

TESTING THE VALIDITY OF
CONVENTIONAL ARGUMENTS AGAINST
FEDERAL DEFICITS

by

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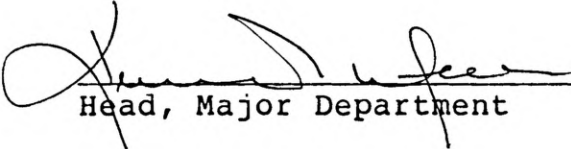
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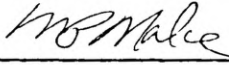
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"That which does not kill you makes you stronger"
-Neitzche

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ABSTRACT

The purpose of this paper is to test claims that deficits are harmful to the economy. An objective look at deficit spending in the United States, will include significant historical background, causal factors and modern philosophy. There has been a movement in this country to force a constitutional convention to amend the constitution to make a balanced federal budget law. Proponents of this amendment list several reasons why deficits should be made unconstitutional.

To test these claims, a correlation coefficient is used to determine any association between deficits and inflation, government growth, high interest rates, unemployment, and foreign control of the debt. The time frame is the 23 year period from 1960 through 1983.

Test results failed to show any significant correlation between deficits and any of the variables tested except for the prime interest rate. These generally weak associations could offer no statistical support of the claims made against deficit spending. Several authors were found to agree with these findings and a brief overview of these studies is made. The indications from this study imply that a variable other than budget deficits controls the tested components of the economy.

This paper concludes that the budget deficits are controllable by the government and that they exist for political reasons and that controlling interest rates has much to do with deficit reduction and the world economy. Only as an aside, it is observed that it is possible that current indicators are obsolete and should be changed in order to make more accurate use of the them as tools in formulating the modern budget.

CHAPTER 1

INTRODUCTION

"A budget is a prescriptive link between financial resources and human behavior...It reflects the political philosophy of the time."

- Aaron Wildavsky, 1979

1969 was the last year the United States government recorded a budget surplus. Since that time, the federal government has recorded increasing annual deficits which have accumulated to a 1.4 trillion dollar national debt. Several legislative reform measures have failed to reverse this deficit trend, resulting in a strong movement to balance the budget through a constitutional amendment. These attempts to force control of the budget are being made because the Congress and President Reagan have failed to work in concert to resolve the problem. The President has made it clear that he does not intend to raise taxes, and has placed the budgets of the Department of Defense and Social Security high on his protective priority list. In like manner, Congress is reluctant to legislate tax increases and remains recalcitrant in giving up pork-barrel spending and constituency based appropriating legislation. This misalliance between the President and Congress has thwarted any efforts to either rationalize

the budget process or to reduce the deficit.

Public policy makers have practiced deficit spending consistently since 1960 and have attempted to balance the federal budget but have failed. They consider deficit spending to be a powerful economic tool and do not want it eliminated. However, the public, the media and the President apparently feel that deficits are dangerous and call for a balance-the-budget constitutional amendment. Political theorists and political economists line up on both sides, some saying that deficit spending has merit but most saying that it is pernicious. Both sides agree that deficits have some effect on the economy.

The Deficit Problem

This paper will test the validity of the claims made by those against deficit spending. Opponents would like to see a balance-the-budget amendment added to the Constitution to halt the deficit spending that they feel has a deleterious effect on the economy. They list six primary reasons why they feel deficits are harmful.

1) Deficits cause inflation. Keynesian economists demonstrate deficits' inflationary tendencies by noting that the rate and velocity by which money flows through the economy dictates the rate of inflation.¹ Deficit

spending increases the amount of money available in the economy and results in a condition where too much money exists to buy the same amount of goods and services.

2) Deficits are expansionary. Spending money in excess of that collected through taxes means that the federal government can grow in size and produce goods and services without raising taxes. With an essentially unrestrained budget, no incentives exist either to curtail public sector growth or to control waste and inefficiency. They also claim that deficits cause irresponsible spending. Congress has little incentive to look critically into the purpose and practicality of its spending when that spending is not restrained by law or held to a budget ceiling. Pork-barrel legislation favoring constituents will continue and may increase with the help of deficit spending.

3) Deficits raise interest rates. With a large percentage of available credit being used up by the federal government to pay the debt service, interest rates for private borrowers will increase and loan availability will decrease.

4) Continued high deficits expand the debt to foreign creditors. Federal Reserve Board figures show

that twenty per cent of the national debt is owned by foreign interests. With limited available credit in the private sector of the United States, many Treasury bonds are being bought by other countries or by international companies, and the United States is in danger of becoming a debtor nation.

5) Deficits futurize the debt and the current administration's policies. Deficit opponents claim that by spending now, future generations will be burdened with a giant debt at home and abroad. They will not only have to pay for our acquired bills, but will also have to live with the policies that created the deficit. In other words, if President Reagan decides to spend money in deficit now to build an MX missile, our children will pay the debt, and the interest on the debt and have nothing more to account for their efforts than an obsolete missile.

6) Deficits increase unemployment. Increasing not only the debt but also increasing the debt service, places an added strain on the economy and causes a related increase in unemployment. In addition, opponents to deficit spending say that paying back the debt drains private savings, making less money available for investment.

Research Methods

In order to test the validity of these claims, this paper will compare data on the coincident economic indicators that are related to each claim and then determine any relationship they may have with the deficit. Coincident economic indicators reflect the state of the economy today. Coincident indicators most commonly referred to by economists are the Consumer and Producer Price Indices. Leading indicators such as new housing starts are designed to predict what the economy might be like tomorrow and lagging indicators show a historical overview of what the economy was like yesterday. For the purposes of this paper, coincident indicators were chosen for the study because the intention is to look at the state of the economy and deficits on a current basis.

To do the investigation, statistical correlations and economic trends will be used to test the validity of the claims posed by those in opposition to deficit spending. It is difficult to separate an analysis of the federal budget from an analysis of the economy because the budget is a forecast based on predictions, assumptions, and formulae derived from trends in the economy. There are a number of indices used to monitor the change in the

status of the economy, this paper will limit its scope to include only those coincident economic indicators most relevant to testing the claims. For example, to test the claim that deficits are always inflationary, a methodology similar to that used by Maxwell Professor at Syracuse University, Jesse Burkhead, in his study conducted in the 1950's will be applied.² In addition, Burkhead's methods will be extended to test the other claims made against deficit spending addressed by this study.

The raw data from each coincident economic indicator will be collected from the source agency and plotted on a graph in order to observe trends. In order to determine any general relationship between the economic indicator and deficits, each graph will be superimposed over a compatible deficit graph. Further, to quantify any such relationship, the Pearson's r correlation coefficient will be calculated. To assure compatibility, whenever possible, all data will be referenced as a percentage of gross national product, a percent annual change or as an absolute. The time frame targeted for this analysis is the twenty three years from 1960 to 1983. This period has been chosen for its contemporary relevance and to insure that enough data are gathered to produce a significant study.

Organization of the Paper

The second chapter of this paper examines the matter of the federal deficit from the perspective of both the present administration and from the perspective of the current Congress. It will examine the reasons that no apparent successful steps have been taken either on the part of the President or by Congress to solve the deficit problem. Chapter 3 is a historical review of the causal factors that brought us to where we are today with the idea of deficit spending. It examines four contributing events including: a change in economic theory, a change in Government ethos, the repudiation of the gold standard and America's interest in inflation. Chapter 4 lists the six major objections to deficits as articulated by those opposed to the idea of federal budget deficits. In chapter 5, the study methodology is explained along with the factors considered in striving for the most accurate way of looking at the statistics used. The chapter also looks at the results of the study and remarks briefly on the findings. Chapter 6 discusses the findings of the study in a more specific manner. Chapter 7 concludes the findings of the study and makes general comments on the literature reviewed and the empirical evidence generated by this research.

NOTES

¹Charles Schulze, National Income Analysis, 2nd Edition (Englewood Cliffs: Prentice Hall, 1967).

²Jesse Burkhead, "The Case for a Balanced Budget," in The Federal Deficit: Fiscal Imprudence of a Policy Weapon, ed. J. Hamnovitch (Boston: D.C. Heath and Co., 1965), p. 4.

CHAPTER 2

PERSPECTIVESCurrent Administration

"We must balance the budget"

- Ronald Reagan, September 9, 1980

In 1980, Ronald Reagan campaigned for the presidency on the premise that he would reverse the budget deficit trend then in progress. He promised to balance the budget, reduce taxes, increase defense spending, and cut domestic spending. To some extent, he has made good his campaign promises. He has restructured the tax system, increased the defense budget and cut domestic spending. He did not, however, balance the budget. In fact, fiscal year 1983, produced the highest federal budget deficit both in terms of real dollars and in percentage of gross national product.¹ In the 1984 presidential election the Democrats questioned Reagan's economic policies and again made the federal deficit a campaign issue, bringing the debate to national attention. More serious questions about Reagan's economic policies arose in May of 1984, when the chairman of the President's Council of Economic Advisers, Martin Feldstein, resigned. Possibly not the only reason for the resignation but certainly a component

of it, was that the President rejected the CEA annual report, claiming the report was in conflict with his own policies.² Paul Volker, chairman of the Federal Reserve Board, and the President's own director of the Office of Management and Budget, David Stockman, expressed agreement with Feldstein's caveats regarding deficits' effect on the economy and exacerbated concern over high deficits. The newsmaking nature of this internal conflict increased public awareness of the budget "crisis." In fact, George Gallup reported the results of a poll showing that discussions on the economy had replaced sports as the number one topic of discussion in the American family home.³ At White House Staff urging, President Reagan has renewed his efforts to bring the issue to fruition with the beginning of the new FY 1986 budget cycle.⁴

Since the Great Depression of the 1930's with its enormous government growth and budget deficit, the nation was for the first time, faced with how to handle national debt. To accomplish this, several post war theories emerged. Of these, the most popular were the counter-cyclic and pro-cyclic approaches. It was felt at the time that the cyclical nature of a capitalist economy requires public intervention to achieve balance. During times of recession, stimulus should be applied to equalize the

peaks and troughs. Counter-cyclic debt management favored the issuance of long-term debt in economic boom in order to reduce money in the economy and the issuance of short-term debt in recessions in order to increase the money flow. Pro-cyclic debt management, on the other hand, places emphasis on debt lengthening and minimizing interest costs. Current economic theory regarding monetary policy is called Monetarism. It was developed by the conservative economist Milton Friedman and favors simplifying treasury financing techniques to stabilize the economy.⁵

Attempts to control the budget through constitutional amendment have been made because Congress and the President have, so far, failed to remedy the situation or to work in concert towards a solution. The President maintains that the strong economic recovery, and the new tax restructuring along with continued reductions in domestic spending will absorb the budget deficit. Congress in turn finds it politically not feasible to legislate tax increases to offset the budget deficit and is reluctant to give up individual domestic programs. This struggle between the President and the Congress has left the question of increasing deficits unresolved.

Legislative Overview

Since 1979, members of the Senate Judiciary Subcommittee on the Constitution have been working toward a compromise measure to control the deficit, one that would attract the support of as many proponents of a constitutional initiative as possible. The National Taxpayers Union and several other like interest groups have supported these efforts.⁶ This increasing constituent concern over the executive/legislative stalemate regarding a solution to sustained deficit spending has prompted the Congress to pass several legislative reform measures in an attempt to reverse the deficit trend.

