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Volume Author/Editor: Geoffrey H. Moore

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Chapter Author: Geoffrey H. Moore

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## *Chapter 8*

# **The Federal Deficit as a Business Cycle Stabilizer**

The federal surplus or deficit, or rather the change in it, has long been considered a stabilizing factor in business cycles. Its stabilizing properties are partly automatic, as when tax collections go down during a recession with a decline in incomes and profits or when expenditures go up because of a rise, say, in unemployment compensation. They can also be partly deliberate, as when tax rates are cut during a recession or the duration of unemployment benefits is extended and expenditures thereby increased. These stabilizing properties can also work in reverse during a business cycle expansion and help to dampen the inflation in the price level that usually accompanies rapid growth.

In order to determine how well or poorly the large deficits of recent years have worked in these respects, some consideration of the past record of deficits during business cycles is essential. To make this record meaningful, I think the commonly cited dollar figures should be adjusted to allow for the fact that the price level has risen substantially. A dollar of deficit now is not worth the same in real goods and services as a dollar of deficit ten or twenty years ago. It is desirable also to allow for the fact that the economy has grown substantially in real terms. A deficit of a billion dollars in a trillion dollar economy is not the same as in a half-trillion dollar economy, even if both the deficit and the economy are measured in constant prices.

Statement presented before the Committee to Investigate a Balanced Federal Budget, Democratic Research Organization, March 25, 1976.

The figures in Table 8-1, then, measure both the deficit and GNP in constant (1972) prices and compare the change in the real deficit with the change in real GNP.<sup>1</sup> They cover six recessions, starting with 1948-1949 and ending with 1973-1975.

Details apart, several points stand out:

1. The real deficit rose in every recession but one, 1953-1954.
2. The increase of \$52 billion in the real federal deficit in the most recent recession was more than twice as large as in any of the five previous recessions. The allowance for rising prices makes a considerable difference—in current dollars, the 1973-1975 increase was more than six times as large as the increase in, say, 1948-1949.
3. Relative to the decline in GNP of \$47 billion, however, the rise in the deficit was relatively modest compared with previous recessions. Allowing for the size of the recession makes a vast difference in how one views the size of the deficit.
4. The price level was relatively stable during the first four recessions, but rose sharply in the last two. Note that changes are measured over a two year interval in 1973-1975, but over one year in the earlier recessions because they did not last as long. Even though the rise in the real deficit in 1973-1975 was not large relative to the decline in real GNP, the rise in prices was extraordinarily great. In fact, it is clear from these figures as well as other price indexes that price increases during recessions have been getting progressively stronger since 1948.

Table 8-1. Changes in the Deficit, GNP, and Price Level during Six Recessions.

<i>Recession, from Peak Year to Trough Year</i>	<i>Change during Recession</i>		
	<i>In Real Deficit</i>	<i>In Real GNP</i>	<i>In GNP Price Level<sup>b</sup></i>
	<i>(billions of 1972 dollars)</i>		<i>(percent)</i>
1948 to 1949	+21	+3 <sup>a</sup>	-1
1953 to 1954	-2	-8	+1
1957 to 1958	+19	-1	+2
1960 to 1961	+10	+18 <sup>a</sup>	+1
1969 to 1970	+23	-4	+5
1973 to 1975	+52	-47	+19

<sup>a</sup>On a quarterly basis, real GNP declined during these recessions, but the declines do not show up in the calendar year totals used here.

<sup>b</sup>Implicit price deflator.

Source: Table 8A-1.

So much for a quick review of recession experience. One cannot, however, determine whether the deficit moved in a stabilizing manner by looking at recessions alone. What happened during expansions is equally relevant, and the contrast at least as important. Table 8-2 presents the record for the six expansions that took place between the recessions.

Several points are worth noting:

1. The real deficit fell during every expansion but one, 1949-1953. Coupled with the result for recessions, we can say that the deficit has nearly always moved in a stabilizing manner, rising in recession, falling in expansion.

2. The declines in the real deficit during expansions have been picayune relative to the rise in real GNP. The real deficit has not acted nearly as powerfully to constrain expansion as to constrain recession.

3. The rise in the price level has generally been far greater in expansion than in recession. There are, of course, many reasons for this, including the obvious one that expansions are periods when demand is rising. But the point just mentioned may also be a factor. The small relative declines in the deficit during expansions probably contributed to the greater rise in the price level at those times.

