

Rockoff, Hugh

Working Paper

World War II and the Growth of the U.S. Federal Government

Working Paper, No. 1998-01

Provided in Cooperation with:

Department of Economics, Rutgers University

Suggested Citation: Rockoff, Hugh (1998) : World War II and the Growth of the U.S. Federal Government, Working Paper, No. 1998-01, Rutgers University, Department of Economics, New Brunswick, NJ

This Version is available at:

<https://hdl.handle.net/10419/94303>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

World War II and the Growth
of the
U.S. Federal Government¹

Hugh Rockoff
Department of Economics
Rutgers, the State University of New Jersey
New Brunswick, New Jersey 08903

Abstract

The question this paper asks is a deceptively simple one: How much did America's involvement in World War II contribute to the long-run growth of the U.S. federal government? One possibility is that after the war the new agencies that were created during the war, and the existing agencies that had expanded their budgets and staff levels, retained part of their wartime gains by vigorously fighting cuts, and relying on the inherent inertia of the political process. This possibility, which is often referred to as the "ratchet" hypothesis, is discussed in sections 2 through 6. Section 2 discusses the evidence for a spending ratchet, section 3 for a staff ratchet, section 4 for a new agency ratchet, and section 5 for a regulatory ratchet. Our conclusion is that the wartime experience did not produce an expansion in the role of the federal government along any of these dimensions. In section 6 we try to explain how the ratchets were avoided. In section 7, however, we argue that the by apparently confirming the validity of Keynesian revolution in macro-economics the war did contribute to the ideological swing toward big government then in process, and in this way to the postwar expansion of the federal government. Finally, in section 8 I summarize the major conclusions.

1. Introduction

The question this paper asks is a deceptively simple one: How much did America's involvement in World War II contribute to the long-run growth of the federal government? But the answer we give depends on what we mean by the growth of government and the channels we can identify through which the wartime experience might have influenced that growth. In some cases, where we specify a simple direct influence, it is possible to give a simple answer. But in other cases precision is impossible.

We can divide the potential channels of influence into two categories. First, there are the ratchet explanations. The arguments here are fairly simple. During wartime periods, agencies experience increased budgets and staff levels. In principle these should be reduced to prewar levels in the postwar period. But by vigorously fighting cuts, and relying on the inherent inertia of the political process, agencies can retain part of their wartime gains. This possibility is discussed in sections 2 through 6. Section 2 discusses the evidence for a spending ratchet, section 3 for a staff ratchet, section 4 for an agency ratchet, and section 5 for a regulatory ratchet. All of these arguments are based on assumptions of fairly simple failures in the political marketplace, and make fairly simple predictions about the changes to be observed in major variables. Our conclusion here is that the wartime experience did not lead to a growth in the role of the federal

government through any of these channels, and in section 6 we try to show how these dangers were avoided.

In addition to the ratchet explanations it is possible that the war influenced intellectual assumptions that produced a tilt toward the growth of government. In section 7 I examine one such impact. Here I conclude that the war may have had some impact through its influence on the Keynesian revolution in macro-economics, although other neglected years may have been equally important. Finally in section 8. I summarize the major conclusions.

2. Was There a Spending Ratchet?

In the usual telling of this story the government expands during the war, acquiring more resources both to fight the war and to manage increased responsibilities on the homefront. People become used to a larger government, and heavier taxes. And since they do, when peace comes legislators and bureaucrats see no reason to reduce the size of government, and with it their own power and influence, to what it was before the war. The electorate is likely to be satisfied with only partial cutbacks from the wartime peak. This story could apply to any war, or even to a peacetime emergency, but it might apply with special force to World War II because of the contrast with the Depression. Since civilian consumption levels would be much higher after the war than before, if full employment could be maintained, consumers would be unlikely

to miss the additional resources going to the government.

In reflecting upon this story it is important to distinguish between military and civilian expenditures, and between war-related civilian expenditures - interest on the national debt, veteran's benefits, reparations and relief, and so forth - and the true peacetime civilian expenditures. While the war-related civilian expenditures may be important to study for various reasons - their economic consequences might well be considerable - their existence is hardly a new or controversial idea. Adam Smith for example, gives a succinct and penetrating account of why governments seek to finance wars through deficit spending, producing increased interest payments that must be met in future years.² Here I will concentrate on the idea that the purely civilian expenditures tended to increase dramatically after the war.

A wide range of opinions can be found in the literature concerning the importance of the spending ratchet. The writers quoted below have a general wartime ratchet in mind, although they would presumably expect their story to apply to World War II. There are many skeptics such as Borchersding who refers to it as that "insubstantial hypothesis;" Musgrave and Musgrave who conclude cautiously that the hypothesis "cannot be taken to give a conclusive explanation" and Peltzman who raises some doubts about it on the basis of international comparisons.³ But there are also writers who take a positive view of the ratchet, although it is noteworthy that the more a writer burries himself in the numbers

the less convincing the case for a spending ratchet become. Among the supporters it is not always clear from their description whether they have in mind simply the war-related civilian expenditures or a true civilian war-ratchet. But the images they employ appear to be useful only if there was a true civilian ratchet.

Thus, Jack Hirshleifer suggests that one explanation of the growth of government may be that wars leave in their wake a "mass of officeholders" who can resist cutbacks. And in a similar spirit, Herman Krooss writes that "in each major war, government clearly became the pre-eminent player on the economic stage, and when the war was over, the government never completely reverted to the status of bit player". This could be merely a colorful discription of the course of government spending. But the vivid image of an actor unwilling to give up the limelight, strongly suggests that government actively sought to prevent even those changes in spending that "should" have occurred. And there is no mistaking Joseph Reid's assertion about World War II that "more likely, it was the incapability of supporting the newly bloated government with tariffs that dictated retention of the new income tax rates," than the new Keynesian notion of the appropriate role of government. Jonathan Hughes, characteristically, has given us a particularly vigorous statement.⁴

Each war inflated the economy and gave the Federal spending mechanism a scope it did not previously have. The historical expansion of the Federal sector has been

mainly achieved by a few short bursts of wartime spending, not by a steady rise related to the country's population growth, or the GNP it produced. After each war there were expanded interest payment, new veteran's benefits, as well as the actual growth of government costs.

