The Impact of the Welfare State
on the American Economy

Executive Summary

In recent decades many of the most important policy issues have revolved around the level and composition of federal spending. There is broad agreement that up to a certain point government functions enhance economic well-being, while after this point the burdens of excessive government spending can reduce economic growth relative to what it would otherwise be. Much of the debate over budget policy is over this question of where total government spending, or the spending level of a particular program, becomes counterproductive.

This study by two distinguished economists, Professors Lowell Gallaway and Richard Vedder of Ohio University, examines the issue of the optimal size of the federal government, expressed as a share of the economy, using econometric techniques. These two academic economists also estimate the net economic costs borne by the economy by the last dollar of federal spending. These additional economic costs are often referred to as a deadweight loss, a net reduction in output caused by excessive levels of federal spending.

Among the findings and implications of the Gallaway and Vedder study are:

- The optimal level of federal government spending is about 17.6 percent of GDP. Beyond this point, the resources consumed by government impose more costs on the economy than benefits.
- The current level of federal outlays is about 4 percentage points of GDP higher than its optimal level. Under the Republican policy of restraining deficit spending, the reduction in the GDP share of federal spending would substantially boost economic growth.
- For every $1 dollar of federal spending growth curtailed, the private sector of the economy will expand $1.38 in the same year. In other words, every dollar of federal spending growth restraint produces a net economic benefit of 38 cents. On the other hand, the failure to constrain each $1 dollar increase in federal spending will cause a net reduction in economic growth of 38 cents.
- Over seven years, economic output would be $2.45 larger for every dollar of spending restraint enacted in the first year and sustained through the period.
- This study has important implications for the current policy debate. In any given year, for every $100 billion of projected federal spending growth curtailed, the economy would grow by an additional $38 billion. This increase in economic output continues into following years so long as this policy remains in effect, compounding the benefits over time.

I am pleased to make this study available to the Congress and the public to demonstrate the powerful economic benefits produced by restraining federal spending.

Jim Saxton
Vice-Chairman
Joint Economic Committee

The Impact of the Welfare State on the American Economy
by
Lowell Gallaway and Richard Vedder

One of the most perplexing questions of the late twentieth century is how large the Federal government of the United States should be. At the beginning of the post-World War II era it commanded about one-seventh of the nation's Gross Domestic Product while, in recent years it has surged toward a one-fourth share. The growth in the size of the Federal government in this time is something of a continuation of a trend that began somewhat earlier. For example, in 1929, Federal government expenditures accounted for only slightly more than one-fortieth (2.6 percent) of Gross Domestic Product. These data raise two issues: what has been the impact of growth in the Federal government on the American economy, and why has the government grown so much.

The Economic Impact of the Federal Government

Much of the increase in the size of the Federal government has been justified on the grounds that it would lead to a more efficient economy. However, this is a questionable proposition. Not that government has no role to play in an economic system. There are things it can do to enhance the functioning of an economy, such as providing for the common defense, establishing a legal framework for resolving disputes, constructing a basic infrastructure, and supervising some minimum safety net. These are the positive benefits of government. However, they can be substantially negated if it expands inordinately. Excessive taxation, over-regulation, profligate spending and special favors for privileged interest groups may have a negative effect on the growth of the productive sector.

In the strictest economic sense, the positive effects of government tend to reduce the costs of producing goods and services, thereby raising output and lowering prices. This increases the sum total of what economists call consumer and producer surplus. However, when government has a negative impact on the economy, costs of production are increases, prices rise, and the total volume of consumer and producer surplus declines. This can be viewed as the "deadweight" loss to the economy of government activities.

What is critical in evaluating the impact of the growth in the Federal government on the American economy is the net effect of its positive and negative contributions. When government is small, additions to it are likely to improve the society's economic performance. However, as it becomes larger and larger, the gains it provides become smaller and smaller until they disappear entirely. Beyond that point, further increases in the magnitude of government actually harm the economy.[1] What this implies is a systematic relationship between the size of government and the economic performance of a nation. At low levels of government activity, its net contributions

are positive, but at high levels, they become negative. Figure 1 shows a representative version of such a relationship.
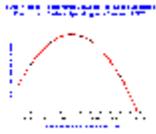
 [Click here to see Figure 1.](#)

