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The Allocation of the US Federal Budget to the States: Evidence on the Power of the Purse*

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Abstract

This paper provides new evidence on the determinants of the allocation of the US federal budget to the states. Departing from the existing literature that gives prominence to Congress, we carry on an empirical investigation on the influence of the President. Our findings suggest that the President has a strong influence on the distribution of federal outlays to the States. First, the presidential race matters. States that heavily supported the incumbent President in past presidential elections tend to receive more funds, while marginal and swing states are not rewarded. Second, States whose governor has the same political affiliation of the President receive more federal funds, while states opposing the president's party in Congressional elections are penalized. These results also provide good evidence in support of partisan theories of budget allocation.

JEL codes: D72, D78, H11, H60, H77, H50

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“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

1. Introduction

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 the role of Congress and its powerful committees². This paper will take a fresh look at the issue of federal budget allocation to provide new evidence on the crucial role played by the president and the political parties in the distribution of large spending aggregates to the states.

The so-called *congressional theories* of budget allocation emphasize the role played by *individual representatives*, occupying key positions in the budget process, in conveying disproportionate amount of money to their districts (Fenno 1973, Kiewiet and McCubbins, 1988). This literature seems mainly divided on which are the relevant actors and mechanisms of influence rather than on the basic idea that elected representatives will try ”to bring pork at home”. For example, Atlas *et al.* (1995) and Lee (1998), focus on the overrepresentation of small states in Congress (especially in the Senate) and show that this affects the distribution of federal funds. The congressional literature is, however, clearly dominated by the studies on *committees* that, according to several scholars, 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 competence³ (Krehbiel, 1991). The empirical literature on committee influence is vast⁴ and, although the results are sometimes mixed, committee influence is usually found on specific spending categories rather than large spending aggregates.

¹Interview following the US Presidential election of november 2004.

²For an overview on the Committee influence literature see Bond *et Al* (2004).

³Weingast 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.

⁴Among the numerous studies on committees see Plott (1968), Goss (1972), Ferejohn (1974), Ritt (1976), Strom (1975), Rundquist and Griffit (1976), Ray (1981), Kiel and McKinzie (1983), Rich (1989), Anderson and Tollison (1991), Owens and Wade (1984), Alvarez and Saving (1997), Carsey and Rundquist (1999), Levitt and Poterba (1999), Aldrich and Rhode (2000) Bond et al. (2004), Knight (2004).

The executive also plays an important role in the budget process, since the president initiates the budget by sending a proposal to Congress and, once the budget has been approved, has veto power that can be overridden only by a qualified majority equal to 2/3 of Congress. A number of scholars argue that the president is an influential player (Kiewiet and Krehbiel, 2000; Edwards, 1980) and the literature focuses in particular on the importance of the presidential veto power (Copeland, 1983; Rhode and Simon, 1985; Kiewiet and McCubbins, 1988; McCarty, 2000). According to McCarty (2000), several reasons could induce the president to sway the federal budget allocation away from a purely social welfare maximizing objective. Namely, the president may use budget allocation to enhance his re-election chances either by targeting swing states or by rewarding his supporters. He could also try to further his legislative agenda by directing spending to specific legislators in order to buy their votes. Finally, “as a leader of his party, he may feel the pressure to favor legislative districts controlled by members of his party” (McCarty, 2000). Lindbeck and Weibull (1987 and 1993) and Dixit and Londregan (1996) provide theoretical models explaining why political actors should redistribute funds to marginal and swing states in order to maximize the 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 policy-makers have larger support. 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 party⁵. According to Kiewiet and McCubbins (1991), party leaders have incentives to protect the reputation of their parties and therefore choose prestige committee members who are competent, honest and reflect average party preferences. In this case, we should find that these committees have little influence on the distribution of federal spending.

Empirically, Levitt and Snyder (1995) find that when Congress was dominated by democratic majorities, outlays at the district level were positively correlated with the district share of democratic votes⁶. Similarly, Carsey and Rundquist (1999) find that states represented by Democrats on a defense committee receive more military procurement awards⁷.

⁵The 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.

⁶Evidence of a bias in favour of democratic districts is also reported in the aforementioned works by Owens and Wade (1984), Alvarez and Saving (1997) and Kiewiet and McCubbins (1985).

⁷Some recent literature has investigated the role of parties on budget allocation in other countries.