4. Indeed, since the restraint on the price level imposed by a declining deficit has been getting relatively smaller, on the whole, since 1946, it is not implausible that this has carried over into the subsequent recessions, thus helping to explain the increasing vigor of price increases during recessions.

Table 8-2. Change in the Deficit, GNP, and Price Level during Six Expansions.

Expansion, from Trough Year to Peak Year	Change during Expansion		
	In Real Deficit	In Real GNP	In GNP Price Level
	(billions of 1972 dollars)		(percent)
1946 to 1948	-8	+12	+20
1949 to 1953	+7	+131	+12
1954 to 1957	-14	+67	+9
1958 to 1960	-20	+57	+4
1961 to 1969	-16	+324	+25
1970 to 1973	-7	+158	+16

Source: Table 8A-1.

To what extent is this record of countercyclical behavior of the federal deficit attributable to discretionary policy on the part of the Congress and the executive branch and to what extent has it been the automatic result of the cyclical swings in the economy? The estimates of the full employment budget help to answer this question, since they indicate roughly what the change in the deficit would have been had the economy remained at a high level instead of lapsing into recession every few years. They enable us to break down the change in the deficit into an automatic component and a "policy-determined" component, the latter being the estimated change in the deficit due to tax or expenditure changes other than those arising directly from recession or recovery. It is recognized, of course, that the so-called policy-determined changes (i.e., change in the full employment surplus or deficit) are adopted for a wide variety of reasons, many of which have nothing to do with stabilization. The figures are given in Table 8-3.

From this we learn that:

1. Stabilizing changes in the deficit (i.e., increases during recession and reductions during expansion) have been the rule for both the automatic and the policy-determined changes.

2. Movements in a stabilizing direction have generally been larger in the automatic than in the policy-determined components of the deficit. The four exceptions (out of eleven), where the policy-determined changes were larger—in the stabilizing direction—than the automatic changes all occurred before 1961. Since 1961, the automatic have far exceeded the policy-determined changes.

3. The policy-determined increase in the real deficit during the recession of 1973-1975 amounted to only \$13 billion (in 1972 prices), a small figure compared with the decline of \$47 billion in real GNP.

4. The policy-determined reduction in the real deficit during the expansion of 1970-1973 was miniscule, and in the expansion before that (1961-1969), the policy-determined component did not decline at all. The price level rose substantially during these expansion periods, and the policy-determined component of the deficit had no net restraining influence whatever. By contrast, in the two preceding expansions (1954-1957 and 1958-1960), the policy-determined reductions in the deficit were quite substantial, and the price level rose very little.

Let me now sum up these observations on the federal deficit as a business cycle stabilizer. As an automatic stabilizer, the deficit has

Table 8-3. Changes in Two Components of the Deficit during Recessions and Expansions.

Recession	Changes in Real Deficit during Recession		Expansion	Changes in Real Deficit during Expansion	
	Automatic	Policy-determined		Automatic	Policy-determined
1948-1949	+8	+13	1949-1953	-13	+20
1953-1954	+7	-9	1954-1957	+1	-15
1957-1958	+11	+8	1958-1960	-2	-18
1960-1961	+4	+6	1961-1969	-17	+1
1969-1970	+17	+6	1970-1973	-6	-1
1973-1975	+39	+13			

Source: Table 8A-1.

almost always moved in the right direction, rising in recession, falling in expansion. The magnitude of these movements has been significantly large during recessions but insignificant during expansions, which is where the big increases in the price level have occurred.<sup>2</sup> We cannot, therefore, depend on automatic reductions in the deficit during expansions to have any appreciable effect in stabilizing prices. The policy-determined changes in the deficit have also, by and large, operated in a stabilizing direction, but here again, the antirecession changes have been more consistently consequential than the anti-inflation changes. Since we are now, once again, in the expansion-inflation phase of the business cycle, the question before policymakers is whether to enhance the automatic tendency of the economy to reduce the deficit.

(Note added August 4, 1978) During the two and a half years since this paper was presented, the United States has continued to enjoy an economic expansion, and the deficit has reacted in much the same way as in previous expansions. The real deficit (i.e., in 1972 dollars) has declined slightly, from \$56 billion in 1975 to \$38 billion in the first quarter of 1978 (at annual rate). The \$18 billion drop in the real deficit compares with a \$158 billion rise in real GNP during the same period. As in previous expansions, the decline in the deficit has been miniscule compared with the rise of GNP or compared with the increase in the deficit during the preceding recession. Meanwhile the price level (GNP deflator) has risen 15 percent, very nearly the same as the rise during the 1970-1973 expansion. The deficit has again failed to offset in any significant way the inflationary pressures that have been building up during the expansion.