   The availability of numerical data describing government expenditures and levels of income and output make it possible to statistically evaluate the conceptual framework provided in Figure 1. For this purpose, a standard measure of overall economic activity, Gross Domestic Product (adjusted for the effect of inflation), will be used to represent the level of output in the American economy. In addition, the national income and product account estimates of government spending will be used to measure the size of the Federal government. The specific estimate will be its spending expressed as a percentage of Gross Domestic product. The time period for which the data have been assembled is 1947 through 1994.[2]

   The major problem is one of describing a specific functional relationship between spending as a proportion of Gross Domestic Product and the level of real Gross Domestic Product that is capable of expressing the patterns shown in Figure 1. A simple way of doing this is to postulate a statistical estimating equation that has the size of the Federal government as an independent variable and real output as a dependent variable. In addition, the size of government variable must be introduced in a quadratic fashion, as follows:

(1) $O = a + b\,G - c\,G^2$

where O represents real output in the economy and G indicates federal government spending as a percentage of Gross Domestic Product.

   A few words of explanation about expression (1). Notice that G appears twice on the right hand side, first in a linear fashion and second as the square of itself. Also, the signs of the two terms are opposite. The positive sign on the linear form is designed to show the beneficial effects of government spending on output, while the negative sign given to the squared term means that this variable should measure any negative effects associated with increases in the size of government. Since the squared term increases in value more rapidly than the linear term, the presence of negative effects from government spending will eventually outweigh the positive impact, producing the downward sloping portion of the relationship shown in Figure 1.

   In addition, two other factors that might influence the behavior of real output over time need to be taken into account. First is growth over time in real output. It is measured by including a simple measure of the passage of time which takes the value one in 1947, two in 1948, and so on, through 48 in 1994. Second is the possibility of cyclical variations in real output. To control for this, the unemployment rate is included as an independent variable in the estimating equation. Of course, it is expected that time will be positively and unemployment negatively related to changes in real output. Thus, the final form of a statistical estimating equation designed to

explain variations in the level of real Gross National Product over the period 1947 through 1994 is:

(2) O = a + b G - cG2 + d T - e U,

where T denotes the time variable and U the unemployment measure.

The results of statistically estimating expression (2) are reported in Table 1.[3] All the independent variables are statistically significant at the one percent level or beyond. The results shown in Table 1 provide enough information to permit estimating an empirical version of Figure 1. Such a curve peaks at a Federal government share of resources of 17.57 percent.[4] In one sense this can be thought of as the "optimal" size of the Federal government in the United States.[5] However, this is true only if government spending is not treated as a "cost" of producing output. This distinction is an important one. If government spending is perceived to be a cost of producing output, the optimal level of spending will occur where the additional output associated with an increase in government spending is just equal to the additional cost of that spending.[6]
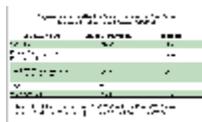
 [Click here to see Table 1.](#)

Using the information reported in Table 1, it is possible to calculate both the additional benefits of government spending and the additional costs associated with it for all levels of such spending. This requires assuming the values for the other variables in expression (2) that existed in 1994. When these calculations are made and the additional benefit and additional cost schedules are graphed, the result is as shown in Figure 2. Under this set of assumptions, the optimal level of Federal government spending as a share of Gross National Product occurs where the two curves cross, which is somewhere between 10 and 11 percent, or less than half its present size.
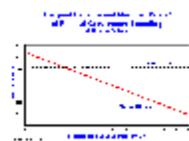
 [Click here to see Figure 2.](#)

Since treating all Federal government spending as a cost of producing output may ignore certain positive services that are not directly related to making the process of production more efficient, it was decided to work with the first of these concepts of optimality. Clearly, the information reported in Table 1 confirms the idea that the American Federal government has become too large - by a factor of about one-third - thereby creating significant economic inefficiencies. What this indicates is simple. As the Federal government grows, it rapidly exhausts the opportunities for contributing to the stability that is necessary for rapid economic growth. Consequently, it must venture more and more into the realm of activities that have the net effect of discouraging economic activity, things such as economic regulation and the use of the government's taxing and spending power to redistribute income. Some standard statistics,

which are summarized in Table 2, will demonstrate just how this transformation has taken place in the United States. Go back to the immediate post-World War II era, after the military stand-down following the war had been completed, say to fiscal year 1948. Federal government spending totaled $29.8 billion, 12.1 percent of Gross Domestic Product. Less than a third of it ($9.1 billion) was for national defense. Three broad categories of social spending - health, income security, and social security - absorbed slightly more than ten percent of outlays, totaling about $3.3 billion or about 1.3 percent of Gross Domestic Product. We focus on these as being representative of the modern welfare state. To be sure, they do not include all social spending, but they are indicative of the broad trends in the character of federal spending. The growth in the social spending category at this time was modest. In the fiscal years from 1940 to 1948, only 8.4 cents of every additional dollar of federal spending had gone for this purpose.