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 representatives⁸.

As far as the president is concerned, the empirical literature on presidential influence on territorial distribution of federal funds is limited to studies on *New Deal* spending⁹ (Wright 1974; Wallis 1987; Anderson and Tollison 1991; Couch and Shughart 1998; Fleck, 2001; Fishback *et al.* 2002). Whether the prominence accorded by some theoretical literature to the role of the president is justified or not, is ultimately an empirical question that in our opinion deserves further investigation.

In this study we will address the issue of presidential influence over federal budget allocation from an empirical point of view. In particular, we will first attempt to estimate the effect of the presidential 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 the presidential race. Second, to uncover whether the president is acting as a partisan leader by diverting federal funds toward states controlled by members of his party, we will try to estimate the effect of partisan alignment between president and state governors and/or state representatives.

Our empirical analysis 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. We will focus on large spending aggregates, i.e. total federal spending, entitlements, defence and grants. Total federal spending and large spending aggregates are the place where the presidential influence is more likely to be found. The use of both panel data and large spending aggregates also contributes toward the generality of the results since, when specific spending programs for some specific years are used, it is hard to say if the results

Dasgupta *et al.* (2001) find that Indian states ruled by the same party that controls the central government receive more grants, while Dahlberg and Johansson (2000) find that the Swedish regions that are “swing” in the national elections receive a higher share of a specific transfer program. Besley and Case (2003) analyze the policy consequences of a number of institutional arrangements by using State-level data on the US. Among other findings, they derive results on the policy impact of the party composition of the State legislature.

⁸They find, for example, a remarkable increase in the pro-business contingent liabilities.

⁹For an overview of the literature on New Deal spending see Couch and Shughart (1998) and Fishback *et al.* (2002). Interestingly, this literature provides support for both the swing and the ideological bias hypotheses.

obtained are merely due to particular features of the data considered or to proper and long lasting political influence. Moreover, although focussing on very specific aggregates makes it possible to shed light on specific forms of influence (i.e. of specific players on well defined spending programs)¹⁰, it renders quite hard to capture the complex bargaining game played over multiple spending programs. Trade of influence among different institutional players is likely to occur and the possible distortions introduced by the different actors may also offset each other leaving a state without a real advantage in the overall allocation of federal funds¹¹.

While we are primarily interested in the role of the president and of political parties, we will 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. 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. We, therefore, check the robustness of our results by simultaneously estimating in the same regressions the impact of several channels of political influence.

To briefly summarize our main results, we find that the president has a large influence 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 race and states that either changed political affiliation 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 very influential 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. Section 2 describes our dataset and

¹⁰This is particularly true for studies on committees, where distortions are more often found on specific spending programs.

¹¹Focussing in 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 favour interests located in a given constituency, as it is shown by Bickers and Stein (2000).

lays out our empirical approach. Section 3 presents our main results. In section 4 we provide our conclusions.

2. Data and methodology

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

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

H2: federal funds are disproportionately targeted to states that are safe wins for the president (ideological bias);

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

We use data on the 48 US continental states from 1982 to 2000¹² to estimate the following equation:

$$\begin{aligned} FEDEXP_{st} &= \alpha_s + \beta_t + \boldsymbol{\theta}_1 \mathbf{P}_{sw}^i + \boldsymbol{\theta} \mathbf{Z}_{st} + \epsilon_{st}, \\ s &= 1, \dots, 48; \quad t = 1982, \dots, 2000; \end{aligned} \tag{1}$$

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 (*income*), state population (*stpop*), unemployment rate (*unemp*), percentage of citizens aged 65 or above (*aged*) and percentage of citizens between 5 and 17 year old (*kids*). We keep these explanatory variables in all the regressions as standard economic and demographic controls. Finally, \mathbf{P}_{sw}^i represents the set of institutional and political variables under consideration.

It is important to point out that there is a lag between the appropriation of federal funds and the moment when these are actually spent. This is relevant when estimating

¹²As customary, Alaska, District of Columbia and Hawaii have been excluded. Summary statistics are reported in Table 1.

