this program has been included under "other nondefense programs."

D. HEALTH AND HOSPITALS. (Table 6.) Expenditures for health and hospitals particularly at the state and local level have been rising steadily during the postwar period. Substantial increases in expendi-

TABLE 6  
Projected Health and Hospital Expenditures—1970  
(billions of 1958 dollars)

1970	
Judgment model	9.8
Low growth—low government	4.7
High growth—high government	14.1
High defense	9.3
Low defense	11.0
1958 actual	3.3

tures, however, will be required to overcome present deficiencies in hospital facilities and to provide adequate medical and hospital care for the growing number of aged in our population. In addition, the rise in living standards which economic growth would bring will heighten the demand for improvements in health and hospital services generally. Our judgment model suggests that if considerable progress in this area is to be achieved, a significant increase in government assistance will be required.

E. HOUSING, COMMUNITY REDEVELOPMENT, AND URBAN RENEWAL. (Table 7.) Government programs for housing and community development currently constitute minor expenditure items although the government does exert a significant influence on private housing

TABLE 7  
Government Expenditures for Housing, Community Redevelopment  
and Urban Renewal—1970  
(billions of 1958 dollars)

1970	
Judgment model	7.9
Low growth—low government	3.3
High growth—high government	11.0
High defense	6.6
Low defense	8.2
1958 actual	.6

through its insurance and guarantee programs. Past or current expenditure levels in this area, however, have little relevancy to the magnitude of the problem which communities face in the coming decade. The cost of modernizing our urban communities and of

preventing deterioration in our metropolitan areas is staggering.<sup>7</sup> And yet, substantial economic growth cannot take place in communities incapable of providing the necessary health, transportation, water, recreation, and other essential facilities. Urban redevelopment includes not only slum clearance. The further development of metropolitan areas will also depend on providing a transportation system which can cope with the changing patterns of urbanization. In a growing number of areas, the ever-expanding problems of the metropolis have become the problem of the emerging megalopolis.

In an economy of rapid growth and technological change there will always be some areas which will lag behind and which in severe and persistent cases of localized depression will require government support. Programs for developing community facilities which would attract new industries are likely to become of growing importance in a dynamic economy. Such programs may be supported both by private and public resources.

F. OTHER NONDEFENSE PROGRAMS. (Table 8.) Recent advances in technology have contributed substantially to rising productivity and economic growth during the past decade. These technological innova-

TABLE 8  
Projected Programs for General Administration and  
Other Nondefense Programs—1970

(billions of 1958 dollars)	
1970	
Judgment model	39.8
Low growth—low government	26.0
High growth—high government	49.4
High defense	36.0
Low defense	43.4
1958 actual	19.3

tions, however, are themselves largely the result of expanded public and private programs for research and development. In the coming decade the promise of economic growth will likewise depend heavily upon advances in our store of knowledge. Continued progress, however, will require increased private and public outlays. Government expenditures for research and development currently finance more than half of the nation's research and development effort.

<sup>7</sup> The cost to the government of undertaking needed urban renewal programs over the coming decade has been estimated at roughly \$20 billion annually. This does not include an estimated \$130 billion of capital expenditures by private enterprises which would be required annually as a result of the redevelopment program. See: Reginald Isaacs, "The Real Cost of Urban Renewal," *Problems of United States Economic Development*, Vol. 1, Committee for Economic Development, 1958.

Moreover, our tax system encourages private enterprise to undertake research and development activities by regarding such functions as essential business expenses and hence deductible from business income. In agriculture, health, and resource development, the government has traditionally supported research activities, while in the field of national security and atomic energy most research and development programs are financed entirely by the government. Beyond these fields, applied research is regarded largely as the responsibility of business and private research organizations. However, there is an urgent need for increased expenditures particularly for basic research without which applied research and continued technological advancement would be stifled. Increased expenditures by the government for research and development activities would thus provide essential support for continued economic growth.