[Click here to see Table 2.](#)

That last statistic, and its behavior subsequent to 1948, is perhaps the key to understanding the changing nature of the role of government in American life. In the twelve years from 1948 through 1960, it more than triples. Over a fourth (26.4 cents) of every new dollar of federal spending went to this variant of social spending. This is just the beginning. Between fiscal years 1960 and 1970, over a third of new spending is in this category and in the interval 1970 through 1980, it is more than one-half.[7]

There is a brief respite in the 1980s. From 1980 to 1990, only 44.0 cents of each new dollar of federal spending is for health, income security, and social security. However, this is just a temporary departure from the long term trend. In the five years from fiscal 1990 through fiscal 1995, outlays on these categories of spending rise by $1.067 for every additional dollar of all federal spending. The combined effect for the period since 1980 is 61.7 cents of new social spending per dollar of further federal spending.

The overall impact of these changes is dramatic. As of fiscal 1995, 11.3 percent of Gross Domestic Product goes to these three categories, compared to 1.3 percent in 1948. Put another way, in fiscal 1948, about one dollar in nine of federal spending was for these social purposes. By fiscal 1995, five dollars out of every nine were devoted to these pursuits.

The critical dimension of this shift in the nature of federal spending is the preponderance of transfer payments in this rapidly growing sector. The negative economic disincentive effects associated with income transfers have been well documented.[8] An increasing emphasis on income transfers exerts a "drag" on the economy and goes far in explaining the statistical results reported earlier. The rapid growth in the American welfare state has been depressing the level of national output for some time.

**Annual Estimates of Lost Output Associated with an Oversized Government**

Specific estimates of the annual losses in real Gross Domestic Product that accompany a Federal government that is either smaller than or larger than the 17.57 percent share that marks

the transition between government being a positive force and its pulling the economy down can be developed from the empirical findings reported earlier. 1965 is the year in which government spending was approximately "optimal." Since then, it has exceeded the 17.57 percent threshold level in every year. The year by year annual losses of output, beginning with 1965, are shown in Table 3, both in constant dollar terms and as a percentage of real Gross Domestic Product. The cumulative losses in real output as the result of the Federal government spending share of Gross Domestic Product being too large amount to about 2.3 trillion dollars in the 1965-1995 period. The behavior of the percentage loss in real output statistic over time is shown in Figure 3.

Click here to see Table 3.

The pattern shown in Figure 3 is quite consistent with the historical discussion of the rise of large government in the United States. During the bulk of the early post-World War II era, the size of the federal government is reasonably close to optimal, as that term is being used here. But, beginning with the mid-1960s it starts to depart substantially from that level and by the mid-1970s is dragging the economy down by two to two-and-one half percent. There is a brief improvement, but then the losses begin to mount in 1980, 1981, and 1982, exceeding four percent in the last of these years. The next seven years, though, see a significant decline in the negative impact of the size of government on the economy. It is in this interval that the federal government share of Gross Domestic Product declines by nearly two full percentage points.
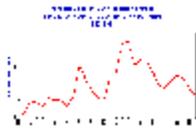
Click here to see Figure 3.

Big Government in Perspective

The picture of how large government negatively influences the level of economic activity in the American economy is now clear. When government grows beyond the level that is optimal for the economy, it introduces inefficiencies that increase the cost of producing goods and services. To put in perspective the magnitude of these inefficiencies, ask the question, "What would be the effect of a $100 billion dollar reduction in Federal government spending?" At 1994 levels of national output, that would amount to about a 1.5 percentage point reduction in spending as a percent of Gross Domestic Product. Since Federal government spending stood at 22.0 percent of Gross Domestic Product in 1994, a $100 billion reduction in spending would lower its percentage equivalent to 20.5. Substituting 20.5 percent for 22.0 percent would have the direct effect of increasing Gross Domestic Product by $38 billion. Put another way, a $100 billion decrease in Federal spending would result in a canceling of $38 billion of deadweight

losses in the economy that are attributable to government being larger than desirable. Thus, the bottom line is that for every dollar reduction in current levels of Federal government spending, other things remaining the same, Gross Domestic Product will increase by 38 cents **during the year of the reduction.**[9] On a per capita basis, this amounts to about a $145 dollar gain in real output.