Legislative history produces several examples of this; in part, the Revenue Act of 1964 intended to "...further the objective of balanced budgets in the near future".⁷ Prior to 1974, decision-makers in Congress considered appropriating funds for each program individually and never saw the impact each appropriation had on the budget as a whole. The 1974 Budget and Impoundment Control Act intended to rationalize the decision-making process by establishing a budgetary timetable and creating information gathering offices

within Congress. More importantly however, the 1974 Act provided for a first and second budget resolution step and a reconciliation process designed to put the parts of the budget in line with the budget as a whole and achieve balance. This streamlining allowed legislators to consider the budget as a whole and was intended to stop expensive constituency based expenditures. Donald Ogilvie observed however, that since 1974 Congress has been required to "give greater attention to agency operations."⁸ The implication here is that by involving themselves in agency operations, Congress has lost perspective of the whole budget. The Full Employment and Balanced Growth Act of 1978, (Public Law 95-523) declared a balanced budget to be a national public policy priority.⁹ Public Law 95-435, a rider attached to a bill to amend the Bretton-Woods Agreement Act, (Public Law 95-435)¹⁰ required that, "starting in fiscal year 1981 total budget outlays of the federal government shall not exceed its receipts."¹¹ In 1979 public law 96-5 which provided for a temporary increase in the debt limit, mandated "Congress shall balance the federal budget." Congress repealed and raised the debt limit more than 56 times since 1954.¹² It seems apparent from these examples that Congress is not bound by its own laws. No congress can

bind any succeeding Congress statutorily, new laws are passed to replace old ones and old laws can be rescinded. As a result of these legislative failures and thier nonbinding status, budget deficits not only persist but are on the increase as may be seen in table 1.

Table 1. Federal Budget deficits, 1960-1983 (in millions of dollars)

Fiscal Year	Surplus/ deficit	Fiscal Year	Surplus/ Deficit
1960	+ 269	1972	- 23,373
1961	- 3,406	1973	- 14,849
1962	- 7,137	1974	- 4,688
1963	- 4,751	1975	- 45,154
1964	- 5,922	1976	- 66,413
1965	- 1,596	1977	- 44,948
1966	- 3,796	1978	- 48,807
1967	- 8,702	1979	- 27,694
1968	- 25,161	1980	- 59,563
1969	+ 3,236	1981	- 57,932
1970	- 2,845	1982	- 110,609
1971	- 23,033	1983	- 195,407

Source: The Office of Management and Budget, The Budget of the United States FY. 1986, Special Analyses and Apppendices (Washington D.C.: U.S. Government printing Office, 1985), p. 6-92.

NOTES

¹Office of Management and budget, The Budget of the United States: FY 1986 (Washington, D.C.: U. S. Government Printing Office, 1985), pp. 9-60.

²George Gallup, America Wants to Know: The Issues and Answers of the Eighties (New York:W & W, 1983), p. 11.

³Hobart Rowan "Feldstein Leaves A Winner, Washington Post National Weekly Edition, 28 May 1984, p. 5.

⁴U. S. President, Public Papers of the President of the United States (Washington, D.C.: Office of the Federal Register, National Archives and Record service) Ronald Reagan, 1985.

⁵Henry Kaufman, Issues in Federal Debt Management, Conference Series 10 (Boston: Federal Reserve Bank, 1973), p. 155)

⁶Richard E. Wagner and Robert D. Tollison, Balanced Budgets, Fiscal Responsibility, and The Constitution,

⁷U. S. Statutes at Large, vol. 90.

⁸Donald Ogilvie, The Congressional Budget Process After Five Years, ed. Rudolph G. Penner (Washington, D.C.: American Enterprise Institute, 1981), p. 109.

⁹U. S. Statutes at Large, vol. 92.

¹⁰James Dale Davidson, The Squeeze (New York: Summit Books, 1980), p. 58.

¹¹U. S. Statutes at Large, vol. 92.

¹²U. S. Code, Title 32, Subchapter 1, Section 3101.

CHAPTER 3

FACTORS THAT CONTRIBUTED TO MODERN DEFICIT PHILOSOPHY

This chapter will look at some of the contributing historical events that helped to facilitate the present deficit philosophy. There are several factors but the four that are discussed here are 1) the repudiation of the gold standard, 2) a governmental ethos change, 3) an evolutionary economic theory change and 4) a change in the way the United States views inflation.

The Gold Standard

Deficits are not the historical norm; balance or surplus was the goal of the government budget since a federal budget became a reality. A series of deficits and surpluses that fluctuated with wartime and peacetime was characteristic of the modern budget through the 1960's. It was 1961 that marked the beginning of a quarter of a century of sustained increasing federal budget deficits that have accumulated to a 1.4 trillion dollar national debt.¹ One event that facilitated deficit spending is the post World War I decision to drop the gold standard as a way to control the money supply. Before 1912, the money supply was controlled by the linking of paper money to

gold. When money was spent, the gold supply dwindled, which created a fundamental monetary and economic stability. Eliminating the gold standard made the creation of money easier because each dollar no longer needed a dollars worth of gold on reserve. The 1913 Federal Reserve Act which allowed the dollar to be backed by a reduced percentage of gold, facilitated inflation.² In 1971 Richard Nixon officially repudiated the promise made by the United States government to back the dollar with gold. The U.S. dollar was backed by nothing and inflation rose.³ Without having every U. S. dollar backed by an amount of gold reserves, the United States could borrow and lend paper money primarily on their good reputation. This new standard placed federal deficit spending into a different perspective.

Ethos Change

A second reason for the budget policy shift is that a significant change in government ethos was occurring. Possibly the most evident change came during the Roosevelt administration and on the heels of the Great Depression. Referring to that era, Allen Schick observed that, "Close budgetary control dissolved during the expansionist years of the New Deal".⁴ Federal government spending was growing at a greater rate than state and local government

spending and surpassed state and local spending as a per cent of National Income in 1939.⁵ (See Table 2) This spending pattern reversal marked the beginning of the movement away from a decentralized, state dominated government, and towards a central federal government. "Until the 1930's," notes Milton Friedman, "the United States remained largely as its founders had envisaged it, a decentralized society in which the state and local governments were the primary governmental entities, with the federal government serving to defend the nation,...not as a participant in the day-to-day lives of its citizens."⁶ This new federal government involvement and the many social welfare programs were intentionally spending in deficit to get the country back on its feet.

Table 2. Government Spending as a Percentage of National Income in Selected Years

Year	Federal Spending	State Spending
1902	3.2	6.1
1913	3.0	7.0
1922	6.3	9.2
1930	3.7	11.3
1940	12.5	10.8
1950	17.2	8.5
1960	22.4	10.4
1970	25.2	13.5
1980	28.4	12.7

Source: Milton and Rose Friedman, The Tyranny of the Status Quo, (San Diego: Harcourt Brace Jovanovich, 1984), p. 15.

Donald Ogilvie's observation of the same phenomenon was that "Keynesian economics provided a theoretical justification not only for direct government intervention in the economy but also for deficit spending."⁷ To further solidify federal economic involvement, the Full Employment Act of 1946 and the Economic Stabilization Act of 1971, gave the President the power to manipulate government spending through impoundment and other methods to "promote economic stability."⁸ In periods of high unemployment, the federal government may expand its budget and undertake projects involving considerable expenditure of manpower.⁹ Such deficit spending is a direct method of intervening in the operation of the economy and temporarily increases the demand for goods and labor. It moves much slower in terms of economic impact than do monetary corrective actions.

Change in Economic Theory

The third contributing factor was that economic theory and economic advisers shifted with the new economic role assumed by the federal government. Until the 1930's, traditional fiscal policy in the United States was one of a balanced annual budget.¹⁰ By the end of the 1930's The "Keynesian Revolution" redefined budgetary goals from that

of a balanced budget to the goal of a balanced economy.¹¹ In fact, this value shift was so complete that "Budget deficits were no longer seen as a sign of irresponsible government action."¹² This post-depression, counter-cyclic budget theory of Keynes placed an emphasis on issuing long-term debt in economic booms in order to reduce liquidity. It promoted a "genuine belief that deficits were good for the economy,"¹³ and deficit spending became a solid foundation for fiscal responsibility.

A New Perspective On Inflation

Finally, the American government has an interest in maintaining a steady rate of inflation which contributes to deficits. In his recent book The Tryanny Of The Status Quo, Milton Friedman elaborates on this idea and says, "what is called a deficit is a ...subtle hidden tax, whether it is financed by pieces of paper called money or bookkeeping entries called bonds."¹⁴ He states further that inflation is a hidden tax because incomes increase to match inflation, and this action increases taxes through "bracket creep", without the necessity of legislative action. The more money one earns, the higher the percentage of taxes he pays. The bracket creep argument is

obviated by the recent (February, 1985) enactment of legislation that indexes taxes to inflation. Now, tax brackets do not go up automatically as income increases. James Dale Davidson, Chairman of the National Taxpayers' Union asserts that as a link to revenue through inflation our political system is "fundamentally biased toward deficit spending."¹⁵

NOTES

¹In 1969 a small surplus was reflected after the tax increase.

²James Dale Davidson, The Squeeze (New York: Summit Books, 1980), p. 58.

³Ibid., p. 60.

⁴Allen Schick, "The BOB That Was," Law and Contemporary Problems, Summer 1970, pp. 519-540.

⁵Milton Friedman and Rose Friedman, The Tyranny of the Status Quo, (San Diego: Harcourt Brace Jovanovich, 1984), pp. 16-17.

⁶Ibid., p. 18.

⁷Donald Ogilvie, The Congressional Budget Process After Five Years, ed. Rudolph G. Penner (Washington, D.C.: American Enterprise Institute, 1981), p. 110.

⁸Robert D. Lee and Ronald W. Johnson, Public Budgeting Systems, 3rd Edition (Baltimore: University Park Press, 1983), pp. 208-211.

⁹Gene C. Uselton, Lags in the Effects of Monetary Policy: a nonparametric Analysis (New York: Marcel-Decker, 1974) p. 2.

¹⁰Bruce R. Bartelt, Reaganomics, Supply-Side Economics in Action, (Westport: Arlington House Publishers, 1981).

¹¹Hugh Dalton, Principles of Public Finance, 4th Edition (London: Routledge and Kegan Paul, 1954), p. 221.

¹²Richard E. Wagner and Robert D. Tollison, Balanced Budgets, Fiscal Responsibility and the Constitution, Studies in Law and Economics Series (Washington, D.C.: CATO Institute, 1982).

¹³Bartelt, p. 160.

¹⁴Milton Friedman and Rose Friedman, p. 10.

¹⁵Wagner, Introduction, p. iv.

CHAPTER 4

CONVENTIONAL ARGUMENTS AGAINST DEFICIT SPENDING

"[I would take] from the federal government the power of borrowing."

- Thomas Jefferson, 1798

The reason public policy makers have practiced deficit spending consistently for two decades is that they consider deficit spending to be a powerful economic tool; a tool far too valuable to lose. Not the least of Congressional rationale is the convenience of spending without taxing. As we have seen, pressure from constituents has prompted several legislative attempts to balance the budget. However, in order to preserve the spending latitude that deficits afford them, Congressmen have avoided any serious attempts at statutory balance. Seventy per cent the public,¹ 33 states,² and the President all feel that deficit spending should be curbed, and observing Congressional reluctance, they call for a binding constitutional law to balance the budget through an amendment. Political theorists and political economists can be found to support both sides of the deficit question, some saying that deficit spending has merit but most saying that it is pernicious. Both sides generally agree that deficits have some effect on the

economy.

