Allocating the U.S. Federal Budget to the States: The Impact of the President

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This paper provides new evidence on the determinants of the U.S. federal budget allocation to the states. Departing from the existing literature that gives prominence to Congress, we carry on an empirical investigation on the impact of presidents during the period 1982–2000. Our findings suggest that federal budget allocation is affected by presidential politics. States that heavily supported the incumbent president in past presidential elections tend to receive more funds, while marginal and swing states are not rewarded. Party affiliation also matters since states whose governor belong to the same party of the president receive more federal funds, while states opposing the president's party in Congressional elections are penalized. These results show that presidents are engaged in tactical distribution of federal funds and also provide good evidence in support of partisan theories of budget allocation.

> "For republican governors, it means we have an ear in the White House, we have a number we can call, we have access that we wouldn't have otherwise had, and that's of course helpful" (Gov. Mitt Romney, *Washington Post*, Monday, November 22, 2004).[1]

The allocation of the federal budget in the United States is the outcome of a complex process involving numerous institutional players. A vast theoretical and empirical literature has devoted a formidable effort to the study of this process. The existing empirical contributions primarily focus on congressional influence via powerful individual representatives, such as for example committee members, or via political parties. The executive, however, also plays an important role in the budget formation: the president initiates the process by sending a proposal to the Congress and, once the budget has been approved, retains a veto power that can be overridden only by a qualified majority equal to two-thirds of Congress.

Historically, the balance of power between president and Congress over the budget has been subject to important changes. The authority of the executive over the initiation of the budget was first established by the Budget and Accounting act of 1921 that began a long-lasting period of domination of presidency over Congress. Following the escalating conflict with the Nixon administration, the Congress tried then to regain control over the budget through the Budget Impoundment and Control act of 1974. According to Schick, the 1974 reform had "the potential of altering presidential-Congress relationship contributing to a resurgence of Congress" (1979, 96). A number of scholars, however, argue that the president is still an influential player (Edwards 1980; Kiewiet and Krehbiel 2002) mainly because of his veto power (Copeland 1983; Kiewiet and McCubbins 1988; McCarty 2000; Rohde and Simon 1985), since "merely the threat of a veto is often enough to force Congress to tailor a bill to conform to administration wishes" (Cummings and Wise 1981, 368). Historical evidence of presidential influence on the territorial distribution of federal funds has been provided by several studies on the New Deal program. In particular, Wallis (1987) and Wright (1974) have found that states with high volatility of presidential vote received more federal support, which is consistent with the idea that the president might try to target swing voters. On the

[1]Interview with Republican governor Mitt Romney, following the reelection of G. W. Bush in November 2004.

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other hand, Anderson and Tollison (1991) and Couch and Shugart (1998) find a positive correlation between Roosevelt's share of votes in 1932 and spending at state level[2] that is compatible with the hypothesis of rewarding loyal rather than swing voters. Finally, Fishback, Kantor, and Wallis (2003) and Fleck (2001) find evidence in support of both hypotheses.[3]

While the New Deal has received great attention, there is a lack of empirical studies on presidential influence after the 1974 reform. Despite the vibrant theoretical debate on the respective roles of Congress and president, the empirical literature on contemporary federal budget allocation has paid attention mainly to the legislative power. To address the shortcomings of this one-sided approach, this paper investigates whether the president has a systematic impact on the allocation of the federal budget to the states. In doing so, we provide a comprehensive empirical test of the existing theoretical models of tactical redistribution. Our results add new significant insights to the conspicuous empirical literature on federal budget allocation and are of extreme relevance to both the theoretical study of American political institutions and the debate on possible reforms of the budget process.

From a theoretical point of view, the executive may have several reasons to sway the federal budget allocation away from a purely social welfare maximizing objective (McCarty 2000). Namely, the president may use budget allocation to enhance his reelection chances either by targeting swing states or by rewarding his supporters. Lindbeck and Weibull (1987, 1993) provide theoretical models explaining why political actors should redistribute funds to marginal and swing states in order to maximize their chances of winning elections. Cox and McCubbins (1986) argue instead that, because of the ideological relationship between voters and candidates, more funds should be allocated where policymakers have larger support. In particular, the targeting of loyal voters can be seen as a safer investment as compared to aiming for swing voters. Hence, risk-adverse political actors who want to maximize their chances of winning elections should allocate more funds to loyal states. Dixit and Londregan (1996) provide an alternative model where politicians face incentives to target both swing and loyal voters. On the one hand, moderate voters, who are indifferent between two parties, can more easily be bought; on the other, core supporters can be targeted in a more efficient way because parties know their preferences better.