If the reduction in spending is a permanent one, the longer term gains in succeeding years will be even greater. Given the emphasis in current budget debates on balancing the budget within seven years, we have estimated the impact of a permanent reduction in spending over such a period. The year-by-year results are reported in Table 4. Two estimates are provided, a current dollar one and another that measures the present value of the output gains discounted back to the initial year of the spending reduction. For the first of these, five percent annual growth in Gross Domestic Product (2.5 percent growth in prices plus 2.5 percent real growth) is assumed. For the second, the basic assumption is that a six percent discount rate is appropriate.

[Click here to see Table 4.](#)

The current dollar effects of a permanent reduction in spending "decay" over time because, as Gross Domestic Product rises, a given reduction in spending represents a smaller percentage of national output. Nevertheless, over a seven year period, the cumulative current dollar effect on output of permanently reducing federal spending is $2.45 for every dollar spending is decreased. The discounted present value of these gains is $2.09 per dollar of spending reduction. Thus, assuming a population of approximately 260 million, the discounted present value of a $100 billion decrease in federal spending would be the equivalent of an $800 lump sum payment to every person in the United States **in addition to the direct gains that would accrue to the private sector as the result of the reduction in government spending freeing up private sector income**. Clearly, the potential long-term output gains from reductions in federal spending are substantial.

Some Additional Considerations

The estimates of the inefficiencies introduced by the pure size of the federal government that have been presented are absolute minimum values. For one thing, much of the actual government spending produces output whose true value is less than the cost of producing it. Yet, a portion of this spending is counted on a cost of production basis as adding to Gross Domestic Product.[10] Even more of a problem is the presence of government activity that impacts on the production of goods and services but is not reflected in the government spending statistics. For example, any regulation that requires private citizens to incur certain costs or outlays is the exact equivalent of government taxing that income away from citizens and spending it for them. In recent years this new form of "silent" taxation has become more popular with elected officials. As an example, consider the cost to the private sector of simply doing the paperwork required to satisfy various government regulations. In addition, there are such mandates as minimum wage rates, expenses necessary to meet environmental regulations, and the costs to business of meeting certain

requirements concerning access for the handicapped. All of these represent some form of government control over the economy's resources and should be included in any measure of the proportion of the country's resources that are in the hands of the government.

More of these programs that constitute silent government taxation and spending have been suggested. The beauty of them for the legislator is their silent quality. Using this technique, it is possible to levy taxes in a far less obtrusive fashion than actually voting up or down for additional levies on the public. The favorite target for these exactions is the business sector of the economy. Business is widely perceived to have "deep pockets" and thus able to bear the cost of these various programs, all of which are justified by the usual rhetoric claiming that they are vital and essential to the well-being of the nation. However, there is no such thing as a "free lunch." The costs of these silent taxes are ultimately borne by resource owners, including individual workers.[11]

A Brief History of the Growth in the Size of the Federal Government

How did we get to the present level of government spending? Why has the country moved away from David Thoreau's principle, "That government is best which governs least." First were structural changes in the nature of the American governmental system, particularly those associated with the year 1913, when the income tax amendment to the Constitution was ratified and the Federal Reserve system went into operation. The first of these ultimately would provide a large part of the wherewithal to finance the expansion of government and the second would be both an instrument of control and a mechanism to facilitate the creation of government debt, also used to pay the bills for an ever growing national government.

Second, the experiences associated with managing the American economy during the first of the two World Wars served to whet the appetite of those with an urge to get their hands on the levers of power in American society. The planning atmosphere of the years 1917-1918 was infectious and would have a lasting effect on many people of influence in the years to come.[12]

Third, there were the events of the Great Depression of the 1930s, a crisis created in no small way by the activities of the Federal Reserve and the economic policies of a control minded President, Herbert Hoover.[13] The traumatic events of that era provided an opportunity and a rationale for a substantial expansion of the role of the Federal government. By 1939, the share of Gross Domestic Product absorbed by Federal expenditures had risen to 9.9 percent.