Opponents of deficit spending give six principal reasons to support their claim that deficit spending has a deleterious effect on the economy.³ They say that deficits 1) cause inflation; 2) increase the size of the government; 3) raise interest rates; 4) expand the debt to foreign creditors; 5) futurize both the debt and the policies that created the deficit; and 6) increase unemployment. The rationale presented by deficit opponents for each claim follows.

Deficits Cause Inflation

Balanced budget supporters claim that deficits cause inflation. To prove this, they quote Keynesian economists that demonstrate deficit's inflationary tendencies by noting that the rate and velocity by which money flows through the economy dictates the rate of inflation.⁴ Deficit spending increases the amount of money available in the economy, and such an increase causes a condition where too much money exists to buy the same amount of goods and services. Inflation can continue if and only if the money supply is increasing as well. It follows then that in any consistent theory of inflation, virtually all nominal (i.e., money) variables will increase together.⁵ (See Appendix A.).

Deficit spending by the federal government can put money into the economy by creating new dollars to pay back the debt. When a situation exists that there is too much money to buy the same amount of goods and services, it is called inflation. Inflation is measured by indices (Producer Price or Consumer Price) that look at what people buy and how much they pay for it. If the federal debt is paid by creating more money, it is a product of monetary policy.

"Inflation," according to Milton Friedman, "is always and everywhere a monetary phenomenon."⁶ Jesse Burkhead agreed that inflation was linked to monetary policy when he discussed bond sales as a means of settling debt obligations and said, "This makes debt management an instrument of monetary control and means that for many purposes the two cannot be separated".⁷ Others argue that it seems to be the fiscal policy and not the monetary policy that controls inflation. Turner, for instance, supports this by citing the 1960's tax law⁸ that attempted to control inflation and contends that restraint on consumption was achieved but that the official fiscal policies designed to restrain inflation may well have made a major contribution to it.⁹ Although there is

disagreement on whether it is fiscal or monetary policy that facilitates inflation, there is little disagreement among these people that inflation is a result of deficit.

Deficits Cause Government Expansion

Amendment protagonists say that deficits increase the size of the government. They say that by spending money in excess of that collected through taxes, the federal government can grow in size and produce more goods and services without Congress having to vote on unpopular tax legislation. In addition grants to state and local governments expands the government through federalism. If government growth is defined by increased spending, an essentially unbridled budget offers no incentives to either curtail that growth or to control waste and inefficiency in the public sector. In discussing the nature of the public sector Burkhead and Miner pointed out that "the public sector manager typically has little incentive to reduce costs or return appropriations unspent. Neither is he likely to be accountable...for mismanagement."¹⁰ Opponents of deficits say that the most devastating effect that this type of behavior has, is that government growth occurs at the cost of the private sector. Further they point to increased "irresponsible" spending by the Congress. Jean-Batiste Say, and others of

his time, writing in the mid 19th century, was cited by Jesse Burkhead to note that "It is the irresponsible government which is to be feared."¹¹ This feeling has perhaps persisted until today as Congress has little incentive to look critically into the purpose and practicality of its spending when it is not restrained by law or held to a budget ceiling and public distrust of government results. In 1974 the Budget and Impoundment Control Act attempted to rationalize this through the 1st and 2nd budget resolution and reconciliation process. However, as seen in the 1981 budget cycle, the Act's intent was circumvented by the President. Pork-barrel legislation favoring constituents will continue and may increase with the help of deficit spending. Adam Smith, in Wealth of Nations said, "Governments would borrow from industry and commerce and thus deprive a capital-poor society of revenue which could be productively reinvested."¹² In short, the ability to engage in loan finance makes for irresponsibility in the sovereign.

Deficits Cause High Interest Rates

One of the most controversial arguments offered against deficits is that deficits raise interest rates. Even balanced budget amendment supporters disagree among

themselves on this point. For example, President Reagan, who supports the balance amendment, has denounced the widely held assumption among his colleagues that deficits raise interest rates. In the first presidential debate during his bid for re-election in 1984, President Reagan said "Deficits have nothing to do with interest rates." This statement was in direct conflict with his economic advisors. In fact, the 1984 Annual Council of Economic Advisors report, CEA chairman Martin Feldstein challenged Reagan's claim that high deficits have nothing to do with high interest rates.¹³ Federal Reserve Board chairman Paul Volker and notable Cabinet members also disagree with the President and describe the phenomenon of "crowding out". Crowding out occurs when a large percentage of available credit is being used up by the federal government to pay the debt service and money becomes more competitive, therefore more expensive to borrow. John Stuart Mill, in his essay Principles of Political Economy said "Government borrowing is harmful if it destroys capital which could otherwise be used for productive employment."¹⁴ This demand on available credit results in interest rates for private borrowers increasing and money available for private loans decreasing.

Deficits Cause Foreign Indebtedness

Fourth, anti-deficit enthusiasts say that continued high deficits expand the debt to foreign creditors. First in the twofold argument, they cite Federal Reserve Board and U.S. Treasury statistics that show foreign interests to be the fastest growing component of debt holders.¹⁵ (Refer to Table 3) With limited available credit in the private sector of the United States, many Treasury bonds are being bought by other countries or by international companies. Through this direct indebtedness, they warn that the United States is in danger of becoming a debtor nation. The Los Angeles Times reported that in the first quarter of 1985, "The U. S. economy crossed a crucial and disturbing threshold...when the...nation's reliance on foreign capital to maintain domestic investment exceeded \$100 billion for the first time."¹⁶ The Department of Commerce reported that foreign investment soared to a record annual rate of \$117.1 billion. Some economists link this trend to growing budget deficits.

Table 3. Foreign Interest in National Debt (in billions of dollars), Selected Years.

Securities and Trust Funds Held by:	1970	1980	Annual % growth rate
Gov't Agencies	97	192	9.1
Federal Reserve	62	121	7.1
Private Investment	229	616	10.4
Foreign	10.6	134	20.6

Source: Federal Reserve Bulletin, 1(Summer 84):41.

The second half of the argument is the indirect indebtedness that lies in the foreign ownership of the banking industry. John Naisbitt, in his recent book Megatrends states that more than 100 major U.S. banks, are owned wholly or in part, by foreign investors. Foreign banks hold forty per cent of all commercial loans in New York State. California, one of Naisbitt's leading indicator states has twenty of the United States largest banks, ten of which are foreign owned. City Bank and Chase Manhattan got fully ten per cent of their 1980 income from their Brazilian subsidiaries.¹⁷ Naisbitt also cites World Papers (Feb. 1981) and The Economist (Aug. 30, 1980) when they showed that foreign banks in the United States have grown from 278 in 1978 to 315 in 1979 and they owned 13.5 per cent of the United States banking assets in 1982.¹⁸ These banking statistics are significant in that they represent indirect foreign

controlled investments not included in the percentage of direct foreign held Treasury bonds in Table 3.

Deficits Futurize the Debt

Fifth, those in opposition concerned with the long range effects of deficits say that deficits futurize the debt. They warn that by "spending in the future," we commit our children and future administrations to policies set in a contemporary environment. We may be sinking costs into functionally tenuous projects that could be rejected by a future, more technologically advanced, society. The accumulated national debt plus interest is at 1.4 trillion dollars and the future is committed not only to paying back debt but also to the policies that created it. "There is a long run danger in debt and it leads inevitably to bankruptcy", warned Jesse Burkhead.¹⁹ Preston Miller of the Federal Reserve Bank of Minneapolis said in The Economic Consequences of Government Deficits that "if bonds alone are used to finance the debt, the country faces insolvency."²⁰

In addition, government borrowing makes future financing more difficult by increasing that portion of the budget that must go for fixed charges. (See Table 4.) Approximately seventy six per cent of the budget is

already committed and therefore cannot be controlled or easily changed. For example, the interest payments on the national debt and all social entitlement transfer payments, along with funds committed by previous administrations and appropriated by the Congress, are not available to politicians to change without substantive legislation. Increasing the percentage of the budget that is uncontrollable, by adding new interest payments limits any money that may be available for new appropriating legislation. Additionally, thirty percent of all the outlays from the federal budget are for 8 entitlement programs that are specifically "indexed" to inflation, this means that if inflation goes up, the entitlement goes up by that same proportion. This increasing size of the untouchable portion in the budget crowds out future spending. Naisbitt admonishes government by saying that, "In the federal governments attempt to be more business like, it is remarkable how willing they are to make the current quarter look better at the expense of the future, to sacrifice the future to make this year's bottom line a little more attractive or a little less embarrassing."²¹

Table 4. Executive Controllability of Federal Budget
Outlays: 1970 - 1983 (in billions of dollars).

	<u>1970</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Total Outlays	196	324	365	401	448	491	577	657	728	805
Uncon- trollable Outlays	123	228	258	284	324	355	424	485	585	614
Percent Total Outlays	63%	70%	70%	71%	72%	72%	74%	74%	75%	76%

Source: Statistical Abstract of the U. S. 1984, 104th Ed.
Table #504 (in billions of dollars except %)
Figures adjusted.

Deficits Cause High Unemployment

Finally, pro-balance patrons say that deficits increase unemployment. They support this by showing that deficits place added strain on the economy, and cause a lower economic growth rate thereby producing a related increase in unemployment.²² Monetarists do not feel that deficits are inflationary but concede that fluctuations in the money supply can affect income over the short run, and contend that income is determined by actual economic output over the long run,²³ successfully affecting employment and wages. Senator Edmund Muskie pointed out that a one percent increase in the unemployment figure

would automatically (without Congressional action) cost the United States Treasury twenty billion dollars.²⁴ Because of the nature of indexing, if a person loses his job, his income loss takes money off of the revenue side of the government's books through a corresponding tax loss. The impact is doubled when that same person goes on unemployment insurance or on welfare and/or gets food stamps which place him on the expense side of the government ledger.

To test the validity of these claims, that budget deficits adversely effect the economy in many different ways, this paper will investigate the relationship between the annual per cent change of each alleged affect and the absolute deficit.

NOTES

¹Gregory B. Mills and John L. Palmer, The Deficit Dilemma, The Changing Domestic Priorities Series (Washington, D.C.: The Urban Institute, 1983).

²Montanans for a Balanced Federal Budget, leaflet, (Helena: Unpublished, 1984).

³Ibid.

⁴Charles Schulze, National Income Analysis, 2nd Edition (Englewood Cliffs: Prentice Hall, 1967), P. 105.

⁵William A. Cale, Editor, Inflation: Causes, Consequences and Control (West Germany: Bell Telephone Laboratories, 1981).

⁶Milton Freidman, Dollars and Deficits: Inflation, Monetary Policy and the Balance of Payments, (Englewood Cliffs: Prentice Hall, 1968).

⁷Jesse Burkhead, Government Budgeting, (New York: Wiley, 1956) p. 65.

⁸Henry Jackson, et.al., Do Trade Unions Cause Inflation? (Boston: Cambridge Press, 1972), p. 81.

⁹In the 1960's the inflation rate was growing so rapidly congress passed new tax laws to serve two purposes: 1) to adjust the relationship of direct taxes on income with indirect taxes on consumption, and thereby restrain total effect of demand/consumption. 2) Use taxation to reallocate total expenditures in various ways, for instance from private consumption into social benefit. The restraint on consumption was achieved but the reallocation did not materialize until 1967. Turner concludes that these official fiscal policies which were designed to restrain inflation, may well have made a major contribution to it.

