

**FISCAL POLICY AND DIVIDED GOVERNMENT\***

Gary W. Cox

and

Mathew D. McCubbins

University of California, San Diego

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Republicans and Democrats have differed over tax policy since the creation of the Republican party before the Civil War. The broad outlines of these differences can be seen by briefly reviewing tax policy in four different periods: the period of Republican dominance from the end of Reconstruction to 1913; the period of Democratic control during World War I; the period of Republican control during the 1920s; and, finally, the New Deal era of Democratic dominance.

Policy differences between the parties were somewhat obscured during the Civil War, due to the absence from Congress of the Southern Democrats, but emerged in stark outline with the return of party competition after Reconstruction. At that time, the Republicans had had unfettered control of the federal government for well over a decade--and were to remain the hegemonic party until 1913.<sup>1</sup> During this long period of ascendancy, the Republicans had ample opportunities to set tax and spending policies; and, even when they temporarily lost control of the House, Senate, or presidency, they retained enough power to veto any significant changes in the tax system that they had instituted (Stewart 1989; 1991).<sup>2</sup>

The Republican tax system emphasized excise taxes on tobacco and alcohol (which fell most heavily on Southern Democratic farmers), and tariffs on manufactured imports (which protected Republican industrial constituents). The ample proceeds from these high excise taxes and tariffs quickly retired the debt incurred during the Civil War, paying off largely Republican bond-holders. Although the Democrats pled for tax relief, the Republicans found that, by continuing to levy taxes at a high rate, they could increase the pensions of the Grand Army of the Republic--another solidly Republican constituency. Contrary to their image in this century, Republicans in the nineteenth century sought both higher taxes (O'Halloran) and higher spending (Stewart 1989; Kiewiet and McCubbins 1991) than did the Democrats.<sup>3</sup>

The Republicans maintained their traditional reliance on excise taxes and tariffs for the first twelve years of the twentieth century--but Democrats and progressive Republicans began to push, with increasing force, for a constitutional amendment allowing the establishment of an income tax. Finally, as part of a deal to get progressive votes for the Payne-Aldrich Tariff of 1909, the old guard Republicans agreed to introduce an income tax amendment, believing that it would not pass. However, they miscalculated: not only were the Republicans weakened by the 1910 elections and swept from power in the 1912 elections, but also the income tax amendment was ratified by the states in 1913 (Studenski and Kroos: 272).

On coming to power in 1913, the Democrats moved quickly to deemphasize tariff rates, shift excise taxes to manufactures, and introduce an income tax. From fiscal year (FY) 1914 to FY 1921, tariff receipts as a percentage of total federal receipts declined from 40 percent to 5 percent, excise tax receipts fell from 42 percent to 21 percent, and income tax receipts took up most of the slack, rising from \$71 million in 1914 (9 percent of total receipts) to \$3.2 billion in 1921 (58 percent).<sup>4</sup>

As World War I drew to a conclusion, the Republicans regained control of Congress and, in 1921, the White House as well. By FY 1922, the Republicans were in a position to change the tax and spending programs that had been enacted by the Democrats over the previous eight years. They slashed expenditures from \$6.2 billion in FY 1920 (the first postwar budget) to \$2.9 billion in FY 1925, and continued to hold expenditures below \$4 billion throughout the remainder of the decade (all figures in current or nominal dollars; see Studenski and Kroos). They also passed four successive tax reductions--in 1921, 1924, 1926 and 1928. As a result, income tax receipts fell from \$4 billion in 1920 (59 percent of total federal receipts) to \$2.3 billion in 1929 (50 percent of receipts). Tariffs and excise taxes rose correspondingly in percentage terms.<sup>5</sup>

The Democrats retook control of both Congress and White House in 1933. During the period of Democratic hegemony that followed, tariff and excise taxes

remained relatively low, despite the repeal of prohibition, while income and payroll taxes became the increasingly predominant form of revenue.

Since World War II we have witnessed, instead of the alternation in partisan control of the prewar period, an alternation between extended periods of divided control, on the one hand, and periods of unified Democratic control, on the other (the one exception being 1953-54, when the Republicans held majorities in both chambers of Congress and the White House). Divided control in the postwar era has consisted mostly of Democratic Congresses facing Republican presidents, with only the "Do Nothing" 80th Congress (held by the Republicans and facing Democrat Harry Truman in the White House) and the split Congresses of Ronald Reagan's first six years breaking the pattern.

The effects of divided control on tax policy are not obvious, and even have the potential to be quite perverse, as each party endeavors to use its institutional leverage to adjust tax policy to its liking. Yet, for the most part, extant theories of fiscal policy-making ignore the possibility of divided partisan control of government. Some theories abstract away from the political process entirely, while those that do not either conclude that there are no substantial differences between the parties or assume that there is unified control. Nonetheless, there are reasons to expect fiscal policy in periods of divided control to differ from that observed in periods of unified control. In this paper, we provide statistical evidence of the impact of divided control on the overall level of taxation in the period 1934-88 (which coincides with the period of Democratic congressional hegemony).<sup>6</sup>

The structure of the paper is as follows. Section 1 reviews some of the literature on the determinants of governmental fiscal policy, noting that none of them takes explicit account of the possibility of divided partisan control of the policy-making apparatus. Section 2 considers the impact that divided control might have on tax levels, using the notion of "reversion points" familiar in the spatial modelling literature (Romer and Rosenthal 1979). Sections 3 and 4 specify and estimate a time series regression to

test whether the ideas developed in section 2 hold any water for the period 1934-1988. Finally, section 5 offers some brief conclusions.

