

CLOSING THE FISCAL POLICY LOOP: A LONG-RUN ANALYSIS

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PREFACE

Closing the Fiscal Policy Loop: A Long-Run Analysis describes an analytical tool for improving the usefulness of long-range projections of the federal budget.

In the past, long-range budget projections have employed a set of assumptions about future economic conditions and have projected the revenues and outlays that might be expected if these economic assumptions were somehow realized. Past studies have not gone on to ask whether the projected budget provided too little or too much economic stimulus to be consistent with the economic assumptions. The present study does ask this question, and constructs a simple model for estimating how much addition to, or reduction in, a projected budget would be necessary for consistency with its underlying economic assumptions. Since these estimates of required change in the budget depend critically on the strength of demands in the private sector, the model is designed to highlight the connection between fiscal stimulus and key measures of the strength of private demands.

The report was prepared as background for Budget Option's for Fiscal Year 1978, Chapter II, CBO Report, February 1977. In accordance with CBO's mandate to provide objective analysis, this report offers no recommendations.

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SUMMARY

This paper describes a model designed to incorporate varying assumptions about the behavior of nonfederal demand (consumption, investment, state and local government purchases, and net exports) into the analysis of long-range projections for the federal budget. The model is used to illustrate how different assumptions about nonfederal demand behavior can influence economic and budgetary goals during the 1978-1982 period. After presenting some general implications of the analysis, the paper concludes with a discussion of recent nonfederal demand performance and suggests indicators worth monitoring during the next year.

Long-range projections for the federal budget have been prepared for many years. They generally represent the estimated expenditures for specific programs and tax revenues, under existing laws, and some reasonable, but essentially arbitrary, assumptions about relevant economic variables. There is no compelling reason to consider the impact of an individual program on the economic variables, since any one program is usually small relative to the whole economy. When all programs are combined into total budget projections, however, the link from the budget to the economy becomes extremely important. Traditional long-range budget estimates have ignored this linkage, partly because of the great uncertainty surrounding this issue. 1/

The departures from current policy budget estimates 2/ required to achieve the economic assumptions are dependent, however, on the autonomous strength of nonfederal demand during the projection period. Consumer spending, private investment, state and local spending, and net exports are, of course, influenced by fiscal policy, but they are also affected by the strength of

1/ Reports of past projections often would point out that such a link existed and was being ignored, but they would devote no analysis to its implications.

2/ See p. 3 for an explanation of current policy budget projections.

consumer and investor confidence, technological development, inflationary expectations, and such unpredictable events as crop failures and oil embargoes. In addition, monetary policy plays an important role in influencing the strength of nonfederal demand, especially demand for investment goods. Similarly, net exports depend heavily on the strength of foreign demand, inflation abroad, and other international developments.

Autonomously strong nonfederal demand contributes directly to rapid economic growth and attainment of federal budget balance. Weakness of nonfederal demand hinders progress toward both goals. For any given nonfederal demand environment, however, rapid economic growth and federal budget balance are conflicting, not complementary goals.

Unfortunately, it is not possible to project the autonomous strength of nonfederal demand with much confidence for more than 18 months to two years into the future. On the other hand, historical experience can provide some guidance as to a plausible range for the strength of autonomous nonfederal demand over a longer period. We can determine, for example, whether stated goals for economic growth and the budget deficit would require moderate, optimistic, or unprecedented autonomous strength of nonfederal demand when measured against historical experience. Having made explicit assumptions about economic growth and autonomous nonfederal demand strength, the model described here makes it possible to determine what departures from current policy expenditures and/or revenues would be required to reach the GNP target.

Analysis of projections for the period 1978 through 1982, using two different GNP targets, three sets of assumptions about autonomous nonfederal demand, and four sets of federal expenditures assumptions, has proved very illuminating. In essence, it indicates that achievement of both low unemployment (the high GNP target) and a balanced federal budget by the end of the projection period would require a relatively optimistic but historically precedented performance by the nonfederal sectors.

General implications of the analysis include the following points:

The greater the vigor of the nonfederal sectors:

- o The easier the achievement of a high GNP with less federal action.
- o The smaller the deficit or the greater the surplus for any GNP goal and federal expenditure strategy.
- o The less the federal flexibility for increasing expenditures or decreasing taxes, given the GNP target.

The higher the desired level of federal expenditures (given nonfederal demand behavior):

- o The easier the achievement of high GNP through federal action.
- o The smaller the deficit or the greater the surplus needed to attain a specified GNP growth path.
- o The smaller the opportunity to cut taxes.

The higher the GNP goal and the lower the unemployment goal (given nonfederal demand behavior):

- o The greater the deficit or the smaller the surplus for any desired level of federal expenditures.
- o The greater the federal flexibility for increasing expenditures or decreasing taxes.
- o The greater the likelihood of continuing or accelerating inflation.

Various approaches are used to characterize the autonomous strength of different components of nonfederal demand. For consumption, strength is characterized in terms of a marginal propensity to consume out of disposable income. In the case of investment, strength is characterized in terms of a rate of growth relative to growth in total GNP. For state and local government purchases, strength is expressed in terms of the rate of growth in a major autonomous component. In the final case (net exports), strength is specified in terms of the level of spending.

The model also enforces the relationships that must hold among different variables. The most important such relationship is that which requires the sum of consumption, investment, government purchases (federal and state and local combined) and net exports to equal total GNP. (The flow diagram that appears as Figure 1 on page 8 of the text may be helpful to many readers.)

The approach described here also corrects a very inappropriate use of the traditional five-year projections. Frequently, the difference between current policy revenues and expenditures has been used to measure the "room" for new programs, that is the stronger the assumed level of economic activity, the larger the apparent leeway for greater federal spending. Unfortunately, this is very misleading. The danger in initiating too many new federal programs is that nonfederal demand might prove too strong, not too weak. If nonfederal demand were weak, new federal programs would largely serve to mobilize otherwise idle resources. If nonfederal demand were strong, however, new federal programs would be competing directly for the limited physical resources of the economy. In this case, a tax increase might well be required to restrain inflationary pressures. Even so, the new federal programs would involve shifting effectively employed resources from the private to the public sector.

Recent evidence is mixed concerning the strength of various components of nonfederal demand. Consumption has proved quite strong in the current recovery, with the saving rate falling from record highs during the 1974-1975 recession, to unusually low levels in recent quarters. Housing investment has recovered well, but most forecasters look for only limited growth in the near future. The recovery in business fixed investment was delayed unusually long after production reached its low point and has been only moderately strong since its recovery began. Wide disagreement exists over whether continued strengthening or eventual decline in business fixed investment is the more likely prospect. State and local government spending has grown very slowly in the last

several quarters. While somewhat faster growth is widely expected, this is not likely to be a major source of nonfederal demand strength in the next several years. Net exports recovered well in 1976, but showed unprecedented weakness in the first half of 1977. While some support for domestic growth may arise from this sector, no major strength is likely until foreign economic activity begins to grow more rapidly.



CHAPTER I. PAST ANALYSIS OF THE BUDGET AND THE ECONOMY

It is widely recognized that the federal budget and the economy are entwined in a two-way causal relationship (the fiscal policy loop). The effect of the economy on the budget is clear and fairly precise. Obviously the level of corporate profits and personal income are major determinants of federal profits tax and personal income tax receipts. In addition, expenditures on various entitlement programs are sensitive to the level of economic activity and the inflation rate. Examples of such programs are unemployment compensation, which is tied to the level of unemployment, and social security benefits, which are linked to the inflation rate (as measured by the Consumer Price Index).

The impact of the budget on the economy is also widely recognized. Unfortunately, this effect is more complex and more uncertain than the economy's impact on the budget. Federal purchases can mobilize idle resources if the economy is operating below full capacity. Purchases from the private sector or increased federal employment can, in such a situation, increase the real quantity of physical output in the economy. If production is already at its physical maximum, additional government demand with no increase in taxes will lead to inflationary pressures. On the receipts side, lower personal tax rates raise people's disposable incomes and encourage higher consumption demand. Similarly, higher investment tax credit rates will reduce corporate tax collections but encourage higher investment spending. These are only a few of the many ways the budget can influence the level of economic activity.

Two stated purposes of the Congressional Budget Act are:

- o to establish national priorities; and
- o to provide for the Congressional determination each year of the appropriate level of federal revenues and expenditures.

Clearly these two objectives are related to each other. The appropriate levels of federal expenditures and revenues restrict the range of available options for dealing with various national

priorities. As will be discussed later, appropriate levels of federal expenditures and revenues are closely tied to the strength of the nonfederal sectors of the economy. Beyond this, however, a given pattern of nonfederal behavior leaves open a range of federal budgets that would reasonably be consistent with growth and inflation goals. Which of this range of budgets should be chosen, or whether the growth and inflation goals themselves should be altered to allow achievement of certain budgetary goals, is a decision properly left to the American people acting through the political process.

The Congressional Budget Act specifically requires a number of reports and documents to assist the Congress in carrying out its budgetary responsibilities. These include the one-year current services budget from the Office of Management and Budget (OMB), the five-year projections in the President's budget, and CBO's five-year projections report and annual report. ^{1/} The only portion of these reports specifically required to consider the budget's impact on the economy is the CBO annual report, and this is only required for the fiscal year in progress and the immediately following one.

The act requires that the OMB current services projections be accompanied by the economic and programmatic assumptions underlying the estimated outlays and proposed budget authority, such as the rate of inflation, the rate of real economic growth, the unemployment rate, program caseloads and pay increases.

Specific programmatic assumptions are to be ones consistent with continuation of all programs and activities....during such ensuing fiscal year at the same level as the fiscal year in progress and without policy changes in such programs and activities.

The act is silent, however, concerning the basis for the economic assumptions to be employed. In their current services budget estimates released in November 1975 and November 1976, OMB has employed four alternate sets of economic assumptions. These

^{1/} The most recent of these are Five-Year Budget Projections: Fiscal Years 1978-1982 (December 1976) and Budget Options for Fiscal Year 1978 (February 1977).

have included a high and low economic growth rate combined with either a high or low inflation rate. Their reports have not stated the criteria for choosing these assumptions. It is reasonable to say, however, that the assumptions have represented a plausible range of economic outcomes consistent with the fiscal policy implications of a current services federal budget. Similarly, the short-term portion, generally the first of 12 to 24 months of CBO five-year projections, have reflected a fully integrated forecast of the path for the economy, given a current policy budget. (The CBO "current policy" concept used here assumes continuation of expenditures on all federal programs at current levels, adjusted for growth caused by inflation, demographic change, and future spending of existing multi-year appropriations. Current policy revenues are those that would be generated by the assumed economic activity levels in combination with continuation of the existing structure of the tax laws.)

The long-range portion of past five-year projections, both those in the President's budget and those prepared by CBO, have not been prepared on this basis. These projections have concentrated exclusively on the impact of a fixed set or sets of economic assumptions on current policy expenditures and revenues. There has been no stated implication that the current policy budget figures would support the assumed economic activity levels. On the contrary, it has been stated that only exceptionally strong nonfederal demand would allow realizations of the activity levels in conjunction with actual implementation of a current policy budget for five years. It is, thus, appropriate to say that the impact of the budget on the economy has been ignored by both OMB and CBO in the long-term portion of past projections.

The major thrust of this study is to examine what departures from either current policy expenditures or revenues would be necessary to achieve the assumptions about growth in output (GNP) and decline in unemployment that underlie the budget projections. This question is considered in combination with a range of projected behavior patterns for the nonfederal sectors (that is, consumers, investors, state and local governments, and net exports).

CHAPTER II. ALTERNATIVE FIVE-YEAR SCENARIOS--A SUPPLEMENT TO
THE CURRENT POLICY BUDGET

Past neglect of the budget's impact on economic activity in a long-range context stems directly from the serious uncertainties involved in such analysis. Historical evidence on the accuracy of economic forecasts clearly indicates a widening range of uncertainty the farther ahead such forecasts are extended. This should come as no surprise to anyone, given the increasing risk of unforeseeable events, such as international political conflict and crop failures, to name only two. In addition to external uncertainties, we have only limited understanding of what determines fluctuations in consumption and investment behavior. Confidence, inflationary expectations, and similar psychological factors play an important role, but they are hard to measure and even harder to predict. Small errors on these and other variables can build up as a forecast is extended forward.

The growing uncertainties in long-term forecasts limit their value. Indeed the ease with which inappropriate precision can be imputed to such forecasts could make them an obstacle to effective budget analysis. On the other hand, historical experience can provide guidance as to a plausible range for the strength of demand by the nonfederal sectors. This is important because, in the final analysis, it is the behavior of nonfederal demand (consumption, investment, state and local government spending, and net exports) that governs the environment within which Congressional budget decisions must be made, and that determines the necessary compromises among goals for economic growth, the size of federal expenditures, and the deficit.

Because of the great uncertainties involved in long-run fiscal analysis, the approach to fiscal policy decisions must necessarily be rather different from that which is appropriate for allocative budget decisions. Our current knowledge does permit long-range planning of allocative decisions in the sense that current actions are directly influenced by projected out-year

budget effects of various alternatives. Aggregate fiscal policy, on the other hand, cannot be planned in the same way over a five- or six-year horizon. Unfortunately, the uncertainties are simply too great to make such an approach practical. A more reasonable approach to planning fiscal policy involves monitoring economic events as they unfold, using an initial set of internally consistent projections as a benchmark. Comparison of the benchmark scenarios with actual economic data, as they become known, will provide evidence on how nonfederal demand is behaving and hence on the probable compromises among economic and budgetary goals that will be required in the future. This should also provide the perspective required to make timely changes in fiscal policy on a short-term basis as the need arises.

The following chapter documents CBO's current mechanism for generating the range of prospective departures from either current policy expenditures or revenues that would allow realization of specified economic growth goals.

CHAPTER III. CHARACTERIZING THE STRENGTH OF NONFEDERAL DEMAND

GENERAL OVERVIEW OF THE APPROACH

As already emphasized, any approach to examining the consistency between five-year economic assumptions and associated budget projections must focus on the autonomous strength of nonfederal demand. A method for characterizing demand strength in each of the nonfederal sectors is described in this chapter. Each of the four major components of nonfederal demand--consumption, investment, state and local government purchases, and net exports--is characterized by a simple functional relationship. The relationships are not intended to represent carefully considered behavioral functions. Rather, they are simply a basis for characterizing each nonfederal demand component as autonomously strong, moderate, or weak in light of U.S. economic experience since World War II.

The strength of demand is characterized differently for each of the four components. In the case of consumption, strength is characterized in terms of marginal propensity to spend disposable income. In the second case, investment, strength is specified in terms of a rate of growth relative to growth in total Gross National Product (GNP). For state and local government purchases, strength is expressed as the rate of growth in a major autonomous component. In the final case of net exports, strength is characterized in terms of a level of spending that is assumed to be consistent with a specific GNP path.

The model also enforces the full set of relationships required for consistency among different variables. Thus, for example, values for wages and salaries, other labor income, interest income, rental income, dividends and proprietors' income that are contained in or consistent with the economic assumptions of a traditional five-year projection are combined with the values for transfers and taxes contained in the budget projections to determine disposable personal income. Disposable income is then the major determinate of consumer expenditures. The most important relationship of this kind is that which equates total purchases, federal plus nonfederal, with the assumed GNP path.

The solution procedure, as illustrated in Figure 1, differs from that which is traditional for this kind of model. Normally GNP is a major internally determined variable. In this context, GNP is an assumed target that is fixed in advance of the solution. A set of parameters for each of the nonfederal demand relationships is also chosen. The model fixes either federal expenditures (solution mode A) or federal taxes (solution mode B) and solves for the level of taxes or expenditures respectively that is needed to bring total demand into equality with targeted GNP.

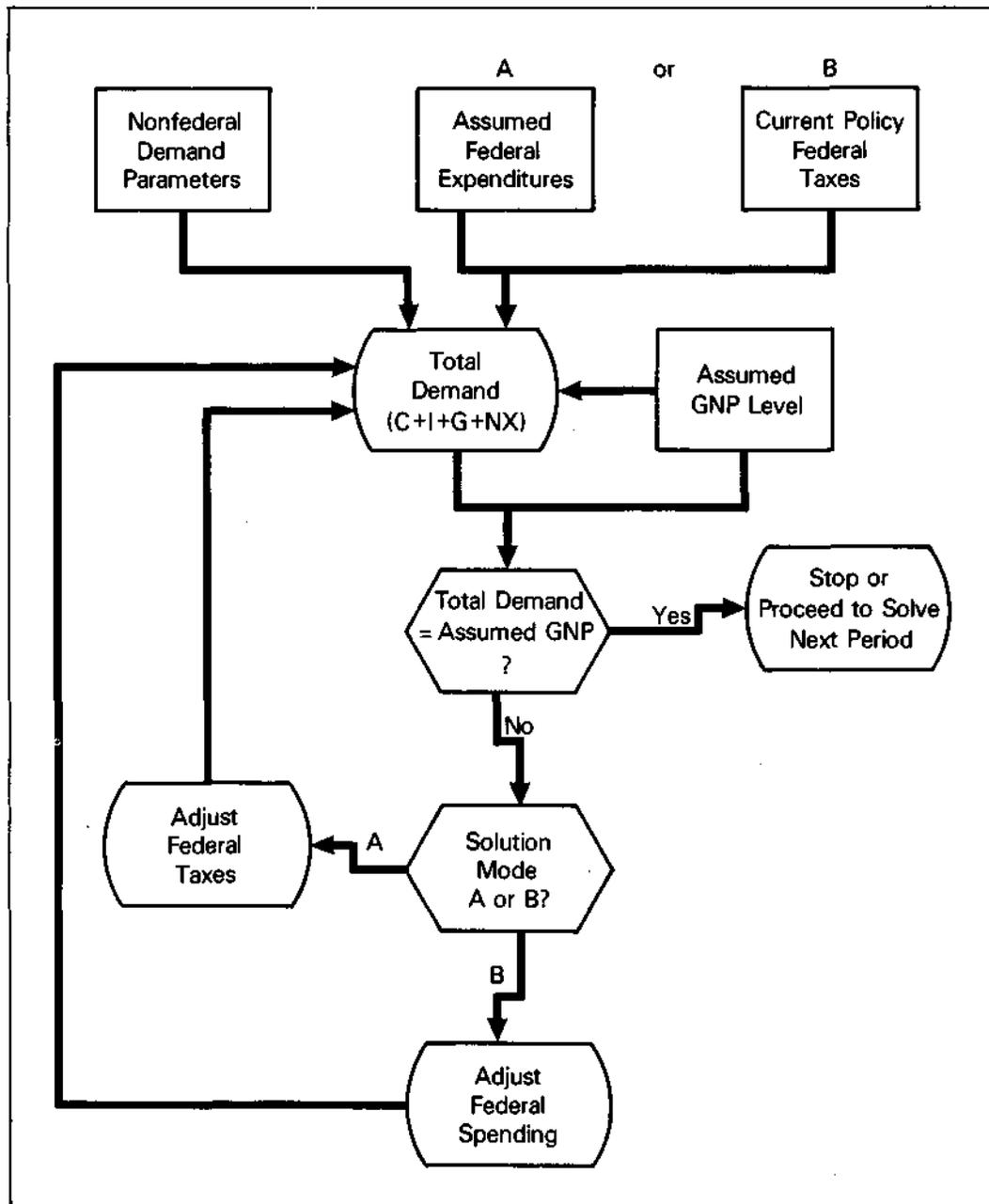
DIFFERENT APPROACHES FOR VARIOUS NONFEDERAL DEMAND COMPONENTS

The strength of the various components of nonfederal demand cannot be characterized by a uniform method. Consumption, for example, is effectively subject to an income constraint in a way that investment is not, since investment is largely financed by borrowing in addition to internally generated funds. Furthermore, the expected response to alternate GNP levels differs among final demand components. Higher GNP should result in a higher level of investment and consumption for any basic "strength" of these two final demand components. On the other hand, net exports are likely to be lower at higher GNP levels, since greater domestic economic activity encourages larger imports and higher domestic prices tend to discourage exports.

The following subsections outline the criteria used to characterize the strength of consumption, investment, state and local spending, and net exports, and the specific manner in which these criteria are implemented for each category. A technical appendix presents the complete set of model equations.

Monetary policy is not explicitly treated in the model. This should not be construed as an attempt to minimize its importance. Monetary policy plays a key role in determining the strength of private investment as that is characterized here. Some economists argue it can have a similar influence on the consumption sector as well. As the model is currently constructed, monetary policy should be viewed as one of the important determinants of whether the autonomous vigor of nonfederal demand turns out to be strong, moderate, or weak during the projection period.

Figure 1
MODEL FLOW CHART



Consumption

The most common measure of the strength of consumer demand is the saving rate which is published on a regular quarterly basis by the Commerce Department. 1/ Since 1946 that rate has varied from a low of 2.9 percent in 1947 to a high of 8.0 percent in 1973. On a five-year average basis, 2/ it has varied from 4.8 percent for the years 1947 through 1951 to 7.4 percent for 1971 through 1975. Table 1 shows the five-year average values for the saving rate for periods ending in 1951 through 1975.

1/ The saving rate is defined as:

$$((YDP - E)/YDP) * 100$$

where YDP = disposable personal income

E = personal expenditures.

2/ The five-year figures presented here are simple averages of the annual saving rates rather than calculations based on five-year averages of disposable income and expenditures. The latter procedure would put greater weight on the saving rates near the end of any five-year period than on those near the beginning, assuming income grew during the period.