The final links in the chain of circumstances that would justify greater intrusions of government into the American economy came from the intellectual community. On the technical side was John Maynard Keynes's **The General Theory of Employment, Interest and Money**, published in 1936, which argued that public spending was a perfect substitute for private spending in terms of its effect on the overall economy.[14] From a broader perspective, Keynes's economic prescriptions were given greater pertinence by the "stagnationist" notions that dominated much of the American intellectual community at the close of the decade of the 1930s. Perhaps the leading proponent of the "stagnationist" idea was Alvin Hansen. In his Presidential address to the American Economic Association in 1938, he maintained that a combination of the closing of the American frontier and a slowing in the rate of population growth meant an absence

of the private investment opportunities that had been the driving force in earlier economic expansion in the United States.[15]

The "stagnationist" argument integrated quite closely with the Keynesian framework. If private investment was doomed to be inadequate to provide further sustained economic growth, **a la** Hansen, the simple solution would be to supplement it with Keynes's perfect substitute, public spending. The vindication of this argument seemed to arrive with the onset of World War II. Even before American entry into that conflict, there had been a large increase in public spending at the national level. In calendar year 1941, Federal government expenditures amounted to 16.4 percent of Gross Domestic Product. It did not go unnoticed that the economy seemed to thrive. The unemployment rate in 1941 is estimated to have been 9.9 percent, the lowest since 1930. What followed seemed to be a testimonial to the efficacy of the Keynes-Hansen analysis. With all-out mobilization, government spending surged and the unemployment rate plummeted, falling to as low as 1.2 percent in 1944.

The impact of World War II on the American economy was widely interpreted as a vindication of Keynesian economic principles. This suggested that it was possible to manage the overall economy through a judicious use of public spending. It also strongly implied that problems might lie ahead as the war reached its climax. In particular, what would happen to the American economy when the massive military expenditures of the war years were no longer necessary. As early as 1943, Hansen was expressing Keynesian-like concerns, remarking, "When the war is over, Government cannot just disband the Army, close down munitions factories, stop building ships, and remove all economic controls."[16]

Peace did come and with it all the worries implied by the Hansen statement. By now, a substantial technical apparatus had been constructed to supplement Keynes's initial work and the economics profession had been overwhelmed by a tidal wave of Keynesian sentiment, especially among its younger members.[17] Within that framework, disaster loomed, unless the government took strong action. More than just professional economists shared this concern. President Harry Truman, speaking to Congress a few days after the Japanese surrender closed the door on World War II, when talking about the post-war reconversion said, "Obviously, during the process there will be a great deal of inevitable unemployment."[18] In the media, **Business Week**, on September 1, predicted that Gross National product in 1946 would be twenty percent less than it was in 1944 and that unemployment would peak at nearly nine million or roughly at 14 percent of the expected civilian labor force.[19]

With rare exceptions, doom and gloom were in the air.[20] The need for some form of government intervention seemed obvious to many. But what? How should the Federal government intervene? In the spirit of the times, Keynesianism, whatever government did should impact on what was now known as aggregate demand, that curious combination of private and public spending that, in a reversal of Say's Law, would supposedly create its own supply. Yet, there seemed to be some uncertainty in political circles about what to do. At times, President Truman apparently was enamored of aggregate demand notions, calling for an increase in the minimum wage on the grounds that, "...the existence of substandard wage levels sharply curtails the national purchasing power and narrows the markets for the products of our firms and factories."[21] At other times, though, his primary concerns were the non-Keynesian notion of

balancing the budget or, better yet, running a budget surplus to reduce the national debt.[22] Elsewhere, arguments were being made for some form of government intervention in the economy. In late August, Paul G. Hoffman, Chairman of the Studebaker Corporation and head of the Committee for Economic Development, recommended federal aid to assist the newly created jobless to move to areas where jobs existed.[23] And, within the Federal government there was a call by the ranking Republican member of the House Ways and Means Committee, Harold Knutson, for a 20 percent reduction in income taxes and Truman's request for the passage of a Full Employment Act that would mandate counter-cyclical fiscal policy - public spending - in case of an emergency.[24] Nothing came of the first of these, but the latter led to the passage of the Employment Act of 1946, which established the Council of Economic Advisers and the Joint Economic Committee of Congress.