## 1. THE DETERMINANTS OF FISCAL POLICY

The literature on the determinants of tax levels is quite diverse. We divide it here into two main branches: first, those studies that focus on economic fundamentals (what kinds of policies will have what kinds of macroeconomic effects?); second, those studies that focus on political fundamentals (what kinds of incentives do fiscal policy-makers face?).

Among the economic models of fiscal policy, we mention just two as examples: Keynes' theory of countercyclical spending and Barro's theory of tax-smoothing. Keynes, of course, was concerned with how fiscal policy *ought* to be conducted, not with predicting how governments actually behave. The gist of his prescriptions is captured in the familiar injunction that government taxation and expenditure should be countercyclical. That is, governments ought to raise taxes and lower expenditures during upturns in the business cycle, in order to prevent inflation, while lowering taxes and raising expenditures during downturns, in order to prevent recession.

The normative injunction that fiscal policy should be countercyclical becomes a positive prediction about any particular government's behavior only if that government buys into Keynesianism. Not all do. There are other theories about how to manage the macro-economy from which a government might choose, and these other theories sometimes prescribe quite different behavior in response to the fluctuations of the business cycle. Barro (1979) has even argued that countercyclical policies can never work, that governments know this, and that they therefore avoid any attempts in this direction.

The gist of his argument is that deficit spending of the kind advocated by Keynes will not increase real growth rates.<sup>7</sup> The reasoning behind this assertion is that rational economic agents, seeing an increase in the deficit, know that it will have to be financed eventually with higher taxes; they therefore reduce their own spending (in order to save enough to defray the coming increased taxes), and this reduction in private spending exactly counterbalances any public deficit. Thus, the real growth of the economy will be invariant with respect to the government's choice between higher taxes and higher debt, and no government will have any incentive to engage in countercyclical policies.<sup>8</sup>

Keynes' and Barro's models do not focus on the political processes underlying fiscal policy. To the extent that they do touch on the issue, however, they seem to assume either unified partisan control of government or minimal differences between the parties. Keynes' assumptions in this regard are less clear than Barro's, but if one supposes that the government is under divided control and that the parties differ over the advisability of countercyclical policy, the question naturally arises of whether such a government could or would implement countercyclical policies. Barro's assumptions about government are quite clear: he explicitly assumes that the government's only goal is to minimize the discounted present costs of collecting taxes and that what all the money collected is to be spent on, now and in future, has already been decided.<sup>9</sup> In the present context, this means either that both parties have adopted the same expenditure policies or that only one party will ever control government.

It is understandable that models of fiscal policy-making whose primary focus is on the macro-economic effects of different policies would not devote much attention to the political process whereby fiscal policy decisions are made. Thus, it is not surprising to find political details, such as whether the various branches of government are controlled by a single party, largely ignored. It is somewhat more surprising to find that even models of fiscal policy making that are primarily political in orientation also ignore

the issue of divided government. We can illustrate this by, again, considering two examples: the electoral cycles model and the median voter model.

The electoral cycles model is based on a very simple notion: that incumbent governments will seek to ensure, in any way they can, that the economy is on the upswing around election time.<sup>10</sup> This might in principle be achieved in any number of ways, but the relevant way in the present context is the pre-election tax cut.

The various versions of the electoral cycles model typically assume unified control of government. If there is divided control, however, the issue of how the electorate assigns blame and credit arises, and, depending on how this issue is resolved in the minds of politicians, incentives to prime the pump at election time may disappear. For example, if it were commonly believed that (1) all credit for a healthy economy accrues to the party of the President; and (2) the health of the economy is the primary determinant of votes in congressional elections; then a party controlling the legislature but not the Presidency would have little incentive to cooperate in any pre-election manipulation of the economy.

The median voter model has a rather different starting point than the electoral cycles model. Although it too is concerned with the electoral incentives that politicians face, it views economic policy primarily as something over which the parties compete in campaigns rather than as something that the party in power implements. Each party is envisioned as advocating a particular fiscal policy (e.g., "taxes and spending should be cut back to a lower level") that can be located along a single left-right spectrum. The parties are assumed to choose a fiscal policy in order to appeal to the largest number of voters and, hence, maximize their vote total. The median voter model's conclusion, enshrined in the famous "median voter theorem", is that competition between vote-maximizing parties will drive both to adopt the position of the median voter.<sup>11</sup>

In research into fiscal policy-making, this theorem has been used to justify a concentration on the tax price faced by, and the preferences of, the median voter.<sup>12</sup>

Issues of divided government do not arise naturally in research motivated by the median voter theorem because both parties end up advocating identical policies--hence there should be little difference between periods of unified and divided control (or, for that matter, between periods of unified control of one party and periods of unified control of the other).

The median voter model is of course an extremely simplified theoretical construct and one that has been criticized from a variety of perspectives. For our purposes, the most pertinent critiques have come from two directions.

First, many scholars have noted that the median voter model overstates the incentives for the two major parties to converge at the center of the electorate.<sup>13</sup> Agreeing with these critiques, we shall take as a premise that the parties differ significantly on fiscal policy, in ways elaborated in the next section.