Besides targeting specific groups of voters, the president could also try to further his legislative agenda by directing spending to specific legislators. Moreover, "as a leader of his party, he may feel the pressure to favor legislative districts controlled by members of his party" (McCarty 2000). Assuming that party reputation is a public good for individual party members, Cox and McCubbins (1993) provide a theoretical explanation for cooperation among representatives belonging to the same party.[4] Along the same line, Dasgupta, Dhillon, and Dutta (2004) argue that when the electoral returns from spending are shared between state and central government, then transferring funds to a governor of the opponent party generates a "leakage" effect whereby the central government looses part of the electoral benefit from spending. Finally, if state governments have some discretion in the way funds are spent, then the federal administration could prefer to allocate more funds to governors with the same policy preferences. All this seems to suggest that the president has incentives to sway the allocation of federal funds in the direction of "friendly" administrators.

This study will test these alternative theories of presidential influence. In particular, we will first estimate the effect of the presidential electoral race on the budget allocation to find out whether the president rewards his supporters or whether he targets states that are marginal or swing in presidential elections. Second, to uncover whether the president diverts federal funds toward states controlled by members of his party, we will estimate the effect of partisan alignment between the president and the state governors and/or state representatives.

The impact of the president as a *party leader* and, more generally, the distributive effects of cooperation between representatives belonging to the same party, are important theoretical questions that have not been explored yet by the empirical literature on partisan budgeting, that tends instead to focus on the role of parties inside Congress. Among the contributions on congressional partisan budgeting, Levitt and Snyder (1995) find that, when Congress was dominated by democratic majorities, outlays at the district level were

[2]Anderson and Tollison (1991) also find evidence of committee influence on New Deal spending.

[3]For an overview of the literature on New Deal spending see Couch and Shugart (1998) and Fishback, Kantor, and Wallis (2003).

[4]The evidence reported by the media on cooperation between party members is abundant. During presidential campaigns a huge emphasis is placed, for example, on the ability of governors to deliver the votes of their state.

positively correlated with the district share of democratic votes.[5] Similarly, Carsey and Rundquist (1999) find that states represented by Democrats on a defense committee receive more military procurement awards. Bickers and Stein (2000) find that the Republican control of the 104th Congress altered the composition of federal outlays in favor of programs that are more compatible with the interests of Republican representatives.[6]

One important advantage of our empirical analysis is that it relies on panel data on federal outlays over a relatively long time span. The panel structure allows us to use state-fixed effects to account for state-level unobserved heterogeneity and identify the effect of the relevant political and economic variables.[7] Since the president, unlike most other individual players, can exercise his influence on any budgetary aggregate, we decided to focus our attention on total federal outlays. This approach has its own drawbacks but, for our purposes, also provides substantial advantages. Focusing on very specific aggregates, as most literature does, makes it possible to shed light on specific forms of influence and to be very precise on them. This is particularly true for studies on committees, where distortions are more often found on specific spending programs. It is, however, quite possible that the distortions introduced by different actors with limited influence may offset each other leaving a state without a real advantage in the overall allocation of federal funds. Since the presidential influence is not limited to particular aggregates, then it is more likely that a state can be favored in the overall budget allocation for reasons related to presidential politics. Therefore, total federal spending is the place where the presidential influence is more likely to be detected. Focusing on whether a state receives, on aggregate, more federal funds, we are of course capturing only a particular channel through which political actors may divert funds toward their constituencies. The composition of the budget is another instrument that can be used to favor interests located in a given constituency, as it is shown by Bickers and Stein (2000).

While we are primarily interested in the role of the president, we also incorporate into the analysis the other relevant institutional players (Congress and committees) because excluding some explanatory variables in the regressions may lead to the well-known problem of omitted variable bias.[8] Therefore, we check the robustness of our results by simultaneously estimating in the same regressions the impact of several channels of political influence that, according to previous studies, may crucially affect federal budget allocation. Following Atlas et al. (1995) and Lee (1998), we control for overrepresentation of small states in Congress. Furthermore, individual representatives occupying key positions in the budget process can convey disproportionate amounts of money to their districts (Fenno 1973; Kiewiet and McCubbins 1988). According to several scholars, *committees* are very influential in determining the budget allocation (Shepsle and Weingast 1987) since they have an advantage both in terms of their agenda-setting power (McKelvey and Ordeshook 1980) and in terms of information and competence[9] (Krehbiel 1991). Hence, we follow the empirical literature on committee influence[10] and introduce committee membership in our analysis.