Economic growth will also require an expansion in various other functions of government. These include such housekeeping activities as police and fire protection, postal service, public welfare institutions, and the general administration and regulating functions of government. In addition, rising population, community development, and industrial expansion could lead to serious problems of resource utilization and conservation. The prospect of a serious water shortage, for example, would become more critical and more widespread in the face of an expected 50 per cent increase in the demands upon our water resources for irrigation, industrialization, and consumption. Government programs are required not only to combat waste and contamination but also to provide additional water sources, such as through the conversion of saline or brackish water. Capital expenditures alone for public water supply facilities are expected at least to double by 1970.

G. TRANSFERS, INTEREST, AND SUBSIDIES. (Table 9.) Government transfer expenditures consist primarily of benefit payments under the social security program (OASI and unemployment compensation), government pension and insurance benefits (including veterans benefits), and payments under public assistance programs. Recent amendments to the Social Security Act have provided for significant increases both in coverage and in benefit payments. Under existing legislation, projected benefit payments would just about double by 1970. Expenditures for veterans benefits are expected to rise only slightly under present laws. However, the experience of the past

indicates that recipients under the various social security and government benefit programs have shared in the real productivity increases which have taken place in the economy. For this reason, our judgment-model projections of government social insurance and pension programs provide for an increase in the level of benefits in line with the increase in real income.

TABLE 9  
Projected Expenditures for Transfers, Interest, and  
Subsidies less Current Surplus  
(billions of 1958 dollars)

	<i>Transfers</i>	<i>Interest</i>	<i>Subsidies less Current Surplus</i>	<i>Total</i>
1970				
Judgment model	44.3	8.6	-3.0	49.9
Low growth—low government	35.0	6.6	-2.2	39.4
High growth—high government	47.1	10.0	-3.3	53.8
High defense	33.3	10.4	-3.1	40.6
Low defense	48.5	8.8	-3.2	54.2
1958 Actual	25.5	6.3	1.5	33.3

TABLE 10  
Government Expenditures 1958-70  
(dollars in 1958 prices)

	1958 ACTUAL			1970 JUDGMENT MODEL		
	<i>Billions</i>	<i>Per Capita</i>	<i>Percentage of GNP</i>	<i>Billions</i>	<i>Per Capita</i>	<i>Percentage of GNP</i>
Goods and services:						
National defense	\$44.0	\$253	10.1%	53.5	\$250	6.8%
Education	15.6	90	3.6	30.7	144	3.9
Highways	8.4	48	1.9	13.1	61	1.7
Health and hospitals	3.3	19	.8	9.8	46	1.2
Housing and urban renewal	.6	3	.1	7.9	37	1.0
Other nondefense programs	19.3	111	4.4	39.8	186	5.0
Total goods and services	\$91.2	\$524	20.9%	\$154.8	\$724	19.6%
Transfers, int., etc.	33.3	191	7.6	49.9	233	6.3
Total gov't expenditures	\$124.5	\$715	28.5%	\$204.7	\$957	25.9%

Projected net interest paid in the high government model assumes an increase in government debt at about the same rate as in the post-war years including the Korean war period. In the low expenditure model, total interest payments change little from current levels.

Finally, with regard to subsidies (less current surplus of government enterprises), the projections assume that by 1970 government subsidy programs (particularly for agriculture) can be substantially reduced and that government enterprises will be managed so as to yield a smaller deficit (or a larger surplus).

NEEDS AND RESOURCES: ALL LEVELS OF GOVERNMENT

H. JUDGMENT MODEL SUMMARY. The foregoing discussion suggests a number of reasonable alternative patterns of government activity within the framework of a full employment economy. In our judgment neither of the alternative patterns represents the most likely combination of programs which might be expected to prevail by 1970. In arriving at our own judgment-model estimates, therefore, it was necessary to consider the most likely course of government action regarding needs and priorities. In summary Table 10 above, our judgment-model estimates for 1970 are compared with actual expenditures for 1958 both on a per capita basis and as a percent of GNP.