Second, Romer and Rosenthal (1979) have criticized the median voter theorem's neglect of budgetary "reversion points". They point out that spending levels typically revert to some prespecified level (zero, or last year's level, for example) in the absence of a new budget agreement. The existence of such a reversion point, however, changes the strategic opportunities considerably from those recognized in the median voter theorem.

The original example of how reversion points change the strategic context actually concerns elections in which party competition does not play much of a role: votes on propositions to finance Oregon schools. To simplify matters, we can pretend here that the Oregon school budgets are voted upon directly by the voters every year. A straight application of the median voter theorem would lead one to expect that budget levels (and corresponding tax rates) would be set at a level that appealed to the median voter: any proposal that was not set at such a level could be defeated by one that was. Romer and Rosenthal point out, however, two things (which we will again simplify here): first, that budgets are made by an interested party--the school system



administrators; second, that voters know that the consequence of voting down a budget is not that another will spring up closer to the median voter's ideal but rather that the school budget for that year will be set to zero--the schools will close, in other words. The existence of such a draconian reversion point changes the calculation of Oregon voters considerably. They do not vote on budgets solely on the merits of the budget in question; instead, they ask, "Do I prefer this budget to the reversionary budget of zero?": this change in question leads to a considerable change in the kind of budgets that can be expected.

Romer and Rosenthal's work has motivated careful attention to reversion points in a variety of models.<sup>14</sup> The issue of reversion points is relevant to fiscal policy too--as will be seen in the next section.

## 2. DIVIDED CONTROL AND FISCAL POLICY

In the last section, we reviewed four theories bearing on the process of fiscal policy-making, all of which essentially ignore the issue of divided partisan control of government. In this section, we indicate the grounds on which one might expect partisan division in control of the policy-making apparatus to have a systematic effect on fiscal policy.

Our basic premise is simply that the major parties in the U.S. differ meaningfully on what constitutes appropriate fiscal policy. They differ most obviously on the appropriate incidence of taxation--i.e., what groups in the population pay what share of the total tax bill. But they also differ in the sense that, for any given incidence of taxation, and any given program of expenditure,<sup>15</sup> they will differ over the optimal level of taxation. Thus, for example, if the incidence of taxation and program of expenditure are chosen by the Democrats, then the Republicans will probably want a substantially lower level of taxation than do the Democrats. If, on the other hand, the

Republicans get to choose where the money comes from and where it goes, they may be the ones willing to set higher tax levels.<sup>16</sup> More generally, as the incidence of taxation and program of expenditure change, each party's appetite for tax revenues will change.

The potential consequences of partisan disagreement over fiscal policy are several. One possibility is suggested by Finer's (1975) "adversary democracy" model. If the two parties alternate in full control of the government, and if they differ significantly over fiscal policy, then one can expect a see-saw pattern across the budgetary board: expenditure will be set first in a Democratic pattern, then in a Republican pattern; taxes will have first a Democratic incidence, then a Republican one; tax and expenditure levels will be set first to Democratic liking, then to Republican liking.

Naturally, there are many inertial elements that parties may find difficult to change, so that the degree of continuity is larger than a pure "adversary democracy" model might predict. Nonetheless, the basic prediction--of an alternation in policy with any alternation in power--is a straightforward consequence of the initial assumption that parties differ (along with an ancillary assumption that they can act on their preferences once in office) and seems to tally reasonably well with the facts of early twentieth century politics.

What happens when the parties do not simply alternate in power but, instead, alternate between the unified control of a dominant party and divided control? This of course is characteristic of most of the post-1933 era in the U.S., with the Democrats playing the role of the dominant party.<sup>17</sup>

One might expect that the transition from unified Democratic to divided control would have little impact on fiscal policy. After all, the post-1933 tax code is largely a Democratic construction. When the Republicans secure control of a branch or two of government, they may very well *want* to change tax levels, but the Democrats can use their branch to veto any change and preserve the status quo.<sup>18</sup>

This point is well-taken as far as it goes, but it fails to recognize several ways in which the Republicans might succeed in dragging real tax levels down. First, tax systems are always subject to evasion and to the invention of new methods of evasion; absent explicit legislative responses to newly invented techniques of avoiding the payment of taxes, real yields may decline. But the Republicans can prevent such legislative responses when they hold a veto over tax legislation, so they may be able to offer the real equivalent of tax cuts without explicit legislation.<sup>19</sup> Second, when Republicans hold the Presidency, they can reduce the allocation of resources to the Internal Revenue Service, loosen audit procedures, and in other ways lower the probability that taxpayers will get caught bending or breaking the rules of the tax code. This too offers the real equivalent of a tax cut without the need for a legislative enactment. Third, when the Republicans control at least one branch of government, they are in a better position to bargain with the Democrats; the bargain may take the form of lower taxes in exchange for some other policy goal that the Democrats alone cannot achieve. Thus the chances of a real tax cut effected through legislation are higher under divided control than under unified Democratic control.

In addition to these general considerations, it should be noted that there is one situation of divided control--that in which the Republicans control Congress while the Democrats control the Presidency--that is likely to yield particularly large tax cuts. Indeed, under certain conditions one expects even larger reductions in real tax levels when Democratic control gives way to divided control of this kind than when Democratic control gives way to unified Republican control.