TABLE 1. FIVE-YEAR AVERAGE SAVING RATES

Years	Rate
1947-1951	4.808
1948-1952	5.577
1949-1953	5.801
1950-1954	6.298
1951-1955	6.333
1952-1956	6.367
1953-1957	6.352
1954-1958	6.365
1955-1959	6.267
1956-1960	6.154
1957-1961	5.916
1958-1962	5.638
1959-1963	5.204
1960-1964	5.280
1961-1965	5.586
1962-1966	5.767
1963-1967	6.206
1964-1968	6.567
1965-1969	6.485
1966-1970	6.677
1967-1971	6.928
1968-1972	6.659
1969-1973	6.924
1970-1974	7.280
1971-1975	7.359
1972-1976	7.110

As can be seen from the data, a five-year average saving rate below 6 percent must be viewed as corresponding to a strong consumption pattern. On the other hand, rates over 7 percent are a reflection of weak consumption demand by historical standards. Thus this study characterizes the strength of consumption demand as follows: 3/

<u>Saving Rate</u>	<u>Strength of Consump- tion Demand</u>
Under 6.0 percent	Strong
6.0 percent to 7.0 percent	Moderate
Over 7 percent	Weak

The following is the consumption relationship in the model:

$$EA = (1.04) **(\text{YEAR}-1973) *(\text{PGNP}/1.0592)*200.0$$

$$E = EA + \text{CMPE}*\text{YDP} -.20(\text{NWI}-\text{NWIC})$$

$$C = E * C/E$$

3/ It should be noted that the saving rate is a somewhat ambiguous measure of consumption strength. Lower income tends to lower the saving rate in the short-run, since people only adjust their consumption to the lower income with a lag. Similarly, higher income results in some tendency toward higher saving rates. Thus any specific assumption about consumption strength results in a somewhat higher saving rate with higher rather than with lower disposable personal income. The ranges shown above are based on an assumption of normal growth in income. Particularly rapid or particularly slow growth in disposable income in a projection can push the saving rate outside the range indicated for the consumption strength assumed.

where

- EA = autonomous consumption.
- YEAR = the fiscal year corresponding to the period being solved (e.g., 1978).
- PGNP = GNP price deflator (1972 = 1.0).
- E = total consumer expenditures, including interest paid by consumers and personal transfers to foreigners.
- CMPE = consumer marginal propensity to spend.

<u>Value</u> ^{4/}	<u>Consumption Strength</u>
.704	Strong
.697	Moderate
.690	Weak

- YDP = disposable personal income.
- NWI = nonwage income (proprietors' income + rental income + personal interest income + dividends).
- NWIC = current policy nonwage income.

^{4/} These values for CMPE were chosen because they generated the desired saving rates, when the model was solved for 1978-1982 period, in those cases where growth in disposable income was neither exceptionally rapid nor exceptionally slow.

It would have been possible to treat consumer expenditures as $(1 - \text{SAVRATE}/100) * \text{YDP}$. This would have resulted, however, in very large implicit multipliers for GNP relative to a change in taxes or transfers. The above approach was adopted to avoid this problem. The last section of this chapter discusses the model's implicit multiplier properties in more detail.

C/E = assumed ratio of personal consumption expenditures to total personal expenditures

C = personal consumption expenditures.

Autonomous consumption is assumed to be \$200 billion in 1973 and to grow at 4 percent per year plus the rate of inflation. It is assumed that consumer prices rise at the same rate as the GNP deflator. The value 1.0592 is the level of the GNP deflator in 1973.

Total personal expenditures equal autonomous consumption plus the marginal propensity to spend times disposable personal income minus .20 *(NWI-NWIC). NWI only differs from NWIC by virtue of corporate tax changes causing an increase or decrease in dividends. The final term makes the marginal propensity to spend dividends .20 lower than the marginal propensity to spend total disposable income.

Total personal expenditures (E) include interest paid by consumers and personal transfers to foreigners in addition to personal consumption expenditures (C). It is assumed that the ratio of consumption to total expenditures remains constant at C/E, which is set equal to .974 throughout the solution. C/E could, however, be allowed to vary from year to year if desired.

Investment

There is no single measure, such as the saving rate for consumption, that is commonly used to characterize the strength of private investment demand. For this purpose CBO has chosen to use the differences between the five-year average growth rate in real (price adjusted) private investment and the corresponding growth rate in real GNP. Historical data on this series appear in Table 2. 5/

5/ The average growth rates are calculated as follows:

$$((\text{GNP}/\text{GNP}_{-5})^{1/5}-1) *100 \text{ for GNP}$$

and similarly for investment.

TABLE 2. FIVE-YEAR AVERAGE GROWTH RATES IN REAL INVESTMENT AND REAL GNP

Years	(1) GNP	(2) Investment	(3) (2)-(1)
1946-1951	3.836	5.795	1.959
1947-1952	5.029	3.486	-1.543
1948-1953	4.978	0.789	-4.189
1949-1954	4.575	4.919	0.344
1950-1955	4.183	2.127	-2.055
1951-1956	3.015	1.804	-1.211
1952-1957	2.613	3.159	0.546
1953-1958	1.791	0.486	-1.305
1954-1959	3.258	5.188	1.930
1955-1960	2.388	0.249	-2.139
1956-1961	2.462	0.136	-2.327
1957-1962	3.253	3.849	0.595
1958-1963	4.100	7.259	3.159
1959-1964	3.951	4.227	0.276
1960-1965	4.675	7.327	2.652
1961-1966	5.368	9.258	3.890
1962-1967	4.748	5.398	0.650
1963-1968	4.833	5.080	0.247
1964-1969	4.291	4.926	0.635
1965-1970	3.037	0.606	-2.431
1966-1971	2.455	0.673	-1.783
1967-1972	3.051	4.280	1.229
1968-1973	3.263	5.372	2.109
1969-1974	2.390	1.614	-0.776
1970-1975	2.077	-2.287	-4.364
1971-1976	2.690	0.487	-2.203

On four occasions, real investment growth has averaged more than 2 percent per year faster than real GNP growth over a five-year period. Three of these four occasions are the five-year periods ending in 1963, 1965, and 1966, respectively. Clearly these periods were heavily influenced by a variety of tax measures, including the first introduction of the investment tax credit in 1962.

The last of the four periods noted above is 1968-1973. During these years real investment growth averaged 2.1 percent per year greater than real GNP growth. It thus appears that real investment growth of 2 percent per year in excess of real GNP growth must be considered on the high end of a "normal" investment boom.

In some cases, average real investment growth has been lower than the growth in real GNP. Since 1956, however, this has only occurred when comparing a recession or immediate post-recession year with a nonrecession year five years earlier. Thus, for example, GNP growth was higher than real investment growth in the five-year periods ending in 1958, 1960, 1961, 1970, 1971, 1974, and 1975. For a period of sustained expansion in real GNP it appears appropriate to characterize investment strength as follows:

<u>Investment Growth Rate Minus GNP Growth Rate</u>	<u>Strength of Investment Demand</u>
2.0 percent per year	Strong
1.0 percent per year	Moderate
0.0 percent per year	Weak

The investment equation is as follows:

$$IC = IC(-1) * (GNP72 / GNP72(-1) + \%CH(I-GNP) / 100) * (PGNP / PGNP(-1))$$

$$I = IC + \sum_{i=0}^{t-1} b(i) * (TFCC(t-i) - TFC(t-i))$$

i =	0	1	2	3	4
b(i) =	.10	.15	.10	.10	.05

where

- IC = current policy total nominal investment (IC(0) is an exogenous value for total nominal investment in the year preceding the first period of the solution)
- GNP72 = real GNP (1972\$)
- %CH(I-GNP) = growth in real investment in excess of the growth in real GNP.

<u>Value</u>	<u>Investment Strength</u>
2.00	Strong
1.00	Moderate
0.00	Weak

- PGNP = GNP price deflator
- I = solution value for total nominal investment
- TFC = solution value for corporate profits taxes
- TFCC = current policy corporate profits taxes
- t = the number of the period currently being solved. This assumes values from 1 to 5 in a five-year solution.

Since the values for $b(i)$ sum to 0.5, they reflect an assumption that 50 percent of additional after tax corporate profits is eventually reflected in higher investment. This only happens, however, with a considerable lag. The other 50 percent of after tax profits is assumed to appear in the form of higher dividends and hence higher disposable income, again with a lag.

It is also assumed that the deflator for investment goods rises at the same rate as the total GNP deflator.

State and Local Government Purchases

A measure of autonomous state and local purchases should attempt to correct actual purchases for the impact of federal grants-in-aid. In this analysis, 40 percent of federal grants-in-aid is deducted from state and local purchases and the difference is deflated by the state and local purchases deflator. The resulting series is referred to as real non-grant-induced state and local purchases. 6/ Table 3 shows the average five-year growth rates in this series since 1946-1951.

While non-grant-induced purchases grew at average annual rates above 6 percent per year in many of the five-year periods since the mid-1940s, there has been a marked slowdown since 1968. Average annual growth rates for the five-year periods ending in 1973 through 1976 have only been in the 2.5 to 3.5 percent per year range. There are many reasons for these lower growth rates. For example, demographic changes have slowed school construction and reduced the growth in education payrolls. This trend should continue to have an influence through 1982. An additional factor is the much publicized financial difficulty of New York City as well as other states and municipalities. Thus, 3.75 percent growth in real non-grant-induced state and local purchases appears to be a high projection during the period in question. Growth of 3 percent per year would correspond to the average rate of increase from 1967 through 1976, while growth of only 2.25 percent per year would correspond to further slowing in the expansion of state and local purchases. Thus real non-grant-induced state and local purchases are allowed to grow as follows in the alternative five-year scenarios:

Annual Growth Rate in
Real Non-Grant-Induced
State and Local Purchases

Strength of State
and Local Demand

3.75 percent
3.00 percent
2.25 percent

Strong
Moderate
Weak

6/ The assumption that 40 percent of general federal grants to states are reflected in purchases is based on micro-economic studies.

TABLE 3. FIVE-YEAR AVERAGE GROWTH RATES IN REAL NON-GRANT-INDUCED STATE AND LOCAL GOVERNMENT PURCHASES

Years	Rate
1946-1951	8.12
1947-1952	6.20
1948-1953	6.00
1949-1954	4.93
1950-1955	4.89
1951-1956	5.42
1952-1957	6.01
1953-1958	6.44
1954-1959	5.26
1955-1960	4.76
1956-1961	5.18
1957-1962	4.78
1958-1963	4.36
1959-1964	5.24
1960-1965	5.76
1961-1966	6.69
1962-1967	6.17
1963-1968	6.28
1964-1969	5.52
1965-1970	4.65
1966-1971	4.23
1967-1972	3.52
1968-1973	3.03
1969-1974	3.22
1970-1975	2.94
1971-1976	2.41

The equation for state and local government purchases is as follows:

$$GSPN = GSPN(-1) * (1 + \%CHGSPN/100) * (1 + ((PGNP/PGNP(-1)) - 1) * 1.5)$$

$$GSP = GSPN + .40 * GFG$$

where

- GSPN = non-grant-induced state and local purchases (GSPN(0) equals an exogenous value for nominal state and local purchases in the year prior to the first period of the solution minus .40 times grants-in-aid during the same interval).
- %CHGSPN = the assumed annual growth rate in real non-grant-induced state and local purchases.

<u>Value</u>	<u>State and Local Demand Strength</u>
3.75	Strong
3.00	Moderate
2.25	Weak

PGNP = GNP price deflator.

GSP = nominal state and local government purchases.

GFG = federal grants-in-aid to state and local governments.

As can be seen from the equations, the price deflator for state and local government purchases is assumed to grow 50 percent faster than the GNP price deflator. This is in line with historical experience. It is also assumed that 40 percent of

federal grants-in-aid is translated into additional state and local purchases. An additional 40 percent appears in the form of lower state and local taxes, ^{1/} and 20 percent implicitly contributes to accumulation of financial assets or reduction of outstanding liabilities.

One shortcoming of this characterization is that it does not fully recognize the balanced budget restriction in effect in most states and localities. Greater non-grant-induced state and local spending does result, in the model, in an increase in state and local personal taxes. ^{1/} Such spending is almost certainly associated with increases in sales, property, and excise taxes as well, which are not captured by the existing model structure. Because of these combined tax increases, it is unlikely that strong state and local spending could be a major source of support for both rapid economic growth and progress toward a balanced federal budget.

Net Exports

One problem in treating net exports is that they tend to be reduced by rapid growth in GNP and to be raised by slow growth in GNP. This is because rapid economic growth raises imports with no immediate corresponding increase in total exports. In fact, if the rapid growth is accompanied by higher prices, this may actually reduce total exports. The handling of net exports is primarily motivated by a desire to have them respond in the expected fashion when the model is solved for different GNP paths. Specifically, a given pattern of net exports is assumed to be consistent with 4 percent per year growth in real GNP and 5 percent per year inflation. This pattern can differ depending on the assumed strength of nonfederal demand. This net export pattern is adjusted downward for any annual growth in projected current dollar GNP in excess of 9 percent and adjusted upward for any growth below that rate.

^{1/} See Appendix A for the equation determining state and local personal taxes (TSP).

Table 4 shows the five-year average values for net exports since 1951. The U.S. typically experienced positive net exports during the last 30 years. The OPEC oil price increase, however, seriously threatens our ability to continue such a performance in the future. On the other hand, the U.S. is the world's major crop producer, and population growth is certain to continue to increase global food demand. Thus agricultural exports could largely offset the rising volume and price of U.S. oil imports.

Recognizing that this is the part of the analysis that some people will question most seriously, CBO has used the following net export assumptions in its three different nonfederal demand scenarios:

NET EXPORTS AT 4 PERCENT PER YEAR REAL GROWTH
AND 5 PERCENT INFLATION

Fiscal Year	Values		
	Strong	Moderate	Weak
1978	13	8	3
1979	15	9	3
1980	17	10	3
1981	19	11	3
1982	21	12	3

Deviations from these figures in the actual scenarios are the result of the current dollar GNP path deviating from the 9 percent per year rate of increase which is assumed to be consistent with the above numbers.

TABLE 4. FIVE-YEAR AVERAGE NET EXPORTS: IN BILLIONS OF CURRENT DOLLARS

Years	Average Values
1947-1951	6.015
1948-1952	4.172
1949-1953	2.988
1950-1954	2.142
1951-1955	2.206
1952-1956	2.293
1953-1957	3.028
1954-1958	3.403
1955-1959	3.117
1956-1960	3.547
1957-1961	3.855
1958-1962	3.716
1959-1963	4.482
1960-1964	6.160
1961-1965	6.804
1962-1966	6.654
1963-1967	6.566
1964-1968	5.763
1965-1969	4.324
1966-1970	3.595
1967-1971	2.896
1968-1972	1.250
1969-1973	2.222
1970-1974	3.365
1971-1975	6.670
1972-1976	7.680

The equation for net exports is as follows:

$$\text{GNP9\%} = \text{GNP9\%}(-1) * (1.09)$$

$$\text{NX} = \text{NX9\%} - ((\text{GNP}/\text{GNP9\%}) - 1) * .07 * \text{GNP9\%}$$

where

GNP9% = current dollar GNP assuming 4 percent per year real growth and 5 percent per year inflation starting in period 1*(GNP9%(0) = GNP(0) = current dollar GNP in the year prior to the first period of the solution.)

NX9% = current dollar net exports at 4 percent real growth and 5 percent inflation. (This is set equal to the values shown above for different assumptions about the strength of net export demand.)

GNP = assumed current dollar gross national product

Current dollar net exports that are consistent with 4 percent per year growth and 5 percent per year inflation are specified exogenously at levels determined by the assumed strength of nonfederal demand. If current dollar GNP is above (below) this 9 percent per year growth path, net exports are adjusted down (up) by a specific amount. The adjustment used here assumes imports are 10 percent of current dollar GNP and that they have an elasticity of .7 with respect to changes in GNP. 8/

8/ In fact the specification is consistent with a slightly lower import elasticity with respect to GNP plus slightly lower current dollar exports because higher GNP results in higher domestic prices.

NONFEDERAL DEMAND PARAMETERS AND FEDERAL BUDGET POLICY

The model described here requires an explicit choice of parameter values for the behavior of nonfederal demand before the solution begins. These behavioral parameters are then fixed during the solution process, regardless of the federal budget policy required to achieve the GNP target. This characteristic of the model has been criticized by some analysts.

Unfortunately, there is great uncertainty over how non-federal demand parameters should be expected to react to federal budget policies. Some argue that short-term stimulus from budget deficits raises capacity utilization and encourages stronger investment. If the short-term stimulus raises employment, it may also serve to strengthen consumption demand. Others argue that large federal deficits create fears of inflation and may have a negative psychological impact in and of themselves. Thus, it is argued, nonfederal demand may be weakened by an expansive fiscal policy. In addition, whatever causal connecting links exist between federal budget policy and nonfederal demand parameters, external shocks may have effects that reinforce or offset the influence of various fiscal policy alternatives.

For all the above reasons, CBO has simply chosen to vary nonfederal demand parameters over some plausible range to illustrate their influence on the prospects for achieving goals of rapid economic growth and a declining federal budget deficit. No one solution should be viewed as a forecast. Rather the whole range of solutions should be considered as a benchmark against which to judge economic events as they unfold.

IMPLICIT MULTIPLIER PROPERTIES OF THE MODEL

Since the model solves for federal expenditures or federal taxes rather than GNP, it is not possible to generate fiscal policy multipliers in the usual sense. It is possible, however, to solve the model for two different GNP paths, look at the resultant differences in spending or taxes, apply a set of consensus multipliers to these spending or tax changes, and compare the implied changes in GNP with the actual differences between the two GNP paths. This is, in fact, one procedure that was used to judge the reasonableness of the parameters chosen for various relationships.

Tables 5 and 6 show these calculations for spending and taxes respectively. Figures represent differences between corresponding series in two solutions, one using the "baseline" GNP path and the other using the "less vigorous" GNP path. 9/

TABLE 5. RESPONSE TO EXPENDITURE CHANGES: IN BILLIONS OF CURRENT DOLLARS PER YEAR

Fiscal Year	Expenditure Differences <u>a/</u>	GNP Differences	Implied GNP Differences Using Standard Multipliers <u>b/</u>
1978	4.8	5.0	5.3
1979	29.3	35.6	35.1
1980	58.2	78.8	82.1
1981	84.0	123.4	130.3
1982	112.5	178.0	180.0

a/ Using the two different GNP paths, taxes were held at current policy levels and expenditures were adjusted to generate sufficient demand to support the assumed GNP.

b/ Implied GNP differences are based on assumed multipliers for a sustained increase in government spending of 1.1, 1.7, and 1.8 for the first, second, and third years, respectively. The expenditure increases are spread among purchases, transfers, and grants-in-aid in the same ratio as these bear to one another in the current policy projections.

9/ See page 28 for explanations of "baseline" and "less vigorous" GNP paths.

TABLE 6. RESPONSE TO TAX CHANGES: IN BILLIONS OF CURRENT DOLLARS PER YEAR

Fiscal Year	Induced Tax Increase <u>a/</u>	Net Tax Loss <u>b/</u>	Exogenous Tax Reduction <u>c/</u>	GNP Differences	Implied GNP Differences Using Standard Multipliers <u>d/</u>
1978	3.9	4.5	8.4	5.0	5.9
1979	14.8	31.4	46.2	35.6	36.5
1980	20.9	58.0	78.9	78.8	80.9
1981	32.3	72.6	104.9	123.4	127.6
1982	47.4	81.1	128.5	178.0	170.7

a/ This is the difference between current policy taxes in the baseline and the less vigorous GNP paths.

b/ In this case, expenditures were held at current policy levels and taxes were adjusted to generate sufficient aggregate demand to support each of the two GNP paths. This column is the difference between tax collections in these two solutions. Departures from current policy taxes were distributed between personal and corporate taxes in the ratio these taxes bear to one another in the current policy projections.

c/ This column is necessary since traditional tax multipliers are calculated relative to the gross tax change, not the net tax revenue gain or loss.

d/ Implied GNP differences are based on assumed multipliers for a sustained decrease in federal taxes (without adjustment for induced tax increases due to resulting higher income levels) of 0.7, 1.2, 1.4, and 1.5 in the first through fourth years, respectively.

While the implied and actual GNP differences are not exactly equal, they are sufficiently close to argue that the multipliers on which the implied differences are based can be viewed as the approximate implicit multipliers in the underlying model, as shown below:

APPROXIMATE DYNAMIC GNP MULTIPLIERS FOR
A SUSTAINED SPENDING OR TAX CHANGE

Year	Change in GNP/Change in Government Spending	-(Change in GNP/ Change in Taxes)
1st	1.1	0.7
2nd	1.7	1.2
3rd	1.8	1.4
4th	1.8	1.5

CHAPTER IV. ALTERNATIVE FIVE-YEAR SCENARIOS, FISCAL YEARS
1978 to 1982

This section discusses 24 scenarios for fiscal years 1978 through 1982. 1/ These combine a high and a low GNP path with strong, moderate, and weak nonfederal demand.

The high or baseline economic path is consistent with the long-range economic assumptions used by both Committees on the Budget for the Second Concurrent Resolution on the 1977 Budget (see Table 7). This path would involve a real economic growth rate averaging 5.1 percent over the next five years and an unemployment rate falling to 4.1 percent by the end of fiscal year 1982. It would imply an annual rate of inflation (Consumer Price Index) that is below 5.0 percent initially but rises to above 5.5 percent by the end of the five-year period. The low or less vigorous path involves a slower economic expansion. The annual rate of economic growth would average almost one percent lower than in the baseline path. The unemployment rate at the end of the five-year period would be 5.5 percent, but the pace of inflation would moderate to 4.6 percent by 1982. 2/

In the first six of the 24 scenarios, federal spending is held at current policy levels. In the second six scenarios spending is reduced below current policy levels in \$10 billion increments each fiscal year from 1978 through 1982. Thus spending is \$50 billion below the current policy level by fiscal year 1982. In the final two sets of scenarios, spending is increased above current policy levels in \$10 billion and \$20 billion increments, respectively, each fiscal year. Spending thus reaches \$50 or \$100 billion above current policy levels by fiscal year 1982.

