

The great depression, 1933–39: the recovery?

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In his speech accepting the Democratic party's nomination for the presidency on July 2, 1932, Franklin Delano Roosevelt pledged "a new deal for the American people." When he was sworn into office as the thirty-second president of the United States on March 4, 1933, he was expected to make good on that promise. The details of the various policies are discussed in Chapter 23. Here we focus upon the macroeconomic question of recovery and the role, if any, that government policy may have played in that recovery.

When Roosevelt took office, the nation was in turmoil, racked by almost four years of economic decline that had revealed numerous flaws in the structure of the American economy and cracks in the veneer of society. At least a quarter of the population was classified as unemployed; countless others had long since abandoned the search for work where none was to be found; thousands had lost their homes and farms; millions had lost at least part of their savings in the successive waves of bank failures that in four years had claimed more than nine thousand banks, a third of all banks in the country; the nation was living off its invested capital, no longer even replacing wear and tear on capital goods; the real value of domestic production was little more than 70 percent of its 1929 peak; and world trade had been seriously impeded by a storm of competitive devaluations and protective tariffs.

The contraction had also done immense structural damage to the economy that was exceedingly difficult to repair. It had destroyed institutions as well as income. Capital markets were unraveled by disintermediation: People, with good reason, distrusted banks after 1931 and were reluctant to use them again. Bankrupt corporations—including many banks—were im-

mersed in legal proceedings that made it difficult to use their underlying assets productively. And the stock market crash brought home to many investors the inherent risks in equity investments, as well as exposed the degree to which the market was vulnerable to stock price manipulation and securities fraud. All this increased the cost of raising capital for businesses that wanted to increase production. Moreover, the burden was not borne equally. Experiences during the depression were often radically different across industries. Such industries as iron and steel and lumber experienced much sharper declines and slower recovery than industry as a whole. Other industries, notably petroleum and tobacco, which were doing much better than average before the onset of the depression, continued to do much better, as a result of differences in the rate of technical change and the nature of demand for their products (Figure 22.1).¹

The Recovery

A glance at almost any of the statistical data covering the period, such as unemployment, GNP, the money supply, or prices, shows that no matter how kindly disposed one may be to Roosevelt's policies, recovery did not come with the New Deal. The economy clawed its way back to levels achieved in the late 1920s only very slowly. By most standards, recovery was far from complete when war broke out in Europe in 1939, providing a much-needed stimulus. Not until after the Japanese attack on Pearl Harbor in 1941 can recovery be considered complete in terms of economic indicators, such as unemployment and real GNP. Even then, one must question whether or not the exigencies of a wartime economy constitute recovery and a return to normality.² Thus, although recovery was one of the goals of the New Deal, on this score it can hardly be considered a resounding success.

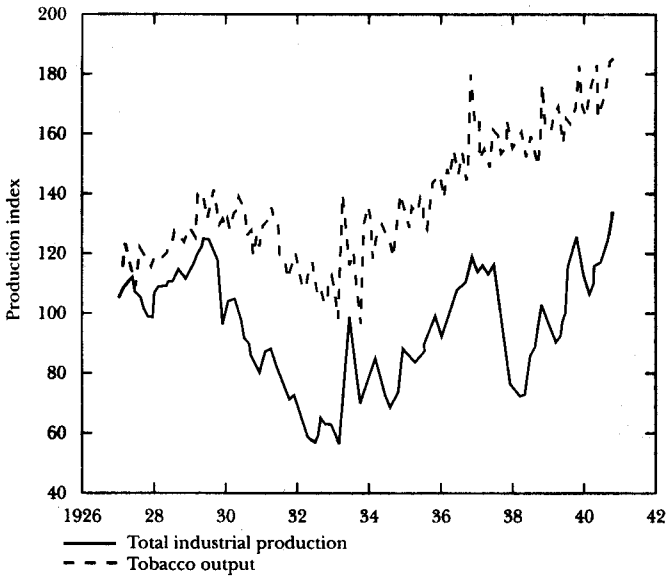
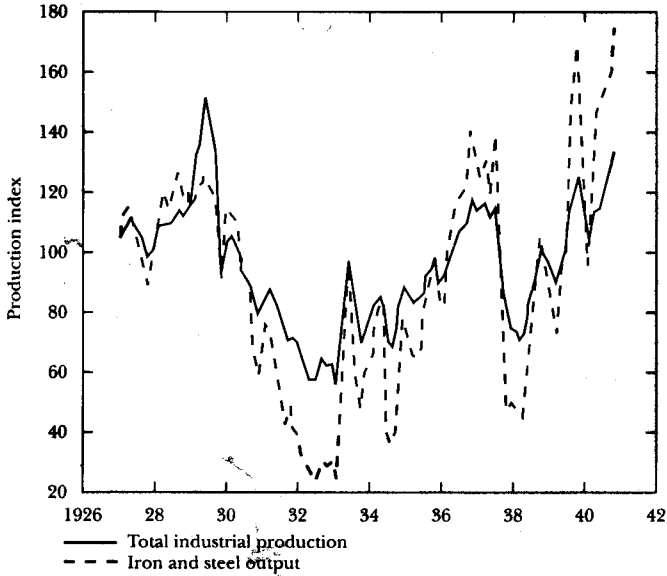
Unemployment, for example, remained stubbornly high—above 14 percent until after 1940. Moreover, unemployment increased sharply between 1937 and 1938 as the economy entered a recession within the midst of the Great Depression. One might even argue that the government contributed to the unemployment problem through its emergency relief make-work projects, such as the Civilian Conservation Corps and the Works Progress Administration. Those holding such relief jobs, who numbered among the millions at times—the WPA, for example, had 3.4 million on its payroll by March 1936—are officially classified as unemployed, apparently on the ground that participation in these programs was of limited duration, sometimes part-time, and at annual wages that were often far below those in the rest of the economy.

¹ Bernstein (1987).

² Higgs (1992).