The conditions under which this expectation holds include three plausible assumptions about partisan preferences and one regarding the status quo after an extended period of Democratic control. The assumptions about preferences deal with how a party's ideal level of taxes depends on the tax incidence, the pattern of expenditure, and the level of expenditure:

(A1) Other things equal, a party will prefer a lower level of taxes when the incidence of taxation is less to its liking.

(A2) Other things equal, a party will prefer a lower level of taxes when the pattern of expenditure is less to its liking.

(A3) Other things equal, a party will prefer a lower level of taxes when the level of spending is lower.

Our assumption about the nature of the status quo after an extended period of Democratic control is simply that the incidence of taxation, the pattern of expenditure, and the level of expenditure will be largely to Democratic liking.

These assumptions, together with some observations about the strategic situation of the parties when the Republicans seize control of Congress after an extended period of Democratic control, yield the desired result. Consider, to begin with, the courses of action open to the Republicans in the hypothetical situation envisioned. They are faced by assumption with an unattractive array of spending programs and an unfavorable incidence of taxation. Yet they cannot initiate new expenditure programs, because this requires authorizing legislation and is hence subject to the President's veto.<sup>20</sup> Similarly, they cannot change the incidence of taxation on their own. They can, however, cut spending, because the reversion point for spending policy is either zero or some low amount defined by the Fenno Rule, so that the President's veto threat is not credible: if he does not accept the Republican cuts, even worse cuts will ensue (see Kiewiet and McCubbins 1988).

Accordingly, one can expect that Republicans in the situation posited will cut spending. After they do so, however, both parties will--other things equal--want to cut taxes. Moreover, under some circumstances to be specified presently, they will agree on a level of taxation lower than would have obtained under unified Republican control, and hence the expected tax cut will be larger than would have occurred had the Republicans taken full control.

Consider first the Republicans. We shall denote the level of taxes that they would have most preferred had they secured full control of the government as  $R(\text{Rep})$  and the level that they actually prefer, given that they control Congress and the Democrats control the Presidency, as  $R(\text{div})$ . Assumptions (A1)-(A3) allow us to conclude that  $R(\text{Rep}) > R(\text{div})$ . To see why this follows, consider the difference between full Republican control and Republican control of Congress only. Under full control, the Republicans can improve the incidence of taxation and the pattern of expenditure much more than they can under divided control. Under both situations, they can cut spending--but they are likely to achieve larger net cuts in spending under divided control, because they cannot initiate new spending programs as readily. Thus, the incidence of taxation is worse, the pattern of expenditure is worse, and the level of spending is less under divided control, and assumptions (A1)-(A3) imply that the Republicans will want a lower level of taxation.

Consider next the Democrats. Denote their most preferred level of taxation after the Republican spending cuts as  $D(\text{div})$ . If this level is less than  $R(\text{Rep})$ , then the argument is complete, since the final outcome will be some compromise between  $D(\text{div})$  and  $R(\text{div})$ , both of which are lower than  $R(\text{Rep})$ . There is some reason to expect that  $R(\text{Rep}) > D(\text{div})$ , since the Republicans' appetite for spending, hence for taxes, would no doubt be increased were they able to establish their own programs and finance them with taxes that fell mostly on Democratic constituencies. But it might well take more than one term in full control before the transformation from anti-tax out party to pro-service in party were complete. Even if  $R(\text{Rep}) < D(\text{div})$ , however, the final outcome under divided control could still be less than  $R(\text{Rep})$ . All that is necessary for this conclusion is that  $R(\text{Rep}) > D^*$ , where  $D^*$  is the lowest tax level that the Democrats' prefer to the status quo level,  $D(\text{Dem})$ . When this condition holds, the Republicans in Congress can offer a take-it-or-leave-it deal to the Democratic President: accept a level (namely, the larger of  $D^*$  and  $R(\text{div})$ ) lower than  $R(\text{Rep})$ , or nothing. If the President

vetoed the offer, the reversion point is the status quo level--D(Dem). But, by definition, the President prefers  $D^*$  to  $D(\text{Dem})$ ; hence, he will not veto the Republican offer, and the level of taxes will end up lower than it would have been under unified Republican control.

The line of argument just sketched is of course highly simplified. In particular, it ignores the possibilities of veto overrides and bipartisan log-rolling of one kind or another. It should therefore be regarded not as a general model but as an illustration of what might happen under a particular form of divided government. Nonetheless, there are some general features to the illustration: in particular, we think it is generally true that the Republicans in the situation posited will *prefer* even larger tax cuts than they would if they were to secure full control.