To briefly summarize our main results, we find that the president has an important impact on the allocation of the budget to the states. In particular, states that ideologically lean towards the president, i.e., states with a high share of presidential votes or with a governor belonging to the party of the president, tend to be rewarded with more funds. On the other hand, states with a close presidential electoral race and states that either changed political affiliation

[5]Evidence of a bias in favour of democratic districts is also reported by Alvarez and Saving (1997), Kiewiet and McCubbins (1985) and Owens and Wade (1984). Some recent literature has investigated the role of parties on budget allocation also in other countries. Dasgupta, Dhillon, and Dutta (2004) find that Indian states ruled by the same party that controls the central goverment receive more grants, while Dahlberg and Johansson (2002) find that the Swedish regions that are "swing" in the national elections receive a higher share of a specific transfer program.

[6]They find, for example, a remarkable increase in the pro-business contingent liabilities.

[7]When data on specific years are used instead, it is hard to say if the results obtained are merely due to particular features of the data considered or to proper and long-lasting political influence.

[8]When different explanatory variables are correlated, as it seems reasonable to expect in most cases, omitting relevant players could deliver biased estimates of the impact of those considered.

[9]Weingast and Marshall (1988) argue that committees are the devices that make logrolling work, by facilitating the trade of influence in the absence of a spot market for the exchanging of support.

[10]The empirical literature on committee influence is vast and, although the results are sometimes mixed, committee influence is usually found on specific spending categories rather than large aggregates. Among the numerous studies on committees see Aldrich and Rohde (2000), Alvarez and Saving (1997), Anderson and Tollison (1991), Bond, Bonneau, and Cottril (2004), Carsey and Rundquist (1999), Ferejohn (1974), Goss (1972), Kiel and McKinzie (1983), Knight (2005), Levitt and Poterba (1999), Owens and Wade (1984), Plott (1968), Ray (1981), Rich (1989), Ritt (1976), Rundquist and Griffith (1976), and Strom (1975). For an overview on the Committee influence literature see Bond et al. (2004).

in the most recent election or that are historically volatile do not receive more money. Hence, overall our analysis suggests that the president is a relevant player as he can direct more funding toward those states that are run by "friendly" governors and that have large groups of "core supporters." Finally, our analysis indicates that partisanship plays an important role since governors politically aligned with the president receive more resources and Congress members opposing the president bring less funds to their states.

The remainder of the paper is organized as follows. The next section describes our data set and lays out our empirical approach. We then present our main results, and, in the last section, we provide our conclusions.

Data and Methodology

Following the theoretical literature on partisan budgeting (Cox and McCubbins 1986; Dixit and Londregan 1996; Lindbeck and Weibull 1987, 1993) and presidential influence (Kiewiet and Krehbiel 2002; McCarty 2000) the hypotheses we want to test may be summarized as follows:

H1: federal funds are disproportionately targeted to states that are marginal and swing in presidential elections (swing bias);

H2: federal funds are disproportionately targeted to states where the president is supported by a large share of the electorate (ideological bias);

H3: party alignment of state governors and/or Congress representatives with the executive increases the receipt of federal funds (party alignment). For completeness, we also check what is the impact of the alignment of governors and state representatives with Congress majorities.