¹⁰Jackson, p. 103.

¹¹Jesse Burkhead and Jerry Miner, Public Expenditure (Chicago: Aldine-Atherton, 1971), pp. 77-79.

¹²Adam Smith, Wealth of Nations, reprinted from the 6th edition (London: G. Bell and Sons, 1887).

¹³Jesse Burkhead, "The Case for a Balanced Budget," The Federal Deficit: Fiscal Imprudence of a Policy Weapon, ed. J. Hamnovitch (Boston: D.C. Heath and Co., 1965), p.4.

¹⁴Hobart Rowan, "Feldstein Leaves a Winner," Washington Post National Weekly Edition, 28 May, 1984, p. 5.

¹⁵John Stuart Mill, Principles of Political Economy, Ashley Edition (London: Longmans-Green and Company, 1929), p. 874.

¹⁶The Federal Reserve Board of Governors, The Federal Reserve Bulletin, 70 (June 1984): A-29.

¹⁵Bozeman Daily Chronicle, 17 March, 1985.

¹⁷John Naisbitt, Megatrends. (New York: Warner Books, 1982), p. 73.

¹⁸*Ibid.*, p. 44.

¹⁹Burkhead, "The Case for a Balanced Budget," p. 4.

²⁰Preston J. Miller, "Examining the Proposition That Deficits Matter," in The Economic Consequences of Government Deficits, Economic Policy Conference Series, ed. Lawrence H. Meyer (Boston: Kluwer-Nijhoff, 1983), p. 18.

²¹Naisbitt, p. 81.

²²G. L. Bach, The New Inflation: Causes, Effects, Cures (Providence: Brown University Press, 1973), p. 69.

²³Sidney Weintraub, Capitalisms Inflation and Unemployment Crisis: Beyond Monetarism and Keynesianism (Reading: Addison-Wesley, 1978), p. 11.

²⁴Robert D. Behm, "The Receding Mirage of the Balanced Budget," Public Interest, (Spring 1982), p. 120.

CHAPTER 5

THE TEST

In order to do the investigation, statistical correlations are used to test the validity of the claims posed by those in opposition to deficit spending. Six coincident economic indicators were compared statistically to the absolute deficit. The coincident indicators used were the Consumer and Producer Price Indices,¹ the amount of money the government spends,² the amount of Treasury bills owned by foreign interests,³ the unemployment rate,⁴ and the prime interest rate.⁵

The Methodology

The raw data (See Appendix B) from each coincident economic indicator was collected from the source agency and graphed to observe trends. In order to determine any gross relationship between the economic indicator and deficits, each graph was compared with a time-compatible deficit graph. (See Appendix C) Further, to quantify any such relationship, the Pearson's r correlation coefficient was calculated. In determining the best approach to the analysis, it is important to note that in any one year a good prediction of the type of indicators

used here, is last year's value. This is true primarily because of the incremental nature of these indices, and government in general. For example, if the CPI was high last year, it will likely be high this year. Without taking this "autocorrelation" into account, comparing deficits with the indicators by use of the correlation coefficient would yeild results that are hard to interpret. This factor was taken into account in the present analysis by using per cent change in the six indicators rather than the absolute level. It was not necessary to adjust the deficit figures as they were used as the independent variable. All data is recognized in current dollars.

If strong correlations are found to exist, a certainty of cause cannot be assumed "because any two or more nominal variables will inevitably be increasing together,...identifying correlation need not rule out the possibility that yet another variable is acutally causing all the considered variables to increase in the first place." ⁶

Findings

As seen in Table 5, the correlations between deficit and the all of the indicators, except the prime rate, are weak. The empirical data in this study cannot

statistically validate any of the claims that deficits are the cause of change in any of the coincident indicators studied.

Table 5. Pearson's r coefficient correlation results between deficit and study indicators.

	r	r ²
CPI	- .109252	.03706
PPI	.02194	.00048
Spending	- .21843	.04771
Foreign	- .06479	.00420
Unemployment	- .12044	.01451
Prime	.42059	.17689

It is understood that results are sometimes difficult to interpret if the relationships between the coefficient data do not remain stable over time. Allowances for this were not included in this study however, because studies that included this factor by Swamy and Tinsley in 1980,⁷ demonstrated little change in overall results. Data accuracy is often dependent on the perception of both the person collecting the data and the person reading it. In doing the research for this study, an effort was made to use the most objective data available. All of the raw

data was obtained through the appropriate government agencies, (See Appendix D) but it has been untouched relative to interpretation.

Support for these findings can be found in a few recent reports. In his latest book, Lawrence Meyer suggested that macroeconomic studies of the United States generally find that federal budget deficits hurt the economy little, if at all.⁸ Large macroeconomic models suggest "that policies which permanently raise budget deficits (i.e., reductions in taxes, liberalizing eligibility rules of transfer payments, and indexing) actually raise the path of real output while having only slight effects on inflation and interest rates."⁹ Weintraub also concurs that "studies suggest generally weak relationships between deficits and major economic indicators."¹⁰ The following chapter will look specifically at the findings as they impact each of the alleged claims from this study, against deficit spending.

NOTES

¹U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1984, 104th Edition (Washington, D.C.: U.S. Printing Office, 1984).

²Office of Management and Budget, The Budget of the United States, FY 1986, Special Analyses and Appendices (Washington, D.C.: U.S. Government Printing Office, 1985).

³U. S. Department Of Commerce, Bureau of Economic Analysis, Business Conditions Digest, November, 1984.

⁴Department of Commerce, Statistical Abstract, 1984.

⁵The Board of Governors of the Federal Reserve System, The Federal Reserve Bulletin, 6:90.

⁶G. L. Bach, The New Inflation, Causes, Effects, Cures (Providence: Brown University Press, 1973), p. 69.

⁷P.A.V.B. Swamy and P. A. Tinsley, "Linear Prediction and Estimation Methods for Regression Models with Stationary Stochastic Coefficients," Journal of Econometrics, February, 1980, p. 103-104.

⁸Lawrence H. Meyer, The Economic Consequences of Government Deficits, Economic Conference Series, (Boston: Kluwer-Nijhoff, 1983), p. 3.

⁹U. S. Congress, Congressional Budget Office Report as cited in, Journal of Money and Economics, April 6 1980, pp.171-198.

¹⁰U. S. Congress, Joint Economic committee 97th Congress 1st session, July, 1981, staff study as cited by R. E. Weintraub, Deficits: Their Impact on Inflation and Growth.

CHAPTER 6

DEFINITIVE FINDINGS

Deficits and Inflation

Definitions of what makes up inflation are numerous and it is often difficult to determine which criteria are being used just by looking at a study. The criteria used to determine the Wholesale Price Index, (important here because it was the index that Burkhead used in his study) has been completely redesigned, making relevant comparisons to historical data virtually impossible.¹ (See Appendix E.) The overhaul was so complete that the index was renamed. The new index is called the Producer Price Index (PPI) and for purposes of this study, the PPI was used with historic figures adjusted for compatibility. Burkhead's study that ended in 1953 shows no consistent positive correlation between the wholesale Price Index (now the Producer Price Index and a major indicator of inflation) and federal budget deficits.² In fact, he found that the inverse reaction was forming in the later years of his study. Naomi Caiden agreed so wholeheartedly that she said in her recent essay stating that, "in fact, inflation causes deficits, not the other way around."³ Monetarists concede that government surpluses can slow the

economy and deficits can accelerate it in the short run. But they say neither surpluses nor deficits have any impact on growth of inflation over time. Instead, they merely influence the mix of public and private spending in the economy. Deficit spending actually removes money from the economy by using up available credit and paying back debt service. The impact of this is doubled if loan for the debt is paid back out of the country to foreign holders. It follows then that deficit spending is not inflationary and may even be recessionary depending on the statistical correlation.

Deficits and Expansionism

If left unbalanced with increased revenue, increased spending will result in deficit. However, to make the quantum leap that deficit therefore causes government growth, is irresponsible argumentation. Fiscal responsibility is the only political trait that can restrain irresponsible spending. Using the Ricardian Equivalence Theorem,⁴ Bennett McCallum tested the "monetarist hypothesis that a constant...budget deficit can be maintained permanently without inflation if it is financed with bonds rather than money. He concluded that the deficit possibly could be maintained, but unfortunately, he calculated for the debt and did not take

into account the interest payments on the debt which would have reversed the conclusions.⁵

It is understood that unless appropriate deflator's are applied, the conventional methods used to determine government growth may be distorted.⁶ However, the amount of money that the government spends was used as a model to test the government growth argument because other methods have failed to prove superior and because, "most analysts use the ratio of government expenditures to the total output of the economy (GNP) to measure the size of the government."⁷ If however, the definition of government growth were to be changed to the number of persons employed by the government, even weaker association is found. Government employment has remained relatively stable since the 1960's.⁸ There are approximately 3 million federal civilian employees and 13 million state and local government employees. These government employment figures represent between 17 and 19 per cent of the total work force. Perhaps, it can be assumed that it does not take a lot more people to spend a lot more money.

Deficits and Interest Rates

While in general, the statistical correlations are weak, the correlation between deficits and the prime rate

could be interpreted as exhibiting a moderately strong positive association. In 1984 (outside the scope of this study) however, the prime rate has fallen steadily to 8 1/2 per cent during the first quarter of 1985. This drop did not see a corresponding fall in the deficit, in fact the deficit has continued to rise. Since there is no established theoretical basis for this type of a relationship, it is probably best interpreted as a chance variation. The earlier years of the study showed the strongest relationships which occurred under Keynesian economic theory. This may demonstrate that interest rates have less dependence on deficit than they do on some other stimulus, or that perhaps both deficit and interest rates respond to a third outside variable. Still, a Pearson's r^2 value of .17 or 17% per cent of the variation explained, cannot be ignored.

Interest rates and the decision to manipulate them are influenced by many factors, not the least of which are the President and Congress of the United States and the Federal Reserve Board. Debt management has traditionally focused on the role of the Treasury in determining the structure of the federal debt. There is a separation of function between the Treasury and the Federal Reserve System under which the Treasury determines the gross

distribution of government liabilities of varying maturities and the Federal Reserve Board determines the net distribution. No matter what securities the Treasury chooses to issue, the Federal Reserve could, through their open-market operation ensure that private investors are controlled.⁹ Monetary policy is set by the Federal Reserve, the nations central bank. The Federal Reserve can influence the money supply through a variety of methods, but its key device is "open market operations", the buying and selling of government securities. If the Federal Reserve wants to increase the money supply, it buys government securities from banks. That puts new cash in the hands of the banks which in turn can lend it out. Conversely, if the Fed wants to cut the money supply back, it sells government securities, thus draining cash out of the banking system. The Federal Reserve System can also influence the money supply by directly changing the amount of reserves the banks hold. Increasing the level of mandatory reserves reduces the amount of money in circulation; decreasing the amount of reserves adds to the sum available in the economy.

A third technique used by the Federal Reserve to manipulate the supply of money in the economy is to adjust the lending rate that it charges its member banks for

interbanking loans. This directly affects the prime lending rate that banks charge both public and private investors. High interest rates keep money from flowing freely by imposing spending constraints.