(Note added February 16, 1982) Amen.

## APPENDIX

(Tables 8A-1 through 8A-4)

Table 8A-1. GNP and Federal N/A Surplus or Deficit, in Current and in 1972 Dollars, at Business Cycle Peaks and Troughs, Calendar Years, 1946-1975.

Business Cycle Peak and Trough Years (1)	GNP		GNP Implicit Price Deflator (1972 = 100) (4)	Federal N/A Surplus or Deficit (-)		Full Employment N/A Surplus or Deficit (-)	
	Current \$ (billions) (2)	GNP in 1972 \$ (billions) (3)		Current \$ (billions) (5)	in 1972 \$ (billions) (6)	Current \$ (billions) (7)	in 1972 \$ (billions) (8)
Trough, 1946	209.6	475.7	44.1	3.5	7.9	n.a.	n.a.
Peak, 1948	259.1	487.7	53.1	8.3	15.7	10.2	19.2
Trough, 1949	258.0	490.7	52.6	-2.6	-5.1	3.1	5.9
Peak, 1953	366.1	621.8	58.9	-7.1	-12.0	-8.1	-13.8
Trough, 1954	366.3	613.7	59.7	-6.0	-10.2	-2.8	-4.7
Peak, 1957	442.8	680.9	65.0	2.3	3.4	6.3	9.7
Trough, 1958	448.9	679.5	66.1	-10.3	-15.7	1.4	2.1
Peak, 1960	506.0	736.8	68.7	3.0	4.5	13.8	20.1
Trough, 1961	523.3	755.3	69.3	-3.9	-5.6	9.8	14.1
Peak, 1969	935.5	1078.8	86.7	8.5	9.9	11.1	12.8
Trough, 1970	982.4	1075.3	91.4	-12.1	-13.2	6.1	6.7
Peak, 1973	1306.3	1233.4	105.9	-6.9	-6.6	7.5	7.1
Trough, 1975	1499.0	1186.4	126.4	-73.4	-58.1	-7.6	-6.0
Budget estimates for calendar							
1976				-64.4		-8.0	
1977 (1st 3 quarters)				-34.1		18.0	

Sources: Column 1. National Bureau of Economic Research, Inc. Columns 2, 3, 4, 5. *Economic Report of the President*, January 1976, Washington, D.C., pp. 171, 172, 174, 249. Federal N/A surplus or deficit is defined according to the national income accounts. Columns 6, 8. Obtained by dividing columns 5 and 7, respectively, by column 4, and multiplying by 100. Based on quarterly data averaged by fiscal years. Column 7. 1948-1949: Federal Reserve Bank of St. Louis; 1953-1975: Council of Economic Advisers.



Table 8A-2. GNP and Federal Budget Surplus or Deficit, in Current and in 1972 Dollars, at Business Cycle Peaks and Troughs, Fiscal Years Ended June 30, 1946-1975.

Business Cycle Peak and Trough Years (Fiscal) (1)	GNP		GNP Implicit Price Deflator (1972 = 100) (4)	Federal Budget Surplus or Deficit (-)		Full Employment Budget Surplus or Deficit (-)	
	GNP in Current \$ (billions) (2)	GNP in 1972 \$ (billions) (3)		in Current \$ (billions) (5)	in 1972 \$ (billions) (6)	in Current \$ (billions) (7)	in 1972 \$ (billions) (8)
Trough, 1946					-15.9		
Peak, 1948	245.9	476.2	51.6	12.0	23.3		
Trough, 1950	264.8	504.8	52.5	-3.1	-5.9		
Peak, 1953	360.1	614.8	58.6	-6.5	-11.2		
Trough, 1954	363.6	613.1	59.3	-1.2	-2.0		
Peak, 1957	433.3	676.2	64.1	3.2	5.1		
Trough, 1958	441.7	673.5	65.6	-2.9	-4.5		
Peak, 1960	498.3	731.1	68.2	0.3	0.4	8.5	12.5
Trough, 1961	509.0	738.3	68.9	-3.4	-4.9	10.7	15.5
Peak, 1969	904.2	1070.2	84.5	3.2	3.8	-0.4	-0.5
Trough, 1970	960.2	1077.2	89.2	-2.8	-3.2	3.0	3.4
Peak, 1974	1358.6	1230.8	110.4	-3.5	-3.1	14.9	13.5
Trough, 1975	1440.0	1180.9	122.0	-43.6	-35.7	5.9	4.8
Budget estimates for fiscal year ended:							
June 30, 1976					-76.0		-16.0
September 30, 1977					-43.0		3.0

Sources: Column 1. National Bureau of Economic Research, Inc.