We use data on federal outlays for the 48 U.S. continental states from 1982 to 2000.[11] Table A1 in the online statistical appendix reports average per capita federal outlays during the period 1982–2000 (expressed in real dollars for the year 2000). It is immediately clear that the differences in spending can be substantial. An average resident of Virginia, for example, has received every year almost $2,700 more than an average resident of Wisconsin. While this gap can be entirely due to the needs and characteristics of the respective populations, it is legitimate to ask how much of this difference can be due to purely political factors. For this purpose we estimate the following equation:[12]

$$FEDEXP_{st} = \alpha_s + \beta_t + \boldsymbol{\theta_1} \mathbf{P}^i_{sw} + \boldsymbol{\theta} \mathbf{Z}_{st} + \varepsilon_{st}, \quad s = 1, \ldots 48; \quad t = 1982, \ldots 2000; \qquad (1)$$

where $FEDEXP_{st}$ is the real per-capita federal expenditure (outlays) in state *s* at time *t*. As in all the subsequent regressions, we include state-fixed effects and year dummies. $\mathbf{Z}_{st}$ is a vector that includes real income per capita, state population, unemployment rate, percentage of citizens aged 65 or above, and percentage of citizens between 5 and 17 years old. We keep these explanatory variables in all the regressions as standard economic and demographic controls. Finally, $\mathbf{P}^i_{sw}$ represents the set of institutional and political variables under consideration.[13]

It is important to point out that in the U.S. budget process there is a lag between the appropriation of federal funds and the moment when these are actually spent. This is relevant when estimating the effect of particular institutional and political variables, since current federal outlays have normally been appropriated in previous budgetary years. Delays should therefore be taken into account. Hence, we introduce lagged values for $\mathbf{P}^i_{st}$, since past policymakers are responsible for current outlays. To give the right weight to lagged independent variables explaining current outlays, we use weighted averages of lagged $\mathbf{P}^i_s$, where the weights are determined by the spend-out rates utilized in official forecasts. The reported results are based on the assumption that 60% of appropriated expenditure is spent within one year and the rest two years later.[14] Hence, we regress outlays at time *t* on the weighted average of two lagged variables, i.e., $\mathbf{P}^i_{sw} = .6 * \mathbf{P}^i_{st-1} + .4 * \mathbf{P}^i_{st-2}$.

Hypotheses 1 and 2. We begin our analysis by considering the role of electoral competition in the presidential electoral race. Hence, we compare the relative

[11]As customary, Alaska, the District of Columbia, and Hawaii have been excluded. Usually those states tend to be excluded to facilitate comparison with previous research. Another reason, and probably a better one, however, is that they attract a disproportionate amount of federal spending for either aministrative reasons (DC) or strategic reasons (Alaska and Hawaii receive a substantial share of defense spending). This could render the political motivations behind an observed distribution less recognizable.

[12]All equations have been estimated by using Stata 8.2.

[13]Summary statistics are reported online in the statistical appendix, http://www.journalofpolitics.org.

[14]See Horney and Greenstein (2000) for estimates of spendout rates. Official spendout rates are estimated each year by the CBO and OMB but they can display substantial variations. For this reason we have considered several possibilities, both increasing the first-year spendout rate up to 80% and increasing the number of lags up to five years. Our results show very little sensitivity to such variations.

impact of the closeness of the presidential elections in each state with that of the share of votes obtained by the president in the last election.[15] A negative sign of the closeness variable should be regarded as support for the idea that the president tends to direct resources to marginal states in order to increase his chances of reelection. A positive sign of the share of presidential votes should instead be seen as evidence that incumbents tend to reward states that show their support in elections. We also take into account the fact that not all states have the same weight in presidential elections by including the number of electoral votes per capita by state.

The closeness of the past election is, however, not necessarily the best measure to identify swing states. We, therefore, generate an indicator of long-term swing which is based on the number of times a state swung its support from a party to another in the last four presidential elections.[16]

Hypotheses 3. As previously discussed, the partisanship of different representatives can have an important effect on budget allocation since cooperation between different political actors belonging to the same party is likely to occur. In particular, the president, acting as a party leader, may divert funds toward state governors and state representatives belonging to his own party. Hence, we consider a series of dummy variables to capture various levels of partisan alignment between central powers and state governments. We first create three dummy variables to reflect the political alignment of state governors with, respectively, the president and the majorities in the House and in the Senate. In a further specification we also consider the possibility that the allocation of funds to a given state is facilitated by party alignment between the governor and the majority of state delegates to the House or the governor and both senators. We then consider the potential effect of having the president and a majority of state delegates in the House, or the president and both senators from a given state, belonging to the same party. Finally, we consider the potential advantage of having a majority of state delegates to the House belonging to the House majority party or having both senators belonging to the Senate majority.