In keeping with the monetarists idea, Director of the Office of Management and Budget, David Stockman¹⁰ argued that the Federal Reserve should pursue a steady monetary policy rather than Keynesian theory designed to counterbalance economic trends. The objective was to prevent debt management from being a source of instability.¹¹ The Federal Reserve's job was to control the rate of growth of the economy by stabilizing the rate of growth in the supply of money. Head of the Federal Reserve System Paul Volker stated that "the primary role of interest rates is to allocate credit to its most productive uses and to bring credit demands into balance with supplies."¹² Therefore the Federal Reserve System's role, as its chairman sees it, is to artificially manipulate the cost of credit.

Deficits and Foreign Indebtedness

Foreign purchases of United States Treasury Bills actually peaked in 1978 at 18% and are on the way down according to information released by the Treasury

Secretary.¹³ The administration may not be inclined to discourage foreign purchase of T-bills to finance the debt because Treasury bills purchased by foreign interests do not use up money now residing in U. S. Commercial or Federal Banks. New money is filtered into (rather than recycled through) the U.S. economy. If foreign interests did not purchase a certain percentage of bonds, a larger portion of the debt would be left unfinanced. As seen in Table 6, the percentage of foreign holdings has remained steady and has actually declined since 1979.

Table 6. Total Gross Public Debt of U.S. Treasury, Public and Foreign Holdings Only. (in billions of dollars)

Year	Total	Foreign	%	Year	Total	Foreign	%
1966	329.5	14.5	4%	1975	544.1	66.0	12.0%
1967	341.3	15.8	4.6	1976	631.9	78.1	12.0
1968	369.8	14.3	3.7	1977	709.1	109.6	15.0
1969	367.1	12.0	3.3	1978	780.4	137.8	18.0
1970	382.6	14.4	3.7	1978	845.1	124.4	14.0
1971	409.5	31.9	7.7	1980	930.2	127.7	14.0
1972	437.3	49.2	11.0	1981	1028.7	141.4	14.0
1973	468.4	59.4	13.0	1982	1197.1	149.4	12.8
1974	486.2	56.9	12.0	1983	1410.7	168.9	12.0

Source: Treasury Bulletin: Summer 1984, graphic FSO.2, Secretary of the Treasury, Office of Government finance and market analysis

There is disagreement in Washington as to the soundness of the idea of selling United States Treasury

Bills abroad. Warnings of political indebtedness and a continued threat to the already tenuous world trade deficit are a few of the caveats circulating regarding foreign interest in the United States debt. Good or bad, little statistical correlation can be found to support a related rise in foreign holdings to the rise in the deficit.

Deficits and Unemployment

The unemployment rate has, over the past 1 1/2 years declined significantly, indicating that variables other than the deficit control the unemployment rate. Unemployment peaked in 1982 at 9.5% (See table 7.) as an effect of the most recent economic recession. In spite of a rising deficit, unemployment has since plummeted and stabilized at approximately 7%. Statistically, no correlation is demonstrated in support of the claim that high deficits cause unemployment.

Table 7: Unemployment Rate, All workers (selected years)

Year	Unemployment Rate	Year	Unemployment rate
1961	6.7%	1978	6.0%
1962	5.5	1979	5.8
1963	5.7	1980	7.0
1964	5.2	1981	7.5
1965	4.5	1982	9.5
1966	3.8	1983	9.5
1969	3.5	1984	7.7

Source: Statistical Abstract of the United States, 104th Edition (Washington, D.C.: U.S. Government Office, 1984), p. 12.

Discussion of Findings

If deficits do not cause these indices to rise, then what kinds of questions should we be asking about the deficit? John Tatom, a research officer for the Federal Reserve Bank of St. Louis suggests that present fiscal policy and changes in economic theory represent a major break from past experience and therefore prove to be of little use in judging their effects. Tatom goes on to conclude from this that high deficits are a product of the unusual cyclical experience in the U.S. economy, and not from the fiscal policy actions that raised spending.¹⁴ Other authors, disagree, at least in part, with Tatom's assessment. Preston Miller for example, agrees that the effects of deficits may be much larger than both conventional economic wisdom and previous empirical

evidence may suggest. Miller departs from Tatom's thought by stating that deficits themselves matter far less than does deficit policy. In an attempt to prove his theory Miller produced a vector autoregression model of deficit policy to test its effect on the economy. Although his abundant use of assumptions regarding policy places the validity of the study's results under suspicion, Miller's study did demonstrate some correlation between deficit policy and the economy.¹⁵ From another vantage point, Milton and Rose Freidman, place the lion's share of blame for deficits on government spending. Instead of looking at spending conventionally, (as a percentage of gross national product), The Freidman's looked at government spending as a percentage of National Income.¹⁶ (National income is the sum of personal consumption expenditures, gross private domestic investment, government purchases of goods and services, and net export; which equals GNP less depreciation which equals net national product, less indirect business taxes.)¹⁷ From the Freidman's perspective, spending indeed appears to be the cause of deficit.

NOTES

¹U. S. Department of Labor, Bureau of Labor Statistics, BLS Handbook of methods, vol. 1, Bulletin 2134-1 (Washington, D.C., U. S. Government Printing Office, 1982), pp. 43-61.

²Jesse Burkhead, "The Case for a Balanced Budget," in The Federal Deficit: Fiscal Imprudence of a Policy Weapon, ed, JH. Hamnovitch (Boston: D.C. Heath and Co., 1965), p. 17.

³Naomi Caiden, "The New Roles of the Federal Budget Game," Public Administration Review, (March/April, 1984), pp. 109-117.

⁴The Ricardian Equivalence Theorem is when the consumer matches the increased deficit by an equivalent increase in personal savings (or cut in consumption). Total spending then, does not rise.

⁵Bennet McCallum, " Are Bond-Financed Deficits Inflationary?: A Ricardian Analysis," Journal of Political Economy, 92(February 1984): 123.

⁶C. Stolp, and M. Winer, "Theorizing About Growth of Government: A Research Assessment," Journal of Public Policy, 1 (1981): 157-220.

⁷D. Berry and David Lowery, "The Measurement of government Size: Implications for the Study of Government Growth," The Journal of Politics 46 (November 1984): 1193.

⁸Milton Friedman and Rose Friedman, the Tyranny of the Status Quo (San Diego: Harcourt Brace Jovanovich, 1984), p. 19.

⁹John A Carlson, Inflation, William A. Cale, ed. (W. Germany: Bell Telephone Laboratories, 1981), pp. 30-36.

¹⁰William Greider, "The Education of David Stockman," Atlantic Monthly, December 1981, pp. 27-54.

¹¹Henry Kaufman, Issues in Federal Debt Mananagement Conference Series 10 (Boston: Federal Reserve Bank, 1973), p. 155.

¹²"The Volker Letters," INC., February 1985, p. 48.

¹³U. S. Secretary of the Treasury, Office of Government Finance and Market Analysis, Treasury Bulletin, Summer 1984, Table FSO.2.

¹⁴John Tatom, "A Perspective on the Federal Deficit Problem", Federal Reserve Bank of St. Louis Review, June/July 1984, pp. 5-11.

¹⁵Preston J. Miller, "Examining the Proposition That Deficits Matter," in The Economic Consequences of Government Deficits, Economic Policy Conference Series, ed. Lawrence H. Meyer (Boston: Kluwer-Nijhoff, 1983), p. 69.

¹⁶Milton Freidman and Rose Freidman, Tyranny, p. 22.

¹⁷Roger LeRoy Miller, Economics Today, 4th Edition (New York: Harper and Row, 1982), p. 196.

CHAPTER 7

CONCLUSIONS

The results of this study suggest that deficits apparently have less effect on the economy than the effect the economy may have on the deficit. Deficits may come about by some combination of three contributors: fluctuations in the economy, deficit policy, and government spending. But perhaps the most plausible conclusion to arrive at might be that the deficit is most likely not as much an economic issue as it is a political one. The moderately strong relationship seen in the study involving interest rates should perhaps be expanded in a later study. There is a suggestion at least, that interest rates, though no direct causal relationship has been established, have some connection with deficit. Possibly a multivariate regression analysis might prove enlightening here. As seen in a recent work by Van de Water and Ruffing,¹ if you can control the interest rates you can control some of the debt also by paying less in debt service. The question of what role the U.S. federal deficit plays in the world economy might also be enlightened by this type of investigation.

This body of research opened with a quote from President Reagan, made during the campaign for his first

term, that he would balance the budget. Another of his promises was not to raise taxes. If a campaign promise had to be broken, it is politically healthier to continue to spend in deficit to meet the requirements of the country than it is to raise taxes to achieve balance.

There has been public admission that the Administration is willing to manipulate statistical predictions to show an economic picture compatible with the Administration's policies and shed a favorable light on the economic situation. In his famous interview in Atlantic Monthly, David Stockman said, "No one really knows what the figures mean."² The ease of manipulating economic indicator figures, as opposed to facing the political implications of raising taxes or containing spending is overwhelming. The idea of balancing the budget through political juggling of statistics becomes more realistic when, as we have seen, a mere one percent increase in the Consumer Price Index increases outlays for the related indexed entitlement programs by 1.9 billion dollars.³

A recent demonstration of the federal government's admission of the political nature of budget deficits occurred when the former Secretary of the Treasury was

asked his opinion of the President's recently televised plea to approve the executive budget. In an attempt to defend the President's claim that continued strong economic recovery will absorb the deficit, Donald Regan said, "The economy is declining right now but we can adjust that pretty easily."⁴ Presumably, he intended this statement to insinuate some manipulation of figures or possibly policy change.

Deficit spending is a powerful economic tool that in and of itself is not bad. It stabilizes the peaks and troughs found in a capitalist economy and intervenes to "cushion" the impact of the economy on society. Projects may cost less in the long run by starting them now with the combined effect of taking advantage of the lower current wages and paying debt amortization in deflated dollars. In addition early returns resulting from the profits of the project would offset the debt service. The way in which the national debt is financed, to whom and for how long, may be the more vital questions to consider regarding deficits.

A final note on the notion of obsolescence. Just as the shift in economic theory acted as a change agent that paved the way for deficit spending, perhaps we too should direct our attention to a new way of looking at the

economy. John Naisbitt in Megatrends observes that "Yesterday is over, and as the third world takes over the major industrial tasks, the developed countries must move on to new enterprises."⁵ This dual economy is a new phenomenon that has caused confusion in analyzing our economic situation. Parts of the United States are in prosperity and parts are in depression. Economists have averaged the two together and declared the nation in a recession. In late 1982, the unemployment rate in Detroit, Buffalo and St. Louis was above 10%; it was below 6% in Denver, Austin and Minneapolis-St. Paul.⁶ By averaging, we lose all intelligence about what is going on. Economists continue to root their judgements in the old indexes, and most of those are buried in the dying industries. We cannot rely on past methods and need new theories and new data if we are to understand what is going on today to say nothing of what is to go on tomorrow.

NOTES

¹Paul N. Van deWater and Kathy A Ruffing, "Federal Deficits, Debt, and Interest Costs" Public Budgeting and Finance, vol. 5 (Spring 85):1, pp. 54-66.

²William Greider, "The Education of David Stockman," Atlantic Monthly December, 1981, p. 5.

³Robert D. Behm, "The Receding Mirage of the Balanced Budget," Public Interest, 6 (Spring 1982):120.

⁴CBS, "CBS Evening News with Dan Rather," 25 April 1985, Interview with Donald Regan, Dan Rather.