The last phrase is crucial. If what Hughes has in mind is simply a rise in costs proportional, say, to the rate of inflation, we are left with the uncontroversial proposition that government spending rose in real terms to pay wartime debts and to pay veteran's benefits. But since he intends his statements to apply to the general expansion of the Federal government I think he means that other government expenditures rose in real terms relative to population or real GNP.

Surprisingly, however, there has been little historical research addressed directly to the spending ratchet. Professor Higgs's Crisis and Leviathan, although directed to a somewhat different thesis, breaks new ground. This lack of interest exists, moreover, despite the large number of studies for other countries stimulated by Peacock and Wiseman's work that identified the spending ratchet as crucial in the British case. The early and excellent work by M. Slade Kendrick was written with a view toward measuring the long-run costs of veteran's benefits, and similar war-related civilian expenditures, and so does not speak directly to the more recent concern with the purely civilian expenditures. The one exception that I know is Tussing and Henning's study which found no evidence of a civilian war ratchet when all levels of

government spending are aggregated.⁵ Here I will take a closer look, using more disaggregated data, at the changes in federal spending during World War II and so put the spending ratchet to a limited but intense test.

Table 1 presents the relevant before and after calculations for World War II. The meaning of the columns is straightforward. The only column about which there might be some question is the column marked foreign. It is arguable that some of the expenditures in this column might be better defined as military expenditures, especially those occurring under the actual military budgets. But in the aggregate, it is unlikely that definitional problems of this sort would effect the general picture.

The message of Table 1 is clear. Military spending shows a strong increase over the prewar years. The lessons of Munich had been learned. America found dangerous new rivals on the world scene, and would not return to its prewar isolationism. The same comment partly explains the jump in expenditures under the heading marked foreign, although purely humanitarian considerations may also have played a role in some of the war relief expenditures. The increase in interest and veteran's benefits also have a clear explanation. Debts incurred in wartime had to be paid in peacetime. The surprising feature of the table, is the decline in the remaining civilian expenditures once these other sources of spending have been removed. There is simply no evidence of a spending ratchet in the sense of an increase in spending over the

prewar level generated by the defensive tactics of bureaucrats.

The result for World War II does not depend simply on the ratio being unusually high in the prewar period because GNP was unusually low, nor on some impact of prewar military preparations. Civilian expenditures net of military spending, foreign spending, interest and veteran's benefits in 1938 were 6.3 percent of full employment GNP, a figure not much lower than the 6.57 percent given in Table 1 for the prewar average. This is full employment real GNP at 1938 prices and so may underestimate full employment nominal GNP to the extent that prices would have risen as full employment was approached. Presumably at higher prices federal spending would have been higher, so the choice of price level does not seem crucial. Federal spending, however, would have been lower at full employment due to lower relief expenditures.

It can also be argued that total spending is not an adequate measure of the role of the federal government because it includes transfers. It could be true that transfers declined across the war, because economic conditions improved, but that federal purchases of real goods and services, a measure of the resource cost of government, actually increased. It could be true, but it isn't. The share of civilian purchases of goods and services by the federal government in GNP fell from 4.1 percent to 2.2 percent across World War II (1939-1940 compared with 1947-1949).⁶

It is also conceivable that gains by certain civilian agencies during and after World War II were masked by declines in agencies

established to deal with the Depression. The decline in the federal net civilian spending ratio, in other words may mask the conversion of temporary relief expenditures into permanent spending. To examine this possibility it is necessary to disaggregate the civilian residual. But the disaggregation must be by organizational unit (Department of Agriculture, Department of State, and so on) rather than by functional category (natural resources, foreign aid, and so on). The latter breakdown, available in a number of sources, does not tell us what bureaucrats were able to accomplish in terms of promoting their own spheres of influence. Table 2 was computed to show how the various agencies fared over the crucial years 1941 to 1948. The units in the table correspond (with a few exceptions) to the appropriation bills passed by Congress and so correspond to the points at which bureaucrats or pressure groups had to make their influence felt if they were to alter spending in their favor.

In constructing Table 2 I have made a number of deductions. Spending by the military services are deducted, even if for nominally civilian purposes. Spending by the Veteran's Administration was omitted from the Independent Offices, and interest on the national debt and certain foreign loans were omitted from the Treasury Department. Finally, expenditures by a variety of purely wartime agencies, such as the Office of Price Administration and the War Asset Administration, were deducted from expenditures by the Executive Office of the President and the Independent Offices. In each case, the idea was to deduct the

obviously war-related expenditures, and so focus on a residual appropriate to the spending-ratchet hypothesis.

The organizational units are arranged according to their growth rates over the years 1941 to 1948. The first significant point is that two-thirds of the units, failed to grow as rapidly as GNP. In some cases this is not surprising. The Federal Works Agency, which included Depression era devices such as the Works Projects Administration, could be expected to shrink relative to GNP with the return of prosperity. But other units (in particular the Department of Agriculture, the Legislative Branch, and the Executive Office of the President) are ones which would be expected to wield considerable power in the fight for funds. If the spending-ratchet was operative how could these powerfully placed agencies have failed to grow as rapidly as the rest of the economy?

When we turn to the five agencies that did expand more rapidly than GNP, it is clear much of the expansion of these agencies can be attributed to demand changes induced by the war. The category of Independent Offices includes a wide range of agencies, but the bulk of the growth is accounted for by a few large agencies, in particular the Railroad Retirement Board. Spending by this unit increased dramatically across the war years. If its expenditures are deducted, the remaining Independent Offices actually show a decline relative to GNP. Although legal changes may have increased expenditures by the Board, the basic commitment to the railroad workers had been made in the Depression. The growth of

the Treasury Department is even easier to understand. There was a much increased debt to manage, and heavier taxes to collect. The demand for the Treasury's services, thus, was derived ultimately from the demand for veteran's benefits, military strength, and so on. The growth at the State Department is also easily understood as a derived demand. The decision after the war to play a more active role in world affairs required a larger volume of resources to create the framework through which American power could make itself felt.