Columns 2, 3, 4. Bureau of Economic Analysis, U.S. Department of Commerce.

Column 5. *Economic Report of the President*, January 1976, Washington, D.C., p. 245. Federal budget surplus or deficit is defined according to the unified budget.

Columns 6, 8. Obtained by dividing columns 5 and 7, respectively, by column 4, and multiplying by 100. Based on quarterly data averaged by fiscal years.

Column 7. Office of Management and Budget. These figures have not been adjusted to the 1976 benchmark revision of the national income accounts.

Table 8A-3. Changes in Federal Budget Deficit and in GNP During Business Cycles, Fiscal Years, 1947-1975.

Business Recessions, Peak to Trough (fiscal years)	Change During Recession			Business Expansions, Trough to Peak (fiscal years)	Change During Expansion		
	Deficit (in billions 1972 \$)	GNP Price Deflator (percent change)	GNP Price Deflator (percent change)		Deficit (in billions 1972 \$)	GNP Price Deflator (percent change)	GNP Price Deflator (percent change)
1948-1950	+29.2	+1.7	+28.6	1950-1953	+5.3	+110.0	+11.6
1953-1954	-9.2	+1.2	-1.7	1954-1957	-7.1	+63.1	+8.1
1957-1958	+9.6	+2.3	-2.7	1958-1960	-4.9	+57.6	+4.0
1960-1961	+5.3	+1.0	+7.2	1961-1969	-8.7	+331.9	+22.6
1969-1970	+7.0	+5.6	+7.0	1970-1974	-0.1	+153.6	+23.8
1974-1975	+32.6	+10.5	-49.9				

Source: Based on Table 8A-2. An increase in the deficit (or reduction in surplus) is recorded with a positive sign. A reduction in the deficit (or increase in surplus) is recorded with a negative sign.

Table 8A-4. Automatic and Policy-determined Changes in Federal Budget Deficit During Business Cycles, Fiscal Years, 1947-1975.

Business Recessions, Peak to Trough (fiscal years)	Change During Recession		Business Expansions, Trough to Peak (fiscal years)	Change During Expansion		Total
	Automatic (in billions 1972 \$)	Policy- determined		Automatic	Policy- determined	
1948-1950	n.a.	n.a.	1950-1953	n.a.	n.a.	+5.3
1953-1954	n.a.	n.a.	1954-1957	n.a.	n.a.	-7.1
1957-1958	n.a.	n.a.	1958-1960	n.a.	n.a.	-4.9
1960-1961	+8.3	-3.0	1961-1969	-24.7	+16.0	-8.7
1969-1970	+10.9	-3.9	1970-1974	+10.0	-10.1	-0.1
1974-1975	+23.9	+8.7				

Source: Based on Table 8A-2. An increase in the deficit (or reduction in surplus) is recorded with a positive sign. A reduction in the deficit (or increase in surplus) is recorded with a negative sign. The policy-determined component is based on the change in full employment surplus or deficit (column 8, Table 8A-2). The automatic component is the change in deficit excluding the policy-determined component.

## NOTES TO CHAPTER 8

1. The figures used in the Tables 8-1 through 8-3 and 8A-1 are for calendar years and pertain to the federal surplus or deficit as defined in the national income accounts. Corresponding figures for the unified budget, for fiscal years, are shown in the other tables of the Appendix.

2. It can be argued that a business-cycle-stabilizing mechanism like the deficit should not operate in a wholly symmetrical manner during expansions and recessions, because it is desirable to stimulate growth. Furthermore, fiscal stimulus may be desirable during the initial recovery phase of an expansion but not later. In a fuller analysis, one should take these points into account, but I do not believe that they would substantially alter the basic results presented here. For an alternative treatment see Chapter 15.