⁵John Naisbitt, Megatrends (New York: Warner books, 1982), p. 81.

⁶Naisbitt, p. 73.

REFERENCES CITED

LIST OF REFERENCES CITED

- Bach G. L., The New Inflation: Causes, Effects, Cures (Providence: Brown University Press, 1973), p. 69.
- Bartelt, Bruce R., Reaganomics, Supply-Side Economics in Action, (Westport: Arlington House Publishers, 1981).
- Behm, Robert D., "The Receding Mirage of The Balanced Budget," Public Interest, Spring 1982, p. 120.
- Berry D. and Lowery, David, "The Measurement of Government Size: Implications for the Study of Government Growth," The Journal of Politics 46 (November 1984): 1193.
- The Board of Governors of the Federal Reserve System, The Federal Reserve Bulletin, 6:90.
- Bozeman Daily Chronicle, 17 March, 1985.
- Burkhead, Jesse Government Budgeting, (New York: Wiley, 1956), p. 65.
- Burkhead, Jesse and Miner, Jerry, Public Expenditure (Chicago: Aldine-Atherton, 1971), pp. 77-79.
- Burkhead, Jesse "The Case for a Balanced Budget," in The Federal Deficit: Fiscal Imprudence of a Policy Weapon, ed. J. Hamnovitch (Boston: D.C. Heath and Co., 1965), p.4.
- CBS, "CBS Evening News with Dan Rather," 25 April 1985, Interview with Donald Regan, Dan Rather.
- Caiden, Naomi, "The New Roles of the Federal Budget Game," Public Administration Review, -(March/April, 1984), pp. 109-117.
- Cale, William A. Editor, Inflation: Causes, Consequences and Control (West Germany: Bell Telephone Laboratories, 1981).
- Dalton, Hugh, Principles of Public Finance, 4th Edition (London: Routledge and Kegan Paul, 1954), p. 221.

- Davidson, James Dale, The Squeeze (New York: Summit Books, 1980), p. 58.
- Federal Reserve Board of Governors, The Federal Reserve Bulletin, 70 (June 1984): A-29.
- Freidman, Milton Dollars and Deficits: Inflation, Monetary Policy and the Balance of Payments, (Englewood Cliffs: Prentice Hall, 1968).
- Freidman, Milton and Friedman Rose, The Tyranny of the Status Quo, (San Diego: Harcourt Brace Jovanovich, 1984), pp. 16-17.
- Greider, William , "The Education of David Stockman," Atlantic Monthly, December, 1981, pp. 27-54.
- Gallup, George, America Want's to Know: The Issues and Answers of the Eighties (New York: W & W, 1983), p. 11.
- Jackson, Henry, et.al., Do Trade Unions Cause Inflation? (Boston: Cambridge Press, 1972), p. 81.
- Kaufman, Henry, Issues in Federal Debt Mananagement Conference Series 10 (Boston: Federal Reserve Bank, 1973), p.155.
- Lee, Robert D. and Johnson, Ronald W., Public Budgeting Systems, 3rd Edition (Baltimore: University Park Press, 1983), pp. 208-211.
- McCallum, Bennet, " Are Bond-Financed Deficits Inflationary?: A Ricardian Analysis," Journal of Political Economy, 92 (February 1984): 123.
- Mill, John Stuart, Principles of Political Economy, Ashley Edition (London: Longmans-Green and Company, 1929), p. 874.
- Miller, Roger LeRoy, Economics Today, 4th Edition (New York: Harper and Row, 1982), p. 196.
- Mills, Gregory B. and Palmer, John L., The Deficit Dilemma, The Changing Domestic Priorities Series (Washington, D.C.: The Urban Institute, 1983).

Montanans for a Balanced Federal Budget Committee,
Montanans for a Balanced Federal Budget, leaflet,
(Helena: Unpublished, 1984).

Naisbitt, John, Megatrends (New York: Warner Books,
1982), p. 73.

Office of Management and budget, The Budget of the United
States: FY 1986 (Washington, D.C.: U.S. Government
Printing Office, 1985), pp. 9-60.

Office of Management and Budget, The Budget of The United
States, FY 1986, Special Analyses and Appendices
(Washington, D.C.: U. S. Government Printing
Office, 1985).

Ogilvie, Donald, The Congressional Budget Process After
Five Years, ed. Rudolph G. Penner (Washington,
D.C.: American Enterprise Institute, 1981), p. 109.

Rowan, Hobart, "Feldstein Leaves A Winner," Washington Post
National Weekly Edition, 28 May 1984, p. 5.

Schick, Allen, "The BOB That Was," Law and Contemporary
Problems, Summer 1970, pp. 519-540.

Schulze, Charles, National Income Analysis, 2nd Edition
(Englewood Cliffs: Prentice Hall, 1967), P. 105.

Stolp, C. and Winer, M., "Theorizing About Growth of
Government: A Research Assessment," Journal of
Public Policy, 1 (1981): 157-220.

Swamy, P.A.V.B. and Tinsley, P. A., "Linear Prediction and
Estimation Methods for Regression Models with
Stationary Stochastic Coefficients," Journal of
Econometrics, February, 1980, p. 103-104.

Tatom, John, "A Perspective on the Federal Deficit
Problem", Federal Reserve Bank of St. Louis
Review, June/July 1984, pp. 5-11.

U. S. Code, Title 32, Subchapter 1, Section 3101.

U. S. Congress, Congressional Budget Office Report as
cited in: Journal of Money and Economics, April 6,
1980, pp.171-198.

- U. S. Congress, Joint Economic committee 97th Congress 1st session, staff study as cited by R. E. Weintraub, Deficits: Their Impact on Inflation and Growth, July, 1981..
- U. S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1984, 104th edition, U. S. Printing Office, 1984).
- U. S. Department Of Commerce, Bureau of Economic Analysis, Business Conditions Digest, November, 1984.
- U. S. Department of Labor, Bureau of Labor Statistics, BLS Handbook of Methods, vol. 1, Bulletin 2134-1 (Washington, D.C., U. S. Government Printing Office, 1982), pp. 43-61.
- U. S. President, Public Papers of the President of the United States (Washington, D.C.: Office of the Federal Register, National Archives and Record service) Ronald Reagan, 1985.
- U. S. Statutes at Large, volumes 90 and 92.
- U.S. Secretary of the Treasury, Office of Government Finance and Market Analysis, Treasury Bulletin, Summer 1984, Table FSO.2.
- Usselton, Gene C., Lags in The Effects of Monetary Policy: a Nonparametric Analysis (New York:Marcel-Decker, 1974), p. 2.
- "The Volker Letters," INC., February 1985, p. 48.
- Van de Water, Paul N. and Ruffing, Kathy A., "Deficits, Debt, and Interest Costs," Public Budgeting and Finance vol.5 (Spring, 1985): 1.
- Wagner, Richard E. and Tollison, Robert D. Balanced Budgets, Fiscal Responsibility and the Constitution, Studies in Law and Economics Series (Washington, D.C.: CATO Institute, 1982).
- Weintraub, Sidney, Capitalisms Inflation and Unemployment Crisis: Beyond Monetarism and Keynesianism (Reading: Addison-Wesley, 1978), p. 11.

LIST OF STATISTICAL SOURCES

Board of Governors of the Federal Reserve System Federal Reserve Bulletin, (June 1984).

The Brookings Institute Setting National Priorities: The 1983 Budget, 1982.

The Counsel of Economic Advisors Economic Indicators, Prepared for the Joint Economic Committee. (November, 1984)

Department of Commerce Bureau of Economic Analysis Business Conditions Digest (November 1984).

Federal Reserve Bank of Kansas City Economic Review (December 1984) and (February 1984).

Federal Reserve Bank of St. Louis Review (December 1983), and (August/September 1984).

Arline Hoel, Kenneth Clarkson, Roger L. Miller Economic Sourcebook of Government Statistics, 1983.

Lawrence R. Klein, Edward Friedman and Stephen Able Journal of Money, Credit and Banking, "Money in the Wharton Quarterly Model", (December 1984)

The Office of Management and Budget The Budget of the United States, 1985 Special Analysis and Appendicies, (Washington D.C.: U.S. Government Printing office), 1984.

U. S. Department of Commerce Bureau of The Census Historical Statistics of the United States: Colonial Times to 1970, part 2, Bicentennial Edition (Washington D.C.: U.S. Government Printing Office), 1975.

U.S. Department of Commerce, Bureau of the Census Statistical Abstract of the United States 1984, 104th Edition, part 2, , U.S. Printing Office.

APPENDICES

APPENDIX A

Table 8. Money Aggregates (in billions of dollars),
Seasonally Adjusted.

<u>Year</u>	<u>M1</u>	<u>M2</u>	<u>M3</u>	<u>L</u>
1976	310.4	1,163.6	1,322.9	1,516.6
1977	335.4	1,286.7	1,472.9	1,704.7
1978	363.1	1,286.7	1,647.1	1,910.6
1979	389.1	1,498.5	1,804.8	2,117.1
1980	414.9	1,632.6	1,990.0	2,599.8
1981	441.9	1,796.6	2,238.2	2,879.8
1982	480.5	1,965.4	2,462.5	2,870.0
1983	525.4	2,196.3	2,710.4	3,178.7
1984	536.8	2,242.9	2,792.4	3,299.3

Source: Statistical Analysis of the U. S. 104th Edition,
part 2, U. S. Department of Commerce, Bureau of
the Census, (Washington, D.C.: U. S. Government Printing
Office), 1984.

Definitions:

M1 = the sum of all currency, demand
deposits, travelers checks and other checkable deposits
(e.g. ATS, NOW)

M2 = M1 plus overnight repurchase and Eurodollars, Money
market mutual funds balances, money market deposit
accounts, savings, small time deposits.

M3 = M2 plus large time deposits, term repurchases term
Eurodollars

L = M3 plus all other liquid assets

APPENDIX B

Raw Data

Table 9. Cumulative raw data used in the study, 1960 to 1983.

<u>Yr</u>	<u>Deficit</u>	<u>GNP</u>	<u>CPI</u>	<u>WPI</u>	<u>Govt. Spending</u>	<u>For- eign</u>	<u>Unemp</u>	<u>Prime</u>	
60	+	269	503.7	88.7	94.9	92,223	13.0	5.5	3.5
61	-	3406	520.1	89.6	94.5	97,795	13.4	6.7	3.0
62	-	7137	560.3	90.6	94.8	106,813	15.3	5.5	3.84
63	-	4751	590.5	91.7	94.5	111,311	15.9	5.7	3.50
64	-	5922	632.4	92.9	94.7	118,584	16.7	5.2	4.00
65	-	1596	684.9	94.5	96.6	118,430	16.7	4.5	5.00
66	-	3796	749.9	97.2	99.8	134,652	14.5	3.8	5.75
67	-	8702	783.9	100.0	100.0	157,608	15.8	3.8	5.75
68	-	25161	864.2	104.2	102.5	178,340	14.3	3.6	6.25
69	+	3236	930.3	109.8	106.5	183,645	12.0	3.5	7.60
70	-	2845	977.1	116.3	110.4	195,652	14.4	4.9	7.30
71	-	23033	1063.4	121.3	114.0	210,172	31.9	5.8	5.30
72	-	23373	1185.9	125.3	119.1	230,681	49.2	5.5	4.80
73	-	14848	1326.4	133.1	134.1	245,647	59.4	4.8	7.66
74	-	4688	1434.2	147.7	160.1	267,912	56.9	5.5	11.01
75	-	45154	1549.2	161.2	174.9	324,245	66.0	8.3	7.85
76*	-	66413	1718.0	170.5	183.0	458,661	78.1	7.6	6.89
77	-	44948	1918.3	181.5	194.2	400,506	109.6	6.9	7.75
78	-	45807	2163.9	195.4	209.3	448,368	137.8	6.0	9.06
79	-	27694	2417.8	217.4	235.6	490,997	124.4	5.8	12.67
80	-	59563	2631.7	246.8	268.8	576,675	127.7	7.0	12.66
81	-	57932	2957.8	272.4	293.4	657,204	141.4	7.5	18.87
82	-	110609	3069.3	289.1	299.3	728,375	149.4	9.5	14.86
83	-	195407	3034.8	298.4	301.7	795,969	168.9	9.5	12.56

*1976 is combined with one transition quarter as a result of the 1974 Budget and Impoundment Control Act of 1974. The Act set up a timetable that began the fiscal year in October.