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}_{sw}^i , since past policy makers are responsible for current outlays. Furthermore, delays vary according to spending categories. To give the right weight to lagged independent variables explaining current outlays, we use weighted averages of lagged \mathbf{P}_s^i , where the weights are determined by the spend-out rates utilized in official forecasts for each spending category¹³. Hence, for the aggregate federal expenditure, since we know that approximately 60% of funds are spent within one year, and assuming that the rest is spent two years later, we regress outlays at time t on the weighted average of two lagged variables, i.e. $\mathbf{P}_{sw}^i = 0.6 * \mathbf{P}_{st-1}^i + 0.4 * \mathbf{P}_{st-2}^i$. If, instead, we consider defense spending, we have a first year spend-out rate equal to 67% and we get $\mathbf{P}_{sw}^i = 0.67 * \mathbf{P}_{st-1}^i + 0.33 * \mathbf{P}_{st-2}^i$. For direct payments to individuals, almost entirely spent within the first year, we have $\mathbf{P}_{sw}^i = \mathbf{P}_{st-1}^i$. Finally, for grants, whose composition tends to mirror the overall federal spending, discussed above, we have $\mathbf{P}_{sw}^i = 0.6 * \mathbf{P}_{st-1}^i + 0.4 * \mathbf{P}_{st-2}^i$. We have also considered other weights (going backwards up to 5 years), but with little noticeable variations (results are therefore not reported). We also consider selected spending aggregates and, hence, we estimate equations of the form:

$$PROGRAM_{st}^j = \alpha_s + \beta_t + \theta_1 \mathbf{P}_{sw}^i + \theta_2 \mathbf{Z}_{st} + \epsilon_{st}, \quad (2)$$

where j is equal respectively to defense spending, grants, and direct payments to individuals (all in real per-capita terms).

Hypotheses 1 and 2. We begin our analysis by considering the role of electoral competition in the presidential race. Hence we compare the relative impact of the closeness of the presidential elections in each state (*presclose*) with that of the share of votes obtained by the president in the last election (*pres_share*). A negative sign of *presclose* 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 re-election. While a positive sign of *pres_share* should be seen as evidence that incumbents tend to reward states that show their support

¹³For example, only 11% of procurement is spent within one year and it often takes up to 10 years to completely utilize the resources. This makes procurement a rather unreliable measure if one wants to study political influence over outlays using yearly data. For this reason, instead of procurement we prefer to use defense spending in our program-by-program regressions.

in elections. In separate regressions, 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 by state, both in absolute (*elvotes*) and per capita (*elvotesPC*) terms.

However, the closeness of the past election is not necessarily the best measure to identify swing states. We therefore construct a dummy variable (*swing_last*) equal to one for the states that switched their support from one party to the other in the last election. We also construct two other variables, *swing_state1* and *swing_state2*, that are meant to capture whether a state has been historically volatile in presidential elections (long term swing). Details can be found in the Appendix.

Hypothesis 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. If this was correct, then party alignment between different levels of governance should lead to pork-barreling. Hence, we consider a series of dummy variables to capture various levels of partizan alignment between central powers and state governments. We first create three dummy variables to reflect the political alignment of state governors with the President (*sameP*), as well as with the majorities in the House (*sameH*) and in the Senate (*sameS*). We also consider the possibility that funds allocation to a given state is facilitated by having the governor and the majority of House state representatives (*sameGOV_H*) or the governor and both senators (*sameGOV_S*) belonging to the same party. We then consider the potential effect of having the president and a majority of state representatives in the House (*SamePres_H*) or the president and both senators of a given state (*SamePres_S*) from the same party. Finally, we consider the potential advantage of having a majority of state representatives in the House and in the Senate belonging to the majority party (respectively *house_maj* and *senate_maj*). These possible alignment effects are first considered separately and then jointly in the same specification.

We are aware that testing our hypotheses separately has a major limitation in that, 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}_{sw}^i vectors in one equation of the form:

$$FEDEXP_{st} = \alpha_s + \beta_t + \sum_i \theta_1^i \mathbf{P}_{st}^i + \theta_2 \mathbf{Z}_{st} + \epsilon_{st}, \quad (3)$$

The results we get from equation (3) provide the big picture that is missed when focussing on specific spending programs and specific actors. Nevertheless, disaggregating by spending categories can provide a number of new insights by considering programs that are targeted at different needs and are administered in different ways. For example, the president is constitutionally responsible for national defense. Hence, although the defense budget goes through the normal process like any other program, it is legitimate to suppose that the president has more authority and influence on defense spending than on many other programs. In fact, historically the president tends to use his veto power mainly for reasons linked to national security.