FIGURE 22.1

Industrial Production, 1927-1941

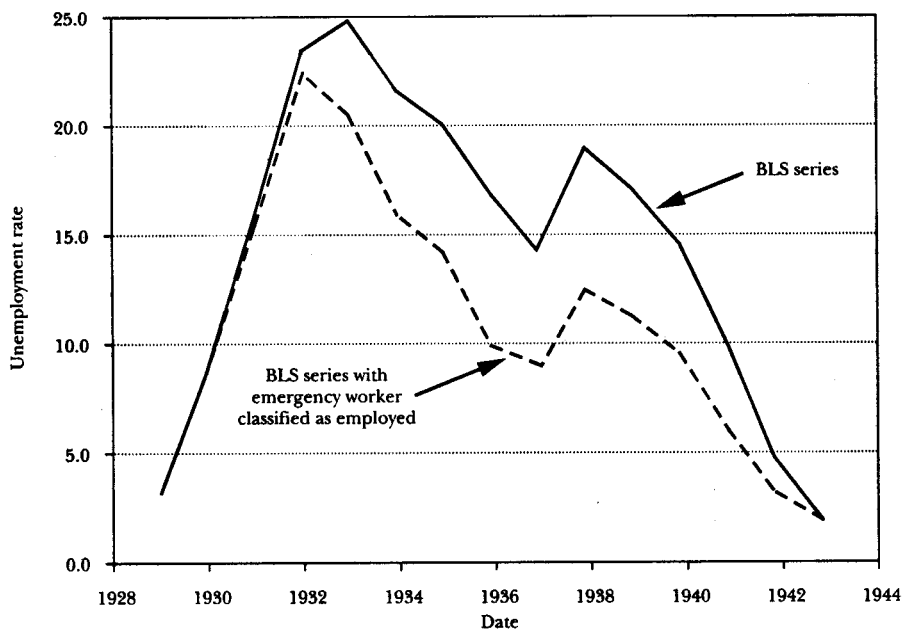


Source: Michael A. Bernstein, *The Great Depression: Delayed Recovery and Economic Change in America, 1929-1939* (New York: Cambridge University Press, 1987): 9.

On the other hand, participants in these programs often created things of lasting value: national forests, lodges in national parks, the Blue Ridge Parkway, and buildings on university campuses around the country. One might therefore reasonably argue that these emergency workers fitted the definition of someone who was gainfully employed. Consequently, Michael Darby has proposed an alternative unemployment series that treats emergency workers as employed since they were no longer searching for jobs. Public make-work projects seen from this perspective were substitutes for the search for private employment. The result is to reduce the unemployment rate by 4 to 7 percentage points and the number of employed by 2 to 3.5 million at the depths of the depression (Figure 22.2). Even with such an adjustment to the unemployment estimates, unemployment remained above 9 percent until after 1940—far in excess of the natural rate, although Darby argues that had it not been for the recession of 1937–38, the economy might have achieved its “natural” rate (i.e., where unemployment reflects job switching rather than structural or cyclical factors) of around 5 percent.

FIGURE 22.2

Unemployment during the Great Depression



Michael Darby, "Three and a Half Million U.S. Employees Have Been Misaid: Or, an Explanation of Unemployment, 1934–41," *Journal of Political Economy* 84 (1976): 8.

Employment in nonmanufacturing activities held up much better than employment in manufacturing. Nationally employment in nonmanufacturing declined between 1929 and 1933, bottoming out at 81 percent of its 1929 level and recovering to almost 90 percent of its 1929 level by 1935, and had essentially fully recovered by 1937. Manufacturing employment, on the other hand, fell to only 67 percent of its 1929 level in 1933 and did not fully recover until 1940. Moreover, employment in the South, particularly in the South Atlantic region, held up much better than elsewhere. In the South Atlantic region employment declined only 14 percent between 1929 and 1932, was actually recovering by 1933, and by 1940 was 26 percent above its 1929 level. The rest of the South didn't do quite as well, but it recovered quickly. Two factors may account for the South's relatively good employment record during the depression. First, southern industry was heavily concentrated in light industry, which maintained production and employment levels much better than heavy industry. Second, fewer southern workers were covered by Social Security and unemployment insurance taxes that raised the cost of labor and had a negative impact on employment.³

State-level employment estimates are probably not as robust as the regional estimates, but they present intriguing contrasts between experiences in different states during the Great Depression. Manufacturing employment in Arizona, for example, apparently declined by more than 50 percent between 1929 and 1933. Arizona, of course, was hardly an industrialized state, but neither was Florida, where employment dropped by less than 24 percent. Experiences differed sharply among the industrialized states. In Illinois employment declined almost 48 percent between 1929 and 1933, whereas in Massachusetts it declined "only" 35 percent.⁴

Work by Robert Margo shows that unemployment experiences also differed widely by occupational group, industry, and age. Unemployment rates followed a U-shaped pattern with respect to age; young and old had much higher incidences of unemployment than the middle-aged. Blue-collar workers were also much more likely to be unemployed than white-collar workers or professionals. In Philadelphia in 1936 (when recovery was supposedly well under way), for example, the unemployment rate among the unskilled was 44 percent, compared with 21 percent among clerical workers and only 12 percent among professionals and managerial workers. Unemployment was particularly high among construction workers—hardly surprising in view of the fact that the Federal Reserve construction index fell to less than one-tenth of its 1929 level by 1933. In March 1933, for example, the unemployment rate among construction workers was 73 percent, compared with 40 percent in manufacturing and "only" 14.5 percent in agriculture.

³ Wallis (1987; 1989).

⁴ Wallis (1989).

Ironically, those on work relief were much more likely to suffer long-term unemployment than those who did not secure work relief jobs. Indeed, more than half of those on work relief had been unemployed for more than a year, compared with less than a third of those not on relief. Being unemployed was, of course, a prerequisite for a work relief job, and those receiving relief were still officially counted as unemployed, but people who had received work relief were much less likely to find gainful private employment than those who had not received work relief. People on work relief differed from the other unemployed: They were more likely to be young, married, nonwhite, native-born, and rural and to live outside the Northeast. These data suggest a need to reinterpret the Keynesian interpretation that high unemployment resulted from sticky wages that would not adjust downward. Instead long-term relief work provided security and an alternative to a potentially fruitless job search, reducing the downward pressure on nominal wages; the unemployed on relief stopped looking for work. Participation in relief work may also have stigmatized workers, screening out the more complacent, risk-averse individuals for public, rather than private, sector employment. Thus relief may have compromised recovery if recovery is measured by reductions in the unemployment rate and increases in employment.⁵