In many ways, the Federal government seemed to be drifting into the post-World War II era. This was largely the result of economic indecision on the part of Harry Truman. What this ultimately translated into in terms of a national economic policy was a determination to maintain the **status quo**, that is to keep the wartime economic controls in place as long as possible. No tax cuts, though, despite a rapid decline in Federal government spending. In the single year 1946 expenditures fell by more than fifty percent over the previous year. Not unexpectedly, the prevalence of Keynesian ideas led a number of major economists to forecast a severe post-war economic decline. However, surprisingly, to the Keynesians, that is, the economy made the transformation to peacetime conditions in a surprisingly smooth fashion. Disaster did not occur as the Federal government did exactly what Alvin Hansen had said it could not do: It disbanded the army, closed the munitions factories, and stopped building ships. All that was left of Hansen's economic recommendations were the wartime controls. And they went by the board in mid-1946 simply because Truman would not accept any watering down of them and the Congress was unable to override his veto of legislation that would have done just that. Suddenly, on July 1, 1946, all of Hansen's worst fears had been realized.

In the aftermath of the absence of substantial government intervention in the economy, there was a marked increase in price levels and a rise in unemployment. However, the unemployment rate increased only to 3.9 percent for 1946, stayed at the level in 1947, and averaged 3.8 percent in 1948. The feared immediate post-World War II depression had not materialized, despite federal government expenditures in 1948 being less than one-third as large as they were in 1944 and despite the disappearance of the wartime controls. None of the Keynesian predictions had been validated. Yet, by now the commitment to Keynesianism was so strong that an **ad hoc** explanation for the relatively easy transition from war to peace that could be used to reconcile actual events with Keynesian theory was developed. It emphasized the role of "pent-up" consumer demand resulting from the lack of availability of goods and services during World War II. To be sure, people wanted more consumer goods (don't they always?) but the empirical evidence simply does not support the idea that there was some dramatic shift in consumption that explained the absence of a serious economic downturn following the war.[25]

With the passage of the Employment Act of 1946, in February of that year, the last element in the system designed to manage the American economy was set in place. After a prolonged debate about the definition of terms such as "full employment" and what the character of the institutional arrangements for implementing it should be, the legislation was agreed upon. It

committed the Federal government to assuming responsibility for the provision of employment opportunities to those "able, willing, and seeking to work." In addition to establishing the Council of Economic Advisers and the Joint Economic Committee of Congress, it mandated the submission of the **Economic Report of the President** to Congress. From this moment on, Federal involvement in the direction of the American economy was a legislative requirement, although the degree of intervention was a matter of choice on the part of a President and his Administration.

The stage was now set for the emergence of what Herbert Stein calls a "consensus" with respect to the use of fiscal policy.[26] Remarkably, that consensus ignored the primary lesson of the immediate post-World War II transition to peace, the lack of a need for an infusion of government spending in order to sustain the American economy. Instead, what emerged contained the seeds of a future explosion in the size of the Federal government. At its heart was the abandonment of the notion of balancing the Federal budget, either in the immediate term or over some longer period of time. Now, the emphasis would be on balancing the budget only in times of prosperity, if then. In the 25 years subsequent to 1949, there are twenty years of budget deficits, for the most part small, with outlays usually being within ten percent of receipts. However, there were exceptions, such as 1959, 1968, 1971, and 1972. In these four years expenditures were more than ten percent greater that receipts. The justification for this new consensus was that it provided a greater government capability to manage the economy and produce conditions of prosperity. Amazingly, the evidence that the manipulation of government expenditures was important to maintaining prosperity was almost non-existent at the time the consensus emerged. As already described, in the years immediately prior to 1949, there is the most dramatic fiscal shift in history. Federal government expenditures go from being **more than twice receipts to being about seventy percent of receipts**. The total fiscal shift in this period represented about one-fourth of the typical year's Gross Domestic Product. In today's terms, this would mean a fiscal shift of approximately one-and-a-half **trillion** dollars. The result of this Draconian slashing of federal expenditures? The previously indicated unemployment rates that did not, on average, exceed four percent during the three years that followed the onset of this change.

Still, the fascination with government spending as a source of prosperity was there. In many ways, the wish seemed to be father of the thought. Later, the recoveries from the relatively mild business cycle downturns of 1949, 1954, and 1958 would be regarded as something of a Keynesian **tour de force**, even though the evidence indicates that "discretionary" fiscal policy changes typically amounted to about one-tenth of one percent of Gross Domestic Product.[27] The reality was that these business cycle recoveries were a testimonial to the natural recuperative powers of the private economy.[28]

There was still one more genie to be let out of the bottle. Through the 1950s the phenomenon of inflation still was widely regarded with distrust. However, toward the end of that decade the intellectual community weighed in with an argument that inflation might not be all that bad. Perhaps the quintessential statement of the Keynesian, or by now neo-Keynesian, theory is the relationship known as the Phillips curve.[29] The implication of the Phillips curve in its original form was that some extra output and employment could be bought by simply accepting some degree of price inflation. This was simply too attractive a possibility to ignore. From the mid-

1960s on, the rate of price inflation escalated inexorably until the early 1980s. Over the twelve years 1953-1964 prices rose by 1.3 percent a year. From 1965 to 1969, the annual increase was 3.4 percent; from 1970 to 1974, 6.1 percent; and 1975 to 1979, 8.1 percent.