APPENDIX C

Figure 1. Deficit and wholesale price index.

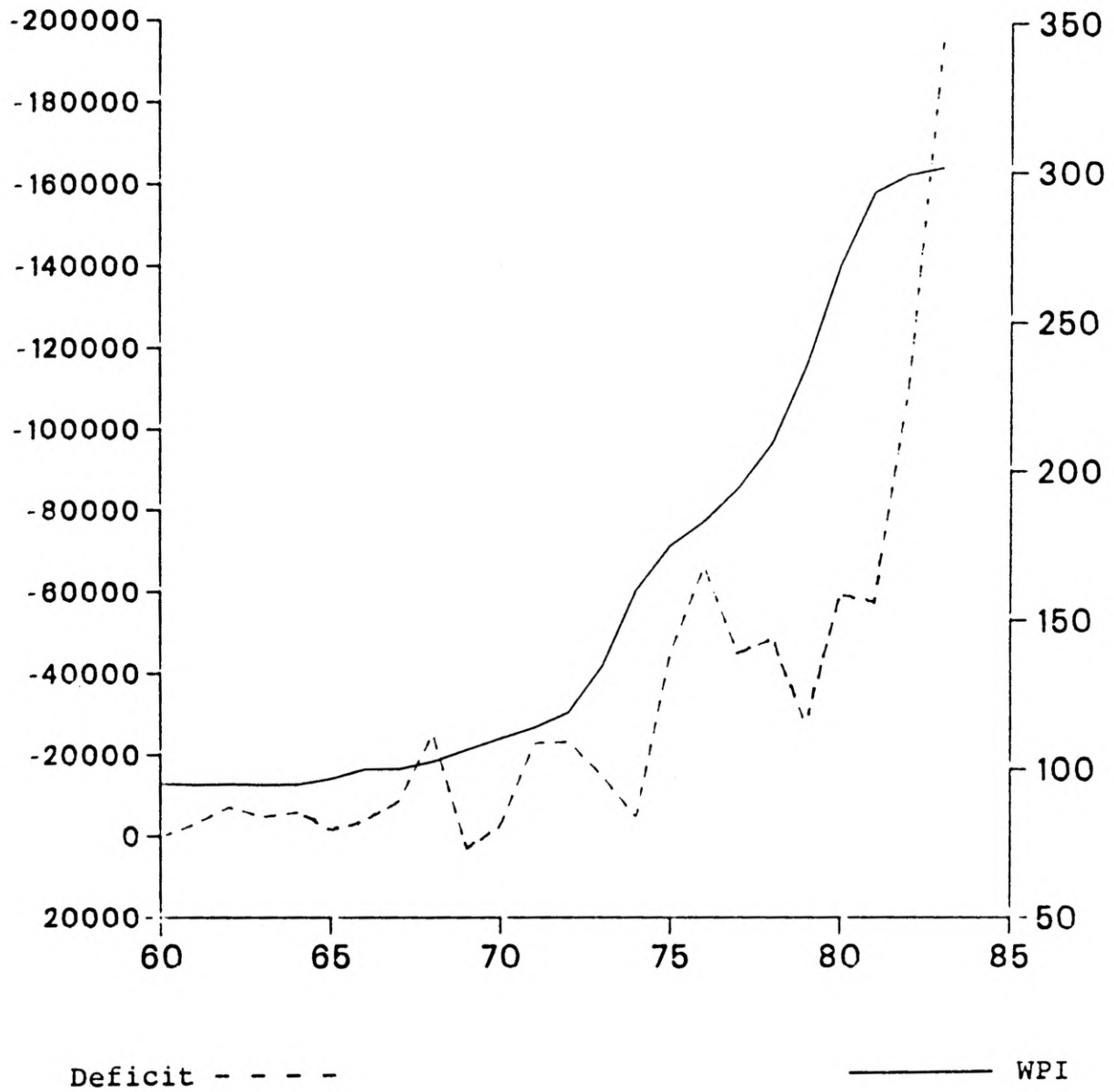


Figure 2. Deficit and government spending.

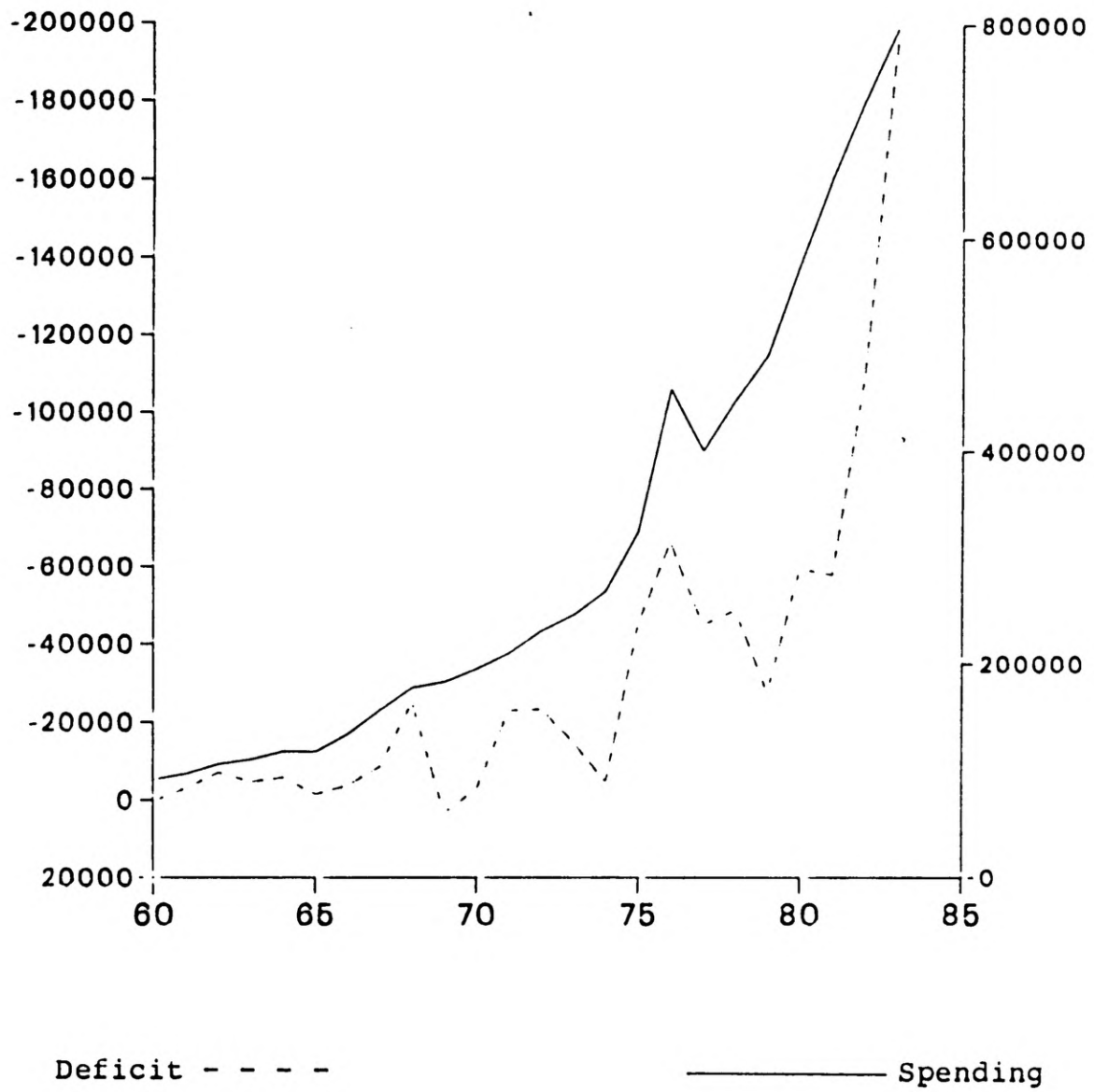


Figure 3. Deficit and Unemployment.

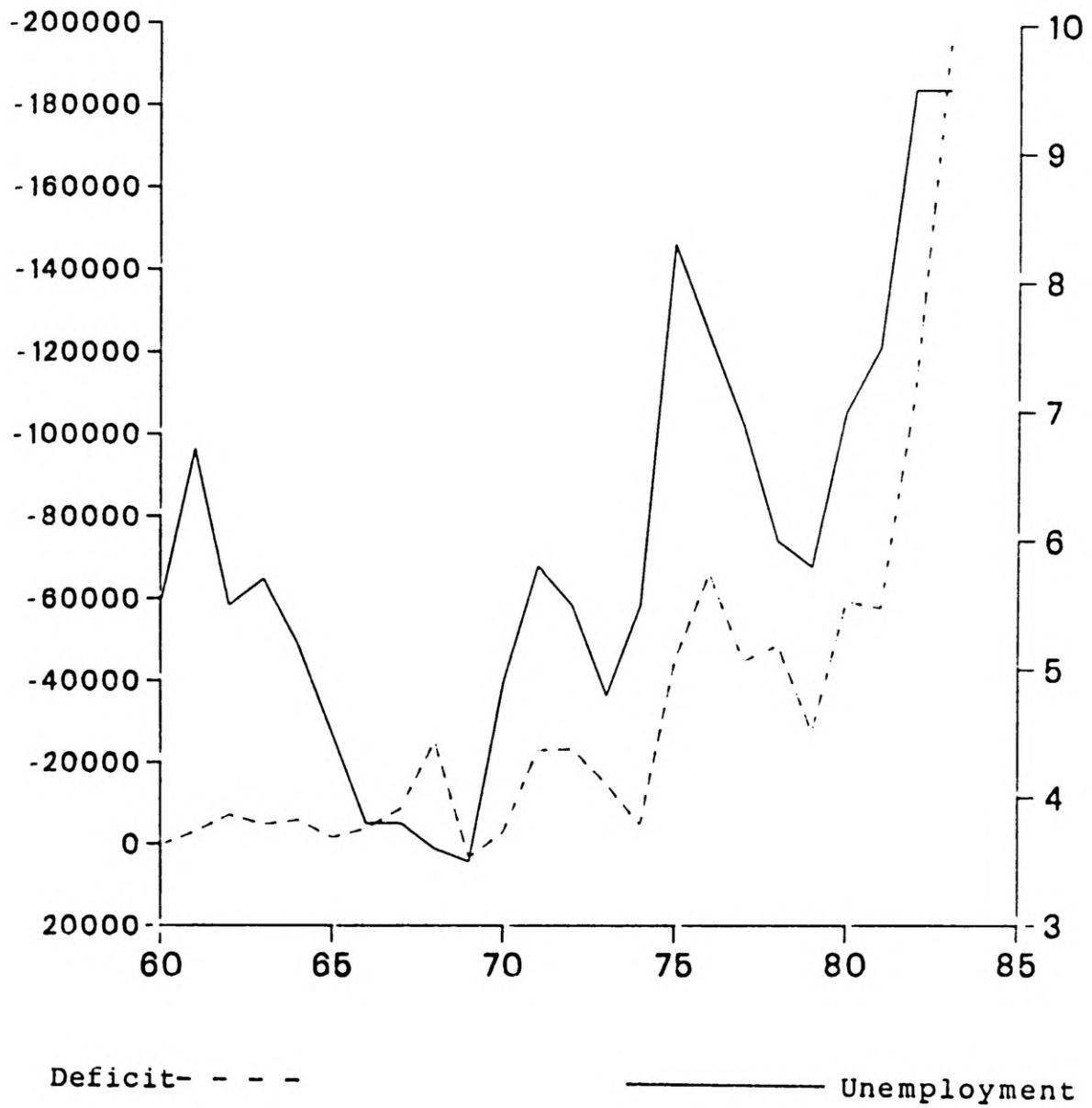


Figure 4. Deficit and prime rate.