If we compare the predictions in the model to the actual sequence of events in the only post-New Deal instance of divided government in which the Republicans controlled Congress, we find some real differences--e.g., the tax bills offered by the Republican-controlled 80th Congress were all vetoed by President Truman, with the last passed over his veto. The model seems correctly to have predicted *preferences*, however: the Republicans wanted very substantial cuts, and Truman was willing to go along with some cuts once the Republican spending reductions that he had been forced to accept had caused the federal budget to go into (prospective) surplus. But the President disliked the alterations in incidence that the Republican bills would have effected and was also worried that a tax cut would exacerbate the bout of inflation that the postwar economy was suffering at the time. In other words, though the lowered spending that the Republicans had forced through may have led Truman to prefer lower taxes, other things equal, other things were not equal: the bill changed tax incidence to some extent and Truman, a good Keynesian, thought that a tax cut in the face of serious inflation was not good policy. Thus, he vetoed the bill and it was passed over his veto with the

help of Southern Democrats. The result was still one of the largest tax cuts in the post-New Deal era.<sup>21</sup>

### 3. AN ECONOMETRIC MODEL OF TAX RECEIPTS

We have suggested several hypotheses about how differing constellations of partisan control of government might affect federal tax policy. These hypotheses can be organized in the context of a model that predicts *change* in the level of real federal tax receipts as a function of which party controls what branches of government: is there unified Democratic or Republican control? do the Democrats or Republicans control just the Presidency? is there split control of Congress? We shall also include, as controls, variables that indicate the fighting of major wars and changes in real income.

The primary economic data we use in our estimations consist of time series on annual federal tax receipts and real income (GNP) from fiscal year 1934 to fiscal year 1988. Using the implicit price deflator for federal purchases and the GNP price deflator, we converted both series into real or constant dollars.<sup>22</sup>

We then created dummy variables to identify varieties of party control of government. In all cases, attention focused on fiscal rather than calendar years--and in interpreting what follows it should be remembered that changes affecting the tax code in fiscal year  $t$  will typically be passed in calendar year  $t-1$ .

We recognize five different varieties of party control: (1) unified Republican control of both Presidency and Congress, designated by the variable UNIF-REPUBLICAN (equal to one in fiscal years 1954 and 1955, zero otherwise); (2) unified Democratic control of government, designated by the variable UNIF-DEMOCRATIC (equal to one for fiscal years 1934 to 1947, 1950 to 1953, 1962 to 1969, and 1978 to 1981, zero otherwise); (3) Republican control of the White House and Democratic control of Congress, designated by the variable P-REPUBLICAN & C-DEMOCRATIC (equal to

one for fiscal years 1956 to 1961, 1970 to 1977, and 1988, zero otherwise); (4) Democratic control of the presidency together with Republican control of Congress, designated by the variable P-DEMOCRATIC & C-REPUBLICAN (equal to one in fiscal years 1948 and 1949, zero otherwise); and (5) Republican control of the White House and Senate together with Democratic control of the House, designated by the variable P-REPUBLICAN & C-SPLIT (equal to one in fiscal years 1982 to 1987, zero otherwise).

This categorization catches all of the observed constellations of partisan control in the period since 1932. Table 1 shows what the mean percentage change in real federal tax receipts has been under each constellation. As can be seen, tax receipts have increased, on average, by 13.7 percent per fiscal year under unified Democratic control. When the Republicans have controlled both houses of Congress, in contrast, tax receipts have declined on average--by 5.1 percent in the two years when they also held the Presidency, by 10.4 percent in the two years when they did not. Finally, when the Republicans have controlled the Presidency, tax receipts have increased on average--by 2.8 percent in the six years when they have also held the Senate, by 2.2 percent in the fifteen years when they have not.

[Table 1 about here.]

These figures may delight Republican campaign strategists, but they do not fairly represent partisan differences in tax policy. After all, the Democrats were in control during World War II, when the largest single run-up in taxes in American history occurred. It seems plausible that, had the Republicans been in office when Pearl Harbor was attacked, taxes would still have gone up dramatically. Moreover, simple averages do not control for fluctuations in the economy, which of course have an important impact on tax receipts.



Accordingly, we included in our regressions both a variable indicating percentage changes in real GNP and a series of dummy variables identifying major wars: WWII, equal to one for fiscal years 1943 to 1946, zero otherwise; KOREA, equal to one for fiscal years 1953 and 1954, zero otherwise; and VIETNAM, equal to one for fiscal years 1967 to 1970, zero otherwise. The impact of World War II can be seen clearly in Figure 1: Tax revenues jumped dramatically in FY 1942, and have since then remained very high, relative to the pre-war period, as we have amortized the cost of the war. As it turned out, the impact of the Korean and Vietnamese conflicts was sufficiently small so that we dropped the associated dummy variables from the final specification reported in the next section.

[Figure 1 About Here]

A few other features of our specification should also be noted. First, the dependent variable,  $DRECEIPTS_t$  is the partial logarithm of real receipts, rather than the simple percentage change.<sup>23</sup> Second, the model does not incorporate the economic models--of countercyclical or flat tax rates. Were we to accommodate these theories all that would change is the specification of the GNP variable, which should be independent of which party controlled what branches of government; thus, at most we lose efficiency.<sup>24</sup> Third, we exclude the UNIF-DEMOCRATIC variable from our specification, thereby throwing its effects into the constant term. That is, the value of the constant term coefficient can be taken to represent the average percentage change in tax receipts (in partial log terms) during years of Democratic control, when real income does not change and no major war is under way.