All spending increments are divided among purchases, transfers to persons, and grants-in-aid in the same proportions as these categories display relative to one another in the current

1/ Complete details on the results of all 24 solutions are contained in Appendix C.

2/ The high GNP path is that referred to as the "baseline" path in the CBO Report, Five-Year Budget Projections: Fiscal Years 1978-1982 (December 1976). The low path is that referred to as "less vigorous economic expansion" in the same report. See pp. 4-6.

TABLE 7. ECONOMIC ASSUMPTIONS, FISCAL YEARS 1977 TO 1982

Economic Variables	1977	1978	1979	1980	1981	1982
Baseline Assumptions						
Gross National Product (GNP)						
Current Dollar GNP (Billions of Dollars)	1,835.6	2,034.2	2,247.2	2,484.8	2,740.5	3,026.0
Real GNP						
(Billions of 1972 Dollars)	1,318.4	1,392.2	1,468.8	1,548.2	1,622.9	1,696.5
Growth Rate of Real						
GNP (Percent)	5.5	5.6	5.5	5.4	4.8	4.5
Unemployment Rate (Percent)	7.0	6.1	5.5	4.9	4.5	4.2
Consumer Price Index						
(Annual Percent Change)	5.06	4.8	4.7	4.9	5.2	5.7
Less Vigorous Economic Expansion						
Gross National Product (GNP)						
Current Dollar GNP (Billions of Dollars)	1,835.6	2,029.2	2,211.6	2,406.0	2,617.1	2,848.0
Real GNP						
(Billions of 1972 Dollars)	1,318.4	1,388.8	1,446.6	1,504.5	1,564.6	1,627.2
Growth Rate of Real GNP						
(Percent)	5.5	5.3	4.2	4.0	4.0	4.0
Unemployment Rate (Percent)	7.0	6.1	5.9	5.8	5.7	5.5
Consumer Price Index						
(Annual Percent Change)	5.0	4.8	4.6	4.6	4.6	4.6

policy expenditure path. This is not to be interpreted as a recommended procedure for increasing spending. Rather it is chosen as the most obviously neutral assumption about the mix of new spending. To allow the spending mix to change for a given GNP path would come close to prejudging various allocational issues, which is not the intent of this analysis.

Once the spending level is established, personal income taxes and corporate profits taxes are raised or lowered to bring total aggregate demand into equality with the target values for GNP. The changes in taxes are allocated between personal and corporate in the same proportion that these taxes bear to one another on a current policy basis.

CURRENT POLICY EXPENDITURES 3/

The first budget strategy examined is that of holding expenditures at the current policy level for the next five years and using tax changes to achieve the target rates of growth. This means that all government programs currently on the books (except those that are explicitly temporary) would be continued and the expenditures for them would be adjusted for inflation and the effects of demographic changes. 4/ For example, social security expenditures would be adjusted not only for increases in the cost of living but also for increases in the number of persons eligible for social

3/ The rest of this chapter is taken almost exactly from Chapter II of the CBO annual report, Budget Options for Fiscal Year 1978. The tables presented in Appendix C show exhaustive details on all scenarios and also include all combinations of GNP and nonfederal demand. As indicated in the annual report, those scenarios that show high GNP and weak nonfederal demand with massive fiscal stimulus and those which show strong nonfederal demand but low GNP due to massive fiscal restraint are quite unrealistic. For this reason they were not shown in the annual report. They are included in Appendix C for the purpose of complete coverage, but should be viewed in light of the above caution.

4/ For a more complete description of current policy expenditures and revenues, see Five-Year Budget Projections.

security. If current policy expenditures were maintained, federal spending would rise at a slower rate than would GNP under either of the growth paths considered here. Federal expenditures as a fraction of GNP would decline from the present 22.5 percent to a level between 19.3 and 20.6 percent in fiscal year 1982, depending on which GNP path was used.

If current policy expenditures were maintained, a balanced budget in fiscal year 1982 could be attained only if the nonfederal sectors were strong (see Table 8). Even in this case, maintaining the higher economic growth rate would require substantial tax cuts late in the period to offset the normal revenue increases that result from rising incomes and a progressive personal income tax structure. If such tax cuts were not made, the federal budget would exert a restraining influence on the economy and economic growth would suffer.

If demand by the nonfederal sectors proved only moderately strong, an increasing federal deficit involving still larger cuts in taxes would be necessary to achieve the baseline GNP path. If the nonfederal sectors were weak, still larger deficits would be required; indeed, it seems unlikely that the baseline economic path could be achieved at all if nonfederal sector demand were weak.

If, however, the economic goals were less ambitious--if the nation were willing to settle for the less vigorous economic growth path over the next five years--it would be easier to balance the budget with a declining ratio of federal spending to GNP. With only moderately strong demand by the nonfederal sectors of the economy, continued current policy expenditures combined with modest tax cuts would bring the budget close to balance by fiscal year 1982. Indeed, if the nonfederal sectors were strong, the federal budget could run a substantial surplus without endangering the attainment of this less vigorous economic path. Only if the nonfederal sectors were weak would it be necessary to run a large and increasing federal deficit even to attain the less vigorous path.

TABLE 8. CURRENT POLICY EXPENDITURES, FISCAL YEARS 1978 TO 1982: IN BILLIONS OF DOLLARS

BASELINE GNP PATH								
Fiscal Year	Federal Expenditures	Ratio of Expenditures to GNP (Percent)	Strong Nonfederal Demand		Moderate Nonfederal Demand		Weak Nonfederal Demand	
			Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-) <u>a/</u>	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)
1978	451.0	22.1	- 15.8	+ 28.1 <u>a/</u>	- 49.8	- 5.8	<u>b/</u>	<u>b/</u>
1979	480.0	21.3	- 13.2	+ 2.7 <u>a/</u>	- 57.6	- 41.6	<u>b/</u>	<u>b/</u>
1980	514.0	20.6	- 20.6	- 32.6 <u>a/</u>	- 77.2	- 89.2	<u>b/</u>	<u>b/</u>
1981	548.0	19.9	- 11.3	- 57.3 <u>a/</u>	- 81.6	-127.6	<u>b/</u>	<u>b/</u>
1982	586.0	19.3	+ 1.0	- 80.9 <u>a/</u>	- 86.1	-168.1	<u>b/</u>	<u>b/</u>

LESS VIGOROUS GNP PATH								
1978	451.0	22.2	<u>c/</u>	<u>c/</u>	- 45.3	+ 0.5	- 79.9	- 34.0
1979	483.0	21.8	<u>c/</u>	<u>c/</u>	- 29.0	+ 0.0	- 73.2	- 44.1
1980	519.0	21.5	<u>c/</u>	<u>c/</u>	- 24.3	- 10.4	- 79.6	- 65.7
1981	552.0	21.0	<u>c/</u>	<u>c/</u>	- 13.6	- 23.3	- 81.4	- 91.1
1982	587.0	20.6	<u>c/</u>	<u>c/</u>	- 5.6	- 39.2	- 88.0	-121.6

a/ Figures in this column are differences from current policy tax collections.

b/ The deficits and tax cuts in this column are too large to be regarded as plausible and are, therefore, omitted from the table.

c/ A tax policy that generates substantial surpluses would be required to keep the economy from growing at a faster rate.

\$50 BILLION LOWER FEDERAL SPENDING BY FISCAL YEAR 1982 5/

A second budget strategy would involve spending cuts of \$50 billion below CBO's current policy estimates by fiscal year 1982. This is somewhat below the long-term expenditure path contained in the fiscal year budget submitted by the Ford Administration in January 1977. Such a path would imply a reduction in the ratio of federal spending to the gross national product from 22.5 percent to between 17.7 and 18.8 percent by 1982 depending upon which GNP path is used.

As may be seen in Table 9, no matter what is assumed about the strength of nonfederal demand, the lower expenditures implied by this budget strategy would have to be accompanied by even larger tax cuts than those required by current policy expenditures to keep the economy growing even at the less vigorous rate. Indeed, near balance in the federal budget could be achieved by the end of the period only if nonfederal demand were strong or if a growth path below the less vigorous one used here were accepted. Moderate nonfederal demand would require large and growing deficits to achieve the baseline GNP path. Smaller and shrinking deficits would, however, be consistent with moderate nonfederal demand and attainment of less vigorous economic growth.

\$50 or \$100 BILLION IN NEW FEDERAL PROGRAMS BY FISCAL YEAR 1982

Current policy spending allows for normal growth in the programs already enacted, but not for new programs--unless these are substituted for existing programs. In the past, of course, the federal government has periodically taken on increasing responsibilities, and at present there is support for further expanding those responsibilities. To illustrate the consequences of such increases, this section analyzes two expenditure strategies that raise federal spending \$50 billion and \$100 billion, respectively, above current

5/ In this and the following section, it is assumed that changes in expenditures from a current policy path are divided among purchases of goods and services, transfers to persons, and grants-in-aid in the same ratios as these categories bear to one another in the current policy projections.

TABLE 9. \$50 BILLION LOWER FEDERAL EXPENDITURES BY FISCAL YEAR 1982: IN BILLIONS OF DOLLARS

BASELINE GNP PATH								
Fiscal Year	Federal Expenditures	Ratio of Expenditures to GNP (Percent)	Strong Nonfederal Demand		Moderate Nonfederal Demand		Weak Nonfederal Demand	
			Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-) <u>a/</u>	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)
1978	441.0	21.6	- 20.4	+ 13.5 <u>a/</u>	- 54.5	- 20.5	<u>b/</u>	<u>b/</u>
1979	460.0	20.4	- 21.0	- 25.0 <u>a/</u>	- 65.6	- 69.6	<u>b/</u>	<u>b/</u>
1980	484.0	19.4	- 30.6	- 72.6 <u>a/</u>	- 87.4	-129.4	<u>b/</u>	<u>b/</u>
1981	508.0	18.5	- 11.3	-108.3 <u>a/</u>	- 92.9	-178.9	<u>b/</u>	<u>b/</u>
1982	536.0	17.7	- 10.5	-142.5 <u>a/</u>	- 97.9	-229.9	<u>b/</u>	<u>b/</u>

LESS VIGOROUS GNP PATH								
1978	441.0	21.7	<u>c/</u>	<u>c/</u>	- 49.9	- 14.0	- 84.6	- 48.7
1979	463.0	20.9	<u>c/</u>	<u>c/</u>	- 36.7	- 27.6	- 81.0	- 71.9
1980	489.0	20.3	<u>c/</u>	<u>c/</u>	- 34.2	- 50.3	- 89.7	-105.8
1981	512.0	19.5	<u>c/</u>	<u>c/</u>	- 24.7	- 74.4	- 92.6	-142.3
1982	537.0	18.8	<u>c/</u>	<u>c/</u>	- 17.2	-100.8	- 99.9	-183.5

a/ Figures in this column are differences from current policy tax collections.

b/ The deficits and tax cuts in this column are too large to be regarded as plausible and are, therefore, omitted from the table.

c/ A tax policy that generates substantial surpluses would be required to keep the economy from growing at a faster rate.

policy levels by fiscal year 1982. The lower of these two levels assumes that successive increments of \$10 billion are added to current policy spending each year through fiscal year 1982, representing an average growth in federal expenditures of 9.0 percent a year; this is comparable to the average rate of increase experienced from fiscal years 1960 through 1976. This rate of increase would imply approximate constancy in the ratio of federal spending to GNP; that ratio would be 21.0 percent to 22.3 percent of GNP by 1982, depending on which GNP path is used.

The higher level of spending assumes an increase of \$20 billion over current policy spending levels in each year, or an average growth rate of federal spending of 10.7 percent per year between fiscal years 1977 and 1982. This is roughly the same as the average rate of increase between 1970 and 1976, but above the corresponding figure for earlier periods. It would imply a rise in the ratio of federal spending to GNP from its current 22.5 percent to between 22.6 percent and 24.1 percent, depending on which GNP path is used.

As shown in Tables 10 and 11, the basic story would remain the same, even when expenditures were growing faster than current policy. Attaining a higher baseline growth path while balancing the budget would be possible only if nonfederal demand were strong. If nonfederal demand were only moderate, it would be necessary either to settle for the less vigorous GNP growth path or to run a federal deficit. With higher spending, however, the deficit would not need to be as large as under current policy to achieve a particular growth path. The cuts below current policy taxes shown in Tables 10 and 11 are considerably smaller than those shown in Table 8. Moreover, as may be seen in Table 11, if private demand were strong and the higher federal expenditure level were desired, taxes must actually be raised to keep the economy from growing faster than the baseline rate. Failure to implement such tax increases in this situation would lead to intense inflationary pressures as rapidly expanding federal programs competed with the nonfederal sectors for the fully employed resources of the economy.

TABLE 10. \$50 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982: IN BILLIONS OF DOLLARS

BASELINE GNP PATH								
Fiscal Year	Federal Expenditures	Ratio of Expenditures to GNP (Percent)	Strong Nonfederal Demand		Moderate Nonfederal Demand		Weak Nonfederal Demand	
			Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-) <u>a/</u>	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)
1978	461.0	22.6	- 11.2	+ 42.7 <u>a/</u>	- 45.2	+ 8.7	<u>b/</u>	<u>b/</u>
1979	500.0	22.2	- 5.4	+ 30.5 <u>a/</u>	- 49.7	- 13.7	<u>b/</u>	<u>b/</u>
1980	544.0	21.8	- 10.6	+ 7.3 <u>a/</u>	- 67.0	- 49.0	<u>b/</u>	<u>b/</u>
1981	588.0	21.4	- 0.2	- 6.2 <u>a/</u>	- 70.3	- 76.3	<u>b/</u>	<u>b/</u>
1982	636.0	21.0	+ 12.5	- 19.4 <u>a/</u>	- 74.2	-106.2	<u>b/</u>	<u>b/</u>

LESS VIGOROUS GNP PATH								
1978	461.0	22.7	<u>c/</u>	<u>c/</u>	- 40.7	+ 15.1	- 75.2	- 19.3
1979	503.0	22.7	<u>c/</u>	<u>c/</u>	- 21.2	+ 27.8	- 65.3	- 16.2
1980	549.0	22.8	<u>c/</u>	<u>c/</u>	- 14.5	+ 29.3	- 69.5	- 25.6
1981	592.0	22.6	<u>c/</u>	<u>c/</u>	- 2.6	+ 27.6	- 70.1	- 39.8
1982	637.0	22.3	<u>c/</u>	<u>c/</u>	+ 5.9	+ 22.3	- 76.1	- 59.7

a/ Figures in this column are differences from current policy tax collections.

b/ The deficits and tax cuts in this column are too large to be regarded as plausible and are, therefore, omitted from the table.

c/ A tax policy that generates substantial surpluses would be required to keep the economy from growing at a faster rate.

TABLE 11. \$100 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982: IN BILLIONS OF DOLLARS

BASELINE GNP PATH								
Fiscal Year	Federal Expenditures	Ratio of Expenditures to GNP (Percent)	Strong Nonfederal Demand		Moderate Nonfederal Demand		Weak Nonfederal Demand	
			Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-) <u>a/</u>	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-) <u>a/</u>	Budget Surplus (+) or Deficit (-)	Required Tax Increases (+) or Decreases (-)
1978	471.0	23.1	- 6.7	+ 57.2 <u>a/</u>	- 40.5	+ 23.4	<u>b/</u>	<u>b/</u>
1979	520.0	23.1	+ 2.3	+ 58.3 <u>a/</u>	- 41.8	+ 14.1	<u>b/</u>	<u>b/</u>
1980	574.0	23.1	- 0.6	+ 47.3 <u>a/</u>	- 56.8	- 8.8	<u>b/</u>	<u>b/</u>
1981	628.0	22.9	+ 10.7	+ 44.7 <u>a/</u>	- 59.0	- 25.0	<u>b/</u>	<u>b/</u>
1982	686.0	22.6	+ 24.1	+ 42.1 <u>a/</u>	- 62.4	- 44.4	<u>b/</u>	<u>b/</u>

LESS VIGOROUS GNP PATH								
1978	471.0	23.2	<u>c/</u>	<u>c/</u>	- 36.1	+ 29.7	- 70.5	- 4.6
1979	523.0	23.6	<u>c/</u>	<u>c/</u>	- 13.5	+ 55.5	- 57.4	+ 11.6
1980	579.0	24.0	<u>c/</u>	<u>c/</u>	- 4.6	+ 69.2	- 59.5	+ 14.3
1981	632.0	24.1	<u>c/</u>	<u>c/</u>	+ 8.3	+ 78.6	- 58.8	+ 11.4
1982	687.0	24.1	<u>c/</u>	<u>c/</u>	+ 17.5	+ 83.9	- 64.2	+ 2.1

a/ Figures in this column are differences from current policy tax collections.

b/ The deficits and tax cuts in this column are too large to be regarded as plausible and are, therefore, omitted from the table.

c/ A tax policy that generates substantial surpluses would be required to keep the economy from growing at a faster rate.

GENERAL IMPLICATIONS

The key point for Congressional decision-making that arises from the preceding analysis is that, no matter what the strength of nonfederal demand, the federal government faces a wide range of budget possibilities over the next five years. Because not all combinations of desired economic and budgetary goals can be achieved, however, tradeoffs must be made.

The greater the vigor of the nonfederal sectors:

- o The easier the achievement of a high GNP with less federal action.
- o The smaller the deficit or the greater the surplus for any GNP goal and federal expenditure strategy.
- o The less the federal flexibility for increasing expenditures or decreasing taxes, given the GNP target.

The higher the desired level of federal expenditures (given nonfederal demand behavior):

- o The easier the achievement of high GNP through federal action.
- o The smaller the deficit or the greater the surplus needed to attain a specified GNP growth path.
- o The smaller the opportunity to cut taxes.

The higher the GNP goal and the lower the unemployment goal (given nonfederal demand behavior):

- o The greater the deficit or the smaller the surplus for any desired level of federal expenditures.
- o The greater the federal flexibility for increasing expenditures or decreasing taxes.
- o The greater the likelihood of continuing or accelerating inflation.

IMPLICATIONS FOR THE NEXT FIVE YEARS

Unless the nonfederal sectors of the economy prove extraordinarily strong, a possible but optimistic prospect, the Congress will have some very hard choices to make in formulating a budget strategy over the next five years. A less than strong performance by the nonfederal sectors would make it impossible simultaneously to maintain a high rate of economic growth, expand federal programs without increasing the relative size of the federal sector, and balance the budget. The Congress would then be forced to compromise among these goals. New programs would have to be chosen with special care and room made in the budget through phasing out some existing programs and finding more effective ways to accomplish objectives.

CHAPTER V. RECENT EVIDENCE ON NONFEDERAL DEMAND

An important use of the scenarios presented here is to provide a consistent benchmark against which economic events can be judged as they unfold. As has been pointed out repeatedly, it is the performance of the nonfederal sectors that ultimately determines the feasibility of achieving both rapid economic growth and progress toward a balanced federal budget. Frequently, however, many policymakers have concentrated great attention on federal budget decisions, and given comparatively little consideration to emerging evidence concerning behavior of the nonfederal sectors. It is exactly such evidence on the strength of nonfederal demand, however, that is the key to whether sustained economic growth and progress toward federal budget balance is becoming more or less likely.

The remainder of this chapter considers recent evidence on each of the major components of nonfederal demand. It examines how the strength of each sector has changed over the last eight to ten quarters, and points out some key indicators that are worth close attention in the coming 12 to 18 months.

CONSUMPTION

The saving rate has exhibited the following pattern in the past 10 quarters: 1/

1/ Data presented earlier in this paper is based on the national income accounts prior to the July 1977 revisions. This chapter, however, relates to recent performance rather than historical averages and incorporates the 1977 NIA revisions.

	1975 Quarters				1976 Quarters				1977 Quarters	
	1	2	3	4	1	2	3	4	1	2
Saving Rate	6.4	9.4	7.0	6.7	6.3	6.0	5.4	4.6	4.1	5.5

The 9.4 percent level in the second quarter of 1975 was artificially high because the one-time tax rebates created a surge in real income that was not immediately reflected in consumption. Since that time the rate has fallen from the 7.0 percent range to very low values of 4.6 and 4.1 percent in the last quarter of 1976 and first quarter of 1977 respectively. In terms of the classifications used here, this represents a shift from weak to very strong consumption demand. Some of the recent drop in the saving rate, however, may be due to special circumstances. Growth in disposable income has been fairly slow since mid-1976, which tends to lower the saving rate if consumption only adjusts with a lag. In addition, farm income has actually fallen. Since it is generally believed that a greater fraction of farm income is saved than is true for total income, this decline tends to lower the saving rate. Finally, some of the high consumption in late 1976 and early 1977 may reflect higher than normal spending on fuel due to the unusually cold weather. For all of these reasons, it is best to say that consumption has moved from being weak in most of 1975 to being in the strong range in 1976 and early 1977. Many analysts are currently looking for the saving rate to stabilize in the 5.5 to 6 percent range in the near term. This would represent continued strong consumption demand as defined here. Analysis of the saving rate over the next year should give a good indication of whether this optimistic view of consumption strength is being fulfilled.