Accompanying the increase in the rate of inflation was a steady growth in the size of the Federal government. This was no accident. Given the progressive nature of the American income tax system and the lack of indexing for changes in the price level during this period, inflation was systematically operating to increase Federal government revenues as a share of Gross Domestic Product. This is the familiar notion of "bracket creep." Of course, this translated into additional government spending. Whereas the Federal share of Gross Domestic Product was 18.7 percent in the interval 1953-1964, it rose to 19.3 percent from 1965 to 1969; 19.7 percent from 1970 to 1974; and 21.5 percent over the years 1975 to 1979.

Towards the end of the period of rising rates of price inflation, budget deficits also began to rise. Excesses of expenditures over receipts of more than 10 percent had occurred four times in the 25 year period 1950-1974. After 1974, there is only one year when this is **not** true. At this point, the revenue restraints that limited the growth in the size of the Federal government in earlier years were non-operative. Predictably, the average share of Gross Domestic Product absorbed by Federal government expenditures in the 16 years following 1979 increased to 22.9 percent.

What to do About the Size of Government

What can we say in closing? Clearly, the historic growth in the relative size of the Federal government has long since reached a critical stage. It has become oversized, at times by more than a third, and currently by more than a fourth. In the process, it has become the source of substantial deadweight losses for the American economy. The message from all this is quite obvious. The time has come to rein in the spending activities of the Federal government. If this is done, the overall economy will benefit and there will be an infusion of income into the private sector of the economy. Our findings indicate that for every dollar government spending is reduced and a dollars worth of resources is freed up to be used by the private sector, an additional 38 cents of output and income will be created in the initial year of the reduction and, over a seven year period, the total increase in income will be $2.45. This constitutes a powerful argument for reducing levels of Federal government spending.

Endnotes

1. Such a relationship is described in Dick Armey, **The Freedom Revolution**(Washington, D. C.: Regnery Publishing Company, 1995), pp. 91-93.

2. We do not use years earlier than 1947 because of serious problems that we feel exist in the data for the World War II years and 1946. For a description of these difficulties, see our "The Great Depression of 1946," **Review of Austrian Economics**, Vol. V, No. 2, (1991).

3. Expression (2) was estimated using ordinary least squares regression techniques. Cochrane-Orcutt adjustments were made to resolve any potential problems of autocorrelation. The Cochrane-Orcutt adjustment terms are not reported here.

4. Emphasizing taxes, rather than spending, Gerald Scully reaches similar conclusions. See his **What is the Optimal Size of Government in the United States?**, NCPA Report No. 188 (Dallas, Texas: National Center for Policy Analysis, 1994). Scully focuses on all government activity, not just federal.

5. Mathematically, the threshold point can be derived by differentiating expression (2) with respect to G, setting the result equal to zero, and solving for G. The result is -b/2c.

6. This is the economist's familiar notion of maximization. In effect, this argument states that the optimal size of the Federal government will be that at which the marginal benefit (in terms of additional real output) is just equal to the marginal cost incurred. A technical point: For this reasoning to be valid, certain other conditions must be satisfied. As will be seen shortly, they are.

7. Beginning with 1966, health spending includes outlays under the Medicare program.

8. For example, see Sheldon Danziger, Robert Haveman, and Robert Plotnick, "How Income Transfer Programs Affect Work, Savings, and Income Distribution: A Critical Review," **Journal of Economic Literature**, September 1981. They conclude that the cumulative effect of income transfers in the United States, at that time, had been to reduce the total supply of labor by 4.8 percent. Similar effects were observed in Lowell Gallaway, Richard Vedder, and Robert Lawson, "Why People Work: an Examination of Interstate Variations in Labor Force Participation," **Journal of Labor Research**, Winter 1991, pp. 47-59.