We expect that Republican control of any part of the policy-making apparatus will yield decreases in real tax receipts, relative to the baseline level of change in Democratic years. Thus, the coefficients on UNIF-REPUBLICAN, P-DEMOCRATIC &

C-REPUBLICAN, P-REPUBLICAN & C-SPLIT, and P-REPUBLICAN & C-DEMOCRATIC are all expected to be negative. We also expect that the coefficient of P-DEMOCRATIC & C-REPUBLICAN will be larger in magnitude than the coefficient of UNIF-REPUBLICAN, which will in turn be larger in magnitude than the coefficient of P-REPUBLICAN & C-SPLIT, which will in turn be larger in magnitude than the coefficient of P-REPUBLICAN & C-DEMOCRATIC. Our results are given in Table 2.<sup>25</sup>

#### 4. RESULTS

The findings in Table 2 do not cause us to reject our hypotheses. The pattern of coefficients in the first equation (column 1) shows a clear partisan difference on tax policy. The constant term, representing the average increase in tax receipts during years of unified Democratic control is, as expected, nearly zero and statistically insignificant: the Democrats for the most part hold the line on taxes, at levels they have had the largest hand in choosing. Unified Republican control, in contrast, produces nearly a ten percent decline in federal tax receipts, relative to the Democratic baseline. When the Republicans hold majorities in both houses of Congress, but do not occupy the White House (i.e., fiscal years 1948-49), we see the steepest mean decline in federal tax receipts, all else constant; this decline, moreover, cannot be chalked up simply to postwar readjustments during the Truman Administration.<sup>26</sup> Finally, when the Republicans control the executive, but do not hold majorities in both houses of Congress, there is some evidence of decline in tax receipts, but the decline is relatively small.

[Table 2 About Here]

The results in the second equation reported in Table 2 (see column 2) provide a clearer contrast between those cases when the Republicans control both houses of Congress (whether or not they also hold the presidency) and when they do not. Instead of the four partisan dummy variables used in the first equation, the second uses only two: C-REPUBLICAN, equal to one when the Republicans hold majorities in both houses of Congress, zero otherwise (i.e., the variable is equal to one for FY 1948 and 1949, and FY 1954 and 1955); and P-REPUBLICAN & H-DEMOCRATIC, equal to one when the president is a Republican, and the Democrats hold a majority in the House of Representatives, zero otherwise (this is the union of two earlier dummies, P-REPUBLICAN & C-DEMOCRATIC, and P-REPUBLICAN & C-SPLIT, since there are no cases of a split Congress with Republican control of the House; it is one for FY 1956 to 1961, FY 1970 to 1977, and FY 1982 to 1988).

As can be seen, the coefficient on the first dummy variable is significantly smaller (a larger negative) than the coefficient on the second (the difference yields a *t*-test of 2.99), suggesting that the most important determinant of changes in tax policy is which party controls Congress. Republican control of both the House and Senate produces cuts in tax receipts of 13 percent (in partial log terms) below the Democratic baseline, while Republican control of some parts of government, but without majorities in both houses of Congress, produces relatively small cuts in tax receipts below the Democratic baseline.

The control variables work about as would be expected. An increase of one percent in GNP yields an increase of slightly more than one-third of one percent in tax receipts, all else constant. Further, the war years between FY 1942 and 1945 saw, on average, a 24 percent increase in tax receipts. The costs of amortizing World War II produced a permanent increase in tax receipts: the increases in tax receipts for the war were not followed by decreases of a similar magnitude in the postwar period.

Though for simplicity of presentation we do not provide the results here, we estimated the equation in column 1 including a dummy variable for election years. The coefficient of the election year term was significant and negative, though including it (or excluding it) has no significant effect on the remaining coefficients. This finding offers some support for a political-taxation cycle: tax receipts fall, on average, in election years.<sup>27</sup>

## 5. CONCLUSION

Which party controls the Presidency has been shown to be important in previous studies of U.S. monetary and fiscal policy (Hibbs). In this study, we have adopted a finer categorization of the possibilities for control, looking not just at control of the Presidency but also at control of the two houses of Congress. In principle, each of the three legislative branches--House, Senate, and Presidency--can be controlled by either of the two parties, yielding eight possible constellations of partisan control. In the period after Franklin Delano Roosevelt's first election, only five of these eight possibilities have been observed, but three of them involve divided partisan control of government.

The motivation for looking at a finer categorization of partisan control is that the American system empowers each branch separately with its own veto. Depending on which party controls which branch of government and what policy will be in force in the absence of new legislation, a variety of different bargaining contexts are established. In the period since 1932, the potential variety of bargaining contexts has been reduced by the continuing Congressional hegemony of the Democratic party. We have thus focused our theoretical attention on questions about the likely consequences of *interrupting* Democratic control with bouts of either Republican control or some kind of divided control.

The chief notions driving the theoretical discussion were simple: that the parties differ significantly on tax policy; and that any party will wish to set a lower tax level when it finds tax incidence or expenditure patterns to be sub-optimal than when it finds them to be optimal. The findings were straightforward. First, when Democratic control is interrupted by Republican control of all branches, there is a substantial decline in real federal tax receipts, relative to the baseline rate of growth established under unified Democratic control. Second, when Democratic control is interrupted by Republican control of either the Presidency alone or of both Presidency and Senate, the decline in tax receipts relative to the Democratic baseline is substantially less than in the first case, but still significant. Third, when Democratic control is interrupted by Republican control of Congress but not the Presidency, there is an even larger decline in tax receipts than in the first case. We have argued that this especially large decline may reflect what Congressional Republicans can and cannot do. They can cut spending but they cannot as readily alter the incidence of taxation or the pattern of spending. They thus want even larger tax cuts than they would were they in full control (and hence able to adjust the incidence of taxation and pattern of expenditure more to their liking). Success in getting large tax cuts is likely because the Democrats will prefer a lower level of taxes after the Republicans have forced through their spending cuts. Although this line of argument makes some abstract sense, there has been only one postwar instance of Republican control of Congress coupled with Democratic control of the presidency. Thus, the empirical evidence for our speculations regarding parties' desires for especially large tax cuts when tax incidence and spending patterns are sub-optimal is necessarily slight.