We are aware that testing our hypotheses separately has a major limitation because, by considering one element at time, we can miss relevant correlations and incorrectly estimate some effects. For this reason we run a regression including all the $\mathbf{P}^i_{sw}$ vectors in one equation of the form:

$$FEDEXP_{st} = \alpha_s + \beta_t + \sum_i \boldsymbol{\theta}_1^i \mathbf{P}^i_{sw} + \boldsymbol{\theta}_2 \mathbf{Z}_{st} + \varepsilon_{st}, \quad (2)$$

The results we get from equation (2) provide the big picture that is missed when focussing on specific channels of influence and provide an important robustness check.

Results

Swing and Ideological Bias

In Table 1 we focus on presidential elections to test the swing-voter hypothesis and contrast it with the potential presence of ideological bias. Column 1 shows that, while the share of presidential votes in the past election displays a positive and significant coefficient, the closeness of the same election has no significant effect.[17] In column 2 we consider the swing variable and we find again no evidence in support of the swing-voter hypothesis, while the share of presidential vote has always a positive and significant effect.[18] Depending on the specification considered, the difference in spending between a state with maximum share of presidential vote and a state with the minimum of

[15]Hypothesis 1 and 2 are different because, although correlated, the closeness and the presidential share of votes measure two separate electoral phenomena. First, they can be different when there are more than two candidates. More importantly, however, they are different because, while an electoral race can be equally "close" in states where the president has won or lost to the opponent, the share of presidential votes will necessarily be different when the president wins.

[16]We have also used two other measures of electoral volatility. One is a moving average of the frequency of swings from one party to the other that starts from the 1964 election. The other is an indicator of short-term volatility represented by a dummy equal to one for the states that switched their support in the last election. Our results do not change when we use such alternative measures. Further details can be found in the online statistical appendix.

[17]Concerning the economic variables, states with higher income per capita receive significantly less, as do states with larger population. The percentage of aged population also has a positive and significant effect. The percentage of children in schooling age has instead a negative and significant effect, while the unemployment rate is completely uncorrelated with aggregate spending per capita. The signs and significance of those coefficients remain substantially the same in all the subsequent specifications.

[18]One obvious concern is that the significance of our estimates could be heavily conditioned by multicollinearity among the independent variables. To verify that the correlations of our predictors do not significantly inflate the estimation of their standard errors, we calculate the Variance Inflation Factor for all the regressions we present in this work. Here, as well as in all the subsequent regressions, we find that that multicollinearity has a very limited impact on our results. A description of the methodology and detailed results are reported online in the statistical appendix.

Table 1 Swing and Ideological Bias
Dependent variable: *real per capita federal outlays, 1982–2000*

Dependent Variable	(1) fedexp	(2) fedexp
Share of vote for the incumbent president	1,821.43 (2.75)***	1,076.899 (2.34)**
Closeness	−615.15 (1.46)	
Swing		−139.3107 (1.25)
Electoral votes per capita	386.04 (1.72)*	345.1779 (1.55)
Observations	864	864
R-squared	.9353	.9347

OLS regressions; Robust t statistics in parentheses (*significant at 10%; **significant at 5%; ***significant at 1%).
In all regressions the following controls are included: income, unemployment, population, percentage of aged, percentage of children, state fixed effects, year fixed effects, constant term. Detailed definitions of all variables are reported in the online statistical appendix.

such a share goes from $536 (column 1) to $908 (column 2) per capita per year, which implies that one standard deviation in the share of presidential vote is worth $97–164. These findings are in line with some of the existing literature. For example, Anderson and Tollison (1991) and Couch and Shugart (1998) find a positive correlation between spending at the state level and Roosevelt's share of votes in 1932, and Wright (1974) finds no effect of the closeness of the presidential race.[19]

To summarize, we find that the ideological bias toward safe states is substantial in terms of both magnitude and statistical significance. We do not find instead any evidence of the refined targeting of swing and marginal states that some formal models seem to suggest. Assuming that electors cast their votes depending on the amount of spending they receive and also on their ideological affinity to a party, the swing voter bias should come from the fact that moderate voters (who are indifferent between two parties) can be more easily convinced to switch their vote in favor of the party that has rewarded them with spending. However, as Dixit and Londregan (1995) point out, the electoral return from a dollar of spending is higher when targeted to an electorate whose preferences the politician understands well. Hence, although the vote of the moderate electors may be "cheaper" to buy, the informational advantage and ability of parties to target funds more efficiently to their supporters can explain why allocating more spending to states with many loyal voters can deliver a better electoral return than targeting areas with many swing voters.