The growth at the Department of Labor is accounted for by the establishment of the United States Employment Service in 1946. This was not a direct result of the war and might be interpreted as having been the result of entrepreneurial efforts by bureaucrats, although the Depression might have created sufficient demand to have eventually produced such an agency in any case. The post office will be treated in detail below, since it is of more importance in the discussion of employment than of expenditures. Overall, it appears that the losses incurred by the relief agencies were totally absorbed by the increase in military and war-related expenditures and did not leave a bonus to be picked up by other civilian agencies.

The before and after comparisons are more vulnerable to the criticism that they ignore the long-run effects of the tax revolution that occurred during the war. The income tax base, as is well known, was considerably broadened during the war. Many people

were forced to pay taxes who had never paid them before, the rates were increased, and payroll withholding was introduced. The public, moreover, got used to large federal deficits and the consequent tax on wealth. High tax revenues could be maintained without much resistance. And because inflation would force people into higher brackets without explicit legislation, the government might well see its revenues rising without much overt resistance. As a purely psychological proposition this has much appeal. We all tend to accept existing impositions and complain mostly about new ones. We tend to accept impositions that seem to be brought on by mysterious forces like inflation, and complain about impositions that are clearly the work of individuals. But can we say any more than this?

One way in which a tax ratchet could work would be for the level of taxes or spending (measured as a percentage of GNP) to remain the same while the purely wartime costs fell. This would create a fiscal dividend that could be used to expand domestic civilian programs. But for a long time things did not work in this way. If we compare the post World War II period (1948 through 1950) with the post Korean War period (1954 through 1956) we find that the share of interest and foreign expenditures in GNP had fallen from 2.16 percent to .55 percent, and the share of federal spending in GNP had risen from 15.05 to 16.83. But neither of these gains were captured by domestic civilian spending. The share of this category in GNP actually fell from 3.91 to 2.51. All of the fiscal dividend from increased government spending and the decline in the

share of interest and foreign affairs related spending fell to the military which increased its share from 4.59 percent to 10.94 percent. The Korean War had taught its own lessons.

It was not until the acceleration of inflation in the sixties brought additional revenues, and the Kennedy and Johnson administrations brought new priorities, that the share of domestic civilian expenditures in GNP began to rise. The war based tax system undoubtedly played a role in this process. But there were forces at work in this period which would have led to some increases in domestic civilian spending in any case.

3. Was there an Employment Ratchet?

Employment in the federal government, of course, need not follow the same course as spending. Agencies administering transfer programs such as social security can spend enormous sums without employing large numbers of people. The share of the civilian labor force employed by the Federal government in the twentieth century, in fact, shows much stronger war displacements than does the expenditure measure. This shows up clearly in graphs of federal employment, and has long been recognized. A few figures will illustrate. Between 1902 and 1977 the Federal share of the labor force rose from .8 percent to 2.84 percent. The increase in the World War I period (1913-1922) was from 1.02 percent to 1.28 percent, so this displacement can account for 12.7 percent of the growth in the Federal share over the whole period. During the World

War II period (1940-1950) the Federal share rose from 2.03 to 3.36 percent, so this displacement can account for virtually all of the growth in the Federal share since 1940. A similar pattern emerges if one omits civilian employees of the military from consideration.

Some years ago, Richard Porter drew attention to this phenomenon and offered an employment ratchet as an explanation.⁷ Federal agencies, according to Porter, add employees during wartime, at times for legitimate reasons, and at times simply because a case can be made, however tenuous, that the new workers are performing some service important to the war effort. After the war, of course, there are cutbacks. But in the absence of a crisis Congress tends to move slowly when it comes to cutting personnel. Moreover, as time goes by Congress gradually loses whatever will it has to attack entrenched bureaucrats. The result is that the layoffs are small in the first few years after a war and eventually cease altogether. The bureaucracy grows, according to Porter, through this ratchet. Although this argument is general to all wars, in the data that Porter considers it is obvious that only World War II has much explanatory power.

Porter offers two kinds of evidence: the general congruence of the major movements in the growth of government employment with his story, and some examples concerning individual appointments. On close examination, however, I find neither sort of evidence convincing. When we take a closer look at which agencies expanded and which didn't we see that, for the most part, increases in

employment are accounted for by increases in demand for services, and most of the increased demands are due to obvious long-term costs of the war.

Table 3 shows the increases in Federal Employment between 1939 and 1949 posted by the organizational units that account for most of the increase. Three units -- the defense establishment, the Post Office, and the Veteran's Administration -- account for the bulk of the increase, about 88 percent of the total. The changes in employment by the military and by the Veteran's Administration are, of course, the counterpart of the spending changes discussed in the preceeding section. They are accounted for by our changed attitude toward defense, and by the decision to reward Veteran's for their wartime service. The increase in employment by the Postal Service, however, appears somewhat mysterious. Here at last, perhaps, is some evidence of a war-ratchet.

But the increase in postal service employment was substantially justified by the vast increase in mail handled by the service. The number of pieces of mail of all kind handled by the postal service rose from 26.4 billion in 1939 to 43.6 billion in 1949 an increase of about 65 percent. This was the main justification for the roughly 78 percent increase in employment. In part, the increase in mail handled was simply a response to the return to full employment. But it also resulted from the vast population movements which occurred during the war.