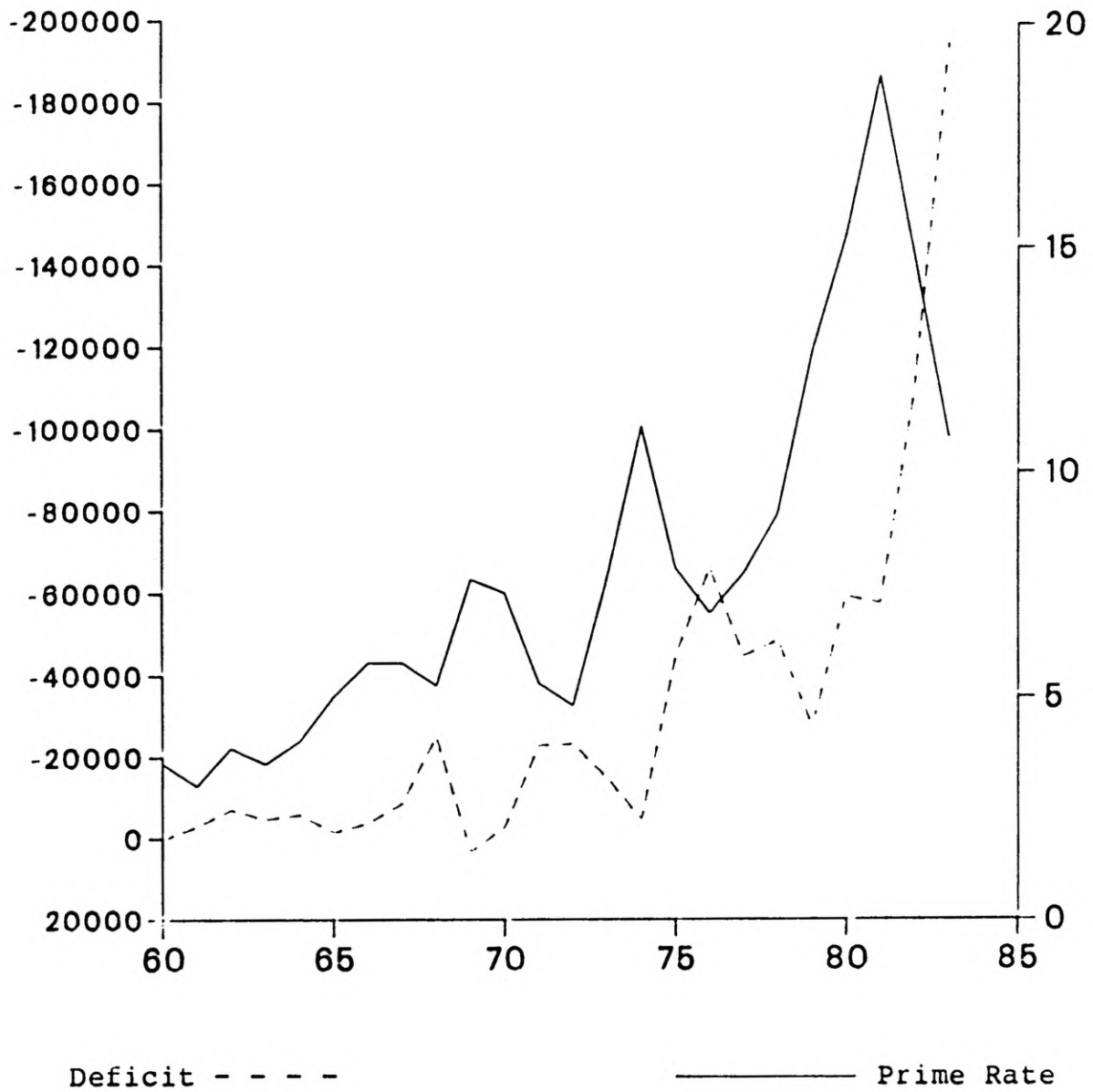
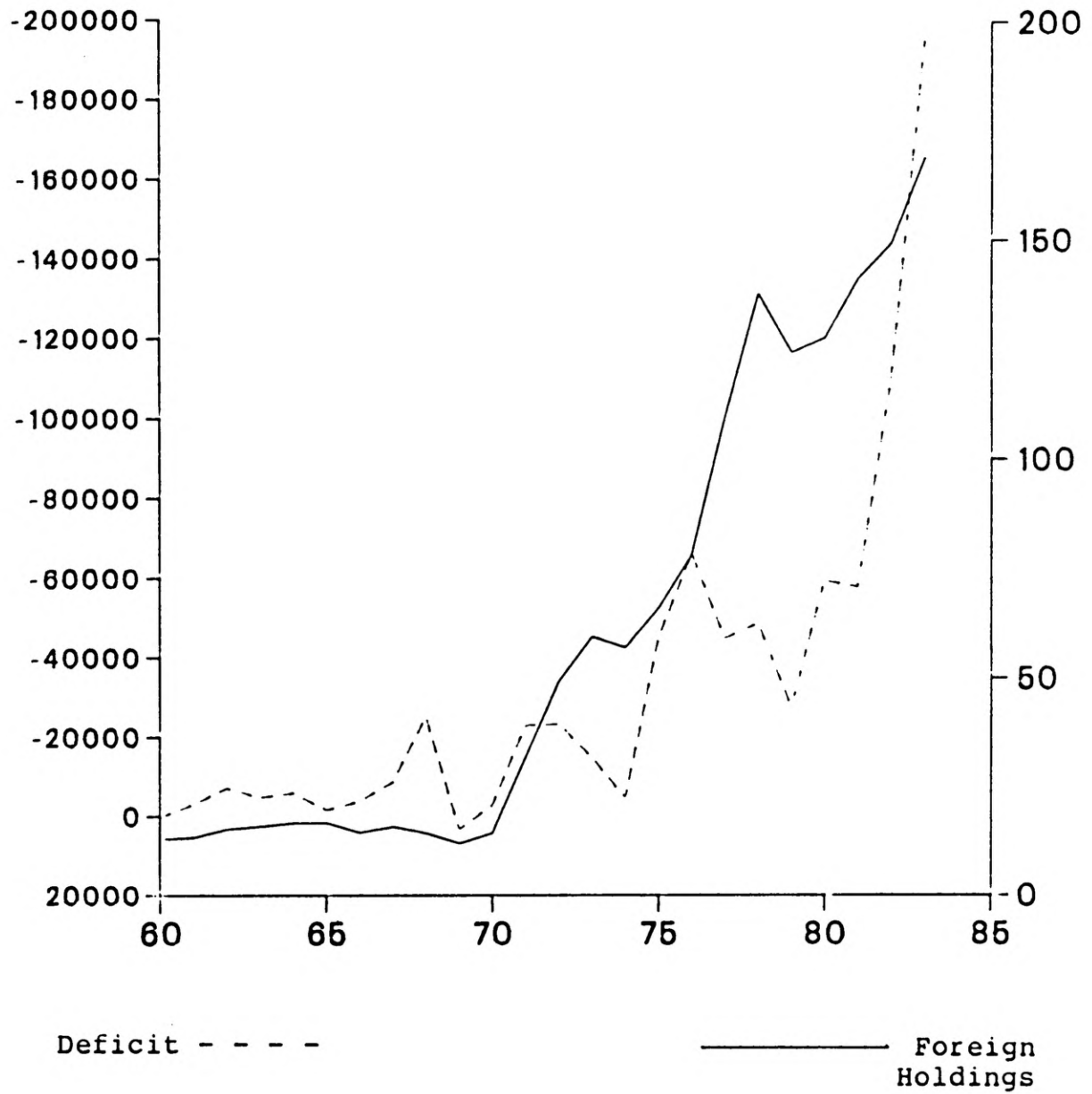


Figure 5. Deficit and foreign holdings.



APPENDIX D

Economic Indicators Used

Consumer Price Index (CPI)

Issued by: U. S. Department of Labor Bureau of Labor
Statistics, Office of Prices and Living
Conditions

Producer Price Index (Formerly WPI)

Issued by: U. S. Department of Labor Bureau of Labor
Statistics

Gross National Product

Issued by: U. S. Department of Commerce Bureau of
Economic Analysis National Income and
Wealth Division

Interest Rates

Issued by: Board of Governors of the Federal Reserve
System

Credit

Issued by: Board of Governors of the Federal Reserve
System Mortgage and Consumer Finance Section

Money Aggregates; M1, M2, M3, L

Issued by: Board of Governors of the Federal Reserve
System Banking Section

Employment and Unemployment, Labor Force

Issued by: U. S. Department of Labor Bureau of Labor
Statistics Division of Employment and
Unemployment Analysis

Federal Deficits/Surplus

Issued by: The Office of Management and Budget

Federal Receipts and Outlays

Issued by: The Office of Management and Budget

Federal Employees/State and Local Employees

Issued by: Department of Commerce Bureau of the Census

Treasury Bond Ownership

Issued by: The Board of Governors of the Federal Reserve
System

APPENDIX E

New Definition of the Producer Price Index

Improvement in the measurement of producer price change occurred in the Bureau of Labor Statistics in 1978. The new methodology used in the PPI revision is designed to reduce many of the limitations of the PPIS as calculated under traditional procedures. The following are the differences between the traditional and new methodology used in computing the PPIS: (1) Probability sampling instead of judgement sampling is being used to select reporting companies, products and the price-determining transaction terms. 2) Companies of all sizes (not just the larger ones are being asked to report prices and transactions on all types of output (not just volume-selling items). Thus precise statistical measures will be available for the first time. 3) Coverage will be expanded to include all 493 Standard Industrial Classification industries in the mining and manufacturing sectors. Before only half of the M and M industries were incorporated in the PPI.

Under the revision, indices are industry oriented rather than commodity oriented. The traditional indices were based on prices received by the producers without

regard to industry classification.

Imports will not be priced under the revision since the PPI are designed to measure changes in prices of output of domestic industries.