INVESTMENT

Investment fluctuates more than other final demand components over the course of a business cycle. For this reason, comparison of investment growth during the first nine quarters of economic recovery with five-year average growth rates is not a very useful exercise.

When compared with other recovery periods, investment has not improved as strongly as expected. On the other hand, it has not been as weak as many popular discussions have indicated.

Housing starts have recovered from low levels below one million units per year to the range of 1.7 to 2.0 million per year. This has represented a pattern of steady improvement, but most forecasters expect little further increase (and possibly some significant declines) in the next two years.

Many analysts have expressed extreme disappointment with the recovery in business fixed investment. It is true that, measured relative to its value at the cyclical low point for GNP, business investment seems to have recovered very slowly. The following quarterly pattern of that recovery is interesting, however:

ANNUAL GROWTH RATES IN REAL GNP AND
REAL BUSINESS FIXED INVESTMENT

	1975 Quarters				1976 Quarters				1977 Quarters	
	1	2	3	4	1	2	3	4	1	2
Real GNP	-9.6	6.4	11.4	3.0	8.8	5.0	3.9	1.2	7.5	6.4
Real Business Fixed Investment	-22.1	-14.9	-3.5	1.1	8.9	8.0	9.3	1.7	19.0	9.0

These figures show that real business fixed investment continued to decline for two quarters after real GNP began to recover and grew only very slowly in the third quarter after the trough in GNP.

For the first nine months of 1976, on the other hand, real business fixed investment grew at rates in the 8 to 9 percent per year range. The slow growth in investment in the fourth quarter of 1976 appears to have been mainly the result of reduced automobile deliveries. The preliminary data for the first half of 1977 shows a resumption of growth in business fixed investment at roughly a 9 percent annual rate, with the very high growth in the first quarter of 1977 reflecting a catch up in automobile deliveries to businesses. Since the last quarter of 1975, real nonresidential fixed investment has grown at a 9.2 percent annual rate.

The quarter-to-quarter growth rates support a view that the recovery in business fixed investment was delayed for an unusual length of time after the trough in real GNP, but that the growth in 1976 and early 1977 was fairly strong.

The next 12 to 18 months will reveal a great deal about prospects for sustained strength in business investment. One result of the recession's severity is that business capacity utilization rates are still fairly low and most businesses can comfortably expand production for several more quarters with existing facilities. Assuming the recovery continues into 1978, capacity utilization will improve. The Congress should monitor how business investment responds as capacity pressures build. This response will be an important clue to whether development of a strong investment boom in the late 1970s and early 1980s is an increasingly likely prospect or a fading hope.

STATE AND LOCAL GOVERNMENT PURCHASES

It should be a surprise to no one that state and local government purchases have shown slow growth in the past two years. Much publicized municipal financial problems and the effect of the recession on tax revenues have both had an influence. If 40 percent of grants-in-aid is deducted from state and local purchases and the remainder is adjusted for inflation, then these expenditures actually fell from 1975 to 1976. Obviously, this is below CBO's weak state and local spending assumption. On the other hand, this is only one year's performance, not a five-year average. It is also heavily influenced by the aftermath of New York's severe financial problems, and some recovery in state and local spending is likely.

CBO concludes that state and local demand has recently been weak and may well continue to be so for some time. The long-term strength of state and local spending, however, could still fall anywhere in the hypothetical range.

NET EXPORTS

As pointed out earlier, net exports are the source of especially large uncertainties. The importance of foreign trade for the U.S. economy has risen significantly in the past 10 years. Our increased dependence on foreign oil is only one example, albeit a very dramatic one, of this growing importance. A broader indication of the expanded role of foreign trade is implicit in the following table. In 1966 the sum of imports and exports amounted to 10.7 percent of GNP. In 1976 the corresponding figure was just over 18 percent.

RELATION OF EXPORTS AND IMPORTS TO GNP:
IN BILLIONS OF CURRENT DOLLARS PER YEAR

	1966	1976
Exports	42.8	162.9
Imports	37.7	155.1
GNP	753.0	1706.5
(I + E)/GNP (percent)	10.7	18.6

Exports and imports during the past ten quarters have been as follows:

(In Billions of Current Dollars Per Year)

	1975 Quarters				1976 Quarters				1977 Quarters	
	1	2	3	4	1	2	3	4	1	2
Exports	147.4	142.7	146.9	152.1	153.9	160.6	168.4	168.5	170.4	175.4
Imports	131.9	118.3	126.1	131.3	143.7	150.4	160.6	165.6	178.6	183.5
Net Exports	15.4	24.3	20.8	20.8	10.2	10.2	7.9	3.0	-8.2	-8.1

The very high net exports in 1975 were largely the result of depressed imports due to the recession and its aftermath. As we moved into 1976, exports continued to grow at a moderate rate, but imports grew much faster, causing a decline in net exports.

In the first half of 1977, the United States has experienced huge balance of trade deficits. This has been partly offset by a surplus in the services account. Nevertheless, net exports of goods and services have turned sharply negative, to a record deficit of over \$8 billion per year for two quarters.

This recent performance must be called extremely weak. While most forecasters expect some improvement in net exports, little real strength appears likely in the near future, since foreign economic recovery is generally lagging behind that in the United States.

APPENDIXES

APPENDIX A. MODEL EQUATIONS

In the following equations, a label ending in C generally indicates a current policy projection for a given series prepared by the CBO Budget Analysis Division or the CBO Tax Analysis Division. This may or may not differ from a final solution value for the same series. An asterisk (*) indicates a "baseline" value for a given series. "Baseline" refers to estimates for a current policy projection that include a full national income account (NIA) translation of federal expenditures. It is sometimes necessary to run the model for an alternate set of assumptions for GNP and current policy expenditures on a unified basis, without a corresponding NIA expenditures translation. The procedure in this case is to modify the baseline ratios of purchases, transfers, and grants to total expenditures based on the relationship between the alternate and baseline real GNP assumptions. (If, for example, alternate GNP is less than baseline GNP then the ratio of transfers to total expenditures is raised while the ratios for purchases and grants are correspondingly lowered.) The new ratios are then used to derive an estimated NIA translation of the alternate current policy expenditures.

- M = Solution type parameter.
- 0 = Assume current policy taxes and solve for expenditures.
- 1 = Assume current policy expenditures and solve for taxes.
- 2 = Set expenditures at a specified proportion of GNP and solve for taxes.
- 2.5 = Set expenditures at the maximum of current policy levels or a specified proportion of GNP and solve for taxes.
- 3 = Set expenditures at a specified amount above or below current policy levels and solve for taxes.

- YEAR = Fiscal Year (e.g., 1977)
- GNP72 = Real GNP (1972\$) (Ex)
- GNP72* = Baseline Real GNP (1972\$) (Ex)
- GNP = Nominal GNP (Current \$) (Ex)
- PGNP = GNP deflator = GNP/GNP72 (1972 = 1.0)
- W&S = Wages and Salaries (Ex)
- NWIC = Current Policy Nonwage Income (Ex)
- NWI(t) = $NWIC(t) + \sum_{i=0}^{t-1} a(i) * (TFCC(t-i) - TFC(t-i))$
- | | | | | | | |
|------|---|-----|-----|-----|-----|-----|
| i | = | 0 | 1 | 2 | 3 | 4 |
| a(i) | = | .06 | .11 | .16 | .11 | .06 |
- t = Solution period index which varies from 1 to 5 as succeeding years are solved.
- GFUC* = Baseline current policy federal expenditures (unified). (Ex)
- GFNC* = Baseline current policy federal expenditures (NIA). (Ex)
- GN-U = Adjustment to unified expenditures = GFNC* - GFUC*.
- GFUC = GNP based current policy federal expenditures (unified). (Ex)

GFU = Federal expenditures (unified).
 If M equals 0, then $GFU = GFN - GN-U$
 If M equals 1, then $GFU = GFUC$
 If M equals 2, then $GFU = (GFU/GNP) * GNP$
 If M equals 2.5, then $GFU = \max(GFUC, GFU/GNP * GNP)$
 If M equals 3, then $GFU = GFUC + GFU-UC$

GFU-UC = Difference between solution value and current policy value for federal expenditures (unified) = $GFU - GFUC$.
 (GFU-UC is exogenous if $M=3$.)

GFU/GNP = Ratio of federal expenditures (unified) to GNP = GFU / GNP .
 (GFU/GNP is exogenous if $M=2$.)

GFN = Federal expenditures (NIA).
 If M equals 0, then GFN = endogenous variable which reconciles final demand with GNP.
 If M is not equal to 0, then $GFN = GFU + GN-U$

GFTC* = Baseline current policy federal transfers to persons. (Ex)

GF(T/N)C* = Baseline current policy ratio of federal transfers to persons relative to federal expenditures (NIA) = $GFTC* / GFNC*$.

GF(T/N)C = Ratio of federal transfers to persons relative to federal expenditures (NIA) for the GNP path actually used = $GF(T/N)C* + ((GNP72* - GNP72)/GNP72*)/3.00$.

GFT = Federal transfers to persons (NIA) = $(GFUC + GN-U) * GF(T/N)C + (GFU-UC) * (GF(T/N)C / (GF(T/N)C + GF(P/N)C + GF(G/N)C))$.

- GF(T/N) = Solution value for the ratio of federal transfers to persons to federal expenditures (NIA) = GFT / GFN .
- GFPC* = Baseline current policy federal purchases (NIA). (Ex)
- GF(P/N)C* = Baseline current policy ratio of federal purchases to federal expenditures (NIA) = $GFPC* / GFNC*$.
- GF(P/N)C = Current policy ratio of federal purchases to federal expenditures (NIA) for the GNP path actually used
 $= GF(P/N)C* - ((GF(T/N)C - GF(T/N)C*) * (GF(P/N)C* / (1 - GF(T/N)C*)))$.
- GFP = Federal purchases (NIA) = $(GFUC + GN-U) * GF(P/N)C + (GFU-UC) * (GF(P/N)C / (GF(T/N)C + GF(P/N)C + GF(G/N)C))$.
- GF(P/N) = Solution value for the ratio of federal purchases to federal expenditures (NIA) = GFP / GFN .
- GFGC* = Baseline current policy federal grants-in-aid to state and local governments. (Ex)
- GF(G/N)C* = Baseline current policy ratio of federal grants-in-aid to federal expenditures (NIA) = $GFGC* / GFNC*$.
- GF(G/N)C = Current policy ratio of federal grants-in-aid to federal expenditures (NIA) for the GNP path actually used = $GF(G/N)C* - ((GF(T/N)C - GF(T/N)C*) * (GF(G/N)C* / (1 - GF(T/N)C*)))$.
- GFG = Federal grants-in-aids to state and local governments = $(GFUC + GN-U) * GF(G/N)C + GFU-UC * (GF(G/N)C / (GF(T/N)C + GF(P/N)C + GF(G/N)C))$.

GF(G/N)	=	Solution value for the ratio of federal grants-in-aid to federal expenditures (NIA) = GFG / GFN.
TFTUC	=	Current policy total federal tax receipts (unified). (Ex)
TFTU	=	Solution for total federal tax receipts (unified). If M equals 0, then TFTU = TFTUC If M does not equal 0, then TFTU = endogenous variable which reconciles final demand with GNP.
TFT(U-UC)	=	Difference between solution value for federal tax revenues and current policy tax revenues = TFTU - TFTUC.
SURFU	=	Federal surplus (+) or deficit (-) = TFTU - GFU.
SURFU/GNP	=	Ratio of federal surplus (+) or deficit (-) to nominal GNP = SURFU / GNP.
GST	=	State and local government transfers to persons. (Ex)
BT	=	Business transfers. (Ex)
OLI/(OLI+W&S)	=	Ratio of other labor income to the sum of other labor income plus wages and salaries. (Ex)
OLI	=	Other labor income = (W&S * OLI/(OLI+W&S)) / (1-OLI/OLI+W&S).
TFSUC	=	Current policy total contributions for social insurance (unified). (Ex)
TFS(P/U)	=	Ratio of personal contributions for social insurance (NIA) to total contributions for social insurance (unified). (Ex)

TFSPC = Current policy personal contributions for social insurance (NIA) = TFSUC * TFS(P/U).

TFPUC = Current policy personal tax receipts (unified). (Ex)

TFPU = Solution for personal tax receipts (unified).
 If M equals 0, then TFPU = TFPUC
 If M does not equal 0, then TFPU = TFPUC + (TFTU-TFTUC) * TFPUC/(TFPUC+TFCC)

TFEU = Federal estate and gift taxes (unified). (Ex)

TFPN = Federal personal tax receipts (NIA) = TFPU + TFEU.

TSP/GSPN+T = Ratio of state and local personal tax receipts to state and local non-grant induced purchases plus transfers to persons. (Ex)

TSP = State and local personal taxes = TSP/GSPN+T * (GSPN + GST) - .40 * GFG.

YDP = Personal disposable income = W&S + NWI + GFT + GST + BT + OLI - TFSPC - TFPN - TSP.

EA = Autonomous consumer expenditures = (1.04)**(YEAR-1973)* (PGNP/1.0592)*200.0.

CMPE = Consumers' marginal propensity to spend. (This changes for different nonfederal demand assumptions.) (Ex)

E = Consumer expenditures (including interest and transfers to foreigners) = EA + CMPE* YDP-.20*(NWI-NWIC).

SAVRATE = Saving rate (percent) = (1-E/YDP)*100.

C/E = Ratio of personal consumption to total personal expenditures. (Ex)

C = Personal consumption = E * C/E.

- $\%CH(I-GNP) =$ Annual growth rate of real investment in excess of the growth rate of real GNP (percent per year). (This changes for different nonfederal demand assumptions.) (Ex)
- TFCC = Current policy federal corporate profits taxes. (Ex)
- TFC = Solution for corporate profits taxes
- If M equals 0, then TFC = TFCC
 If M does not equal 0, then TFC = TFCC + (TFTU - TFTUC) * (TFCC/TFPUC + TFCC).
- IC = Current policy total nominal investment
 = $IC(-1) * (GNP72/GNP72(-1) + \%CH(I-GNP)/100) * (PGNP/PGNP(-1))$.
- (IC(0) is an exogenous value for total nominal investment in the year preceding the first period of the solution.)
- I = Total nominal investment
- $IC + \sum_{i=0}^{t-1} b(i) * (TFCC(t-i) - TFC(t-i))$
- | | | | | | | |
|------|---|-----|-----|-----|-----|-----|
| i | = | 0 | 1 | 2 | 3 | 4 |
| b(i) | = | .10 | .15 | .10 | .10 | .05 |
- $\%CHGSPN =$ Annual growth rate in real non-grant-induced state and local government purchases. (This changes for different nonfederal demand assumptions.) (Ex)
- GSPN = Non-grant-induced state and local government purchases = $GSPN(-1) * (1 + \%CHGSPN/100) * (1 + ((PGNP/PGNP(-1)) - 1) * 1.50)$. (GSPN(0) is an exogenous value for nominal state and local government purchases in the year prior to the first period of the solution minus .40 times grants-in-aid during the same period.)

GSP = State and local government purchases =
GSPN + .40*GFG.

NX9% = Nominal net exports at 4 percent real growth
and 5 percent inflation. (This changes for
different nonfederal demand assumptions.) (Ex)

GNP9% = GNP9% (-1)*(1.09) (GNP9% (0) = GNP(0) = nominal GNP
in the year prior to the first period of the
solution.)

NX = Nominal net exports = NX9% - ((GNP/GNP9%) - 1)*
.07*GNP9%.

Depending on the solution procedure chosen, either GFN, total expenditures NIA, or TFTU (total tax receipts, unified) is determined by the GNP identity, namely, that $GNP = C + I + GFP + GSP + NX$.

APPENDIX B
GLOSSARY

APPENDIX B. GLOSSARY

%CH(I-GNP)	=	Annual growth rate in investment minus annual growth rate in real GNP.
%CHGSPN	=	Annual growth rate in real non-grant-induced state and local government purchases.
BT	=	Business transfers.
C	=	Personal consumption expenditures.
C/E	=	Consumption / total personal expenditures.
CMPE	=	Consumer marginal propensity to spend.
E	=	Total personal expenditures.
EA	=	Autonomous personal expenditures.
I	=	Total investment (current \$).
IC	=	Current tax policy investment (current \$).
GF(G/N)	=	Federal grants-in-aid to state and local governments / federal expenditures (NIA).
GF(G/N)C	=	Current policy (federal grants-in-aid to state and local governments / federal expenditures (NIA)).
GF(G/N)C*	=	Baseline current policy (federal grants-in-aid to state and local governments / federal expenditures (NIA)).
GF(P/N)	=	Federal purchases / federal expenditures (NIA).

GF(P/N)C = Current policy (federal purchases / federal expenditures (NIA)).

GF(P/N)C* = Baseline current policy (federal purchases / federal expenditures (NIA)).

GF(T/N) = Federal transfers to persons / federal expenditures (NIA).

GF(T/N)C = Current policy (federal transfers to persons / federal expenditures (NIA)).

GF(T/N)C* = Baseline current policy (federal transfers to persons / federal expenditures (NIA)).

GFG = Federal grants-in-aid to state and local governments.

GFGC* = Baseline current policy federal grants-in-aid to state and local governments.

GFNC* = Baseline current policy federal expenditures (NIA).

GFP = Federal purchases (NIA).

GFPC* = Baseline current policy federal purchases (NIA).

GFT = Federal transfers to persons.

GFTC* = Baseline current policy federal transfers to persons.

GFU = Federal expenditures (unified).

GFU-UC = Federal expenditures (unified) minus current policy federal expenditures (unified).

GFU/GNP = Federal expenditures (unified) / current dollar GNP.

GFUC = Current policy federal expenditures (unified).

GFUC* = Baseline current policy federal expenditures (unified).

GN-U = Federal expenditures (NIA) minus federal expenditures (unified).

GNP = Gross national product (current \$).

GNP72 = Gross national product (1972 dollars).

GNP72* = Baseline gross national product (1972 dollars).

GNP9% = Current dollar GNP assuming a 9 percent annual growth rate from an initial level.

GSP = State and local government purchases (current \$).

GSPN = Non-grant-induced state and local government purchases (current \$).

GST = State and local government purchases (current \$).

NWI = Nonwage income.

NWIC = Current policy nonwage income.

NX = Net exports (current \$).

NX9% = Net exports assuming 4% growth and 5% inflation (current \$).

OLI = Other labor income.

PGNP = Gross National Product price deflator (1972=1.0).

OLI/(OLI+W&S) = Other labor income / (other labor income
 + wages & salaries).

PGNP = GNP price deflator.

SAVRATE = Personal savings rate.

SURFU = Federal surplus(+) or deficit(-) (unified)

SURFU/GNP = Federal surplus(+) or deficit(-) (unified)
 / current dollar GNP.

TFC = Federal corporate income tax receipts.

TFCC = Current policy federal corporate income
 tax receipts.

TFEU = Federal estate and gift tax receipts
 (unified).

TFPN = Federal personal tax and nontax receipts
 (NIA).

TFPU = Federal individual income tax receipts
 (unified)

TFPUC = Current policy federal individual income
 tax receipts (unified).

TFS(P/U) = Personal social insurance contributions
 (NIA) / total social insurance contribu-
 tions (unified).

TFSPC = Personal contributions for social insurance
 (NIA).

TFSUC = Total contributions for social insurance
 (unified).

TFT(U-UC) = Total federal revenues (unified) minus current policy total federal revenues (unified).

TFTU = Total federal revenues (unified).

TFTUC = Current policy total federal revenues (unified).

TSP = State and local personal tax receipts.

TSP/GSPN+T = State and local personal tax receipts / (non-grant-induced state and local purchases) + state and local transfer payments.

W&S = Wages and salaries.

YDP = Disposable personal income.

YEAR = Fiscal year currently being solved.

APPENDIX C
DETAILED SOLUTION RESULTS

NOTES: This appendix contains facsimilies of 24 computer print-outs giving the details of the equation solutions for the 24 scenarios discussed generally in Chapter IV.

All years in the tables are fiscal years.