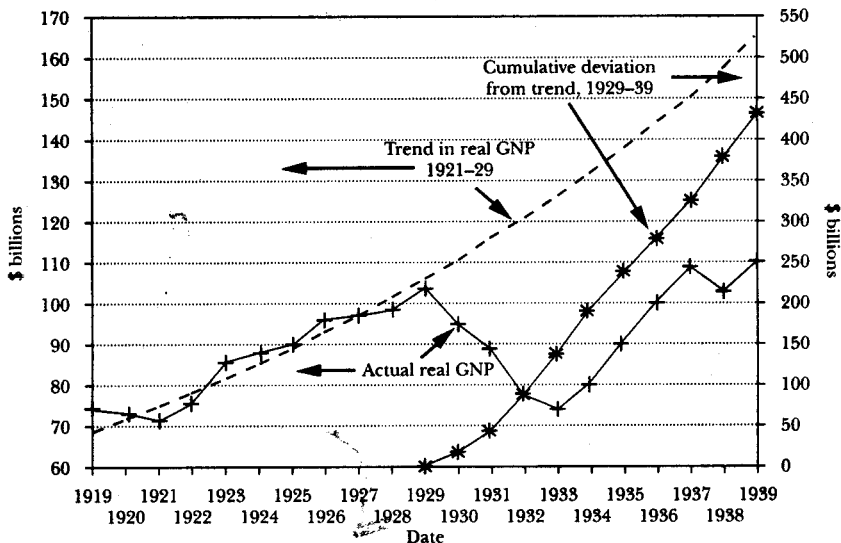
With the onset of the depression real GNP fell, bottoming out in 1933. It was not until 1937 that real GNP exceeded its 1929 level. If real GNP had instead continued to grow after 1929 at the same rate as from 1921 to 1929, when it grew at an average annual rate of 4.4 percent, then by 1939 real GNP would have been about \$165 billion (Figure 22.3). Its actual level was only \$111 billion (in 1929 prices). Actual real GNP during the 1930s totaled \$932 billion, whereas if the rate of growth during the 1920s had been maintained, it would have been about \$1.365 billion—a shortfall of over \$400 billion, or almost a third.

Although the economy began to recover after 1933, the rate of growth during that recovery was little different from what it had been during the days of full employment in the 1920s, despite the existence of considerable unemployed and underemployed resources. There was no real “rebound” in the economy. Sluggish as the recovery in America was, it was faster than in most other countries, except Germany and Japan, which were embarking on their militaristic expansion that resulted in World War II. Given the magnitude of the United States’ decline, though, one might reasonably have expected a much stronger recovery than actually occurred.

Following the debacle of the final banking crisis that ended with the bank holiday of March 1933, monetary growth resumed, growing at annual rates of 9.5 percent, 14 percent, and 13 percent from June 1933 through June 1936. Milton Friedman and Anna Schwartz attribute this rapid recovery

⁵ Margo (1991).

FIGURE 22.3
Real Gross National Product, 1919-1939
(1929 prices)



Source: Peter Temin, *Did Monetary Forces Cause the Great Depression?* (New York: W. W. Norton, 1976): 4. Trend calculated as a simple growth trend 1921-29 extrapolated over the period. Cumulative deviation calculated as the difference between actual real GNP and the trend cumulated from 1929 on.

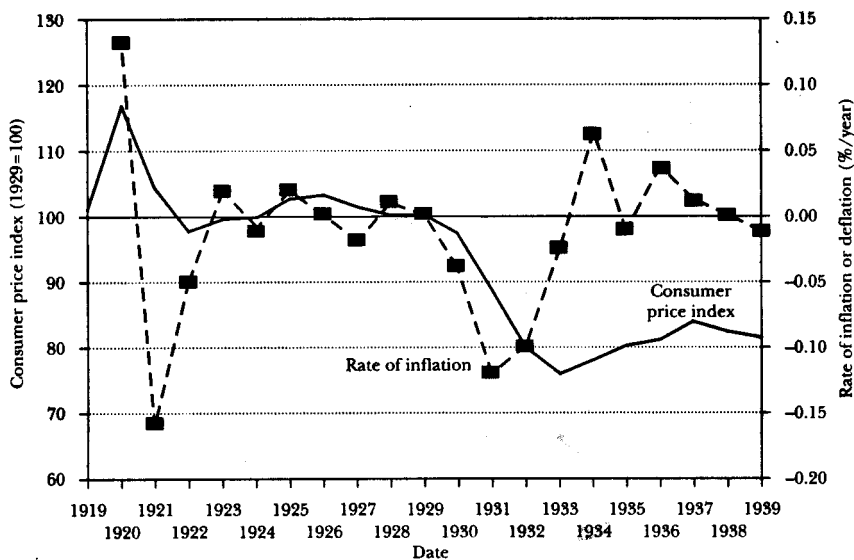
to the inflow of gold stimulated by devaluation—gold would buy 67 percent more dollars after devaluation than before (\$35 per ounce, compared with \$20.67 prior to 1933)—and capital flight (particularly from Germany) rather than the recovery of business. Prices also showed some recovery, though the price index remained far below its levels of the 1920s throughout the 1930s (Figure 22.4).

Recession in the Midst of Recovery, 1937-38

Unemployment rose again from 1937 to 1938, and real GNP declined. Some argue that this setback to recovery resulted from a reversal of the government's fiscal policy in response to mounting federal deficits, but other factors were also at work. First, other countries, notably Britain, France, and Canada, also experienced economic decline about the same time, the ex-

FIGURE 22.4

Inflation and the Consumer Price Level 1919–1939



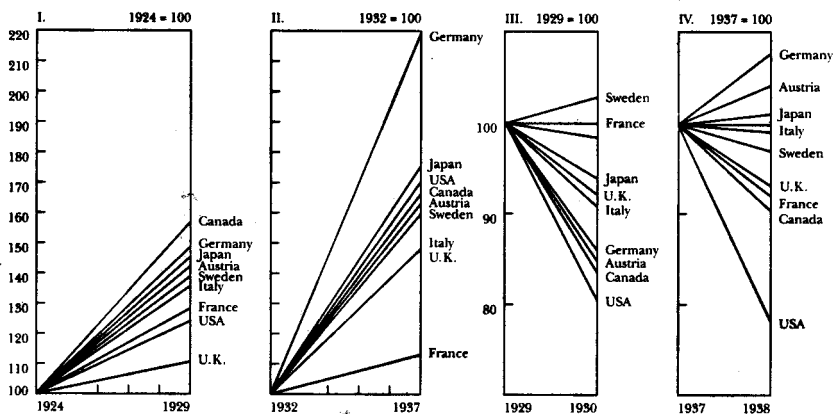
Source: U.S. Bureau of the Census, *Historical Statistics of the United States* (Washington, D.C.: Government Printing Office, 1975): Series E135 (reindexed).

ceptions being those nations on a war footing and where national socialism was dominant (Figure 22.5). Second, there was an abrupt reversal of domestic monetary policy in the United States. Money, which had grown by 14 and 13 percent in the preceding two years, grew only 4.2 percent between June 1936 and June 1937, and it fell 2.4 percent the following year.