There does seem, however, to have been some slippage: Postal

employment seems to have grown more than could be strictly accounted for by increased demand. A way of estimating this excess is to regress the log of postal employment (N) on lagged values of mail handled (M), the demand variable, Federal revenues (R), to capture the the normal tendency of government to spend more on the post office as revenues rise and dummy variables for the war years, 1939-1944 (W), and for the postwar years, 1945-1949, (PW). The coefficients on the dummies should then tell us how many war-ratchet employees were added. The resulting regression was

$$(1) \quad N = 2.47 + .56M + .04R - .01W + .06PW$$

$$(1.26) \quad (3.59) \quad (.78) \quad (.25) \quad (1.95)$$

A five period, second degree, almon lag was used, unconstrained at either end, and sum of the lag coefficients reported, for both of the time series. The equation was estimated over the years 1908 to 1970 using the Cochrane-Orcutt method, and yielded an adjusted R^2 of .50 with a Durbin-Watson of 1.81. Using the log of the dependent variable seemed to give a better fit. The number in parentheses are "t" statistics. The Postwar dummy suggests (as do a few variations run on this basic regression) that employment in the immediate postwar years was, perhaps, six percent higher due to a war-ratchet.

There is, however, another explanation of why post office employment grew somewhat faster than demand during the immediate

postwar period: to provide employment for returning servicemen. Many of the returnees found jobs in the private sector, others took advantage of the G. I. bill. But if neither option was open, how was a community to reward a serviceman with an outstanding war record? One alternative was to find a place for him on the public payroll. In many communities this meant either the local government payroll or the post-office. I have no evidence on the magnitude of this effect. But it was one of the arguments postal authorities made for increased appropriations, and it explains the timing of the increase in postal employment better than does Porter's thesis. This source of the increased demand for postal workers is similar, then, to the demand for veteran's benefits.

The increases in employment experienced by the four traditional departments that gained substantially during the war-commerce, treasury, justice, and state - can also be explained, to a substantial degree, by demand variables. The growth of Commerce Department employment was dominated by the Civil Aeronautics authority and the Weather Bureau. The growth of these agencies is no mystery. Total civil aircraft increased by a factor of about 6.7 from 13,772 to 92,622 between 1939 and 1949. Revenue miles of scheduled air traffic increased by a factor of 4.2 from 82.9 million to 351.6 million. The number of lighted airports increased by a factor of 2 from 735 to 1480.⁸ These increases were partly the direct result of the war. Wartime technological innovations, military training of pilots, and the transfer of

capital created for war purposes to the private sector -- all of these favored the development of commercial aviation. Given the consensus already reached concerning the role of the government in aviation, they also promoted increased Federal employment. The increases in employment at The Treasury and the State Department parallel rapid growth in expenditures by these agencies. Increased revenue collections, and increased involvement in world affairs, produced a derived demand for the personnel that administered these programs.

The only one of these agencies that seems to have gained substantially more employees than can be accounted for by a simple proxy for demand is the Justice Department. The number of civil cases in United States District Courts net of price control cases increased substantially in these years - from 28,909 in 1941 to 47,278 in 1951, an increase of 63.5 percent.⁹ But the Justice Department's increase in employment was even more. Economists, for some reason, do not find this exception surprising.

All the remaining units of the Federal government together accounted for only 3.6 percent of the total change in employment. But even among these agencies there are some increases that were clearly the result of changes in the structure of demands produced by the war, rather than of a war-ratchet. The atomic energy commission, for example, was a major employer by 1949.

All of this is not meant to argue that bureaucrats did not strive for, and sometimes succeed in acquiring, more personnel. The

decision to hold down postage rates, for example, must have contributed to the increase in mail that justified increased employment. But it does argue that demand changes were the dominant variable.

4. Was there an Agency Ratchet?

Great oaks grow from little acorns. It could be that additional agencies were established during the war that were allowed to survive the war although perhaps cut back. These agencies could then begin to build up a constituency and to lobby for larger funds. In the long-run they might grow to important proportions. But their contribution to the long - run growth of government would not show up in simple before and after comparisons of spending or employment. Professor Higgs has noted this possibility, although he does not claim that this was a major channel through which the war influenced the growth of government.¹⁰

A book by the Budget Bureau, the United States at War, gives what appears to be a fairly complete list of wartime agencies established by the President or the Congress.¹¹ I have tried to trace the subsequent fate of these agencies, relying primarily on various issues of the U.S. Government Manual. But it is not always easy to trace the movements of an agency given the byzantine structure of the federal government, and I make no claim of complete accuracy. There may well be a few agencies that continued

their activities in some fashion that I mistakenly thought had been terminated, and there may be a few agencies that I assumed survived within the confines of larger units that were eliminated. But I believe that on the whole the picture I have built up is roughly accurate. There are 152 entries in the Budget Bureau's list. After eliminating double counting due to name changes, there appear to have been about 131 agencies created, ranging in size from large bureaucracies, such as the Office of Price Administration, to small interdepartmental committees. I have been able to trace the fate of about 120 of these agencies. The results are tabulated in table 4, although I must again note that the use of summary statistics suggests greater precision than is perhaps really there. But the general picture portrayed by table 4 cannot be off by much.

It is clear that most of the emergency agencies established during the war were terminated in the immediate postwar years. Nineteen forty five was the big year. But in a number of cases, skeleton forces were maintained, sometimes after transfer to other agencies, for a few years to wind up the affairs of the agency. Higgs notes, for example, that when the War Production Board was terminated in 1945 some of its functions were transferred to the Civilian Production Administration.¹² But this agency was consolidated with others to form the Office of Temporary Controls in 1946, and the latter was terminated in 1947, although a few of its functions derived from other agencies survived longer.

The most important point, however, is that the list of

survivors does not appear to be an impressive one. It is hard to point to a large, highly visible, civilian agency created during the war. Eight of the twenty survivors were small international institutes or offices that have descendants in the state department. Two are military agencies. Several of the remaining survivors are relatively small panels, for example the National Roster of Scientific and Specialized Personnel, the function of which was ultimately continued by the National Science Foundation.