TABLE C-1
BASELINE GNP PATH
&
STRONG NON-FEDERAL DEMAND
EXPENDITURES AT CURRENT POLICY LEVELS

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.4						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	377.7						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	417.0						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	461.2						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	511.0						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFU				
1978	0.2217	451.0	6.7	457.7	0.3840	0.3840	175.8	0.3840	175.8				
1979	0.2135	480.0	8.4	488.4	0.3894	0.3894	190.2	0.3894	190.2				
1980	0.2068	514.0	8.6	522.6	0.3941	0.3941	206.0	0.3941	206.0				
1981	0.1999	548.0	12.3	560.3	0.3999	0.3999	224.1	0.3999	224.1				
1982	0.1936	586.0	16.2	602.2	0.4066	0.4066	244.9	0.4066	244.9				

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSJC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	209.5	6.0	215.5	0.2990	56.9
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	221.0	6.0	227.0	0.3030	66.7
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	229.9	7.0	236.9	0.3070	77.6
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	250.4	7.0	257.4	0.3110	89.6
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	277.2	8.0	285.2	0.3150	103.7

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(1-GNP)	TFCC	TFC	IC	I
1978	1373.7	335.6	0.7040	5.1596	1302.8	0.9740	1268.9	2.0000	58.0	64.6	304.8	304.2
1979	1530.3	365.5	0.7040	5.7045	1443.0	0.9740	1405.5	2.0000	67.0	67.6	343.1	342.1
1980	1699.5	398.7	0.7040	6.1270	1595.4	0.9740	1553.9	2.0000	77.0	69.4	386.6	386.6
1981	1873.0	436.3	0.7040	6.3107	1754.8	0.9740	1709.2	2.0000	85.0	72.1	434.6	436.2
1982	2062.2	479.3	0.7040	6.3865	1930.5	0.9740	1880.3	2.0000	92.0	74.7	489.0	493.0

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	457.7	73.7	0.1610	0.1610	0.1610	73.7	3.7500	258.5	288.0	13.0	10.6	0.0052
1979	488.4	75.4	0.1543	0.1543	0.1543	75.4	3.7500	287.1	317.3	15.0	10.9	0.0046
1980	522.6	78.4	0.1500	0.1500	0.1500	78.4	3.7500	319.8	351.2	17.0	9.4	0.0038
1981	560.3	83.3	0.1486	0.1486	0.1486	83.3	3.7500	357.8	391.1	19.0	8.5	0.0031
1982	602.2	89.2	0.1481	0.1481	0.1481	89.2	3.7500	402.5	438.2	21.0	6.8	0.0022

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	162.3	0.3545	0.3545	0.3545	457.7	457.7	6.7	451.0	451.0	451.0	0.0
1979	171.8	171.8	0.3517	0.3517	0.3517	488.4	488.4	8.4	480.0	480.0	480.0	0.0
1980	183.5	183.5	0.3511	0.3511	0.3511	522.6	522.6	8.6	514.0	514.0	514.0	0.0
1981	195.3	195.3	0.3485	0.3485	0.3485	560.3	560.3	12.3	548.0	548.0	548.0	0.0
1982	207.4	207.4	0.3444	0.3444	0.3444	602.2	602.2	16.2	586.0	586.0	586.0	0.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	435.1	28.1	-15.8	-0.0077
1979	464.0	466.7	2.7	-13.2	-0.0059
1980	526.0	493.3	-32.6	-20.6	-0.0083
1981	594.0	536.6	-57.3	-11.3	-0.0041
1982	668.0	587.0	-80.9	1.0	0.0003

TABLE C-2
BASELINE GNP PATH
&
MODERATE NON-FEDERAL DEMAND
EXPENDITURES AT CURRENT POLICY LEVELS

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.8
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	379.2
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	420.2
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	466.2
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	517.6

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT
1978	0.2217	451.0	6.7	457.7	0.3840	0.3840	175.8	0.3840	175.8
1979	0.2135	480.0	8.4	488.4	0.3894	0.3894	190.2	0.3894	190.2
1980	0.2068	514.0	8.6	522.6	0.3941	0.3941	206.0	0.3941	206.0
1981	0.1999	548.0	12.3	560.3	0.3999	0.3999	224.1	0.3999	224.1
1982	0.1936	586.0	16.2	602.2	0.4066	0.4066	244.9	0.4066	244.9

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	183.5	6.0	189.5	0.2990	56.3
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	187.0	6.0	193.0	0.3030	65.5
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	186.4	7.0	193.4	0.3070	75.5
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	195.9	7.0	202.9	0.3110	86.4
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	208.5	8.0	216.5	0.3150	99.2

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YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(1-GNP)	TFCC	TFC	IC	I
1978	1400.7	335.6	0.6970	6.3383	1312.0	0.9740	1277.8	1.0000	58.0	56.6	302.0	302.1
1979	1567.1	365.5	0.6970	6.9846	1457.7	0.9740	1419.8	1.0000	67.0	57.2	336.8	338.0
1980	1748.3	398.7	0.6970	7.5187	1616.8	0.9740	1574.8	1.0000	77.0	56.3	375.9	379.6
1981	1935.7	436.3	0.6970	7.8158	1784.4	0.9740	1738.0	1.0000	85.0	56.4	418.6	425.7
1982	2141.9	479.3	0.6970	8.0116	1970.3	0.9740	1919.1	1.0000	92.0	56.2	466.6	477.6

YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	CFG	XCHGSPN	GSPN	GSP	NX9X	NX	NX/GNP
1978	457.7	73.7	0.1610	0.1610	0.1610	73.7	3.0000	256.6	286.1	8.0	5.6	0.0027
1979	488.4	75.4	0.1543	0.1543	0.1543	75.4	3.0000	283.0	313.2	9.0	4.3	0.0019
1980	522.6	78.4	0.1500	0.1500	0.1500	78.4	3.0000	312.9	344.3	10.0	2.4	0.0009
1981	560.3	83.3	0.1486	0.1486	0.1486	83.3	3.0000	347.5	380.9	11.0	0.5	0.0001
1982	602.2	89.2	0.1481	0.1481	0.1481	89.2	3.0000	388.2	423.9	12.0	-2.1	-0.0007

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	162.3	0.3545	0.3545	0.3545	457.7	457.7	6.7	451.0	451.0	451.0	0.0
1979	171.8	171.8	0.3517	0.3517	0.3517	488.4	488.4	8.4	480.0	480.0	480.0	0.0
1980	183.5	183.5	0.3511	0.3511	0.3511	522.6	522.6	8.6	514.0	514.0	514.0	0.0
1981	195.3	195.3	0.3485	0.3485	0.3485	560.3	560.3	12.3	548.0	548.0	548.0	0.0
1982	207.4	207.4	0.3444	0.3444	0.3444	602.2	602.2	16.2	586.0	586.0	586.0	0.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	401.1	-5.8	-49.8	-0.0245
1979	464.0	422.3	-41.6	-57.6	-0.0256
1980	526.0	436.7	-89.2	-77.2	-0.0310
1981	594.0	466.3	-127.6	-81.6	-0.0297
1982	668.0	499.8	-168.1	-86.1	-0.0284

TABLE C-3
BASELINE GNP PATH
&
WEAK NON-FEDERAL DEMAND
EXPENDITURES AT CURRENT POLICY LEVELS

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	333.3						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	380.7						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	423.5						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	471.2						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	524.2						
YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2217	451.0	6.7	457.7	0.3840	0.3840	175.8	0.3840	175.8				
1979	0.2135	480.0	8.4	488.4	0.3894	0.3894	190.2	0.3894	190.2				
1980	0.2068	514.0	8.6	522.6	0.3941	0.3941	206.0	0.3941	206.0				
1981	0.1999	548.0	12.3	560.3	0.3999	0.3999	224.1	0.3999	224.1				
1982	0.1936	586.0	16.2	602.2	0.4066	0.4066	244.9	0.4066	244.9				
YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	156.9	6.0	162.9	0.2990	55.7
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	152.5	6.0	158.5	0.3030	64.3
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	142.5	7.0	149.5	0.3070	73.4
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	141.1	7.0	148.1	0.3110	83.3
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	140.1	8.0	148.1	0.3150	94.8
YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I	
1978	1428.3	335.6	0.6900	7.5077	1321.1	0.9740	1286.7	0.0000	58.0	48.4	299.2	300.1	
1979	1604.5	365.5	0.6900	8.2464	1472.1	0.9740	1433.9	0.0000	67.0	46.6	330.5	334.0	
1980	1797.5	398.7	0.6900	8.8794	1637.9	0.9740	1595.3	0.0000	77.0	43.0	365.4	372.8	
1981	1998.6	436.3	0.6900	9.2734	1813.2	0.9740	1766.1	0.0000	85.0	40.6	403.1	415.6	
1982	2221.4	479.3	0.6900	9.5682	2008.8	0.9740	1956.6	0.0000	92.0	37.8	445.0	463.0	
YEAR	GFN	GFNC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC*	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP	
1978	457.7	73.7	0.1610	0.1610	0.1610	73.7	2.2500	254.8	284.2	3.0	0.6	0.0003	
1979	488.4	75.4	0.1543	0.1543	0.1543	75.4	2.2500	278.9	309.1	3.0	-1.6	-0.0007	
1980	522.6	78.4	0.1500	0.1500	0.1500	78.4	2.2500	306.2	337.5	3.0	-4.5	-0.0018	
1981	560.3	83.3	0.1486	0.1486	0.1486	83.3	2.2500	337.5	370.9	3.0	-7.4	-0.0027	
1982	602.2	89.2	0.1481	0.1481	0.1481	89.2	2.2500	374.3	409.9	3.0	-11.1	-0.0036	
YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC	
1978	162.3	162.3	0.3545	0.3545	0.3545	457.7	457.7	6.7	451.0	451.0	451.0	0.0	
1979	171.8	171.8	0.3517	0.3517	0.3517	488.4	488.4	8.4	480.0	480.0	480.0	0.0	
1980	183.5	183.5	0.3511	0.3511	0.3511	522.6	522.6	8.6	514.0	514.0	514.0	0.0	
1981	195.3	195.3	0.3485	0.3485	0.3485	560.3	560.3	12.3	548.0	548.0	548.0	0.0	
1982	207.4	207.4	0.3444	0.3444	0.3444	602.2	602.2	16.2	586.0	586.0	586.0	0.0	
YEAR	TFTLC	TFTU	TFT(U-LC)	SURFU	SURFU/GNP								
1978	407.0	366.4	-40.5	-84.5	-0.0415								
1979	464.0	377.1	-86.8	-102.8	-0.0457								
1980	526.0	379.6	-146.3	-134.3	-0.0540								
1981	594.0	395.8	-198.1	-152.1	-0.0555								
1982	668.0	412.9	-255.0	-173.0	-0.0571								

TABLE C-4
LESS VIGOROUS GNP PATH
 &
STRONG NON-FEDERAL DEMAND
EXPENDITURES AT CURRENT POLICY LEVELS

YEAR	GNP72	GNP72*	PCNP	GNP	W&S	NWIC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	331.8						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	373.3						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	405.1						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	439.1						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	477.0						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2222	451.0	6.7	457.7	0.3840	0.3849	175.8	0.3849	176.1				
1979	0.2183	483.0	8.4	491.4	0.3894	0.3944	190.2	0.3944	193.8				
1980	0.2157	519.0	8.6	527.6	0.3941	0.4035	206.0	0.4035	212.9				
1981	0.2109	552.0	12.3	564.3	0.3999	0.4119	224.1	0.4119	232.4				
1982	0.2061	587.0	16.2	603.2	0.4066	0.4202	244.9	0.4202	253.5				

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFFUC	TFFU	TFEU	TFFN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	213.1	6.0	219.1	0.2990	56.9
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	248.2	6.0	254.2	0.3030	66.7
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	279.2	7.0	286.2	0.3070	77.3
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	311.9	7.0	318.9	0.3110	88.5
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	349.0	8.0	357.0	0.3150	101.0

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(1-GNP)	TFCC	TFC	IC	I
1978	1367.5	335.6	0.7040	5.0486	1298.5	0.9740	1264.7	2.0000	57.3	65.3	304.1	303.3
1979	1485.5	365.2	0.7040	4.9920	1411.3	0.9740	1374.6	2.0000	63.2	73.1	337.8	335.6
1980	1604.7	397.3	0.7040	4.8003	1527.6	0.9740	1487.9	2.0000	70.9	80.8	374.6	371.3
1981	1733.2	432.2	0.7040	4.6135	1653.2	0.9740	1610.3	2.0000	77.5	87.1	415.3	411.0
1982	1872.8	470.3	0.7040	4.4328	1789.8	0.9740	1743.2	2.0000	82.6	91.6	460.6	455.9

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	457.7	73.7	0.1610	0.1608	0.1608	73.6	3.7500	258.5	287.9	13.0	11.0	0.0054
1979	491.4	75.4	0.1543	0.1531	0.1531	75.2	3.7500	286.8	316.9	15.0	12.8	0.0058
1980	527.6	78.4	0.1500	0.1476	0.1476	77.9	3.7500	318.1	349.3	17.0	14.9	0.0062
1981	564.3	83.3	0.1486	0.1457	0.1457	82.2	3.7500	352.8	385.7	19.0	17.1	0.0065
1982	603.2	89.2	0.1481	0.1447	0.1447	87.2	3.7500	391.5	426.5	21.0	19.3	0.0067

YEAR	GFPC*	GFU	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	162.0	0.3545	0.3541	0.3541	457.7	457.7	6.7	451.0	451.0	451.0	0.0
1979	171.8	171.4	0.3517	0.3488	0.3488	488.4	491.4	8.4	480.0	483.0	483.0	0.0
1980	183.5	182.3	0.3511	0.3456	0.3456	522.6	527.6	8.6	514.0	519.0	519.0	0.0
1981	195.3	192.7	0.3485	0.3416	0.3416	560.3	564.3	12.3	548.0	552.0	552.0	0.0
1982	207.4	202.9	0.3444	0.3365	0.3365	602.2	603.2	16.2	586.0	587.0	587.0	0.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	439.5	34.4	-11.4	-0.0056
1979	453.9	497.4	43.5	14.4	0.0065
1980	505.1	549.3	44.2	30.3	0.0126
1981	561.7	605.7	44.0	53.7	0.0205
1982	620.6	664.0	43.4	77.0	0.0270

TABLE C-5
LESS VIGOROUS GNP PATH
&
MODERATE NON-FEDERAL DEMAND
EXPENDITURES AT CURRENT POLICY LEVELS

YEAR	GNP72	GNP72*	PCNP	GNP	W&S	NWTC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.2						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	374.7						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	408.2						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	443.8						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	483.2						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFU				
1978	0.2222	451.0	6.7	457.7	0.3840	0.3849	175.8	0.3849	176.1				
1979	0.2183	483.0	8.4	491.4	0.3894	0.3944	190.2	0.3944	193.8				
1980	0.2157	519.0	8.6	527.6	0.3941	0.4035	206.0	0.4035	212.9				
1981	0.2109	552.0	12.3	564.3	0.3999	0.4119	224.1	0.4119	232.4				
1982	0.2061	587.0	16.2	603.2	0.4066	0.4202	244.9	0.4202	253.5				

YEAR	GST	BT	DLI/ (DLI+W&S)	DLI	TFSJC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	187.2	6.0	193.2	0.2990	56.3
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	214.6	6.0	220.6	0.3030	65.5
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	236.7	7.0	243.7	0.3070	75.2
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	259.2	7.0	266.2	0.3110	85.4
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	283.5	8.0	291.5	0.3150	96.6

YEAR	YDP	EA	CMPE	SAURATE	E	C/E	C	ZCH(I-GNP)	TFCC	TFC	IC	I
1978	1394.5	335.6	0.6970	6.2307	1307.6	0.9740	1273.6	1.0000	57.3	57.4	301.3	301.2
1979	1521.8	365.2	0.6970	6.2988	1426.0	0.9740	1388.9	1.0000	63.2	63.2	331.5	331.5
1980	1652.3	397.3	0.6970	6.2528	1549.0	0.9740	1508.7	1.0000	70.9	68.5	364.1	364.3
1981	1793.8	432.2	0.6970	6.2096	1682.4	0.9740	1638.7	1.0000	77.5	72.3	399.9	400.7
1982	1948.8	470.3	0.6970	6.1786	1828.4	0.9740	1780.9	1.0000	82.6	74.4	439.3	441.1

YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC	ZCHGSPN	GSPN	GSP	NX9Z	NX	NX/GNP
1978	457.7	73.7	0.1610	0.1608	0.1608	73.6	3.0000	256.6	286.1	8.0	6.0	0.0029
1979	491.4	75.4	0.1543	0.1531	0.1531	75.2	3.0000	282.7	312.8	9.0	6.8	0.0030
1980	527.6	78.4	0.1500	0.1476	0.1476	77.9	3.0000	311.3	342.5	10.0	7.9	0.0033
1981	564.3	83.3	0.1486	0.1457	0.1457	82.2	3.0000	342.7	375.6	11.0	9.1	0.0035
1982	603.2	89.2	0.1481	0.1447	0.1447	87.2	3.0000	377.6	412.5	12.0	10.3	0.0036

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	162.0	0.3545	0.3541	0.3541	457.7	457.7	6.7	451.0	451.0	451.0	0.0
1979	171.8	171.4	0.3517	0.3488	0.3488	488.4	491.4	8.4	480.0	483.0	483.0	0.0
1980	183.5	182.3	0.3511	0.3456	0.3456	522.6	527.6	8.6	514.0	519.0	519.0	0.0
1981	195.3	192.7	0.3485	0.3416	0.3416	560.3	564.3	12.3	548.0	552.0	552.0	0.0
1982	207.4	202.9	0.3444	0.3365	0.3365	602.2	603.2	16.2	586.0	587.0	587.0	0.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	405.6	0.5	-45.3	-0.0223
1979	453.9	453.9	0.0	-29.0	-0.0131
1980	505.1	494.6	-10.4	-24.3	-0.0101
1981	561.7	538.3	-23.3	-13.6	-0.0052
1982	620.6	581.3	-39.2	-5.6	-0.0019

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TABLE C-6
LESS VIGOROUS GNP PATH
&
WEAK NON-FEDERAL DEMAND
EXPENDITURES AT CURRENT POLICY LEVELS

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.7						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	376.2						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	411.3						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	448.6						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	489.4						
YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2222	451.0	6.7	457.7	0.3840	0.3849	175.8	0.3849	176.1				
1979	0.2183	483.0	8.4	491.4	0.3894	0.3944	190.2	0.3944	193.8				
1980	0.2157	519.0	8.6	527.6	0.3941	0.4035	206.0	0.4035	212.9				
1981	0.2109	552.0	12.3	564.3	0.3999	0.4119	224.1	0.4119	232.4				
1982	0.2061	587.0	16.2	603.2	0.4066	0.4202	244.9	0.4202	253.5				
YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	160.7	6.0	166.7	0.2990	55.8
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	180.5	6.0	186.5	0.3030	64.2
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	193.8	7.0	200.8	0.3070	73.1
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	206.2	7.0	213.2	0.3110	82.3
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	218.2	8.0	226.2	0.3150	92.3
YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I	
1978	1422.0	335.6	0.6900	7.4033	1316.8	0.9740	1282.5	0.0000	57.3	49.3	298.4	299.2	
1979	1558.7	365.2	0.6900	7.5859	1440.5	0.9740	1403.0	0.0000	63.2	53.1	325.3	327.5	
1980	1700.4	397.3	0.6900	7.6701	1570.0	0.9740	1529.1	0.0000	70.9	56.1	353.9	357.6	
1981	1854.6	432.2	0.6900	7.7502	1710.8	0.9740	1666.3	0.0000	77.5	57.6	384.9	390.9	
1982	2024.6	470.3	0.6900	7.8432	1865.8	0.9740	1817.3	0.0000	82.6	57.2	418.9	427.3	
YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP	
1978	457.7	73.7	0.1610	0.1608	0.1608	73.6	2.2500	254.8	284.2	3.0	1.0	0.0004	
1979	491.4	75.4	0.1543	0.1531	0.1531	75.2	2.2500	278.6	308.7	3.0	0.8	0.0003	
1980	527.6	78.4	0.1500	0.1476	0.1476	77.9	2.2500	304.5	335.7	3.0	0.9	0.0004	
1981	564.3	83.3	0.1486	0.1457	0.1457	82.2	2.2500	332.9	365.8	3.0	1.1	0.0004	
1982	603.2	89.2	0.1481	0.1447	0.1447	87.2	2.2500	364.0	399.0	3.0	1.3	0.0004	
YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC	
1978	162.3	162.0	0.3545	0.3541	0.3541	457.7	457.7	6.7	451.0	451.0	451.0	0.0	
1979	171.8	171.4	0.3517	0.3488	0.3488	488.4	488.4	8.4	480.0	483.0	483.0	0.0	
1980	183.5	182.3	0.3511	0.3456	0.3456	522.6	522.6	8.6	514.0	519.0	519.0	0.0	
1981	195.3	192.7	0.3485	0.3416	0.3416	560.3	564.3	12.3	548.0	552.0	552.0	0.0	
1982	207.4	202.9	0.3444	0.3365	0.3365	602.2	603.2	16.2	586.0	587.0	587.0	0.0	
YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP								
1978	405.1	371.0	-34.0	-79.9	-0.0393								
1979	453.9	409.7	-44.1	-73.2	-0.0331								
1980	505.1	439.3	-65.7	-79.6	-0.0331								
1981	561.7	470.5	-91.1	-81.4	-0.0311								
1982	620.6	498.9	-121.6	-88.0	-0.0309								

TABLE C-7
BASELINE GNP PATH

&
STRONG NON-FEDERAL DEMAND

\$50 BILLION LOWER FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.6						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	378.4						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	418.8						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	464.3						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	515.5						

YEAR	GFLU/GNP	GFLU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2167	441.0	6.7	447.7	0.3840	0.3840	175.8	0.3831	171.5				
1979	0.2046	460.0	8.4	468.4	0.3894	0.3894	190.2	0.3874	181.5				
1980	0.1947	484.0	8.6	492.6	0.3941	0.3941	206.0	0.3913	192.7				
1981	0.1853	508.0	12.3	520.3	0.3999	0.3999	224.1	0.3964	206.2				
1982	0.1771	536.0	16.2	552.2	0.4066	0.4066	244.9	0.4025	222.2				

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPLC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	198.3	6.0	204.3	0.2990	57.6
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	199.8	6.0	205.8	0.3030	68.1
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	199.1	7.0	206.1	0.3070	79.6
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	210.8	7.0	217.8	0.3110	92.3
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	228.7	8.0	236.7	0.3150	107.0

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1380.0	335.6	0.7040	5.2750	1307.2	0.9740	1273.3	2.0000	58.0	61.2	304.8	304.5
1979	1542.3	365.5	0.7040	5.9001	1451.3	0.9740	1413.6	2.0000	67.0	61.1	343.1	343.2
1980	1716.8	398.7	0.7040	6.3852	1607.2	0.9740	1565.4	2.0000	77.0	60.1	386.6	388.9
1981	1895.3	436.3	0.7040	6.6173	1769.8	0.9740	1723.8	2.0000	85.0	60.7	434.6	439.8
1982	2089.3	479.3	0.7040	6.7295	1948.7	0.9740	1898.0	2.0000	92.0	61.7	489.0	497.8