Friedman and Schwartz argue that it was this abrupt change that precipitated the recession from May 1937 to June 1938. The money supply had peaked in March 1937; it turned around in May 1938. These reversals reflected policy changes by the Fed. Prompted by concern about the inflationary potential of the large volume of excess reserves held by the banks, the rapid growth of the money stock, and the modest increase in prices, the Fed had increased reserve requirements. As a result, interest rates rose and business confidence collapsed while banks wanted to maintain a cushion of excess reserves. The Fed returned to its policy of sterilizing gold inflows that underlay the rapid expansion of the money supply from 1933. The result was the third-largest recorded decline in the money supply, exceeded only by the declines in 1920–21 and 1929–33. This explanation is all the more credible

FIGURE 22.5

Changes in Industrial Production in Selected Countries,
1924-29, 1932-37, 1929-30, and 1937-38
(index numbers with specified bases)



Source: Charles P. Kindleberger, *The World in Depression* (Berkeley: University of California Press, 1986): 278.

since recovery and monetary growth resumed once the Fed reduced reserve requirements, lowered the discount rate, and made some modest open market purchases.

Explaining Recovery from 1933

Many explanations have been offered for the turnaround of the economy in 1933. Friedman and Schwartz credit the halt of the collapse of the financial system and the resumption of growth in the money supply. One might argue that considering the magnitude of the decline, sooner or later things had to turn around.⁶ Subsistence placed a floor beneath the economy; thereafter the only way out was up. For liquidationists—the Austrian school—recovery came when the unsound businesses had finally been put out of their protracted misery.⁷ The Keynesian interpretation is that recovery resulted from New Deal spending and the massive government deficits that accrued as the government substituted public spending for inadequate private spending—a view that will be discussed in more detail later.⁸

More recently the recovery has been attributed to the shock of Roosevelt's new policy regime (but not the spending associated with it),

⁶ Kindleberger (1986).

⁷ Robbins (1934); Hayek (1984).

⁸ Keynes (1936); Hansen (1984).

which altered expectations and stimulated renewed investment.⁹ Specifically, Peter Temin and Barrie Wigmore identify the devaluation of the dollar and the subsequent rise in farm prices and incomes as crucial. Devaluation broke the iron grip of the gold standard that tied America to the rest of the world and the rest of the world to America. This explanation is appealing. It provides a better—that is, more timely—explanation of the turning point than Friedman and Schwartz's claim that recovery was sparked by expectations of higher prices resulting from the National Industrial Recovery Act (NIRA), which was passed some two months after devaluation was a fait accompli, and codes of fair competition took a number of additional months to be drawn up and implemented. Others have also linked devaluation to recovery in the rest of the world.¹⁰ On the other hand, the market anticipated devaluation long before Roosevelt was sworn in as president. Indeed, the run on gold that led up to the bank holiday reflected those expectations and, it might be argued, left policy makers with no choice but to devalue. Furthermore, since foreign trade was relatively small, this explanation makes international trade the tail that wags the dog. Still, as Temin and Wigmore point out, while other factors such as the NIRA and the Agricultural Adjustment Act (AAA) may have affected prices independently of devaluation, the prices of internationally traded agricultural commodities, such as wheat and cotton, changed by more and responded much more quickly than domestically traded commodities, such as soft fruits, milk, and vegetables.

As plausible as these explanations may be, and despite the considerable evidence in support of them, many still believe that recovery was a direct result of the fiscal stimulus supplied by Roosevelt's New Deal. Consequently, it is worthwhile reviewing the evidence for and against this hypothesis in greater detail.

FISCAL POLICY

The federal government had the weapons with which to fight the depression: fiscal and monetary policy. Monetary policy, however, was in the hands of the same individuals—the Board of Governors of the Federal Reserve—who had never smelled the smoke in 1930 and then refused to help put out the fire in 1932. They did virtually nothing from 1933 to 1937 that could be construed as policy of any sort. This left fiscal policy. Did Roosevelt play an aggressive role, adopting the new interventionist approach called for by John Maynard Keynes and his crowd? Probably not.

Keynes, Cambridge University's premier economic theorist and the controversial adviser to several British governments, did meet Franklin Roosevelt—once. But that meeting came off badly—neither found his audience sufficiently respectful—and there is not a hint that Roosevelt was in-

⁹ Temin (1989); Temin and Wigmore (1990).

¹⁰ Eichengreen (1992); Eichengreen and Sachs (1985).

fluenced by Keynes. However, it took the analysis of E. Cary Brown, writing in 1956, to bury the myth that Roosevelt was the first American Keynesian.

In Keynes's analysis, the depression was the result of a decline in aggregate demand (defined as the sum of consumption expenditures, investment expenditures, net exports, and net government spending) sparked by a reduction in the level of desired business investment arising from less optimistic business expectations. The decline in aggregate demand led in turn to a reduction in aggregate supply below the level at which resources were fully employed. As reductions in aggregate supply rippled through the economy, people were thrown out of work. The unemployed had little choice but to reduce their consumption expenditures. Even those who were still employed may have felt compelled to increase their savings at the expense of current consumption just in case they were next on the layoff list. With rising inventories of unsold goods, businesses had no incentive to invest in new plants and equipment to maintain existing output levels, let alone expand production.