The major examples of surviving agencies or programs that appear on the Budget Bureau's list appear to be the Southwestern Power Administration, and possibly some of the wartime housing programs consolidated in the National Housing Agency which may have been continued by the Housing and Home Finance Agency created in 1947. Perhaps the best example of a wartime legacy is the Employment service of the Department of labor, although strictly speaking this was a postwar agency.

Constrast this roster with the legacy of the 1930's: the Social Security Administration, the Federal Deposit Insurance Corporation, the Federal Communications Commission, the Tennessee Valley Authority, and so on. By this standard the legacy of the war appears rather modest.

5. Was there a Regulatory Ratchet?

As has often been pointed out there is an important aspect of government that might go completely unnoticed by someone watching

the variables we have so far examined: the growth of federal regulation. It is possible for the government to impose a far reaching web of rules and regulations affecting every aspect of the civilian economy without creating large expensive agencies. This point is hard to deal with in a short space since no one has come up with a really satisfactory measure of the extent of regulation.

What I offer here is merely a suggestion, which at least has the merit of being less familiar: Cases commenced in Federal District Courts to which the United States was a party relative to real GNP. This measure will not capture all of the restraints on economic life imposed by government, what professor Higgs writes as "Big Government" with capital letters. But our measure is likely to be highly correlated with Big Government. In our economy any law that effectively prevents people from doing what they want to do will lead to violations and confrontations that end up in the courts. We can imagine a law which has a large impact, and yet leaves no trace in the legal record, but it is hard to think of plausible examples. Two of the most famous cases of the extension of governmental power, prohibition and wartime wage and price controls, clearly left substantial imprints. Over the twentieth century, moreover, this measure grew rapidly, corresponding to our notion that federal rules and regulations increasingly constrained economic life. In 1902 there were 23.3 United States cases in Federal District courts for every one billion dollars of real (1958 prices) GNP; by 1981 this figure had risen to 62.5.

As Table 5 shows, however, this increase is not explained by World War II. There is an increase across World War I, due in part, to income tax cases, but there are no substantial increases over World War II or the later wars. Total cases in the courts relative to real GNP did reach a peak in World War II. But this was due purely to price and ration cases. When we turn in the second column to a figure net of these cases, we see that the relative case load actually fell during the war and remained low afterwards. Indeed, the most surprising feature of the table is that the ratio was drifting downward in most of the postwar period; it is only within the last decade that the role of government in the private sector, by this measure, has returned to the levels reached in the Great Depression.

6. How Were the Ratchets Avoided?

Intuitively, the war-ratchet hypotheses is highly plausible. Bureaucrats are ambitious and many would, if they were able, expand their spheres of influence even if the increase was not warranted by additional demand. It is worth asking, therefore, how this was avoided given a favorable environment for government expansion in excess of demand.

The proximate answer is that the economic dislocations of war were generally addressed by newly created agencies (the War Production Board, the Office of Price Administration, and so on) so that funding could easily be cut when the war was over. Had

traditional agencies simply been expanded to cover these functions it might have been harder to make cuts.

New agencies were created for several reasons. They served to dramatize the government's response to a particular problem. In World War II, for example, the public was better reassured that labor shortages were being dealt with effectively when the War Manpower Commission was created, than it would have been, if it had been told that the Department of Labor was being expanded to deal with the matter. New agencies also permitted new approaches to problems that might have been barred by the long-run commitments of certain existing agencies. The Office of Price Administration, in World War II for example, found it easier to maintain price ceilings on agricultural products than the Department of Agriculture would have, because of the latter's fundamental commitment to raising farm incomes. But it also seems likely that the executive branch found it easier to ask for increased funding for new agencies, because this device responded to the concern of fiscal conservatives that emergency increases in spending might become permanent. This device, incidentally, was also used during the Great Depression presumably for a similar reason. Indeed, a separate emergency budget was kept alongside the traditional budget during the Depression.

The success of this budgetary device in World War II can be illustrated by reference to what happened in the Executive Office of the President. Spending in this administrative division

increased from 11.1 billion in 1941 to a peak of 408.1 billion in 1945. But all of this was accounted for by spending by emergency agencies housed in this division. These included the War Production Board, the Foreign Economic Administration, the Office of Defense Transportation, the Office of War Information, and the War Manpower Commission among many others. Spending by this group of agencies had risen from 7.8 billion to 404.9 billion. By 1948 through the elimination of emergency agencies spending in the Executive Office of the President had been reduced to 7.9 billion of which 1.7 billion consisted of spending by emergency agencies.

But budgetary devices are obviously only part of the answer. The fundamental reason for the failure of the war-ratchet hypotheses in this period was the ability of some legislators to make political capital from fiscal conservatism. Bureaucrats (or some legislators) may gain, as the war-ratchet hypotheses suggest, from an expansion of Federal spending. But other legislators may gain from leading the fight against additional spending. Reference to the careers of the dominant political figures of the immediate post-war years will make this clear. Harry Truman came to prominence as the dedicated chairman of the Senate's Special Committee to Investigate the National Defense Program. Robert Taft maintained the fortunes of the Republican party by leading an astute rearguard action against the expansion of spending and enlarged governmental authority after the war. He maintained, for example, that price controls were a necessary evil during wartime,

but that they had to be removed quickly once the war was over. In other words, Federal agencies could not quietly hang on to appropriations and powers originally granted to deal with the economic dislocations of the war. Increases had to wage a steep uphill battle. A crucial requirement was the ability to show that increased spending was warranted by some obvious need resulting from obligations incurred during the war, or from America's new role in world affairs.

There may have been, it must be admitted, an element of pure chance in reaching this outcome. It was Roosevelt and the Democrats who happened to be in power when the war began. So it was the left that suffered in the post-war period from the loss of its wartime leader, and the desire for a return to "normalcy" after the war was over, to use Harding's term coined in similar circumstances after World War I. In Britain, by way of contrast, the situation was very different. Wartime deprivations took place under conservative leadership, and the left benefited from the desire for a change.