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFC	XCHGSPN	GSPN	GSP	NX%	NX	NX/GNP
1978	447.7	73.7	0.1610	0.1610	0.1606	71.9	3.7500	258.5	287.3	13.0	10.6	0.0052
1979	468.4	75.4	0.1543	0.1543	0.1536	71.9	3.7500	287.1	315.9	15.0	10.3	0.0046
1980	492.6	78.4	0.1500	0.1500	0.1489	73.3	3.7500	319.8	349.2	17.0	9.4	0.0038
1981	520.3	83.3	0.1486	0.1486	0.1473	76.6	3.7500	357.8	388.5	19.0	8.5	0.0031
1982	552.2	89.2	0.1481	0.1481	0.1466	80.9	3.7500	402.5	434.9	21.0	6.8	0.0022

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFLU	GFUC	GFLU-UC
1978	162.3	158.3	0.3545	0.3545	0.3537	457.7	447.7	6.7	451.0	441.0	451.0	-10.0
1979	171.8	163.9	0.3517	0.3517	0.3500	488.4	468.4	8.4	480.0	460.0	480.0	-20.0
1980	183.5	171.7	0.3511	0.3511	0.3486	522.6	492.6	8.6	514.0	484.0	514.0	-30.0
1981	195.3	179.7	0.3485	0.3485	0.3454	560.3	520.3	12.3	548.0	508.0	548.0	-40.0
1982	207.4	188.2	0.3444	0.3444	0.3409	602.2	552.2	16.2	586.0	536.0	586.0	-50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	420.5	13.5	-20.4	-0.0100
1979	464.0	438.9	-25.0	-21.0	-0.0093
1980	526.0	453.3	-72.6	-30.6	-0.0123
1981	594.0	485.6	-108.3	-22.3	-0.0081
1982	668.0	525.4	-142.5	-10.5	-0.0034

TABLE C-8
BASELINE GNP PATH
&
MODERATE NON-FEDERAL DEMAND
EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP73	GNP74	GNP75	GNP76	GNP77	GNP78	GNP79	GNP80	GNP81	GNP82	GNP	WBS	NMTC	NMI	GFT	TFPU	TFEU	TFPN	TSP
1978	1392.2	1468.8	1548.2	1622.9	1696.5	1771.0	1847.0	1924.0	2003.0	2084.0	2167.0	2252.0	2339.0	2428.0	2519.0	171.5	6.0	178.3	0.2990	57.0
1979	1468.8	1548.2	1622.9	1696.5	1771.0	1847.0	1924.0	2003.0	2084.0	2167.0	2252.0	2339.0	2428.0	2519.0	181.5	6.0	171.6	0.3030	66.9	
1980	1548.2	1622.9	1696.5	1771.0	1847.0	1924.0	2003.0	2084.0	2167.0	2252.0	2339.0	2428.0	2519.0	2610.0	192.7	7.0	162.5	0.3070	77.5	
1981	1622.9	1696.5	1771.0	1847.0	1924.0	2003.0	2084.0	2167.0	2252.0	2339.0	2428.0	2519.0	2610.0	2701.0	206.2	8.0	153.1	0.3110	89.1	
1982	1696.5	1771.0	1847.0	1924.0	2003.0	2084.0	2167.0	2252.0	2339.0	2428.0	2519.0	2610.0	2701.0	2792.0	222.2	8.0	167.8	0.3150	102.5	

YEAR	GFU/GNP	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GF(T/N)C	GF(T/N)	GF(T/N)	TFPC	TFUC	TFPU	TFEU	TFPN	TSP
1978	0.2167	6.7	447.7	0.3840	0.3840	0.3840	0.3831	0.3831	175.8	175.8	172.3	6.0	178.3	0.2990
1979	0.2046	8.4	468.4	0.3894	0.3894	0.3894	0.3874	0.3874	190.2	190.2	165.6	6.0	171.6	0.3030
1980	0.1947	8.6	492.6	0.3941	0.3941	0.3941	0.3913	0.3913	206.0	206.0	155.5	7.0	162.5	0.3070
1981	0.1853	12.3	520.3	0.3999	0.3999	0.3999	0.3964	0.3964	224.1	224.1	156.1	7.0	163.1	0.3110
1982	0.1771	16.2	552.2	0.4056	0.4056	0.4056	0.4025	0.4025	244.9	244.9	159.8	8.0	167.8	0.3150

YEAR	YDP	EA	CMPE	OL/OL+MBS	OL/OL+MBS	SAVRATE	E	C/E	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1407.1	335.6	0.6970	0.6688	78.1	5.4504	1315.4	0.9740	1.0000	58.0	53.1	302.0	302.5
1979	1579.2	365.5	0.6970	0.6683	88.3	7.1730	1465.9	0.9740	1.0000	67.0	50.6	336.8	339.1
1980	1765.8	398.7	0.6970	0.6698	100.0	7.7651	1628.6	0.9740	1.0000	77.0	46.9	375.9	381.9
1981	1958.2	436.3	0.6970	0.6713	112.9	8.1060	1799.4	0.9740	1.0000	85.0	44.9	418.6	429.2
1982	2169.2	479.3	0.6970	0.6728	127.5	8.3331	1988.5	0.9740	1.0000	92.0	43.1	466.6	482.4

YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GF(G/N)	XCHCSPN	GSB	NX	NX/GNP
1978	447.7	73.7	0.1610	0.1610	0.1606	0.1606	256.6	8.0	5.6	0.0027
1979	468.4	75.4	0.1543	0.1543	0.1536	0.1536	311.8	9.0	4.3	0.0019
1980	492.6	78.4	0.1500	0.1500	0.1489	0.1489	342.3	10.0	2.4	0.0009
1981	520.3	83.3	0.1486	0.1486	0.1473	0.1473	378.2	11.0	0.5	0.0001
1982	552.2	89.2	0.1481	0.1481	0.1466	0.1466	420.6	12.0	-2.1	-0.0007

YEAR	GFPC*	GF(P/N)C*	GF(P/N)C	GF(P/N)	GF(P/N)	GFUC*	GFUC	GFU-UC
1978	162.3	0.3545	0.3545	0.3537	0.3537	451.0	451.0	-10.0
1979	171.8	0.3517	0.3517	0.3500	0.3500	480.0	480.0	-20.0
1980	183.5	0.3511	0.3511	0.3486	0.3486	514.0	514.0	-30.0
1981	195.3	0.3485	0.3485	0.3454	0.3454	548.0	548.0	-40.0
1982	207.4	0.3444	0.3444	0.3409	0.3409	586.0	586.0	-50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	386.4	-20.5	-54.5	-0.0267
1979	464.0	394.3	-69.6	-65.6	-0.0292
1980	526.0	396.5	-129.4	-87.4	-0.0351
1981	594.0	415.0	-178.9	-92.9	-0.0338
1982	668.0	438.0	-229.9	-97.9	-0.0323

TABLE C-3
BASELINE GNP PATH

&
WEAK NON-FEDERAL DEMAND

\$50 BILLION LOWER FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NMI
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	333.5
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	381.5
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	425.3
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	474.3
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	528.7

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)*	GF(T/N)C	GFTC*	GF(T/N)	GFT
1978	0.2167	441.0	6.7	447.7	0.3840	0.3840	175.8	0.3831	171.5
1979	0.2046	460.0	8.4	468.4	0.3894	0.3894	190.2	0.3874	181.5
1980	0.1947	484.0	8.6	492.6	0.3941	0.3941	206.0	0.3913	192.7
1981	0.1853	508.0	12.3	520.3	0.3999	0.3999	224.1	0.3964	206.2
1982	0.1771	536.0	16.2	552.2	0.4066	0.4066	244.9	0.4025	222.2

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	145.7	6.0	151.7	0.2990	56.5
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	130.9	6.0	136.9	0.3030	65.6
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	111.5	7.0	118.5	0.3070	75.4
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	101.1	7.0	108.1	0.3110	86.0
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	91.2	8.0	99.2	0.3150	98.1

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YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1434.8	335.6	0.6900	7.6166	1325.5	0.9740	1291.0	0.0000	58.0	44.9	299.2	300.5
1979	1616.7	365.5	0.6900	8.4279	1480.4	0.9740	1441.9	0.0000	67.0	40.0	330.5	335.1
1980	1815.2	398.7	0.6900	9.1148	1649.7	0.9740	1606.8	0.0000	77.0	33.6	365.4	375.1
1981	2021.3	436.3	0.6900	9.5484	1828.2	0.9740	1780.7	0.0000	85.0	29.1	403.1	419.1
1982	2248.9	479.3	0.6900	9.8705	2026.9	0.9740	1974.2	0.0000	92.0	24.6	445.0	467.8

YEAR	GFN	GFCC*	GF(G/N)*	GF(G/N)C	GF(G/N)	GFCC	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	447.7	73.7	0.1610	0.1610	0.1606	71.9	2.2500	254.8	283.5	3.0	0.6	0.0003
1979	468.4	75.4	0.1543	0.1543	0.1536	71.9	2.2500	278.9	307.7	3.0	-1.6	-0.0007
1980	492.6	78.4	0.1500	0.1500	0.1489	73.3	2.2500	306.2	335.5	3.0	-4.5	-0.0018
1981	520.3	83.3	0.1486	0.1486	0.1473	76.6	2.2500	337.5	368.2	3.0	-7.4	-0.0027
1982	552.2	89.2	0.1481	0.1481	0.1466	80.9	2.2500	374.3	406.7	3.0	-11.1	-0.0036

YEAR	GFPC*	GFP	GF(P/N)*	GF(P/N)C	GF(P/N)	GFPC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-LC
1978	162.3	158.3	0.3545	0.3545	0.3537	457.7	447.7	6.7	451.0	441.0	451.0	-10.0
1979	171.8	163.9	0.3517	0.3517	0.3500	488.4	468.4	8.4	480.0	460.0	480.0	-20.0
1980	183.5	171.7	0.3511	0.3511	0.3486	522.6	492.6	8.6	514.0	484.0	514.0	-30.0
1981	195.3	179.7	0.3485	0.3485	0.3454	560.3	520.3	12.3	548.0	508.0	548.0	-40.0
1982	207.4	188.2	0.3444	0.3444	0.3409	602.2	552.2	16.2	586.0	536.0	586.0	-50.0

YEAR	TFTUC	TFTU	TFT(U-LC)	SURFU	SURFU/GNP
1978	407.0	351.7	-55.2	-89.2	-0.0438
1979	464.0	349.0	-114.9	-110.9	-0.0493
1980	526.0	339.2	-186.7	-144.7	-0.0582
1981	594.0	344.2	-249.7	-163.7	-0.0597
1982	668.0	350.8	-317.1	-185.1	-0.0611

TABLE C-10
LESS VIGOROUS GNP PATH
&
STRONG NON-FEDERAL DEMAND

#50 BILLION LOWER FEDERAL EXPENDITURES BY FISCAL YEAR 1982													
YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.0						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	374.0						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	406.8						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	442.1						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	481.3						
YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2173	441.0	6.7	447.7	0.3840	0.3849	175.8	0.3839	171.8				
1979	0.2093	463.0	8.4	471.4	0.3894	0.3944	190.2	0.3925	185.0				
1980	0.2032	489.0	8.6	497.6	0.3941	0.4035	206.0	0.4007	199.4				
1981	0.1956	512.0	12.3	524.3	0.3999	0.4119	224.1	0.4084	214.1				
1982	0.1885	537.0	16.2	553.2	0.4066	0.4202	244.9	0.4161	230.2				
YEAR	GST	BT	DLI/ (DLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPLC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	202.0	6.0	208.0	0.2990	57.6
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	226.9	6.0	232.9	0.3030	68.1
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	248.4	7.0	255.4	0.3070	79.3
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	272.2	7.0	279.2	0.3110	91.1
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	300.4	8.0	308.4	0.3150	104.2
YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	ZCH(1-GNP)	TFCC	TFC	IC	I	
1978	1373.9	335.6	0.7040	5.1649	1302.9	0.9740	1269.0	2.0000	57.3	61.9	304.1	303.6	
1979	1497.4	365.2	0.7040	5.1975	1419.6	0.9740	1382.7	2.0000	63.2	66.8	337.8	336.7	
1980	1621.7	397.3	0.7040	5.0832	1539.3	0.9740	1499.3	2.0000	70.9	71.9	374.6	373.4	
1981	1755.0	432.2	0.7040	4.9586	1668.0	0.9740	1624.6	2.0000	77.5	76.0	415.3	414.4	
1982	1899.1	470.3	0.7040	4.8276	1807.5	0.9740	1760.5	2.0000	82.6	78.8	460.6	460.5	
YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	ZCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP	
1978	447.7	73.7	0.1610	0.1608	0.1604	71.8	3.7500	258.5	287.2	13.0	11.0	0.0054	
1979	471.4	75.4	0.1543	0.1531	0.1523	71.8	3.7500	286.8	315.6	15.0	12.8	0.0058	
1980	497.6	78.4	0.1500	0.1476	0.1466	72.9	3.7500	318.1	347.3	17.0	14.9	0.0062	
1981	524.3	83.3	0.1486	0.1457	0.1444	75.7	3.7500	352.8	383.1	19.0	17.1	0.0065	
1982	553.2	89.2	0.1481	0.1447	0.1432	79.2	3.7500	391.5	423.2	21.0	19.3	0.0067	
YEAR	GFPC*	GFU	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-LC	
1978	162.3	158.1	0.3545	0.3541	0.3532	457.7	447.7	6.7	451.0	441.0	451.0	-10.0	
1979	171.8	163.6	0.3517	0.3488	0.3471	488.4	471.4	8.4	480.0	463.0	483.0	-20.0	
1980	183.5	170.8	0.3511	0.3456	0.3432	522.6	497.6	8.6	514.0	489.0	519.0	-30.0	
1981	195.3	177.5	0.3485	0.3416	0.3386	560.3	524.3	12.3	548.0	512.0	552.0	-40.0	
1982	207.4	184.3	0.3444	0.3365	0.3331	602.2	553.2	16.2	586.0	537.0	587.0	-50.0	
YEAR	TFTUC	TFTU	TFT(U-LC)	SURFU	SURFU/GNP								
1978	405.1	425.0	19.9	-15.9	-0.0078								
1979	453.9	469.9	16.0	6.9	0.0031								
1980	505.1	509.6	4.5	20.6	0.0085								
1981	561.7	554.9	-6.7	42.9	0.0164								
1982	620.6	602.6	-17.9	65.6	0.0230								

TABLE C-11
LESS VIGOROUS GNP PATH

&
MODERATE NON-FEDERAL DEMAND

*50 BILLION LOWER FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PCNP	GNP	W&S	NWIC	NW1						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.4						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	375.5						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	409.9						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	446.8						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	487.5						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2173	441.0	6.7	447.7	0.3840	0.3849	175.8	0.3839	171.8				
1979	0.2093	463.0	8.4	471.4	0.3894	0.3944	190.2	0.3925	185.0				
1980	0.2032	489.0	8.6	497.6	0.3941	0.4035	206.0	0.4007	199.4				
1981	0.1956	512.0	12.3	524.3	0.3999	0.4119	224.1	0.4084	214.1				
1982	0.1885	537.0	16.2	553.2	0.4066	0.4202	244.9	0.4161	230.2				

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	176.0	6.0	182.0	0.2990	57.1
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	193.2	6.0	199.2	0.3030	66.8
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	205.8	7.0	212.8	0.3070	77.1
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	219.3	7.0	226.3	0.3110	88.0
1982	40.0	10.6	0.0728	120.2	178.8	0.5700	101.9	314.6	234.7	8.0	242.7	0.3150	99.8

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1400.9	335.6	0.6970	6.3436	1312.1	0.9740	1277.9	1.0000	57.3	53.9	301.3	301.6
1979	1533.8	365.2	0.6970	6.4965	1434.2	0.9740	1396.9	1.0000	63.2	56.9	331.5	332.6
1980	1669.5	397.3	0.6970	6.5223	1560.6	0.9740	1520.0	1.0000	70.9	59.5	364.1	366.5
1981	1815.8	432.2	0.6970	6.5352	1697.1	0.9740	1653.0	1.0000	77.5	61.2	399.9	404.1
1982	1975.5	470.3	0.6970	6.5473	1846.1	0.9740	1798.1	1.0000	82.6	61.6	439.3	445.8

YEAR	GFN	GFNC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC*	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	447.7	73.7	0.1610	0.1608	0.1604	71.8	3.0000	256.6	285.4	8.0	6.0	0.0029
1979	471.4	75.4	0.1543	0.1531	0.1523	71.8	3.0000	282.7	311.4	9.0	6.8	0.0030
1980	497.6	78.4	0.1500	0.1476	0.1466	72.9	3.0000	311.3	340.5	10.0	7.9	0.0033
1981	524.3	83.3	0.1486	0.1457	0.1444	75.7	3.0000	342.7	373.0	11.0	9.1	0.0035
1982	553.2	89.2	0.1481	0.1447	0.1432	79.2	3.0000	371.6	409.3	12.0	10.3	0.0036

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	158.1	0.3545	0.3541	0.3532	457.7	447.7	6.7	451.0	441.0	451.0	-10.0
1979	171.8	163.6	0.3517	0.3488	0.3471	488.4	471.4	8.4	480.0	463.0	483.0	-20.0
1980	183.5	170.8	0.3511	0.3456	0.3432	522.6	497.6	8.6	514.0	489.0	519.0	-30.0
1981	195.3	177.5	0.3485	0.3416	0.3386	560.3	524.3	12.3	548.0	512.0	552.0	-40.0
1982	207.4	184.3	0.3444	0.3365	0.3331	602.2	553.2	16.2	586.0	537.0	587.0	-50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	391.0	-14.0	-43.9	-0.0246
1979	453.9	426.2	-27.6	-36.7	-0.0166
1980	505.1	454.7	-50.3	-34.2	-0.0142
1981	561.7	487.2	-74.4	-24.7	-0.0094
1982	620.6	519.7	-100.8	-17.2	-0.0060

TABLE C-12
LESS VIGOROUS GNP PATH
&
WEAK NON-FEDERAL DEMAND

\$50 BILLION LOWER FEDERAL EXPENDITURES BY FISCAL YEAR 1982													
YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.9						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	377.0						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	413.1						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	451.6						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	493.8						
YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)*	GF(T/N)C	GFTC*	GF(T/N)	GFU				
1978	0.2173	441.0	6.7	447.7	0.3840	0.3849	175.8	0.3839	171.8				
1979	0.2093	463.0	8.4	471.4	0.3894	0.3944	190.2	0.3925	185.0				
1980	0.2032	489.0	8.6	497.6	0.3941	0.4035	206.0	0.4007	199.4				
1981	0.1956	512.0	12.3	524.3	0.3999	0.4119	224.1	0.4084	214.1				
1982	0.1885	537.0	16.2	553.2	0.4066	0.4202	244.9	0.4161	230.2				
YEAR	GST	BT	QLI/ (QLI+W&S)	QLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/CBPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	149.4	6.0	155.4	0.2990	56.5
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	158.9	6.0	164.9	0.3030	65.6
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	162.8	7.0	169.8	0.3070	75.1
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	166.2	7.0	173.2	0.3110	84.9
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	169.1	8.0	177.1	0.3150	95.5
YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I	
1978	1428.5	395.6	0.6900	7.5130	1321.2	0.9740	1286.8	0.0000	57.3	45.8	298.4	299.6	
1979	1570.8	365.2	0.6900	7.7762	1448.7	0.9740	1411.0	0.0000	63.2	46.8	325.3	328.6	
1980	1717.8	397.3	0.6900	7.9271	1581.6	0.9740	1540.5	0.0000	70.9	47.1	353.9	359.8	
1981	1876.8	432.2	0.6900	8.0581	1725.5	0.9740	1680.7	0.0000	77.5	46.4	384.9	394.4	
1982	2051.5	470.3	0.6900	8.1887	1883.5	0.9740	1834.5	0.0000	82.6	44.4	418.9	431.9	
YEAR	GFN	GFCC*	GF(G/N)*	GF(G/N)C	GF(G/N)	GFCC	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP	
1978	447.7	73.7	0.1610	0.1608	0.1604	71.8	2.2500	254.8	283.5	3.0	1.0	0.0004	
1979	471.4	75.4	0.1543	0.1531	0.1523	71.8	2.2500	278.6	307.3	3.0	0.8	0.0003	
1980	497.6	78.4	0.1500	0.1476	0.1466	72.9	2.2500	304.5	333.7	3.0	0.9	0.0004	
1981	524.3	83.3	0.1486	0.1457	0.1444	75.7	2.2500	332.9	363.2	3.0	1.1	0.0004	
1982	553.2	89.2	0.1481	0.1447	0.1432	79.2	2.2500	364.0	395.7	3.0	1.3	0.0004	
YEAR	GFPC*	GFP	GF(P/N)*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC	
1978	162.3	158.1	0.3545	0.3541	0.3532	457.7	447.7	6.7	451.0	441.0	451.0	-10.0	
1979	171.8	163.6	0.3517	0.3488	0.3471	488.4	471.4	8.4	480.0	463.0	483.0	-20.0	
1980	183.5	170.8	0.3511	0.3456	0.3432	522.6	497.6	8.6	514.0	489.0	519.0	-30.0	
1981	195.3	177.5	0.3485	0.3416	0.3386	560.3	524.3	12.3	548.0	512.0	552.0	-40.0	
1982	207.4	184.3	0.3444	0.3365	0.3331	602.2	553.2	16.2	586.0	537.0	587.0	-50.0	
YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP								
1978	405.1	356.3	-48.7	-84.6	-0.0417								
1979	453.9	381.9	-71.9	-81.0	-0.0366								
1980	505.1	399.2	-105.8	-89.7	-0.0373								
1981	561.7	419.3	-142.3	-92.6	-0.0354								
1982	620.6	437.0	-183.5	-99.9	-0.0351								