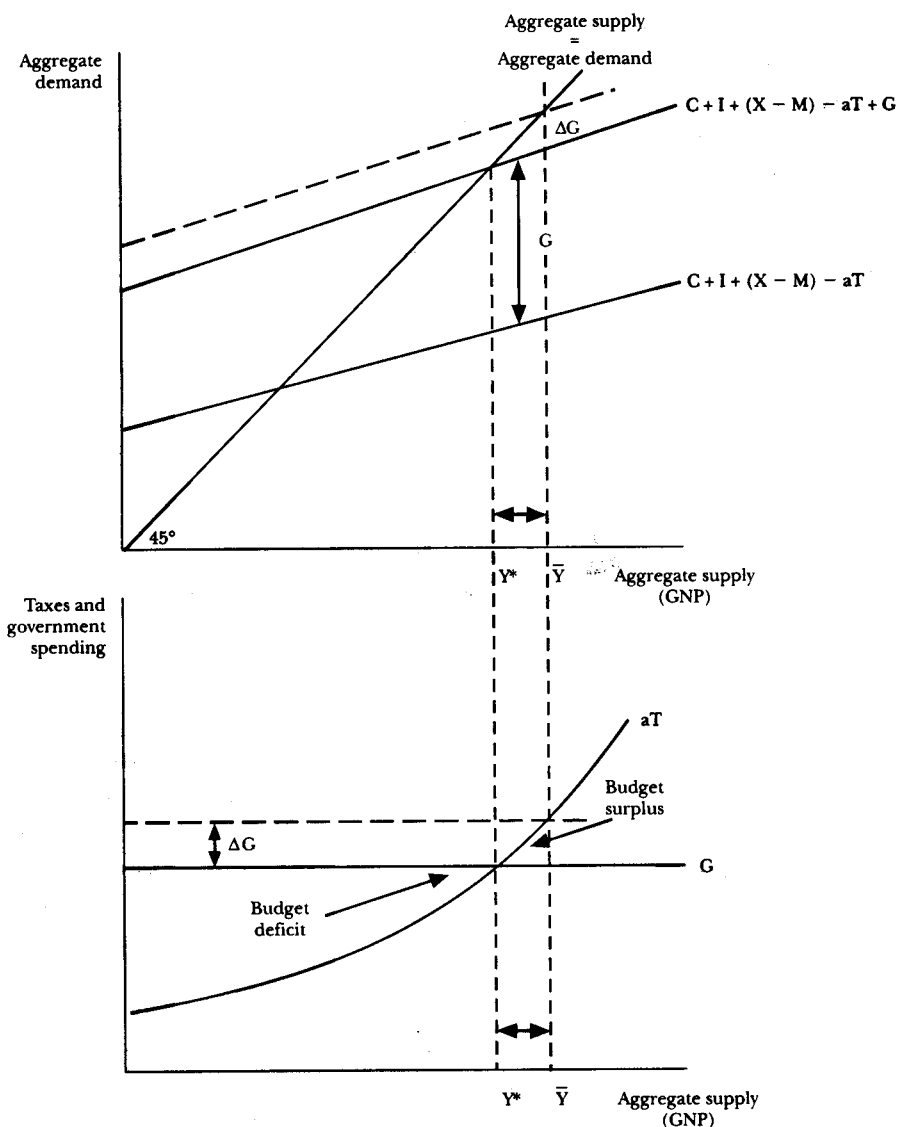
Government, however, had within its power the means to counter the decline in private aggregate demand. If private-sector expenditure fell short of that necessary to attain and maintain full employment, the public sector could make good, increasing its expenditures relative to its income and borrowing if need be. Public spending could be substituted for private spending. Government expenditure (G in Figure 22.6) and taxes (T) are viewed as discretionary variables; to be set at whatever levels the government deems necessary to achieve its policy objective. The way it's supposed to work is as follows:

For each level of aggregate demand, there is an equilibrium level of GNP, Y^* , where aggregate demand is equal to aggregate supply, represented by the 45° line in Panel A of Figure 22.6. If prices are inflexible, especially if they are sticky downward, then the economy may be in equilibrium (defined as the income level where aggregate supply equals aggregate demand) at less than full employment. Suppose, however, that the government is committed to full employment, represented by \bar{Y} , and that resources are currently unemployed ($Y^* < \bar{Y}$). Under such circumstances, Keynes suggested that by increasing government expenditures relative to taxes by ΔG , the government could increase aggregate demand and the equilibrium level of GNP by a sufficient amount to reach the goal of full employment—provided the private sector does not react so as to offset the increased aggregate demand arising from increased government spending.

Budget deficits represent injections of cash into the circular flow of income, increasing the demand for goods and services. They are expansionary and potentially inflationary. Budget surpluses, on the other hand, represent withdrawals from the circular flow of income. They are contractionary or deflationary. Politicians are fond of using the size of the budget deficit as a gauge of fiscal impact. But there is a problem here. Since taxes also tend to

FIGURE 22.6

Fiscal Policy



rise as GNP increases, the fiscal stimulus provided by a given level of government spending at any moment of time depends upon the level of GNP. The same set of tax rates and government spending programs may generate either a budget surplus or a budget deficit depending on the vigor of the private sector. If businesses and individuals spend aggressively on their own, tax

collections go up. Moreover, government spending tends to fall as the need for welfare, unemployment benefits, and jobs programs disappears. As a result, the federal budget could be in surplus. If, on the other hand, private spending is slack, then tax revenues fall and government social spending accelerates and the federal budget is in the red. This explains why economically conservative governments, like the Eisenhower administration, could run up big deficits without even trying. During the 1958-59 recession President Eisenhower's advisers were horrified to find that federal expenditures exceeded federal revenues by 16 percent, the largest deficit since the crisis years of World War II.

One must be extremely cautious about judging the fiscal stimulus of a particular combination of taxes and government spending programs by the magnitude of the current budget deficit or surplus. The current budget surplus or deficit merely indicates the direction in which fiscal policy is driving the economy. Instead Brown measured the relative impact of fiscal policy on aggregate demand at full employment income—that is to say, the GNP that would be produced if all resources were to be fully and efficiently employed. Brown's question was, Would the economy have ever reached full employment if the government had maintained a particular year's fiscal policy for long enough? That is, given the levels of expenditure and taxation, and if we assume that these levels didn't change, would the economy have expanded to full employment, or would recovery have stopped short of that goal? The question is an important one because the fiscal stimulus from any given tax and spending program diminishes as GNP increases—a phenomenon referred to as fiscal drag. Moreover, fiscal stimulus ceases once the budget is balanced. Thus, if the budget is balanced at less than full employment GNP, fiscal policy will never move the economy to full employment GNP, and recovery will stop short. On the other hand, if full employment GNP is less than the balanced budget GNP, then recovery may be complete, but inflationary pressures are likely to cause other problems.