7. Ideological and Intellectual Change

I turn now to some additional channels through which the war influenced the growth of government, channels that appear equally plausible as those already considered, but ones that are less subject to empirical testing: the impact of the war on the central political ideas of the population at large, and on intellectual views of the role of government. There are several channels that

fall within this group: changes in the legal system, changes in general public attitudes toward the effectiveness of government and so on. Here I will consider only one such channel, one that appears to have been particularly important to me: the effect of the war on the ideas of macro-economists.

For it is clear that the wartime experience played a major role in converting macro-economists to Keynesian economics. It was widely believed that the experience of the 1930's had shown that monetary policy was ineffective. The Federal Reserve had done its best, but it could do nothing to alleviate the Depression. "You can't push on a string." While some individual monetary economists rejected this view, it was not until Milton Friedman and Anna Schwartz published A Monetary History of the United States that the profession as a whole began to rethink this view. Meanwhile, Keynes's General Theory had convinced a brilliant generation of young American economists that increased government spending could restore, and indeed was crucial to maintaining, full employment. But while purely intellectual arguments were convincing to many. The case remained to a theoretical one in the late 1930's. Deficit spending under the New Deal had not cured the Depression.

The war, however, helped to change that. It showed that federal spending of sufficient magnitude could produce full employment. For many economists this undoubtedly helped to clinch the argument for Keynesian economics. As Herbert Stein shows, by the end of the war a major consensus had developed that full

employment should be a major policy objective of the federal government, and that this objective should be achieved by fiscal policy.¹³ The war, of course, also produced an extraordinary increase in the stock of money, but monetary policy had already been discredited by the Depression. In the United States, moreover, Alvin Hansen's stagnation thesis had raised the possibility that the wartime levels of federal spending were not a temporary aberration. If private investment was permanently depressed then high and growing levels of government spending would be needed to fill the gap.

But the wartime experience was not decisive. During the war inflation had been checked, at least to an extent, by wage and price controls, and rationing. This had not been part of the Keynesian promise, and in the early postwar years American economists were concerned with whether Keynesian economics also required a permanent set of direct controls. If it did, then a strong argument against a thorough going Keynesian revolution remained. Even liberal economists were concerned about a policy regime that required permanent wage controls. But the early postwar experience seemed to suggest that this danger could be avoided. After an initial surge of prices, a period of fairly stable prices set in for several years. As Alvin Hansen explained it in his influential A Guide to Keynes¹⁴

Keynesian critics, however, have exaggerated the dangers of inflation and wage control in a full-employment society.

The price inflation of 1946 - 1947 in the United States was a product of the war, not a test of peacetime full employment. Indeed from January 1948 to December, 1948, the United States enjoyed full employment without inflation despite the absence of price and wage controls. My point here is not the slender basis of the evidence, but rather that for the purpose of reinforcing the Keynesian message a very ordinary year may do as well or better than the war years.

The potential implications of this change in thinking for the growth of government were, of course, enormous. For generations economists believed that there was a heavy cost to government spending. Each dollar of additional government spending had to be extracted from the private sector, reducing consumption, savings, and incentives to produce and invest. Now the social cost of increased government spending was essentially zero (in the case of a tax financed increase in government spending) or even negative (in the case of a deficit financed increase in spending). The growth of government had become a free good. What is surprising, perhaps, is that there was any resistance at all to such a beguiling message.

8. Conclusions

We may distinguish two general ways in which the American experience of World War II might have influenced the growth of the Federal government. One emphasizes failures of the political

process to accurately reflect the basic needs and preferences of the public. A typical story here would be that an agency would have a larger budget or staff during the war and that by relying on special interests and general inertia it would be able to keep a share of these wartime gains after the war was over. Or alternatively, it might be that new agencies are established during the war, but not terminated afterwards. These agencies would then set to work to build up a constituency to assure their future survival. But on the whole, this class of explanations of the growth of government does not work very well.

Certain categories of spending and staffing, defense and foreign relations, did increase relative to the rest of the economy. But no assumption of failures in the political process is needed to explain these increases. America had learned a lesson about ignoring foreign dictators that it did not intend to repeat in the postwar world. But other areas of spending and staffing were cutback after the war. A few of the wartime emergency agencies survived, but most were abolished. Perhaps the most important legacy was that war made high taxes a part of everyday life. The tax base was expanded, and a system of progressive rates were imposed which much later may have eased the transition to larger spending by domestic civilian agencies. But it should not be forgotten that this did not happen until the priorities of the nation's presidential leadership had changed dramatically.

A second way in which the war could have influenced the growth

of the federal government is through its influence on the perceptions of the general population about the competence of government. And here, indeed, the war played a role, although the extent is difficult to measure. In the popular and academic imaginations, the Depression was viewed as proof that the free market left to itself could not be counted on to provide a decent standard of living. The question that was still unanswered in the late 1930's was could government do better? And this question the war appeared to answer in the affirmative. Huge government deficits could produce material abundance. But the war by itself was not all of the evidence that liberal economists had to bring.

The relatively strong performance of the economy in the 1940's and 1950's, in contrast with the 1930's, was equally important in providing evidence for the Keynesian vision. This is perhaps one reason why it was not until the Kennedy Administration that the Keynesian philosophy was firmly embraced. But there is no doubt that the wartime experience helped to tip the balance toward increased government spending in the postwar years.

Professor Higgs and other writers who have drawn attention to the war are undoubtedly right that the expansion of government power during the war contributed in some measure to the long-run expansion of the role of the federal government in the economy. My point here is simply that when looked at closely that contribution appears to be comparatively small, at least in contrast with the Great Depression or the Kennedy - Johnson years.

Select Bibliography

Borcherding, Thomas E. "One Hundred Years of Public Spending." In Budgets and Bureaucrats: The Sources of Government Growth. Edited by Thomas E. Borcherding. Durham, North Carolina: Duke University Press, 1977.