3. *Government Financial Resources and Intergovernmental Relationships*

A. FINANCIAL NEEDS AND RESOURCES. (Table 11.) Rising personal income and increased business activity provide a higher revenue base for financing government programs. At the same time, however, economic growth and rising incomes are influenced by government

TABLE 11  
Projected Government Revenues—1970  
(billions of 1958 dollars)

	<i>Personal Taxes</i>	<i>Corporate Taxes</i>	<i>Indirect Business Taxes</i>	<i>Contributions to Social Insurance</i>	<i>Total Receipts</i>
Judgment model	63.0	35.1	70.3	27.4	195.9
Low growth—					
low government	35.1	25.0	65.5	23.3	149.1
High growth—					
high government	64.6	40.3	71.1	29.1	205.1
High defense	70.8	35.6	71.3	29.0	206.6
Low defense	56.7	34.6	69.6	27.5	188.5
1958 Actual	42.8	18.6	38.6	14.4	114.4

tax and revenue policies. Thus, in deriving the alternative and judgment models the revenue programs of the government, like its expenditure programs, were related to the growth prospects for the economy as a whole.

Because of the nature of our tax structure, some parts of government revenues tend to increase faster than the growth in GNP, while other revenue sources tend to lag behind the increase in economic activity. Projected changes in tax rates also had to take into account

differences in the pattern of economic growth. For example, if economic growth is achieved with high levels of consumption or investment, the tax rate on personal and corporate income is assumed to be lower than if a substantial portion of our resources is devoted to higher defense or nondefense government programs. In our judgment model the increase in government programs is accompanied by a moderate reduction in taxes. In the aggregate, taxes on individual incomes, profits, and business activity would represent approximately the same percentage of GNP in 1970 as in 1958.

B. INTERGOVERNMENTAL RELATIONSHIPS. In our judgment model, which assumes a small increase in national security expenditures, we estimate that aggregate annual government expenditures (defense and nondefense; federal, state, and local) would rise by 66 per cent from 1958 to 1970; GNP (all measured in 1958 prices) would rise by 80 per cent.<sup>8</sup> This means that the increase in the *ratio* of nondefense expenditures to GNP would not quite offset the decline in the ratio of defense expenditures to GNP. If we were to look only at the aggregates, financing would seem to present no problem because public programs would account for approximately the same percentage of GNP. However, as soon as we look at the federal, state, and local functions separately, a very serious problem becomes apparent.

Under the traditional distribution of functions between federal programs on the one hand, and state and local on the other, this projection would indicate a much smaller rise in federal expenditures than in those at the state-local level. However, under the traditional distribution of the tax sources, federal revenues would rise much more in response to expanding incomes and production than state and local revenues. This discrepancy in the prospective development of expenditures and revenues creates a problem requiring more drastic measures than those contemplated in the past. There are a number of alternatives through which the problem could be attacked: These are:

1. Reduce or abolish certain federal taxes and increase certain state—local tax rates
2. A change in the division of functions between federal and state and local government
3. A change in the division of tax sources

<sup>8</sup> Compared to 1957, government expenditures and GNP by 1970 would both rise by about 80 per cent.

4. Adoption of some system by which state and local governments would share in the yield of federal income and estate taxes
5. Additional use of grants-in-aid
6. Additional use of the federal tax credit device
7. Federal support of state or local borrowing
8. The use of intergovernmental semi-independent agencies for some functions (e.g., urban renewal) with federal support of financing (including borrowing).

This problem of the discrepancy between federal and state-local expenditures and revenues becomes even more critical if a reduction in national security expenditures should become feasible. Only in case of a substantial increase in national security expenditures beyond what has here been contemplated, might there develop a situation in which some increase in tax rates at all levels of government may be needed. For the purpose of this Conference we deal primarily with the situation in which only a moderate increase in defense expenditures (i.e., a decline in the ratio of defense expenditures to GNP) would be needed. Both of the other cases would require more drastic measures for channeling a higher portion of purchasing power from the public into private hands, in the one case, and from private into public hands in the other. The basic problem of Federal, state-local relations can best be studied if one assumes that the ratio of public to private functions in the *aggregate* remains approximately constant.

In this paper we do not intend to deal with the respective merits or demerits of the various possible solutions as set forth, either individually or in combination. We only want to suggest that our projections strongly indicate some change is imperative in the present relationship between the federal and state-local governments. Thereby, we have posed the problem with which subsequent papers in this session of the Conference will deal directly.