TABLE C-13
BASELINE & GNP PATH

STRONG NON-FEDERAL DEMAND

*\$50 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.1						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	376.9						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	415.1						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	458.1						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	506.6						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2266	461.0	6.7	467.7	0.3840	0.3840	175.8	0.3850	180.0				
1979	0.2224	500.0	8.4	508.4	0.3894	0.3894	190.2	0.3912	198.8				
1980	0.2189	544.0	8.6	552.6	0.3941	0.3941	206.0	0.3966	219.2				
1981	0.2145	588.0	12.3	600.3	0.3999	0.3999	224.1	0.4030	241.9				
1982	0.2101	636.0	16.2	652.2	0.4066	0.4066	244.9	0.4101	267.5				

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	220.6	6.0	226.6	0.2990	56.2
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	242.3	6.0	248.3	0.3030	65.4
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	260.6	7.0	267.6	0.3070	75.6
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	290.1	7.0	297.1	0.3110	87.0
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	325.7	8.0	333.7	0.3150	100.4

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(1-GNP)	TFCC	TFC	IC	I
1978	1367.3	335.6	0.7040	5.0430	1298.4	0.9740	1264.6	2.0000	58.0	68.0	304.8	303.8
1979	1518.3	365.5	0.7040	5.5057	1434.7	0.9740	1397.4	2.0000	67.0	74.1	343.1	340.9
1980	1682.2	398.7	0.7040	5.8635	1583.5	0.9740	1542.3	2.0000	77.0	78.7	386.6	384.4
1981	1850.7	436.3	0.7040	5.9966	1739.7	0.9740	1694.5	2.0000	85.0	83.5	434.6	432.7
1982	2035.2	479.3	0.7040	6.0344	1912.4	0.9740	1862.7	2.0000	92.0	87.8	489.0	488.2

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GF	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	467.7	73.7	0.1610	0.1610	0.1614	75.4	3.7500	258.5	288.7	13.0	10.6	0.0052
1979	508.4	75.4	0.1543	0.1543	0.1550	78.8	3.7500	287.1	318.7	15.0	10.3	0.0046
1980	552.6	78.4	0.1500	0.1500	0.1509	83.4	3.7500	319.8	353.2	17.0	9.4	0.0038
1981	600.3	83.3	0.1486	0.1486	0.1498	89.9	3.7500	357.8	393.8	19.0	8.5	0.0031
1982	652.2	89.2	0.1481	0.1481	0.1493	97.4	3.7500	402.5	441.5	21.0	6.8	0.0022

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	166.2	0.3545	0.3545	0.3554	457.7	467.7	6.7	451.0	461.0	451.0	10.0
1979	171.8	179.6	0.3517	0.3517	0.3533	488.4	508.4	8.4	480.0	500.0	480.0	20.0
1980	183.5	195.2	0.3511	0.3511	0.3533	522.6	552.6	8.6	514.0	544.0	514.0	30.0
1981	195.3	210.8	0.3485	0.3485	0.3512	560.3	600.3	12.3	548.0	588.0	548.0	40.0
1982	207.4	226.5	0.3444	0.3444	0.3473	602.2	652.2	16.2	586.0	636.0	586.0	50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	449.7	42.7	-11.2	-0.0055
1979	464.0	494.5	30.5	-5.4	-0.0024
1980	526.0	533.3	7.3	-10.6	-0.0042
1981	594.0	587.7	-6.2	-0.2	-0.0001
1982	668.0	648.5	-19.4	12.5	0.0041

TABLE C-14
BASELINE GNP PATH

&
MODERATE NON-FEDERAL DEMAND

\$50 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.6						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	378.4						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	418.4						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	463.0						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	513.1						
YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2266	461.0	6.7	467.7	0.3840	0.3840	175.8	0.3850	180.0				
1979	0.2224	500.0	8.4	508.4	0.3894	0.3894	190.2	0.3912	198.8				
1980	0.2189	544.0	8.6	552.6	0.3941	0.3941	206.0	0.3966	219.2				
1981	0.2145	588.0	12.3	600.3	0.3999	0.3999	224.1	0.4030	241.9				
1982	0.2101	636.0	16.2	652.2	0.4066	0.4066	244.9	0.4101	267.5				
YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	194.7	6.0	200.7	0.2990	55.6
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	208.4	6.0	214.4	0.3030	64.1
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	217.3	7.0	224.3	0.3070	73.5
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.3	295.0	235.7	7.0	242.7	0.3110	83.8
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	257.3	8.0	265.3	0.3150	95.9
YEAR	YOP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I	
1978	1394.3	335.6	0.6970	6.2252	1307.5	0.9740	1273.5	1.0000	58.0	60.0	302.0	301.8	
1979	1555.0	365.5	0.6970	6.7933	1449.4	0.9740	1411.7	1.0000	67.0	63.7	336.8	336.8	
1980	1730.8	398.7	0.6970	7.2674	1605.0	0.9740	1563.3	1.0000	77.0	65.6	375.9	377.3	
1981	1913.2	436.3	0.6970	7.5189	1769.3	0.9740	1723.3	1.0000	85.0	67.9	418.6	422.1	
1982	2114.7	479.3	0.6970	7.6818	1952.2	0.9740	1901.5	1.0000	92.0	69.4	466.6	472.8	
YEAR	GFN	GFNC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC*	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP	
1978	467.7	73.7	0.1610	0.1610	0.1614	75.4	3.0000	256.6	286.8	8.0	5.6	0.0027	
1979	508.4	75.4	0.1543	0.1543	0.1550	78.8	3.0000	283.0	314.6	9.0	4.3	0.0019	
1980	552.6	78.4	0.1500	0.1500	0.1509	83.4	3.0000	312.9	346.3	10.0	2.4	0.0009	
1981	600.3	83.3	0.1486	0.1486	0.1498	89.9	3.0000	347.5	383.5	11.0	0.5	0.0001	
1982	652.2	89.2	0.1481	0.1481	0.1493	97.4	3.0000	388.2	427.2	12.0	-2.1	-0.0007	
YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC	
1978	162.3	166.2	0.3545	0.3545	0.3554	457.7	467.7	6.7	451.0	461.0	451.0	10.0	
1979	171.8	179.6	0.3517	0.3517	0.3533	488.4	508.4	8.4	480.0	500.0	480.0	20.0	
1980	183.5	195.2	0.3511	0.3511	0.3533	522.6	552.6	8.6	514.0	544.0	514.0	30.0	
1981	195.3	210.8	0.3485	0.3485	0.3512	560.3	600.3	12.3	548.0	588.0	548.0	40.0	
1982	207.4	226.5	0.3444	0.3444	0.3473	602.2	652.2	16.2	586.0	636.0	586.0	50.0	
YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP								
1978	407.0	415.7	8.7	-45.2	-0.0222								
1979	464.0	450.2	-13.7	-49.7	-0.0221								
1980	526.0	476.9	-49.0	-67.0	-0.0269								
1981	594.0	517.6	-76.9	-70.3	-0.0256								
1982	668.0	561.7	-106.2	-74.2	-0.0245								

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TABLE C-15
BASELINE GNP PATH

&
WEAK NON-FEDERAL DEMAND

*50 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	333.1						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	379.9						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	421.6						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	468.0						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	519.7						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2266	461.0	6.7	467.7	0.3840	0.3840	175.8	0.3850	180.0				
1979	0.2224	500.0	8.4	508.4	0.3894	0.3894	190.2	0.3912	198.8				
1980	0.2189	544.0	8.6	552.6	0.3941	0.3941	206.0	0.3966	219.2				
1981	0.2145	588.0	12.3	600.3	0.3999	0.3999	224.1	0.4030	241.9				
1982	0.2101	636.0	16.2	652.2	0.4066	0.4066	244.9	0.4101	267.5				

YEAR	GST	BT	DLI/ (DLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	168.2	6.0	174.2	0.2990	55.0
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	174.0	6.0	180.0	0.3030	62.9
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	173.5	7.0	180.5	0.3070	71.4
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	181.1	7.0	188.1	0.3110	80.7
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	189.1	8.0	197.1	0.3150	91.5

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I
1978	1421.8	335.6	0.6900	7.3978	1316.6	0.9740	1282.4	0.0000	58.0	51.9	299.2	299.8
1979	1592.2	365.5	0.6900	8.0622	1463.9	0.9740	1425.8	0.0000	67.0	53.2	330.5	332.8
1980	1779.9	398.7	0.6900	8.6393	1626.1	0.9740	1583.8	0.0000	77.0	52.4	365.4	370.6
1981	1975.9	436.3	0.6900	8.9921	1798.2	0.9740	1751.5	0.0000	85.0	52.1	403.1	412.0
1982	2193.9	479.3	0.6900	9.2583	1990.7	0.9740	1939.0	0.0000	92.0	51.0	445.0	458.2

YEAR	GFN	GFNC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	467.7	73.7	0.1610	0.1610	0.1614	75.4	2.2500	254.8	285.0	3.0	0.6	0.0003
1979	508.4	75.4	0.1543	0.1543	0.1550	78.8	2.2500	278.9	310.4	3.0	-1.6	-0.0007
1980	552.6	78.4	0.1500	0.1500	0.1509	83.4	2.2500	306.2	339.5	3.0	-4.5	-0.0018
1981	600.3	83.3	0.1486	0.1486	0.1498	89.9	2.2500	337.5	373.5	3.0	-7.4	-0.0027
1982	652.2	89.2	0.1481	0.1481	0.1493	97.4	2.2500	374.3	413.2	3.0	-11.1	-0.0036

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	166.2	0.3545	0.3545	0.3554	457.7	467.7	6.7	451.0	461.0	451.0	10.0
1979	171.8	179.6	0.3517	0.3517	0.3533	488.4	508.4	8.4	480.0	500.0	480.0	20.0
1980	183.5	195.2	0.3511	0.3511	0.3533	522.6	552.6	8.6	514.0	544.0	514.0	30.0
1981	195.3	210.8	0.3485	0.3485	0.3512	560.3	600.3	12.3	548.0	588.0	548.0	40.0
1982	207.4	226.5	0.3444	0.3444	0.3473	602.2	652.2	16.2	586.0	636.0	586.0	50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	381.1	-25.8	-79.8	-0.0392
1979	464.0	405.2	-58.7	-94.7	-0.0421
1980	526.0	420.0	-105.9	-123.9	-0.0499
1981	594.0	447.3	-146.6	-140.6	-0.0513
1982	668.0	475.1	-192.8	-160.8	-0.0531

TABLE C-17
LESS VIGOROUS GNP PATH

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MODERATE NON-FEDERAL DEMAND

*\$50 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PCNP	GNP	W&S	NWIC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.0						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	374.0						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	406.4						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	440.8						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	478.8						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFU				
1978	0.2271	461.0	6.7	467.7	0.3840	0.3849	175.8	0.3858	180.4				
1979	0.2274	503.0	8.4	511.4	0.3894	0.3944	190.2	0.3962	202.6				
1980	0.2281	549.0	8.6	557.6	0.3941	0.4035	206.0	0.4060	226.4				
1981	0.2262	592.0	12.3	604.3	0.3999	0.4119	224.1	0.4149	250.7				
1982	0.2236	637.0	16.2	653.2	0.4066	0.4202	244.9	0.4238	276.8				

YEAR	GST	BT	DLI/ (DLI+W&S)	DLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	198.4	6.0	204.4	0.2990	55.6
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	236.0	6.0	242.0	0.3030	64.1
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	267.6	7.0	274.6	0.3070	73.2
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	293.1	7.0	306.1	0.3110	82.8
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	332.3	8.0	340.3	0.3150	93.4

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1388.1	335.6	0.6970	6.1167	1303.2	0.9740	1269.3	1.0000	57.3	60.8	301.3	300.9
1979	1509.8	365.2	0.6970	6.0979	1417.8	0.9740	1380.9	1.0000	63.2	69.5	331.5	330.3
1980	1635.1	397.3	0.6970	5.9776	1537.3	0.9740	1497.3	1.0000	70.9	77.4	364.1	362.1
1981	1771.8	432.2	0.6970	5.8759	1667.7	0.9740	1624.3	1.0000	77.5	83.5	399.9	397.3
1982	1922.2	470.3	0.6970	5.7936	1810.7	0.9740	1763.7	1.0000	82.6	87.2	439.3	436.5

YEAR	GFN	GFNC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC*	XCHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	467.7	73.7	0.1610	0.1608	0.1611	75.3	3.0000	256.6	286.8	8.0	6.0	0.0029
1979	511.4	75.4	0.1543	0.1531	0.1537	78.6	3.0000	282.7	314.2	9.0	6.8	0.0030
1980	557.6	78.4	0.1500	0.1476	0.1486	82.8	3.0000	311.3	344.4	10.0	7.9	0.0033
1981	604.3	83.3	0.1486	0.1457	0.1467	88.7	3.0000	342.7	378.2	11.0	9.1	0.0035
1982	653.2	89.2	0.1481	0.1447	0.1459	95.3	3.0000	377.6	415.7	12.0	10.3	0.0036

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	166.0	0.3545	0.3541	0.3549	457.7	467.7	6.7	451.0	461.0	451.0	10.0
1979	171.8	179.2	0.3517	0.3488	0.3504	488.4	511.4	8.4	480.0	503.0	483.0	20.0
1980	183.5	193.9	0.3511	0.3456	0.3478	522.6	557.6	8.6	514.0	549.0	519.0	30.0
1981	195.3	207.9	0.3485	0.3416	0.3441	560.3	604.3	12.3	548.0	592.0	552.0	40.0
1982	207.4	221.6	0.3444	0.3365	0.3393	602.2	653.2	16.2	586.0	637.0	587.0	50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	420.2	15.1	-40.7	-0.0200
1979	453.9	481.7	27.8	-21.2	-0.0096
1980	505.1	534.4	29.3	-14.5	-0.0060
1981	561.7	589.3	27.6	-2.6	-0.0010
1982	620.6	642.9	22.3	5.9	0.0020

TABLE C-13:
LESS VIGOROUS GNP PATH
&
WEAK NON-FEDERAL DEMAND

*\$50 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	332.5						
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	375.5						
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	409.5						
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	445.5						
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	485.1						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2271	461.0	6.7	467.7	0.3840	0.3849	175.8	0.3858	180.4				
1979	0.2274	503.0	8.4	511.4	0.3894	0.3944	190.2	0.3962	202.6				
1980	0.2281	549.0	8.6	557.6	0.3941	0.4035	206.0	0.4060	226.4				
1981	0.2262	592.0	12.3	604.3	0.3999	0.4119	224.1	0.4149	250.7				
1982	0.2236	637.0	16.2	653.2	0.4066	0.4202	244.9	0.4238	276.8				

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPLC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	171.9	6.0	177.9	0.2990	55.1
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	202.0	6.0	208.0	0.3030	62.9
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	224.9	7.0	231.9	0.3070	71.1
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	246.3	7.0	253.3	0.3110	79.7
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	267.2	8.0	275.2	0.3150	89.1

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I
1978	1415.6	335.6	0.6900	7.2926	1312.3	0.9740	1278.2	0.0000	57.3	52.7	298.4	298.9
1979	1546.6	365.2	0.6900	7.3926	1432.3	0.9740	1395.0	0.0000	63.2	59.5	325.3	326.3
1980	1683.0	397.3	0.6900	7.4077	1558.3	0.9740	1517.8	0.0000	70.9	65.1	353.9	355.4
1981	1832.3	432.2	0.6900	7.4349	1696.1	0.9740	1652.0	0.0000	77.5	68.8	384.9	387.5
1982	1997.8	470.3	0.6900	7.4884	1848.2	0.9740	1800.1	0.0000	82.6	70.1	418.9	422.6

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GF%	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	467.7	73.7	0.1610	0.1608	0.1611	75.3	2.2500	254.8	284.9	3.0	1.0	0.0004
1979	511.4	75.4	0.1543	0.1531	0.1537	78.6	2.2500	278.6	310.1	3.0	0.8	0.0003
1980	557.6	78.4	0.1500	0.1476	0.1486	82.8	2.2500	304.5	337.7	3.0	0.9	0.0004
1981	604.3	83.3	0.1486	0.1457	0.1467	88.7	2.2500	332.9	368.4	3.0	1.1	0.0004
1982	653.2	89.2	0.1481	0.1447	0.1459	95.3	2.2500	364.0	402.2	3.0	1.3	0.0004

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	166.0	0.3545	0.3541	0.3549	457.7	467.7	6.7	451.0	461.0	451.0	10.0
1979	171.8	179.2	0.3517	0.3488	0.3504	488.4	511.4	8.4	480.0	503.0	483.0	20.0
1980	183.5	193.9	0.3511	0.3456	0.3478	522.6	557.6	8.6	514.0	549.0	519.0	30.0
1981	195.3	207.9	0.3485	0.3416	0.3441	560.3	604.3	12.3	548.0	592.0	552.0	40.0
1982	207.4	221.6	0.3444	0.3365	0.3393	602.2	653.2	16.2	586.0	637.0	587.0	50.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	385.7	-19.3	-75.2	-0.0370
1979	453.9	437.6	-16.2	-65.3	-0.0295
1980	505.1	479.4	-25.6	-69.5	-0.0289
1981	561.7	521.8	-39.8	-70.1	-0.0267
1982	620.6	560.8	-59.7	-76.1	-0.0267

TABLE C-10
BASELINE GNP PATH

&
STRONG NON-FEDERAL DEMAND

\$100 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PCNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	331.9						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	376.1						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	413.3						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	455.0						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	502.1						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2315	471.0	6.7	477.7	0.3840	0.3840	175.8	0.3858	184.3				
1979	0.2313	520.0	8.4	528.4	0.3894	0.3894	190.2	0.3928	207.5				
1980	0.2310	574.0	8.6	582.6	0.3941	0.3941	206.0	0.3989	232.4				
1981	0.2291	628.0	12.3	640.3	0.3999	0.3999	224.1	0.4056	259.7				
1982	0.2267	686.0	16.2	702.2	0.4066	0.4066	244.9	0.4131	290.1				

YEAR	GST	BT	DLI/ (DLI+W&S)	DLI	TFSJC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	231.7	6.0	237.7	0.2990	55.4
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	263.6	6.0	269.6	0.3030	64.0
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	291.3	7.0	298.3	0.3070	73.6
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	329.7	7.0	336.7	0.3110	84.3
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	374.2	8.0	382.2	0.3150	97.1

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1361.0	335.6	0.7040	4.9255	1294.0	0.9740	1260.3	2.0000	58.0	71.5	304.8	303.5
1979	1506.4	365.5	0.7040	5.3038	1426.5	0.9740	1389.4	2.0000	67.0	80.6	343.1	339.7
1980	1664.8	398.7	0.7040	5.5946	1571.7	0.9740	1530.8	2.0000	77.0	87.9	386.6	382.1
1981	1828.4	436.3	0.7040	5.6749	1724.7	0.9740	1679.8	2.0000	85.0	95.0	434.6	429.2
1982	2008.2	479.3	0.7040	5.6728	1894.2	0.9740	1845.0	2.0000	92.0	100.9	489.0	483.5

YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	XCHGSPN	GSPN	GSP	NX%	NX	NX/GNP
1978	477.7	73.7	0.1610	0.1610	0.1617	77.2	3.7500	758.5	289.4	13.0	10.6	0.0052
1979	528.4	75.4	0.1543	0.1543	0.1557	82.2	3.7500	287.1	320.1	15.0	10.3	0.0046
1980	582.6	78.4	0.1500	0.1500	0.1518	88.4	3.7500	319.8	355.2	17.0	9.4	0.0038
1981	640.3	83.3	0.1486	0.1486	0.1507	96.5	3.7500	357.8	396.4	19.0	8.5	0.0031
1982	702.2	89.2	0.1481	0.1481	0.1504	105.6	3.7500	402.5	444.8	21.0	6.8	0.0022

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	170.1	0.3545	0.3545	0.3562	457.7	477.7	6.7	451.0	471.0	451.0	20.0
1979	171.8	187.5	0.3517	0.3517	0.3548	488.4	528.4	8.4	480.0	520.0	480.0	40.0
1980	183.5	207.0	0.3511	0.3511	0.3553	522.6	582.6	8.6	514.0	574.0	514.0	60.0
1981	195.3	226.3	0.3485	0.3485	0.3535	560.3	640.3	12.3	548.0	628.0	548.0	80.0
1982	207.4	245.7	0.3444	0.3444	0.3499	602.2	702.2	16.2	586.0	686.0	586.0	100.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	464.2	57.2	-6.7	-0.0033
1979	464.0	522.3	58.3	2.3	0.0010
1980	526.0	573.3	47.3	-0.6	-0.0002
1981	594.0	638.7	44.7	10.7	0.0039
1982	668.0	710.1	42.1	24.1	0.0079

TABLE C-20
BASELINE GNP PATH

MODERATE NON-FEDERAL DEMAND
*100 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PCNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.4						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	377.6						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	416.5						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	459.9						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	508.7						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT					
1978	0.2315	471.0	6.7	477.7	0.3840	0.3840	175.8	0.3858	184.3					
1979	0.2313	520.0	8.4	528.4	0.3894	0.3894	190.2	0.3928	207.5					
1980	0.2310	574.0	8.6	582.6	0.3941	0.3941	206.0	0.3989	232.4					
1981	0.2291	628.0	12.3	640.3	0.3999	0.3999	224.1	0.4056	259.7					
1982	0.2267	686.0	16.2	702.2	0.4066	0.4066	244.9	0.4131	290.1					