Fabricant, Solomon. The Trend of Government Activity in the United States Since 1900. New York: National Bureau of Economic Research, 1952.

Goldin, Claudia D. "War." In the Encyclopedia of American Economic History. Edited by Glenn Porter. New York: Charles Scribner's Sons, 1980.

Hansen, Alvin. A Guide to Keynes. New York: McGraw - Hill, 1953.

Higgs, Robert. Crisis and Leviathan: Critical Episodes in the Growth of the American Government (San Francisco: Pacific Institute for Public Policy Research, 1986, unpublished).

Hughes, J. R. T. The Governmental Habit. New York: Basic Books, 1977.

Kendrick, M. Slade. "A Century and a Half of Federal Expenditures." Occasional Paper 48. New York: National Bureau of Economic Research, 1955.

Krooss, Herman E. American Economic Development. Second Edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966.

Meltzer, A.H., and S.F. Richard. "Tests of a Rational Theory of the Size of Government." Public Choice. 41:403-418.

Musgrave, R. A. and J. M. Culbertson. "The Growth of Public Expenditures in the United States, 1890-1948." National Tax Journal 6 (June 1953): 97-115.

Musgrave, R. A. and Peggy B. Musgrave. Public Finance in Theory and Practice. Third Edition. New York: McGraw Hill Book Company, 1980.

Niskanen, William A. Bureaucracy and Representative Government. Chicago: Aldine, 1974.

- _____. "Bureaucrats and Politicians." Journal of Law and Economics 18 (December 1975): 617-644.
- Parkinson, C. Northcote. Parkinson's Law: and other Studies In Administration. Boston: Houghton Mifflin Company, 1957.
- Peacock, Allan T. "Bureaucrats and Politicians" Journal of Law and Economics 18 (December 1975): 617-644.
- Peacock, Allan T. and Jack Wiseman. The Growth of Public Expenditure in the United Kingdom. Princeton: Princeton University Press, for the NBER, 1961.
- _____. "Approaches to the Analysis of Government Expenditure Growth." Public Finance Quarterly 7 (January 1979): 3-24.
- Peltzman, Sam. "The Growth of Government." The Journal of Law and Economics 23 (October 1980): 209-288.
- Porter, Bruce D. "Parkinson's Law Revisited: War and the Growth of Government" The Public Interest 60 (Summer 1980): 50-68.
- Ransom, Roger L. "In Search of Security: The Growth of Government Spending in the United States, 1902-1970". In Explorations in the New Economic History: Essays in Honor of Douglass C. North. New York: Academic Press, 1982.
- Reid, Joseph A. Jr. "Tax Revolts in Historical Perspective." National Tax Journal 32 (June 1979): 67-74.
- Stein, Herbert. The Fiscal Revolution in America. Chicago: University of Chicago Press, 1969.
- Studenski, Paul and Herman E. Krooss. Financial History of the United States. New York: McGraw-Hill Book Company, Inc., 1952.
- Tussing, A. Dale and John A. Henning. "Long-Run Growth of Non-defense Government Expenditures In the United States." Public Finance Quarterly 2 (April 1974): 202-22.
- U. S. Administrative Office of the Courts. Annual Report of the Director.
- U.S. Bureau of the Budget. The United States at War: Development and Administration of the War Program by the Federal Government. Washington, D.C.: U.S. Government

Printing Office, 1946.

U. S. Bureau of the Census. Historical Statistics of the United States, Colonial Time to 1970. Bicentennial Edition. 200 Volumes. Washington, D. C.: 1975.

U.S. Office of the Federal Register. The United States Government Manual, 1985-1986. Washington D.C.: U.G.P.O, 1985.

TABLE 1

Federal Spending Before, During and After World War II
(as a percentage of GNP)

	Military	Interest & Veteran's Benefits	Foreign	Civilian	Total
Prewar, 1938-40	1.30	1.61	.03	6.57	9.51
Transition, 1941	5.11	1.21	.11	4.81	11.24
War, 1942-46	31.02	1.70	.32	3.41	36.45
Transition, 1947	5.39	4.53	2.70	3.14	15.76
Postwar, 1948-50	4.59	4.39	2.16	3.91	15.05

sources. Spending: U.S. Bureau of the Census [1975] series Y472, 473, 474, 476, 485; GNP, series F1.

TABLE 2

Spending by Peacetime Agencies of the Federal Government, 1941-1948
(per \$1000 of GNP)

Organizational Unit	1941	1942	1943-46 (Avg.)	1947	1948
Housing & Home Finance Agency	.08	.59	.07	.98	.29a
Federal Works Agency	13.63	7.55	1.91	1.50	1.89
Department of Agriculture	10.02	13.25	10.98	6.60	4.76
Federal Security Agency	7.79	6.19	3.75	4.01	3.99
Department of Commerce	.79	1.01	.83	.71	.67
Executive Office of the President	.03	.02	.02	.02	.02
Department of the Interior	1.55	1.32	.96	1.18	1.36
Legislative Branch	.19	.17	.14	.17	.17
Department of Justice and the Judiciary	.59	.60	.58	.57	.54
District of Columbia	.05	.04	.03	.03	.05
Independent Offices	6.42	15.45	10.80	8.35	7.24
Treasury Department	1.82	6.34	10.01	4.32	2.70
Department of Labor	.10	.08	.15	.48	.33
Post Office Department	.24	.11	.21	1.06	1.19
Department of State	.21	.21	.43	1.37	2.62
TOTAL	43.51	52.93	40.87	31.35	27.82

^aAn excess of repayments over expenditures.

Source: Budget of the United States, 1950, Appendix 4, pp. 1386-1396.