Party Alignment

In this section we explore the effect of partisan alignment between central and state government. Our analysis provides support for the idea that partisanship matters and that political actors exchange favors and policies within the party boundaries. Column 1 of Table 2 shows that the coefficient of the alignment between the president and the governor in a given state has a positive and statistically significant impact. The size of the coefficient is also relevant, implying a transfer of approximately $135–138 per capita per year. On the other hand, we find that the effect of alignment of governors with the majority in either chamber of Congress is not significant. This is especially important because it shows both the relevance of party affiliation at different levels of governance and the prominent role of the president in the budget process as a party leader.

In column 2, we include other alignment variables. The significance and magnitude of the alignment between governors and the president appears unaffected by the introduction of new variables. Other alignment variables appear to have no statistically significant impact. The only exception is represented by having a majority of state delegates to the House belonging to the same party of the president. This again suggests that the widespread emphasis on the role of the House in the allocation of the federal budget can obscure the important role played by both the president and the party affiliation.[20]

These results turn out to be very robust to different specifications where the three hypotheses (swing voter, ideological bias, and party allignment) are con-

[19]Our results are also consistent with the findings of Strömberg (2004), who shows how, when state fixed effects are included in the regressions, evidence that swing states received more federal support under the New Deal vanishes.

[20]To take into account possible multicollinearity we also run separate regressions for different forms of alignment. The results (available online in the statistical appendix) remain unchanged, with the exception of the alignment between the majority of state delegates and the House Majority, which has now a negative impact. This is not surprising if we consider that the House has been mostly opposed to the president in the period we consider (with the exception of the period 1993–94). To confirm this, when we directly include alignments with the president (column 2 of Table 2), this result vanishes.

Table 2 Alignment
Dependent variable: *real per capita federal outlays, 1982–2000*

Dependent Variable	(1) fedexp	(2) fedexp
Alignment Governor-President	134.904	137.917
	(2.35)**	(2.52)**
Alignment Governor-House	100.720	100.078
	(1.54)	(1.56)
Alignment Governor-Senate	12.3287	36.8956
	(.28)	(.86)
Alignment between the Governor and the majority of state delegates in the House		−5.3423
		(.11)
Alignment between the Governor and the two state senators		−99.7257
		(1.60)
Alignment between the President and the two state senators		22.1627
		(.39)
Alignment between the President and the majority of state delegates in the House		235.273
		(3.02)***
Alignment between the majority of state delegates in the House and the House majority		71.001
		(.93)
Alignment between the two senators of the state and the Senate majority		36.5556
		(.76)
Observations	864	864
R-squared	.9273	.9326

OLS regressions; Robust t statistics in parentheses (*significant at 10%; **significant at 5%; ***significant at 1%).
In all regressions the following controls are included: income, unemployment, population, percentage of aged, percentage of children, state fixed effects, year fixed effects, constant term. The alignment variables are dummies equal to one when partisan alignment occurs and zero otherwise. Detailed definitions of all variables are reported in the online statistical appendix.

sidered at the same time.[21] Our robustness checks confirm that some states receive disproportionate amounts of money for reasons essentially linked to politics and to the budget allocation process. The results concerning the president, as well as the support for partisan theories, turn out to be particularly robust.

The role of parties in American politics has been reconsidered in recent research, and new evidence about party cohesion casts some doubts on the common view that American parties are weak organizations, with limited ideological divide (Rohde 1991). If parties are influential, then the president, as a party leader, may favor legislative districts controlled by members of his party. By showing that the president is able to target more funds toward states that are controlled by state governors belonging to his party, we find good evidence in support of the theoretical literature that gives prominence to political parties and party leaders in shaping public policies. Consistent with Levitt and Snyder (1995), who find that democratic districts received more federal spending under the Carter administration than under the Reagan administration, we also find that state representatives opposing the president bring less funds to their states as compared to representatives aligned with the president.

Concerning the relationship between the president and the state governors, Carsey and Wright (1998) find that votes in gubernatorial elections crucially depend on presidential approval rate. On the other hand, governors can play an important role in presidential elections as suggested by the attention the media devote to the ability of state governors to "deliver" the vote of their state. The casual evidence on the privileged partisan link between president and governors is abundant.[22] The endorsement of governors also plays a fundamental role in the selection of presidential candidates during primaries[23] and the governors' associations underline their important role in shaping federal policies.[24] Uncovering that the partisanship of state governors and president is an important determinant of the distribution of federal funds to the states, our study provides evidence of an effective link between governors and the president through political parties.