The results reviewed in the previous paragraph suggest two simple lessons about divided control of government and fiscal policy-making. First, for some purposes control of Congress may be more important than control of the Presidency; the Republicans, in any event, have achieved far larger cuts in spending and taxes when

they have controlled Congress than when they have controlled the Presidency.<sup>28</sup> Second, in some cases, divided control of government can produce even larger changes in policy than would occur under partisan alternation in office, due to the particular bargaining situation that the structure of our government provides.

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## FOOTNOTES

1. The Republican party held unified control of government in the 37th-43rd (1861-1875), 47th (1881-1883), 51st (1889-1891) and 55th-61st (1897-1911) Congresses. The Democrats gained control of the House in the 44th-45th (1875-1879), 48th-50th (1883-1889), and 52nd (1891-1893) Congresses; of both the House and Senate in the 46th (1879-1881) and 53rd (1893-1895) Congresses; and of the White House in 1885-1889 and 1893-1897 (Cleveland's two terms). In the entire period from the creation of the Republican party in 1854 to the inauguration of Woodrow Wilson in 1913, the Democrats enjoyed unified control of government for only a single Congress, the 53rd (1893-1895).
2. Grover Cleveland and the House Democrats, for example, prepared a modest reduction in the average tariff in the 51st Congress, but the Republican-controlled Senate would have none of it.
3. The Democrats meanwhile advocated, without success, a reinstatement of the income tax that had first been enacted during the Civil War, along with a reduction in the excise taxes and tariffs besetting their constituents. Democrats such as Grover Cleveland characterized tariffs in particular as a "vicious, inequitable, and illogical source of unnecessary taxation" (Studenski and Kroos: 208).
4. U.S. involvement in World War I, of course, played an important role, in that amortizing the cost of the war required a large and permanent increase in revenues. For our purposes, however, the important point is that this increase came almost entirely in the form of income taxes. In contrast, the Civil War had been paid for chiefly by tariff revenues and excise taxes.
5. A complicating factor for the Republicans was the ratification of Prohibition and passage of the Volstead Act in 1919, which eliminated a major source of excise tax revenue.
6. On the roots of Democratic hegemony in the House, see Jacobson 1990.

7. This is the so-called "Ricardian invariance theorem", first advanced by David Ricardo.
8. Barro deduces from the Ricardian invariance theorem various conclusions about "tax smoothing" -- i.e., the maintenance of a constant tax rate when government expenditures are fully anticipated and the financing of unanticipated expenditures by permanent, one-time adjustments in the tax rate.
9. The future stream of government expenditures is assumed to be exogenously fixed at some (presumably optimal) levels.
10. The literature on electoral cycles in government policy and in the health of the economy is vast. See for example, Beck; Hibbs; Kalecki; Kiewiet and McCubbins 1985; Tufte; Nordhaus.
11. For a full statement and proof of the median voter theorem and a review of its history, see Enelow and Hinich 1984, ch. 1.
12. Quantitative testing of the median voter theorem in the finance literature has been confined for the most part to single service local governments, such as school boards, and to cases of direct voter control over budgets. See Pommerehne and Inman for reviews and critiques of this literature.
13. This criticism is embodied in several branches of the spatial literature--in, for example, the branch that stresses the role of primary elections (Aranson and Ordeshook); the branch that stresses that parties seek not just office *per se* but also specific policy outcomes (Wittman 1973, 1984, 1990; Cox); and the branch that investigates how entry by third parties is deterred (Palfrey). To these one might also add the branch that stresses the multidimensionality of the policy space. The convergence of candidates to the "center" of the voter distribution is still observable in some such models (Miller; McKelvey; Cox), but it is convergence to an area rather than to a single point. Hence some room for divergence is left.
14. See Rosenthal for a review of the literature using the reversion point notion.

15. By a "program of expenditure" we have in mind here a complete budgetary specification of how much will be spent on what, not just a single project.
16. It might be recalled that in the late nineteenth and early twentieth centuries the Republicans were the "tax and spend" party, not the Democrats (see O'Halloran, and the chapter by Stewart in this volume).
17. They have lost control of all three legislative branches--House, Senate, and Presidency--only once since FDR's first election.
18. This is where fiscal and expenditure policy differ crucially from a strategic point of view. The reversion point in tax policy is last year's tax code. For most expenditure programs, however, spending is determined by annual appropriation, for which the reversion point is zero.
19. Of course, two can play at this game. Bracket creep in the personal income tax increased the real yield of taxes for many years without requiring new legislation.
20. We are assuming that the Republicans do not have a large enough Congressional majority so that they can override any veto.
21. For a review of tax legislation in the 80th Congress, see Hartmann 1971; Studenski and Kroos.
22. Total federal revenue for 1934 to 1988 is drawn from Table 2.1, pp. 24-25, Historical Tables, Budget of the United States Government for fiscal 1990. These figures were deflated using the Implicit Price Deflator for federal government purchases of goods and services as reported in Survey of Current Business (1972=100). Current dollar GNP is drawn from Historical Statistics, Vol. 1, series F1, p. 224 (through 1970), the National Income and Products Accounts of the United States 1929-1974, Statistical Tables; and National Income and Product Accounts of the United States 1976-1979, Special Supplement (for 1975 to 1979) and subsequent issues of the Survey of Current Business (1971-1988). These figures were deflated using the Implicit Price Deflator for GNP as reported in the National Income and Product Accounts of the United States

1929-1974, Statistical Tables; and National Income and Product Accounts of the United States 1976-1979, Special Supplement (for 1975 to 1979) and calculated from Implicit Price Deflator figures reported in subsequent issues of Survey of Current Business (1972=100).