Table 3

Changes in Federal Employment
Between 1939 and 1949

Organizational	Employment			
	1939 ^a	1949 ^b	Change	Change as a Percent of the Total Change
Civilian Employees of the Military	222,648	879,875	657,227	55.8
Post Office	291,114	517,743	226,629	19.2
Veteran's Administration	38,493	195,488	156,995	13.2
Department of Commerce	13,469	46,830	33,361	2.8
Department of Treasury	60,216	89,682	29,466	2.5
Department of Justice	10,075	25,925	15,850	1.3
Department of State	6,249	21,203	14,954	1.3
Other	290,041	332,896	42,855	3.6
TOTAL	932,305	2,109,642	1,177,337	100

^aDecember

^bJune

Source. Various issues of the Statistical Abstract
of the United States.

Table 4
The Fate of the Emergency Agencies of WWII

	Number	Percent
Agencies Established (1935-45)	131	100.00
Abolished 1939-1944	9	6.9
" 1945	46	35.1
" 1946	14	10.7
" 1947	23	17.6
" 1948 or after	8	6.1
Survived	20	15.3
Fate Unknown	11	8.4

Sources. U.S. Bureau of the Budget, The United States at War: Development and Administration of the War Program by the Federal Government (Washington: U.S. Government Printing Office, 1946), pp. 521 - 535. Various editions of the Office of the Federal Register, The United States Government Manual.

Table 5
Activity in Federal Courts Relative to Real GNP

Period	Federal cases ^a	Net federal cases ^b
	(per billion dollars of real GNP)	
<u>WWI</u> 1914-1916	29.25	29.25
17-19	29.39	29.39
20-21	58.53	48.91
22-24	71.75	46.87
 <u>WWII</u>		
1938-1940	60.31	60.31
41	62.73	62.73
42-46	88.68	47.45
47	96.22	47.19
48-50	60.98	45.57
 <u>Korean War</u>		
1948-1950	60.98	45.57
51-53	55.47	44.56
54-56	47.66	47.58
 <u>Vietnam War</u>		
1964-1966	35.17	35.17
67-70	30.74	30.74
71-73	34.61	34.32

^a Civil cases to which the U.S. was a party commenced in all federal district courts. GNP is in 1958 dollars.

^b Cases commenced net of prohibition cases in WWI; and price control cases in WWII, the Korean War, and the Vietnam War. Sources: Cases Commenced in Federal District Courts: The Annual Report of the Attorney General, and The Annual Report of the Superintendent of U.S. Courts, various years. GNP: U.S. Bureau of the Census, 1975, series F1.

Endnotes

1. This paper is a revised version of a paper prepared for the Pacific Institute/ Liberty Fund Conference on Crisis and Leviathan, Oct. 9 - 12, 1986. It is based in part on a related paper on war and the growth of the federal government. For help with that paper I would like to thank Stanley Engerman, David Levy and Eugene White, for a number of useful comments. Paul Trescott graciously shared some of his unpublished work. I also learned a great deal from the participants in a session at the Social Science History Association Meetings in Bloomington, Indiana in November, 1982, and particularly from Peter Temin who was the discussant of the paper. Seminars at California State University at Northridge, at Rutgers, and at the University of Chicago were also important. This is in no respect an official publication of the NBER, and the views expressed here are purely my own. Any remaining errors are my responsibility.

2. Adam Smith, The Wealth of Nations (Modern Library Edition. New York: Random House, Inc., 1937), pp. 872-73.

3. Thomas E. Borcharding, "One Hundred Years of Public Spending," in Thomas E. Borcharding, ed., Budgets and Bureaucrats: The Sources of Government Growth (Durham, North Carolina: Duke University Press, 1977), p. 37. R. A. and Peggy B. Musgrave, Public Finance in Theory and Practice (Third Edition. New York: McGraw Hill Book Company, 1980), pp. 158-9. Sam Peltzman, "The Growth of Government," The Journal of Law and Economics 23 (October 1980): 214.

4. Jack Hirshleifer, Price Theory and Its Applications (Englewood Cliffs, N.J.: Prentice-Hall, 1976), p. 486. Herman E. Krooss, American Economic Development (Second Edition, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966), p. 468. Joseph A. Reid, Jr., "Tax Revolts in Historical Perspective" National Tax Journal 32 (June 1979): 73. J.R.T. Hughes, The Governmental Habit (New York: Basic Books, 1977), p. 209.

5. Allan T. Peacock, and Jack Wiseman, The Growth of Public Expenditure in the United Kingdom (Princeton: Princeton

University Press, for the NBER, 1961). M. Slade Kendrick, "A Century and a Half of Federal Expenditures," Occasional Paper 48 (New York: National Bureau of Economic Research, 1955). A. Dale Tussing and John A. Henning, "Long-Run Growth of Non-defense Government Expenditures In the United States" Public Finance Quarterly 2 (April 1974): 202-22

6.U.S. Bureau of the Census, Historical Statistics of the United States, Colonial Time to 1970, Bicentennial Edition (Washington, D. C.: 1975), series F69, p.230.

7.Bruce D. Porter, "Parkinson's Law Revisited: War and the Growth of Government," The Public Interest 60 (Summer 1980): 50-68.

8.U. S. Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1957 (Washington, D. C.: U.S.G.P.O., 1961), pp. 467 and 469.

9.U.S. Administrative Office of the Courts, Annual Report, 1946, p. 56; Annual Report, 1952, p. 154.

10.Robert Higgs, Crisis and Leviathan: Critical Episodes in the Growth of the American Government (San Francisco: Pacific Institute for Public Policy Research, 1986, unpublished), chapter 9, pp. 59-60.

11.U.S. Office of the Federal Register, The United States Government Manual, 1985-1986 (Washington D.C.: U.G.P.O, 1985).

12.Higgs, Crisis and Leviathan, chapter 9, p. 59.

13.Herbert Stein, The Fiscal Revolution in America (Chicago: University of Chicago Press, 1969), pp. 169 - 196.

14.Alvin Hansen, A Guide to Keynes (New York: McGraw - Hill, 1953), p. 229.