Brown, of course, did not know exactly how large the government deficit or surplus would have been at full employment. However, by assuming that (1) government expenditures were virtually unaffected by income levels, (2) tax collections were roughly proportional to increases in income above actual income levels, and (3) full employment income was growing at 3 percent a year, he was able to construct counterfactual full employment budgets (Table 22.1).

By these estimates, federal fiscal policy was, on balance, expansionary during six of the seven Roosevelt administration years shown (1933 on). Only in 1937 would there have been a budget surplus at full employment, amounting to a reduction in full employment GNP of about 0.7 percent. But that should be cold comfort, indeed, for Roosevelt partisans. On closer inspection, it becomes clear that the expansionary stimulus of fiscal policy was very modest. At the trough of the depression, when Brown calculates that ac-

TABLE 22.1

Impact of Federal Fiscal Policy on Aggregate Demand
(\$ billions)

| Year | Government Spending (current dollars) | Taxes (current dollars) | Current | | Real Spending | Real Employment Taxes | Full | | Full Employment Budget as % of Full Employment GNP |
|------|--|-------------------------------|--------------------------------------|--------------------------------------|------------------|-----------------------------|--|--|--|
| | | | Budget Deficit (-) Surplus (+) | Budget Deficit (-) Surplus (+) | | | Employment Budget Deficit (-) Surplus (+) | Employment Budget Deficit (-) Surplus (+) | |
| 1929 | 1.4 | 2.6 | 1.2 | 2.5 | 3.4 | 0.9 | 0.9 | -0.6 | |
| 1930 | 1.5 | 1.8 | 0.3 | 2.9 | 3.0 | -0.1 | -0.1 | +0.1 | |
| 1931 | 1.8 | -0.3 | -2.1 | 3.4 | 0.3 | -3.1 | -3.1 | +2.1 | |
| 1932 | 1.6 | 0.1 | -1.5 | 3.2 | 1.5 | -1.7 | -1.7 | +1.0 | |
| 1933 | 2.5 | 1.2 | -1.3 | 5.2 | 4.7 | -0.5 | -0.5 | +0.3 | |
| 1934 | 4.6 | 1.8 | -2.8 | 8.4 | 5.6 | -2.8 | -2.8 | +1.6 | |
| 1935 | 4.6 | 2.1 | -2.5 | 8.5 | 5.5 | -2.8 | -2.8 | +1.6 | |
| 1936 | 5.4 | 2.0 | -3.4 | 9.3 | 5.4 | -3.9 | -3.9 | +2.1 | |
| 1937 | 5.1 | 4.9 | -0.2 | 8.8 | 10.2 | 1.4 | 1.4 | -0.7 | |
| 1938 | 5.9 | 3.9 | -2.0 | 10.6 | 9.4 | -1.2 | -1.2 | +0.6 | |
| 1939 | 5.8 | 3.6 | -2.2 | 10.2 | 8.5 | -1.7 | -1.7 | +0.8 | |

Source: Adapted from E. Cary Brown, "Fiscal Policy in the Thirties," *American Economic Review* 46 (1956): 864-65, Table 1.

tual output was 39 percent below full employment capacity, the full employment deficit would have been only 0.3 percent of GNP. In 1936 the Roosevelt budget reached its expansionary peak (2.1 percent of GNP)—but only because Congress, over White House objections, sweetened the veterans' compensation program. And the following year political pressures to balance the budget pushed fiscal policy into its most conservative stance since the late 1920s.

Note, too, that the extremely moderate stimulus of the Roosevelt budgets was offset by increasingly conservative financial policies of state and local governments that were up to their capitol domes in debt. During the last three disastrous years of the Hoover administration (1930-32), state and local governments maintained a slightly positive fiscal stance, raising the net stimulative impact of all government activity. But after 1932, efforts to stem growing deficits made nonfederal government budgets a net deflationary force, fully offsetting Roosevelt's cautious expansion. As a result, the net impact of all government on aggregate demand was negative in four out of seven Roosevelt years and was surely less expansionary overall from 1933 to 1939 than it had been from 1930 to 1932 (Table 22.2)! By Brown's standard, then, Herbert Hoover was a better Keynesian than FDR.

Larry Peppers's reworking of Brown's computations puts depression fiscal policy in an even worse light. Peppers adjusted Brown's estimates of full employment income and made more sophisticated projections of tax revenues and expenditures at the full employment level. He discovered that the federal budget would have been in full employment *surplus* in every depression year, with the exception of 1931 and 1936 (see Table 22.3).

Why was fiscal policy so perversely practiced during the depression? The simple—and nearly complete—answer is that policy makers did not know any better. To be fair, ignorance was a perfectly reasonable excuse in the early 1930s. Monetary policy makers at least had intuition working in their favor: Saving the banks by pumping liquidity into the system seems sensible if the banks were caught by a panic caused by a general crisis of confidence rather than the result of their own unwise lending policies, speculation, or fraud. Fiscal planners, by contrast, had only classical macroeconomic theory, which prescribed nothing but increased labor market competition as the answer to unemployment, and the false analogies with private business and the household budget to guide fiscal planning.

Government budget deficits were seen as a threat to stability in the same way operating deficits were seen as a threat to the stability of the corporation. The only proper course, it appeared, was to batten the hatches and head into the wind. It could be said, too, that government was hostage to these homilies even if policy makers were not fully taken in by them. Radical departures from accepted policies could have further weakened confidence in the economy and thereby defeated their own purpose. All in all, however, Herbert Hoover comes out looking a tad better than Franklin Roosevelt as

TABLE 22.2

Fiscal Impact of Federal, State, and Local Government Taxes and Spending (\$ billions)

| Year | Actual Federal Budget | Actual State & Local Budget | Full Employment Federal Budget | Full Employment State & Local Budget | Aggregate Full Employment Budget (Federal+State+Local) | Aggregate Full Employment Budget as a Percent of Full Employment GNP |
|------|-----------------------|-----------------------------|--------------------------------|--------------------------------------|--|--|
| | Deficit (-) | Deficit (-) | Budget | Budget | (Federal+State+Local) | Full Employment GNP |
| 1929 | 1.2 | -0.2 | 0.9 | -2.0 | -1.1 | +0.7 |
| 1930 | 0.3 | -0.6 | -0.1 | -2.3 | -2.4 | +1.6 |
| 1931 | -2.1 | -0.7 | -3.1 | -1.7 | -4.8 | +3.2 |
| 1932 | -1.5 | 0.3 | -1.7 | 0.3 | -1.4 | +0.9 |
| 1933 | -1.3 | 0.0 | -0.5 | 2.2 | 1.7 | -1.0 |
| 1934 | -2.8 | 0.4 | -2.8 | 3.0 | 0.2 | -0.1 |
| 1935 | -2.5 | 0.5 | -2.8 | 2.8 | 0.0 | 0.0 |
| 1936 | -3.4 | 0.5 | -3.9 | 1.9 | -2.0 | +1.1 |
| 1937 | -0.2 | 0.7 | 1.4 | 2.2 | 3.6 | -1.9 |
| 1938 | -2.0 | 0.5 | -1.2 | 2.4 | 1.2 | -0.6 |
| 1939 | -2.2 | 0.1 | -1.7 | 1.4 | -0.3 | +0.1 |

Source: Adapted from E. Cary Brown, "Fiscal Policy in the Thirties," *American Economic Review* 46 (1956): 864-65, Table 1.