We then estimate a series of disaggregate equations of the form

$$PROGRAM_{st}^j = \alpha_s + \beta_t + \sum_i \theta_2^i \mathbf{P}^i + \theta_3 \mathbf{Z}_{st} + \epsilon_{st}, \quad (4)$$

where j = defense, grants and direct payments to individuals. Both the scope and administration of such programs is sufficiently diverse and allow therefore to shed further light on the issues we investigate.

3. Results

3.1. Swing and Ideological Bias

In Table 2 we focus on the role of the president and use data on presidential elections to test the swing voter hypothesis and contrast it with the potential presence of ideological bias. Columns 1 and 2 show 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. This result is robust to the introduction of controls for the electoral vote system (electoral votes in column 1 and electoral votes per capita in column 2). *ElvotesPC*, which captures the overrepresentation embedded in the electoral vote system, turns out to be positive and significant at the 10% level, and therefore we maintain it in subsequent regressions. In column 3 we consider the variable *swing_last* (equal to 1 if the state swung at the last election) and we find again no evidence in support of the swing voter hypothesis. Similarly, in columns 4 and 5, when we introduce the long term swing variables *swing_state1* and *swing_state2*, we do not find any significant effects. Our results are

in line with the existing literature. For example, Wright (1974) also finds no effect of the closeness of the presidential race. While studies of the allocation of New Deal spending (Wright, 1974; Wallis, 1987; Fleck, 2001; Fishback *et al.*, 2003) have found some evidence that states with high volatility of presidential vote received more federal support, Stromberg (2004) shows that these findings vanish when state fixed effects are included.

Hence, we do not find any evidence of the refined targeting of swing and marginal states that some formal models seem to suggest. We find instead that the ideological bias toward safe states is substantial in terms of both magnitude and significance. Depending on the specification considered, the difference between a state with maximum support and a state with minimum support for the president goes from 786 to 1370 \$ per capita per year. One standard deviation in *Pres_share* is worth 179-310 \$, depending on the specification. This is consistent with theories that predict that parties may target spending towards loyal voters (Kramer 1964; Cox and McCubbins 1986; Dasgupta *et al.*, 2001).

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 sign significant at the 1% level. The percentage of children in schooling age is instead negative and significant¹⁴, while the unemployment rate is completely uncorrelated with aggregate spending per capita¹⁵.

3.2. Party Alignments

In this section we explore the effect of partizan 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 4 shows that the coefficient of the alignment between the President and the governor in a given state (*sameP*) is positive and very significant. 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 (*sameH* and *sameS*) is not significant. This is especially important because

¹⁴This could be due to having more citizens that absorb resources but cannot electorally reward the politicians. It should be noted, however, that the economic variables are considered in the same period of the dependent variable and should therefore only capture the mechanical reactions of some spending programmes to contingent economic circumstances rather than planned intentions of incumbent politicians.

¹⁵These results, with the only exception of the unemployment in column (4) in table 4, are unaltered in all the subsequent specifications we report in table 3 and table 4.

it shows both the relevance of party affiliation at different levels of governance and the prominent role of the president in the budget process and as a party leader.

The other regressions do not show any significant alignment effect, apart from the positive coefficient of *samePres_H* and the negative coefficient of *house_maj*. 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). Thus, the significance of both *samePres_H* and *house_maj* can be seen as a further signal of the strong power of the president on the budget allocation. In column 5, we include all the alignment variables in the same specification. The significance and magnitude of both *sameP* and *samePres_H* are unaffected, while the negative coefficient of *house_maj* now vanishes, since we directly include the presidential effect. 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.

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. Consistently 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 the voting for governors crucially depends 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 partizan link between president and governors is abundant¹⁶. The endorsement of governors also plays a

¹⁶In a recent interview, following the recent US presidential election of 2004, Mitt Romney, Governor of Massachusetts declared that “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

fundamental role in the selection of presidential candidates during primaries¹⁷ and the governors associations underline their important role in shaping federal policies¹⁸. Uncovering that the partisanship of state governors and the 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.

3.3. Robustness

We now check if the results we found are robust to a different specification, in which various effects are considered at the same time. In Table 5 we test simultaneously the different, though not necessarily conflicting, hypotheses.