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	fSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	205.8	6.0	211.8	0.2990	54.9
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	229.8	6.0	235.8	0.3030	62.7
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	248.2	7.0	255.2	0.3070	71.5
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	275.5	7.0	282.5	0.3110	81.1
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	306.0	8.0	314.0	0.3150	92.6

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I
1978	1387.9	335.6	0.6970	6.1110	1303.1	0.9740	1269.2	1.0000	58.0	63.5	302.0	301.4
1979	1542.9	365.5	0.6970	6.5990	1441.1	0.9740	1403.6	1.0000	67.0	70.3	336.8	335.6
1980	1713.3	398.7	0.6970	7.0109	1593.2	0.9740	1551.7	1.0000	77.0	74.9	375.9	375.1
1981	1890.7	436.3	0.6970	7.2149	1754.3	0.9740	1708.7	1.0000	85.0	79.4	418.6	418.6
1982	2087.4	479.3	0.6970	7.3434	1934.1	0.9740	1883.8	1.0000	92.0	82.5	466.6	468.0

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC*	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	477.7	73.7	0.1610	0.1610	0.1617	77.2	3.0000	256.6	287.5	8.0	5.6	0.0027
1979	528.4	75.4	0.1543	0.1543	0.1557	82.2	3.0000	283.0	315.9	9.0	4.3	0.0019
1980	582.6	78.4	0.1500	0.1500	0.1518	88.4	3.0000	312.9	348.3	10.0	2.4	0.0009
1981	640.3	83.3	0.1486	0.1486	0.1507	96.5	3.0000	347.5	386.2	11.0	0.5	0.0001
1982	702.2	89.2	0.1481	0.1481	0.1504	105.6	3.0000	388.2	430.5	12.0	-2.1	-0.0007

YEAR	GFPC*	GFU	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	170.1	0.3545	0.3545	0.3562	457.7	477.7	6.7	451.0	471.0	451.0	20.0
1979	171.8	187.5	0.3517	0.3517	0.3548	488.4	528.4	8.4	480.0	520.0	480.0	40.0
1980	183.5	207.0	0.3511	0.3511	0.3553	522.6	582.6	8.6	514.0	574.0	514.0	60.0
1981	195.3	226.3	0.3485	0.3485	0.3535	560.3	640.3	12.3	548.0	628.0	548.0	80.0
1982	207.4	245.7	0.3444	0.3444	0.3499	602.2	702.2	16.2	586.0	686.0	586.0	100.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	430.4	23.4	-40.5	-0.0199
1979	464.0	478.1	14.1	-41.8	-0.0186
1980	526.0	517.1	-8.8	+56.8	-0.0228
1981	594.0	568.9	-25.0	-59.0	-0.0215
1982	668.0	623.5	-44.4	-62.4	-0.0206

TABLE C-21
BASELINE GNP PATH

&
WEAK NON-FEDERAL DEMAND

\$100 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI						
1978	1392.2	1392.2	1.4611	2034.2	1091.9	332.8	332.9						
1979	1468.8	1468.8	1.5299	2247.2	1205.5	378.5	379.2						
1980	1548.2	1548.2	1.6049	2484.8	1333.0	417.7	419.8						
1981	1622.9	1622.9	1.6886	2740.5	1471.0	460.5	464.8						
1982	1696.5	1696.5	1.7836	3026.0	1624.1	507.9	515.2						

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT				
1978	0.2315	471.0	6.7	477.7	0.3840	0.3840	175.8	0.3858	184.3				
1979	0.2313	520.0	8.4	528.4	0.3894	0.3894	190.2	0.3928	207.5				
1980	0.2310	574.0	8.6	582.6	0.3941	0.3941	206.0	0.3989	232.4				
1981	0.2291	628.0	12.3	640.3	0.3999	0.3999	224.1	0.4056	259.7				
1982	0.2267	686.0	16.2	702.2	0.4066	0.4066	244.9	0.4131	290.1				

YEAR	GST	BT	DLI/ (DLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.1	124.0	0.5700	70.6	188.0	179.4	6.0	185.4	0.2990	54.3
1979	32.8	8.9	0.0683	88.3	139.0	0.5700	79.2	219.0	195.5	6.0	201.5	0.3030	61.5
1980	35.2	9.5	0.0698	100.0	152.0	0.5700	86.6	255.0	204.6	7.0	211.6	0.3070	69.4
1981	37.6	10.2	0.0713	112.9	170.0	0.5700	96.9	295.0	221.1	7.0	228.1	0.3110	78.0
1982	40.0	10.8	0.0728	127.5	188.0	0.5700	107.1	341.0	238.0	8.0	246.0	0.3150	88.2

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I
1978	1415.4	335.6	0.6900	7.2869	1312.2	0.9740	1278.1	0.0000	58.0	55.3	299.2	299.4
1979	1580.0	365.5	0.6900	7.8750	1455.6	0.9740	1417.8	0.0000	67.0	59.8	330.5	331.6
1980	1762.2	398.7	0.6900	8.3944	1614.3	0.9740	1572.3	0.0000	77.0	61.7	365.4	368.3
1981	1953.2	436.3	0.6900	8.7042	1783.2	0.9740	1736.8	0.0000	85.0	63.7	403.1	408.4
1982	2166.3	479.3	0.6900	8.9406	1972.6	0.9740	1921.3	0.0000	92.0	64.2	445.0	453.4

YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	477.7	73.7	0.1610	0.1610	0.1617	77.2	2.2500	254.8	285.7	3.0	0.6	0.0003
1979	528.4	75.4	0.1543	0.1543	0.1557	82.2	2.2500	278.9	311.8	3.0	-1.6	-0.0007
1980	582.6	78.4	0.1500	0.1500	0.1518	88.4	2.2500	306.2	341.5	3.0	-4.5	-0.0018
1981	640.3	83.3	0.1486	0.1486	0.1507	96.5	2.2500	337.5	376.2	3.0	-7.4	-0.0027
1982	702.2	89.2	0.1481	0.1481	0.1504	105.6	2.2500	374.3	416.5	3.0	-11.1	-0.0036

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	170.1	0.3545	0.3545	0.3562	457.7	477.7	6.7	451.0	471.0	451.0	20.0
1979	171.8	187.5	0.3517	0.3517	0.3548	488.4	528.4	8.4	480.0	520.0	480.0	40.0
1980	183.5	207.0	0.3511	0.3511	0.3553	522.6	582.6	8.6	514.0	574.0	514.0	60.0
1981	195.3	226.3	0.3485	0.3485	0.3535	560.3	640.3	12.3	548.0	628.0	548.0	80.0
1982	207.4	245.7	0.3444	0.3444	0.3499	602.2	702.2	16.2	586.0	686.0	586.0	100.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	407.0	395.8	-11.1	-75.1	-0.0369
1979	464.0	433.3	-30.6	-86.6	-0.0385
1980	526.0	460.4	-65.5	-113.5	-0.0457
1981	594.0	498.8	-95.1	-129.1	-0.0471
1982	668.0	537.2	-130.7	-148.7	-0.0491

TABLE C-27
LESS VIGOROUS GNP PATH
 &
STRONG NON-FEDERAL DEMAND

\$100 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NMI
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	331.4
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	371.8
1980	1504.5	1548.2	1.5932	2406.0	1293.2	408.1	401.5
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	433.1
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	468.4

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT
1978	0.2321	471.0	6.7	477.7	0.3840	0.3849	175.8	0.3867	184.7
1979	0.2364	523.0	8.4	531.4	0.3894	0.3944	190.2	0.3979	211.4
1980	0.2406	579.0	8.6	587.6	0.3941	0.4035	206.0	0.4083	239.9
1981	0.2414	632.0	12.3	644.3	0.3999	0.4119	224.1	0.4176	269.1
1982	0.2412	687.0	16.2	703.2	0.4066	0.4202	244.9	0.4268	300.1

YEAR	GST	BT	DLI/ (DLI+W&S)	DLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/CSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	235.4	6.0	241.4	0.2990	55.5
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	290.8	6.0	296.8	0.3030	64.0
1980	35.2	9.5	0.0698	97.0	148.7	0.5700	84.7	244.9	340.7	7.0	347.7	0.3070	73.3
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	391.3	7.0	398.3	0.3110	83.3
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	446.1	8.0	454.1	0.3150	94.6

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YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I
1978	1354.9	335.6	0.7040	4.8127	1289.6	0.9740	1256.1	2.0000	57.3	72.2	304.1	302.6
1979	1461.7	365.2	0.7040	4.5709	1394.9	0.9740	1358.6	2.0000	63.2	85.6	337.8	333.3
1980	1570.5	397.3	0.7040	4.2159	1504.3	0.9740	1465.2	2.0000	70.9	98.6	374.6	366.9
1981	1689.6	432.2	0.7040	3.8965	1623.7	0.9740	1581.5	2.0000	77.5	109.3	415.3	404.2
1982	1820.0	470.3	0.7040	3.6088	1754.3	0.9740	1708.7	2.0000	82.6	117.1	460.6	446.6

YEAR	GFN	GFCC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFG	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	477.7	73.7	0.1610	0.1608	0.1615	77.1	3.7500	258.5	289.4	13.0	11.0	0.0054
1979	531.4	75.4	0.1543	0.1531	0.1544	82.0	3.7500	286.8	319.7	15.0	12.8	0.0058
1980	587.6	78.4	0.1500	0.1476	0.1494	87.8	3.7500	318.1	353.3	17.0	14.9	0.0062
1981	644.3	83.3	0.1486	0.1457	0.1477	95.1	3.7500	352.8	390.9	19.0	17.1	0.0065
1982	703.2	89.2	0.1481	0.1447	0.1469	103.3	3.7500	391.5	432.9	21.0	19.3	0.0067

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	169.9	0.3545	0.3541	0.3557	457.7	477.7	6.7	451.0	471.0	451.0	20.0
1979	171.8	186.9	0.3517	0.3488	0.3518	488.4	531.4	8.4	480.0	523.0	483.0	40.0
1980	183.5	205.5	0.3511	0.3456	0.3497	522.6	587.6	8.6	514.0	579.0	519.0	60.0
1981	195.3	223.1	0.3485	0.3416	0.3463	560.3	644.3	12.3	548.0	632.0	552.0	80.0
1982	207.4	240.3	0.3444	0.3365	0.3417	602.2	703.2	16.2	586.0	687.0	587.0	100.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	468.6	63.5	-2.3	-0.0011
1979	453.9	552.6	98.7	29.6	0.0134
1980	505.1	628.7	123.6	49.7	0.0206
1981	561.7	707.3	145.6	75.3	0.0288
1982	620.6	786.7	166.1	99.7	0.0350

TABLE 1
LESS VIGOROUS GNP PATH

&
MODERATE NON-FEDERAL DEMAND

\$100 BILLION ADDITIONAL FEDERAL EXPENDITURES BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	PGNP	GNP	W&S	NWIC	NWI					
1978	1388.8	1392.2	1.4611	2029.2	1089.8	332.3	331.8					
1979	1446.6	1468.8	1.5288	2211.6	1188.8	374.8	373.2					
1980	1504.5	1548.2	1.5992	2406.0	1293.2	408.1	404.6					
1981	1564.6	1622.9	1.6726	2617.1	1406.9	443.3	437.7					
1982	1627.2	1696.5	1.7502	2848.0	1531.2	481.8	474.5					

YEAR	GFU/GNP	GFU	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GFTC*	GF(T/N)	GFT			
1978	0.2321	471.0	6.7	477.7	0.3840	0.3849	175.8	0.3867	184.7			
1979	0.2364	523.0	8.4	531.4	0.3894	0.3944	190.2	0.3979	211.4			
1980	0.2406	579.0	8.6	587.6	0.3941	0.4035	206.0	0.4083	239.9			
1981	0.2414	632.0	12.3	644.3	0.3999	0.4119	224.1	0.4176	269.1			
1982	0.2412	687.0	16.2	703.2	0.4066	0.4202	244.9	0.4268	300.1			

YEAR	GST	BT	OLI/ (OLI+W&S)	OLI	TFSUC	TFS(P/U)	TFSPC	TFPUC	TFPU	TFEU	TFPN	TSP/GSPN+T	TSP
1978	30.4	8.2	0.0668	78.0	124.0	0.5700	70.6	186.8	209.5	6.0	215.5	0.2990	54.9
1979	32.8	8.9	0.0683	87.1	137.2	0.5700	78.2	214.6	257.5	6.0	263.5	0.3030	62.7
1980	35.2	9.9	0.0698	97.0	148.7	0.5700	84.7	244.9	298.6	7.0	305.6	0.3070	71.2
1981	37.6	10.2	0.0713	108.0	164.1	0.5700	93.5	277.5	339.0	7.0	346.0	0.3110	80.2
1982	40.0	10.8	0.0728	120.2	178.8	0.5700	101.9	314.6	381.1	8.0	389.1	0.3150	90.2

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	%CH(I-GNP)	TFCC	TFC	IC	I
1978	1381.7	335.6	0.6970	6.0016	1298.8	0.9740	1265.0	1.0000	57.3	64.2	301.3	300.6
1979	1497.8	365.2	0.6970	5.8938	1409.5	0.9740	1372.9	1.0000	63.2	75.8	331.5	329.2
1980	1617.8	397.3	0.6970	5.6965	1525.7	0.9740	1486.0	1.0000	70.9	86.4	364.1	360.0
1981	1749.7	432.2	0.6970	5.5338	1652.9	0.9740	1609.9	1.0000	77.5	94.6	399.9	393.9
1982	1895.6	470.3	0.6970	5.4100	1793.1	0.9740	1746.4	1.0000	82.6	100.0	439.3	431.8

YEAR	GFN	GFGC*	GF(G/N)C*	GF(G/N)C	GF(G/N)	GFNC	%CHGSPN	GSPN	GSP	NX9%	NX	NX/GNP
1978	477.7	73.7	0.1610	0.1608	0.1615	77.1	3.0000	256.6	287.5	8.0	6.0	0.0029
1979	531.4	75.4	0.1543	0.1531	0.1544	82.0	3.0000	282.7	315.5	9.0	6.8	0.0030
1980	587.6	78.4	0.1500	0.1476	0.1494	87.8	3.0000	311.3	346.4	10.0	7.9	0.0033
1981	644.3	83.3	0.1486	0.1457	0.1477	95.1	3.0000	342.7	380.8	11.0	9.1	0.0035
1982	703.2	89.2	0.1481	0.1447	0.1469	103.3	3.0000	377.6	418.9	12.0	10.3	0.0036

YEAR	GFPC*	GFP	GF(P/N)C*	GF(P/N)C	GF(P/N)	GFNC*	GFN	GN-U	GFUC*	GFU	GFUC	GFU-UC
1978	162.3	169.9	0.3545	0.3541	0.3557	457.7	477.7	6.7	451.0	471.0	451.0	20.0
1979	171.8	186.9	0.3517	0.3488	0.3518	488.4	531.4	8.4	480.0	523.0	483.0	40.0
1980	183.5	205.5	0.3511	0.3456	0.3497	522.6	587.6	8.6	514.0	579.0	519.0	60.0
1981	195.3	223.1	0.3485	0.3416	0.3463	560.3	644.3	12.3	548.0	632.0	552.0	80.0
1982	207.4	240.3	0.3444	0.3365	0.3417	602.2	703.2	16.2	586.0	687.0	587.0	100.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	434.8	29.7	-36.1	-0.0177
1979	453.9	509.4	55.5	-13.5	-0.0061
1980	505.1	574.3	69.2	-4.6	-0.0019
1981	561.7	640.3	78.6	8.3	0.0032
1982	620.6	704.5	83.9	17.5	0.0061

TABLE C-24
LESS VIGOROUS GNP PATH
WEAK NON-FEDERAL DEMAND BY FISCAL YEAR 1982

YEAR	GNP72	GNP72*	GNP	MNS	NMIC	NMI	GF(T/N)C*	GF(T/N)C	GF(T/N)	GF(T/N)	GF(T/N)	TFPU	TFEU	TFPN	TSP/SPN+T	TSP
1978	1388.8	1392.2	1461.1	1089.8	332.3	374.7	0.3840	0.3849	0.3857	0.3867	184.7	183.2	6.0	189.2	0.2990	54.4
1979	1446.6	1468.8	1528.8	1188.8	374.8	374.7	0.3894	0.3944	0.3979	0.3979	211.4	223.5	6.0	229.5	0.3030	61.5
1980	1504.6	1548.8	1598.2	1293.2	408.1	407.7	0.3941	0.4035	0.4083	0.4083	239.9	256.0	7.0	263.0	0.3070	69.1
1981	1564.6	1622.9	1672.6	1406.9	443.3	442.4	0.3999	0.4119	0.4176	0.4176	269.1	286.4	7.0	293.4	0.3110	77.1
1982	1627.2	1696.5	1750.2	1531.2	481.8	480.7	0.4066	0.4202	0.4268	0.4268	300.1	316.2	8.0	324.2	0.3150	85.9

YEAR	GFU/GNP	GN-U	GFN	GF(T/N)C*	GF(T/N)C	GF(T/N)	GF(T/N)	TFUC	TFPU	TFEU	TFPN	TSP/SPN+T
1978	0.2321	6.7	477.7	0.3849	0.3849	0.3857	0.3867	184.7	183.2	6.0	189.2	0.2990
1979	0.2364	8.4	531.4	0.3944	0.3944	0.3979	0.3979	211.4	223.5	6.0	229.5	0.3030
1980	0.2406	8.6	587.6	0.3941	0.4035	0.4083	0.4083	239.9	256.0	7.0	263.0	0.3070
1981	0.2414	12.3	644.3	0.3999	0.4119	0.4176	0.4176	269.1	286.4	7.0	293.4	0.3110
1982	0.2412	16.2	703.2	0.4066	0.4202	0.4268	0.4268	300.1	316.2	8.0	324.2	0.3150

YEAR	GST	BT	DLI	TFJUC	TFS(P/U)	TFSPC	TFPU	TFEU	TFPN	TSP/SPN+T
1978	30.4	8.2	0.0668	124.0	0.5700	70.5	186.8	183.2	6.0	189.2
1979	32.8	8.9	0.0683	137.2	0.5700	78.2	214.6	223.5	6.0	229.5
1980	35.2	9.5	0.0698	148.7	0.5700	84.7	244.9	256.0	7.0	263.0
1981	37.6	10.2	0.0713	164.1	0.5700	93.5	277.5	286.4	7.0	293.4
1982	40.0	10.8	0.0728	178.8	0.5700	101.9	314.6	316.2	8.0	324.2

YEAR	YDP	EA	CMPE	SAVRATE	E	C/E	C	XCH(I-GNP)	TFCC	TFC	IC	I
1978	1409.1	335.6	0.6900	7,180.8	1307.9	0.9740	1273.9	0.0000	57.3	56.2	298.4	298.5
1979	1534.5	365.2	0.6900	7,196.2	1424.0	0.9740	1387.0	0.0000	63.2	65.8	325.3	325.2
1980	1665.6	397.3	0.6900	7,139.8	1546.7	0.9740	1506.5	0.0000	70.9	74.1	353.9	353.2
1981	1810.1	432.2	0.6900	7,111.9	1681.4	0.9740	1637.7	0.0000	77.5	79.9	384.9	384.0
1982	1970.9	470.3	0.6900	7,123.9	1830.5	0.9740	1782.9	0.0000	82.6	83.0	418.9	417.9

YEAR	GFN	GF(G/N)C*	GF(G/N)C	GF(G/N)	GF(G/N)	ZCHGSPN	GFSPN	GFSPN	NX%	NX	NX/GNP
1978	477.7	0.1610	0.1608	0.1615	0.1615	2,250.0	254.8	254.8	3.0	1.0	0.0004
1979	531.4	0.1543	0.1531	0.1544	0.1544	2,250.0	278.6	278.6	3.0	0.8	0.0003
1980	587.6	0.1500	0.1476	0.1494	0.1494	2,250.0	304.5	304.5	3.0	0.9	0.0004
1981	644.3	0.1486	0.1457	0.1477	0.1477	2,250.0	332.9	332.9	3.0	1.1	0.0004
1982	703.2	0.1481	0.1447	0.1469	0.1469	2,250.0	364.0	364.0	3.0	1.3	0.0004

YEAR	GFPC*	GF(P/N)C*	GF(P/N)C	GF(P/N)	GF(P/N)	GFUC*	GFUC	GFU-UC
1978	162.3	0.3545	0.3541	0.3557	0.3557	451.0	451.0	20.0
1979	171.8	0.3517	0.3488	0.3518	0.3518	480.0	483.0	40.0
1980	183.5	0.3511	0.3456	0.3497	0.3497	514.0	519.0	60.0
1981	195.3	0.3485	0.3416	0.3463	0.3463	548.0	552.0	80.0
1982	207.4	0.3444	0.3365	0.3417	0.3417	586.0	587.0	100.0

YEAR	TFTUC	TFTU	TFT(U-UC)	SURFU	SURFU/GNP
1978	405.1	400.4	-4.6	-70.5	-0.0347
1979	453.9	465.5	11.6	-57.4	-0.0259
1980	505.1	519.4	14.3	-53.5	-0.0247
1981	561.7	573.1	11.4	-58.8	-0.0224
1982	620.6	622.7	2.1	-64.2	-0.0225