[21]The results of the robustness check, obtained by estimating equation (2), are reported and discussed extensively in the online statistical appendix.

[22]See, for example, the opening quote from the interview of the governor of Massachusetts appeared on the *Washington Post*, Monday, November 22, 2004.

[23]The Republican Governors' Association reports that "Presidential candidates hailing from out of state can trade on a governor's name cachet and fund-raising network, while governors can gain a powerful ally in the Oval Office if their horse wins the race" (Larry Sabato on the interview by Kenneth P. Vogel, Wednesday June 18, 2003, *The News Tribune*).

[24]Both the Republican and Democratic Governors' Associations explicitly state on their web site their intent to influence federal policies.

Conclusions

A common view about the U.S. federal budget is that the president influences the big macroeconomic aggregates while individual congressmen bargain over the territorial distribution of funds in order to bring resources to their constituents. This study shows that presidents are also engaged in tactical distribution of federal funds to the states. This conclusion is supported by a number of findings concerning the relation of federal spending with both the results of presidential elections and the party affiliation of the president. States that display large support for the presidential party tend to be rewarded. States where the governor belongs to the same party of the president receive more funds, while states that have a delegation in the House which is predominantly opposed to the president tend to be penalized. These results also seem to show that parties are important players and that the president tend to act as a party leader.

Congressional pork barrel is often viewed as a common and almost inevitable consequence of representative democracy where elected representatives use federal funds in order to buy political support. However, presidents themselves, as elected representatives of broader constituencies, are not immune from the same problem. Starting from the 1980s, all presidencies have put forward proposals for the introduction of presidential line-item veto[25] and expanded impoundment control aiming at increasing the power of the president to control unnecessary congressional pork-barrel spending. These proposals have raised the suspicion of a possible change in the balance of power between executive and Congress mainly because the impoundment power, before the 1974 budget act, has been extensively used by the presidency to override congressional budget priorities. However, whether this shift in power might be desirable or not depends, among other factors, on whether the executive could be a more effective body in controlling pork-barrel spending. Our study casts some doubts on the disciplining role of the executive and suggests that the arguments for increasing the power of the president on budgetary matters should be taken with due caution.

Our findings also shed light on alternative theories of electoral competition. We find that states with a large share of presidential supporters get more funds, but we do not find that more federal monies are allocated to marginal or swing states. This evidence, while corroborating the hypothesis of ideological bias formalized by existing theoretical models, also suggests that we need further theoretical research on the ongoing link between parties and "core supporters." If one investigates the reasons behind voters' loyalty, then it is hard to justify why loyal voters should support political actors that systematically allocate funds to the advantage of swing voters. Hence, in a context of repeated interactions between the electorate and the politicians, loyalty in itself can be sustained only if political actors build a reputation of rewarding their supporters. The need for such a long-term perspective provides a further rationale for the importance of parties in the process of allocating federal resources.

Further empirical investigation is also necessary to gain more insights on presidential pork barrel. In particular, an analysis of disaggregated spending categories could be useful in order to find out if there are budget aggregates which are more prone to presidential manipulation and whether different spending categories are used to achieve different goals.[26] To conclude, by using panel data on a relatively long time span and by testing various theories on the same data set, we reach new and robust findings which help in evaluating current models of tactical redistribution and possible reforms of the U.S. budget process. Having established that presidents are involved in tactical redistribution in cooperation with other institutional players, we suggest new directions for further research where more attention should be granted to the interplay of different political actors.

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[25]The line-item veto was introduced in 1997 under the Clinton administration, but was declared unconstitutional only one year later. Recently, in a news conference in November 2004, President G. W. Bush has reiterated the administration wish for the reintroduction of the line-item veto. For an overview on the proposals of line-item veto see Fisher (2004).

[26]Since cooperation between members belonging to the same party can also be due to policy motivation, it could happen that, when state governments have more discretion on how to spend certain funds, the bias toward friendly governors might be bigger. An investigation along those lines goes beyond the scope of this paper, but this is an interesting empirical question that we leave for further research.

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