9. Interestingly, Ballard, Charles L., John B. Shoven, and John Whalley, "General Equilibrium Computations of the Marginal-Welfare Costs of Taxes in the United States," **American Economic Review**, March 1985, find that the marginal excess burden (deadweight loss) associated with taxation could fall in the range of 20 to 50 cents per dollar of taxation. Their methodology is that of a computable general equilibrium model. Such models are capable of incorporating various dynamic effects of increases in government taxation and spending. The correspondence between their estimates of deadweight loss and ours is reassuring.

10. The portion of government spending that is categorized as government purchases of goods and services is included in the calculation of the statistic Gross National Product.

11. An example of this phenomenon is illustrated in Richard Vedder and Lowell Gallaway, **Laws, Litigation and Labor Markets: Some New Evidence in The Economic Effects of Employment Law in California: The Unintended Consequences of Good Intentions**, introduction by Steven Hayward (San Francisco: Pacific Research Institute, 1995). This study analyzes the negative wage and employment effects of the change from a legal doctrine of "employment at will" to one that permits employees to claim "wrongful termination."

12. For a discussion of the impact of World War I on the attitudes of influential business and political leaders, especially during the Great Depression years, see William E. Leuchtenberg, "The New Deal and the Analogue of War," in John Braeman, Robert E. Bremner, and Everett Walters, eds., **Change and Continuity in Twentieth Century America** (Columbus, Ohio: Ohio State University Press, 1964), pp. 81-143.

13. For a detailed description of the sequence of events which triggered the Great Depression, see Richard Vedder and Lowell Gallaway, **Out of Work: Unemployment and Government in Twentieth Century America** (New York: Holmes and Meier, 1992), Chapter 5.

14. Keynes, John Maynard, **The General Theory of Employment, Interest and Money** (New York: Harcourt Brace, 1936).

15. Alvin H. Hansen, "Economic Progress and Declining Population Growth," **American Economic Review**, vol. 29, March 1939.

16. This comment is included in a publication for the National Resources Planning Board, as quoted by Hugh S. Norton, **The Employment Act and the Council of Economic Advisers, 1946-1976** (Columbia, S. C.: University of South Carolina Press, 1977).

17. For an intriguing reflection on the changes in the thinking of economists wrought by Keynes, see Paul A. Samuelson, "The General Theory," in Seymour Harris, ed., **The New Economics** (New York: A. A. Knopf, 1947).

18. **New York Times**, September 7, 1945, p. 16, col. 3.

19. **Business Week**, September 1, p. 9.

20. For detailed discussions of the nature of the economic forecasts of this period, see Martin Bronfenbrenner, "The Consumption Function Controversy," **Southern Economic Journal**, January 1948, pp. 304-20, and Michael Sapir, "Review of Economic Forecasts for the Transition Period," in Vol. XI, **Studies in Income and Wealth** (New York: National Bureau of Economic Research, 1949).

21. **New York Times**, September 1, p. 16, col. 3.

22 See Alonzo Hamby, **Man of the People** (New York: Oxford University Press, 1995), p. 385.

23. **New York Times**, August 28, 1945, p. 38, col. 4.

24. **New York Times**, August 28, 1945, p. 1, col. 2. Knutson repeated his call for a 20 percent reduction in the individual income tax plus an end to the corporate excess profits tax in late September. Both suggestions were ignored. Truman's request for a Full Employment Act is reported in **New York Times**, September 7, 1945, p. 16, col. 1.

25. In an amazingly rapid turnaround, the process of reconversion was largely complete in early 1946. Nearly seven million people had left the armed forces, and government spending had fallen well over 90 percent of the way from the wartime peak to what would be the postwar low in 1947. In addition, monetary growth also contracted sharply. For example, bank reserves had declined by about sixty percent. As to unemployment, it was slightly in excess of four percent. Yet, at this time, consumer spending was still well below normal peacetime levels. For a detailed discussion of the "pent-up" demand thesis, see Vedder and Gallaway, **Out of Work, op. cit.**, Chapter 8.

26. Herbert Stein, **The Fiscal Revolution in America** (Chicago, Ill.: University of Chicago Press, 1969), Chapter 9.

27. See Wilfred Lewis, Jr., **Federal Fiscal Policy in the Postwar Recessions** (Washington, D. C.: The Brookings Institution, 1962).

28. For a more detailed discussion of this point, see Vedder and Gallaway, **Out of Work, op. cit**, Chapter 9.

29. The most influential argument in this respect is contained in Paul Samuelson and Robert Solow, "The Analytics of Anti-Inflationary Policy," **American Economic Review**, May 1960, pp. 177-194.