From columns 1 and 2 it is clear that all the results obtained on individual variables (or group of variables) are substantially confirmed by this check. In the remaining regressions we also add a number of further controls that previous studies have identified as determinants of the federal budget allocation. We include the electoral *turnout* in presidential elections and a dummy variable for having a democratic president (*dempres*). To take into account overrepresentation we follow Atlas et al. (1995) and introduce the variable senators per capita (*senatorsPC*). In addition, given the importance of the relationship between the president and the governors, we also add a dummy equal to 1 if the state has a gubernatorial election (*gov_electionyear*). We find that *gov_electionyear* has a significantly positive, though small, impact on the allocation of grants (around 6.5 \$ per capita). This seems to suggest, not surprisingly, that grants might have a particular importance for incumbent governors¹⁹. Furthermore, having a democratic president substantially increases overall spending (more than 1000 \$ yearly per capita), as well as grants and direct payments to

helpful” (Gov. , Washington Post, Monday, November 22, 2004)

¹⁷The 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 interview the by Kenneth P. Vogel, Wednesday June 18, 2003 The News Tribune).

¹⁸Both the Republican and Democratic Governors’ Associations explicitly state on their website their intent to influence federal policies.

¹⁹It is intuitively clear that grants can give political returns to governors: thanks to the discretion they might have on how to spend grants, it is well possible that voters associate that form of spending with governors much more than they do for other transfers. However motivated a governor can be to obtain more grants, it remains to be asked what is the process that leads to actual allocation: in other terms we should ask who are the actors or institutions that drive such result. We tried to include a number of interactions in order to isolate the relevant mechanism but could not render our findings any more defined.

individuals, while it has no impact on defense spending. Overrepresentation is positive and significant²⁰. Finally, we do not find any evidence that turnout has any impact on the allocation process.

As a further robustness check, we also consider the role of committee membership. We focus on the most influential committees in the budget process and, thus, we use as explanatory variables the number of members by state in the Appropriation, Budget, Ways and Means, and Rules committees of the House. When the dependent variable is defense spending, we also include membership of the Armed Services committee.

In column 3, introducing the membership of the prestige committees, i.e. Appropriation, Budget, Rules and Ways and Means, we find that having members in the Ways and Means committee has a positive effect (around 76 \$ per capita per member). This confirms the results that Alvarez and Saving (1997) obtain in their cross-section study. On the other hand, we do not find evidence that other prestige committees distort large spending categories²¹. Concerning our main variable of interest, we find again that the party alignment between the president and the governor, as well as the share of presidential votes in the last election positively affect federal expenditure per capita. The magnitude of *same_P* is substantially insensitive to the change in specification. We also find again that *samePres_H* has a positive sign and that the gain from electing a majority of delegates in the House who are on the president's side is almost 100 \$ per capita.

In column 4 we analyze defense spending, finding again some evidence of a party alignment affect (president-governor), while Democratic and Republican presidents do not seem to behave differently²². Column 5 reports the results for grant spending, which shows good support for the ideological bias hypothesis. For direct payments to individuals instead (column 6), we find that none of the variables considered has a significant effect, while it is clear

²⁰One standard deviation of *SenatorsPC* is worth around 1,200 \$ in per capita spending. This is consistent with the finding of Atlas *et al.* (1995).

²¹These findings seem consistent with the existing literature, which tend to show that the effect of committees can usually be found on very specific spending programs rather than on large aggregates.

²²Concerning the economic variables, we find that, differently from other spending aggregates, the unemployment rate is negative in the defense equation. This suggests the possibility that the unemployed could be less electorally responsive to pork-barrel spending. This is especially intriguing as we control for income, which has a negative sign. Buying the votes of poorer citizens should be cheaper, if we believe in decreasing marginal utility of income. A negative coefficient of income is therefore compatible with both vote-seeking and purely welfaristic concerns. This is clearly not the case for a negative coefficient of unemployment, that cannot be justified on welfaristic grounds.

that spending depends essentially on overrepresentation²³, on having a democratic president and on economic and demographic variables.

To sum up this section, our results are quite robust to changes in the specification adopted and to joint consideration of various theories. We find that economic and demographic characteristics are very important explanatory variables of the allocation of the budget to the states, but are not sufficient to explain the disparities in the amounts received. Some states receive disproportionate amounts of money for reasons essentially linked to politics and to the budget allocation process. In particular, we find that the president turns out to have an important role. We also provide support for partisan theories, since there is evidence that the president rewards his "core supporters" and the members (governors and representatives) of his own party.