TABLE 22.3

Peppers's Full Employment Budget Calculations, 1929-39

| Year | Potential Budget Surplus (+) in billion (\$) | Potential Taxes (% GNP) | Potential Expenditures (% GNP) | Full Employment Surplus (% GNP) |
|------|---|-------------------------------|--------------------------------------|--|
| 1929 | 1.3 | 3.75 | 2.55 | 1.20 |
| 1930 | 0.9 | 3.57 | 2.67 | 0.90 |
| 1931 | -0.5 | 3.78 | 4.32 | -0.54 |
| 1932 | 0.8 | 4.43 | 3.56 | 0.87 |
| 1933 | 1.7 | 6.34 | 4.44 | 1.90 |
| 1934 | 0.1 | 6.59 | 6.45 | 0.14 |
| 1935 | 0.8 | 7.10 | 6.34 | 0.76 |
| 1936 | -0.7 | 7.57 | 8.14 | 0.57 |
| 1937 | 3.2 | 9.31 | 6.50 | 2.82 |
| 1938 | 3.4 | 10.09 | 7.17 | 2.92 |
| 1939 | 2.6 | 9.53 | 7.32 | 2.21 |

Source: Larry Peppers, "Full Employment Surplus Analysis and Structural Change: The 1930's," *Explorations in Economic History* 10 (1973): 203.

an economic leader. It was Hoover who embarked upon ambitious public works projects to put people to work. It was Hoover who established the Reconstruction Finance Corporation to lend money to private businesses and banks in financial difficulties. It was Hoover who ran the largest budget deficits relative to GNP. But as historian (and fiscal planner under the Nixon administration) Herbert Stein argues, Hoover had no hope of breaking with conventional policies that had yet to be demonstrated ineffective to the business and financial communities. Instead much of his energies seemingly went into increasingly inane speeches about prosperity being just around the corner when everything all around seemed to be falling apart. The philosophy was that business confidence needed bolstering to encourage private investment. Arguably Hoover had a point: Private investment was much larger than government spending at the time, and thus any given percentage increase in private investment would have increased aggregate demand by more than the same percentage increase in government spending.

Roosevelt had the advantage of some hindsight: The policies he inherited obviously had not worked at all. But he resisted an expansionary approach out of the conviction that the economy's problems were structural, rather than fiscal. In the short run budget deficits might be tolerated in order to provide emergency relief for the unemployed. But Roosevelt be-

lieved—or at least acted as though he believed—that the country could not spend its way out of the depression. Salvation could be had only through structural reform.

This goes a long way toward explaining the passions of Roosevelt's economic advisers in defending the New Deal's emphasis on structural change. Nor is it clear that this New Deal emphasis upon structural change was misplaced. The depression revealed fundamental flaws in some basic institutions. Private charities, for example, were completely overwhelmed. However, liberal economists today get a painful surprise when they look back and see what the first modern liberal attempted. For while New Dealers of the 1930s and mainstream liberal economists of the 1970s share a common commitment toward income redistribution, contemporary liberal economists have far greater respect for the value of competitive market mechanisms in making sure there is something to redistribute.

The Objectives of New Deal Spending

By the standard of the times, enormous resources were invested in New Deal programs. This investment seems reasonable as part of the Roosevelt administration's attempt to cope with the impact of the depression on real incomes. But what seems less reasonable is the great variations in per capita allotments of funds among the states (Table 22.4); Nevada residents averaged \$1,499 per person, while North Carolinians managed only \$228.

Don Reading argues that the New Deal's goals were more specifically defined by the president as first relief and recovery and then reform. For Reading, relief and recovery meant repairing the immediate economic damage done by business failure and unemployment. Reform meant dealing with a failed Federal Reserve System, an uncontrolled stock market, falling wages and prices, and the farm crisis. Reform also meant attacking the structural causes of poverty: low productivity, racial discrimination, unequal wealth distribution. To measure the New Deal's goals in practice, Reading chose variables that showed the states' relative relief needs (such as percent decline in income and level of unemployment) and the state's relative reform needs (such as per capita income, percentage of tenant farmers and percentage of African-Americans). He then statistically regressed these variables (plus others to allow for the practical problems of setting up aid programs) against per capita New Deal aid to see if they explained state-by-state variations in spending.

His results show a much deeper dollar commitment to relief than to reform. Expenditures were greatest where, other factors being equal, unemployment and the rate of decline of income were greatest. Loan dollars appear to be related to income declines but not to unemployment. This