23. The dependent variable is  $DRECEIPTS_t$ , equal to  $\log(\text{Receipts}_t/\text{Receipts}_{t-1})$ , where  $\text{Receipts}_t$  equals the total real federal tax receipts in fiscal year  $t$ . This transformation yields a statistic that closely approximates percentage changes, but whereas percentage change scores are asymmetric (they cannot be less than zero), these scores have the advantage that the distribution of change scores is symmetric. The percentage change in real GNP is calculated in the same manner.
24. Similarly, the model does not incorporate "median voter" variables, in part because we can't get information on tax level preferences of the national electorate, in part because the criticism of the unidimensionality assumption seems more telling at the national level, in part because the Romer-Rosenthal critique seems plausible and our model more or less incorporates their view.
25. Our first cut at this regression revealed that the errors were first-order autoregressive. (We used a series of Lagrange multiplier tests, as detailed in Harvey, p. 169, in testing for autocorrelation.) We therefore included, as additional independent variables, the first-order lags of the dependent variable and of the percentage change in real GNP. With this respecification, the errors were no longer autoregressive.
26. As Figure 1 shows, the tax rate does not decline after the war to anything like its pre-war levels. Moreover, if one puts in a dummy variable specifically for the "postwar wind-down period", defined as fiscal year 1946, nothing of consequence changes in the regression. If the wind-down period is defined as fiscal years 1946-47 or 1946-48, the regression results do change, but the coefficient on the variable under consideration--P-DEMOCRATIC & C-REPUBLICAN--does not. So the large negative value of this coefficient cannot be chalked up simply to post-war readjustments.

27. The election year term was defined to be one in odd numbered year (to reflect the realization of tax policy enacted in election years), and zero otherwise. The coefficient of this dummy variable was  $-0.04$ , with a standard error of  $0.02$ , yielding a significant  $t$ -statistic (in a one-tailed test) of  $-1.76$ . The standard error of the regression is reduced to  $0.085$ . Neither the sign nor the significance of any of the other variables was changed by the inclusion or exclusion of this variable.

28. Hibbs studies fiscal policy in the period 1955-1987. During this period, there are no cases with a Democratic President and Republican Congress nor any of unified Republican control. Thus, classifying by "control of the Presidency" essentially divides the cases into two groups: unified Democratic control, on the one hand, and divided control with the Democrats holding at least the House, on the other. Thus, Hibbs' use of the party controlling the Presidency as the key variable makes sense as a way of identifying Republican intrusion into the policy-making process for the period he studies.

**TABLE 1**  
**Partisan Control and Federal Tax Receipts, 1934 to 1988**

<u>Partisan Control</u>	<u># of Fiscal Years</u>	<u>Average of 100 x (Receipts<sub>t</sub>/Receipts<sub>t-1</sub>) in those fiscal years</u>
Unified Democratic control	30	13.7
Unified Republican control	2	-5.1
Republican President, Democratic Congress	15	2.2
Democratic President, Republican Congress	2	-10.4
Republican President, Split Congress	6	2.8

Note: Receipts<sub>t</sub> is total real federal tax receipts in fiscal year t.

**TABLE 2**  
**Divided Government and Federal Tax Receipts, 1934 to 1988**

Dependent Variable:    **RECEIPTS<sub>t</sub>**

<u>EQUATION 1</u>			<u>EQUATION 2</u>		
Independent Variables	Coefficient	Standard Error	Independent Variables	Coefficient	Standard Error
CONSTANT	0.015	0.02	CONSTANT	0.014	0.02
UNIF-REPUBLICAN	-0.095	0.02**	C-REPUBLICAN	-0.130	0.04**
P-REP & C-SPLIT	-0.033	0.02	P-REP & H-DEM	-0.036	0.02*
P-DEM & C-REP	-0.169	0.05**			
P-REP & C-DEM	-0.038	0.02*			
GNP <sub>t</sub>	0.362	0.188*	GNP <sub>t</sub>	0.375	0.19*
WWII	0.242	0.09**	WWII	0.237	0.09**
<b>Autoregressive Variables</b>			<b>Autoregressive Variables</b>		
GNP <sub>t-1</sub>	1.363	0.31**	GNP <sub>t-1</sub>	1.352	0.31**
RECEIPTS <sub>t-1</sub>	-0.180	0.14	RECEIPTS <sub>t-1</sub>	-0.164	0.136
adj R <sup>2</sup>	0.64		adj R <sup>2</sup>	0.65	
Standard Error	0.086		Standard Error	0.085	

\* significant at 0.05 confidence level

\*\* significant at 0.01 confidence level