TABLE 22.4

New Deal Outlays per Capita, by State, 1933-1939

| Region/State | Allocation | | Region/State | Allocation | |
|------------------|------------|------|---------------------|------------|-------|
| | Rank | (\$) | | Rank | (\$) |
| <i>Northeast</i> | 6 | 301 | Indiana | 34 | 333 |
| Connecticut | 47 | 237 | Iowa | 15 | 467 |
| Delaware | 36 | 310 | Michigan | 21 | 389 |
| Maine | 32 | 336 | Minnesota | 17 | 426 |
| Massachusetts | 39 | 286 | Missouri | 31 | 340 |
| New Hampshire | 45 | 248 | Ohio | 22 | 383 |
| New Jersey | 35 | 330 | Wisconsin | 20 | 290 |
| New York | 33 | 335 | <i>Great Plains</i> | 3 | 424 |
| Pennsylvania | 42 | 261 | Kansas | 16 | 434 |
| Rhode Island | 46 | 247 | North Dakota | 6 | 708 |
| Vermont | 19 | 390 | Oklahoma | 30 | 343 |
| <i>Southeast</i> | 5 | 306 | South Dakota | 7 | 702 |
| Alabama | 37 | 310 | Texas | 216 | 362 |
| Arkansas | 18 | 396 | <i>Pacific</i> | 2 | 536 |
| Florida | 23 | 377 | California | 10 | 538 |
| Georgia | 40 | 273 | Oregon | 12 | 536 |
| Kentucky | 44 | 251 | Washington | 13 | 528 |
| Louisiana | 23 | 370 | <i>Mountain</i> | 1 | 716 |
| Maryland | 28 | 345 | Arizona | 4 | 791 |
| Mississippi | 27 | 358 | Colorado | 14 | 506 |
| North Carolina | 48 | 228 | Idaho | 5 | 744 |
| South Carolina | 38 | 306 | Montana | 2 | 986 |
| Tennessee | 29 | 344 | Nevada | 1 | 1,499 |
| Virginia | 43 | 255 | New Mexico | 8 | 690 |
| West Virginia | 41 | 265 | Utah | 9 | 569 |
| <i>Midwest</i> | 4 | 380 | Wyoming | 3 | 897 |
| Illinois | 25 | 365 | | | |

Source: Don Reading, "New Deal Activity and the States, 1933-39," *Journal of Economic History* 33 (1973): 794-95. Reprinted by permission of Cambridge University Press.

follows, Reading argues, from the fact that all the programs specifically targeted against unemployment—welfare, public works—were grant programs.

Surely the most striking result from the study is the apparent failure of New Deal administrators to pass out funds according to the single clearest measure of need: per capita income. It also explains why Congress was so interested in discovering Harry Hopkins's secret formula. The poorest region

of the country, the South, got relatively little, while the richest, the Pacific states, averaged 75 percent more per capita. In a sense, this fits the recovery versus reform dichotomy; the New Deal simply never got as far as reform. But it also adds weight to the argument that Roosevelt was most concerned with defusing political and social unrest. Within bounds, it is logical that people would react more strongly to changes in income than to their absolute level of purchasing power. Thus an Oregon orchard owner, who had lost half of his or her substantial income, would be a better candidate for aid than a dirt-poor North Carolina sharecropper, whose income had fallen only marginally during the contraction and who did not vote.

It has been suggested that Roosevelt may have had something more prosaic—more Machiavellian—in mind, too: getting himself and other Democrats reelected.¹¹ This idea is elegantly developed by Gavin Wright, who econometrically tests several alternative models of spending for votes. A smart politician with limited resources to offer does not simply reward loyalty; a dollar spent on a sure vote is a dollar wasted. Rather, the politician tries to maximize the clout of expenditures, spending where the money is most likely to change the course of an election. This implies that more should be spent in states where, other factors being equal, (1) the voting is expected to be close and (2) there have been substantial swings in voter sentiment, suggesting that voters can be persuaded to switch party allegiance in return for favors.

Even without formal statistical testing, the predictive power of this approach is clear. The South, ever-loyal to the Democratic party, seemingly got little, while western states that switched allegiance frequently were heavily courted with dollars. Wright's regression analysis bears out the intuitive: Adjusting for the "ruralness" of states—the combination of electoral votes per capita, variability in previous elections, and the closeness of the 1932 election vote—explains 80 percent of state-to-state variations in New Deal spending.

These three variables dominate the statistical analysis so completely that plausible alternatives—like Reading's relief hypothesis—wash out. When the percentage decline in per capita income, the percentage of families on government relief, and the unemployment rate are added to the basic "political" model, they have no statistical impact on the spending equation. Wright's political explanation works differently, however, in accounting for one important component of New Deal spending, public jobs. Here the political variables all make some difference in 1936 but even in that year collectively explain just 37 percent of state-to-state variations in how the administration apportioned some 2.5 million Works Progress Administration jobs.

¹¹ Arrington (1969; 1970).

John Wallis's state-level employment estimates, however, suggest a need to temper this interpretation somewhat. After taking account of the simultaneous determination of grants to states and state employment, Wallis finds that grants and per capita income were positively related: Richer states got more grants because they tended to spend more of their own money on relief and hence qualified for larger matching federal grants. Moreover, he concludes that economic as well as political factors were important in explaining the interstate variations in grants per person. Indeed, a one standard deviation decrease in employment would raise the annual per capita grant by \$6.70 (grants averaged \$44 per person per year) whereas a one standard deviation increase in political productivity would raise the per capita grant by only \$3.20.

Furthermore, the South did get something out of the New Deal. The Agricultural Adjustment Act, for example, was particularly favorable to the South in terms both of the support given tobacco and cotton and of how the benefit payments were to be distributed. The favorable treatment accorded southern planter interests is hardly surprising since the chairman and ten of the twenty-four House Agriculture Committee members were from the South. Similarly, farm labor was excluded from the minimum wage legislation and exempted from unemployment insurance taxes and Social Security. True, lip service was paid to the problems of race, of tenancy, of poverty, but relatively little was done about them. In the 1930s African-Americans, sharecroppers, and the poor did not vote.

Did Roosevelt's political spending strategy work? It is not enough to show that he was reelected three times. It is necessary to demonstrate that New Deal funds changed the share of Democratic votes in the states. Here Wright's statistical analysis produced more ambiguous results. Improvements in income raise the percentage of Democratic votes, all right, but the effect of government spending per se is barely visible in the 1936 election and disappears entirely in the 1938 and 1940 elections. It can be argued that government spending raised incomes, so that the indirect effect of spending was still there to be seen. But that isn't very persuasive because the link between government spending and per capita income is not tight. Clearly a more complex model of voting behavior is needed—or, as likely, a different model for each election. Wright notes that the European war probably dominated other issues in the 1940 election. Indeed, the single variable with the most power to explain votes is the percentage of German-Americans in the state population.

Roosevelt, then, probably tried to use, and less probably succeeded in using, New Deal spending to keep Democrats in office. Economic goals either were secondary or did not figure in decisions on how to allocate funds. Roosevelt need not be judged harshly for this preoccupation with politics, though. It would take an unreconstructed cynic to claim that FDR did not believe that his reelection and the election of New Deal Democrats to

Congress would help the economy. However the New Deal is judged, there was certainly more to it than the maximization of Franklin Roosevelt's political power.

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