When we consider different spending categories, we also find some significant variations in the way different forms of public spending respond to political variables. While defense seems to be privileged by presidents willing to target allied states, grants are used to reward core supporters as well as to help governors in their re-election years. Direct payments to individuals seem less prone to manipulation, although they are disproportionately allocated to overrepresented states.

4. Conclusions

The most common view about the US budget process is that the Congress (and particularly the House) is the place where the distribution of federal monies is decided, through a process of logrolling among non-partisan territorially-oriented representatives. Our study shows that the president, a player neglected in most previous empirical literature, enjoys substantial budgetary power. 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. We find that states that display large support for the presidential party are rewarded. On the other hand, we do not find any evidence that spending is targeted at marginal or short-term and long-term swing states. The impact of the president-governor relationship on federal spending also confirms that the president is a key player in the budget formation process. Furthermore, the finding that the governors

²³This is consistent with what has been found by Atlas *et al.* (1995).

belonging to the same party of the president receive more funds, clearly suggests that party membership matters. The importance of partisanship is also confirmed by the fact that federal funds are lower for states that have a delegation in the House which is predominantly opposed to the president's party.

Our study reveals that the Congress is probably not the only influential player, at least on large spending aggregates. Although the budget is approved by the Congress, the proposal and veto power of the President and the structure of the budgetary process (together with the very sophisticated technical support available for the drafting of the president's budget), leave a substantial space for manoeuvre to the president, not only, as obvious, on macroeconomic aggregates, but also on the territorial distribution of funds.

Further empirical research is certainly necessary to better understand the determinants of the federal budget allocation. Nevertheless, by using panel data on a relatively long time span and by testing various theories on the same dataset, we reached new and robust findings. These results help in evaluating the validity of current theories and, most importantly, call for new theoretical developments in order to understand distributive politics.

List of variables

From the Statistical Abstract of the US and the Bureau of Statistics

- *Fedexp*: real federal expenditure by state (year 2000 constant USD per capita).
- *Defense*: real defense expenditure by state (year 2000 constant USD per capita).
- *Direct*: real direct payment to individuals (year 2000 constant USD per capita).
- *Grants*: real grants (year 2000 constant USD per capita).
- *Income*: real income (year 2000 constant USD per capita).
- *Stpop*: state population divided by 1000.
- *Turnout*: total percentage of voting population in the last presidential election.
- *Aged*: share of population over 65 years old by state.
- *Kids*: share of population between 5 and 17 years old by state.
- *Unemp*: unemployment rate.

Authors' elaboration on data from the Statistical Abstract of the United States

- *SameP*: dummy variable equal to one when the party affiliation of the governor is the same of the President, and zero otherwise.
- *SameH*: dummy variable equal to one when the party affiliation of the governor is the same of the majority of the House, and zero otherwise.
- *SameS*: dummy variable equal to one when the party affiliation of the governor is the same of the majority of the Senate, and zero otherwise.
- *SenatorsPC*: $2000/Stpop$.
- *Elvotes*: number of electoral votes.

- *ElvotesPC*: $1000 \times Elvotes/Stpop$.
- *SameGOV_S*: dummy variable equal to one when the governor is from the same party of both senators in the state, and zero otherwise.
- *SameGOV_H*: dummy variable equal to one when the governor is from the same party of the majority of state delegates in the House, and zero otherwise.
- *SamePres_S*: dummy equal to 1 if both senators from a state are from the same party of the President.
- *SamePres_H*: dummy equal to 1 if a majority of state delegates in the House are from the same party of the President.
- *Presclose*: distance in percentage of vote between the winner of the presidential race and the runner up.
- *Pres_share*: share of votes for the President in the last presidential elections.
- *Swing_last*: dummy equal to 1 if the state swung at the last presidential election.
- *Swing_state1*: let $i = 1, 2, 3, 4$ indicate the four previous presidential elections at each given time. Also, t indicate the years and $k = 1, \dots, 48$ indicate a state; then $swing_state_{kt} = \sum_{i=1}^4 swing_last_{kt}/4$. In other words, *swing_state1* is the average of *swing_last* over the previous four elections.
- *Swing_state2*: let $i = 1, 2, \dots, N$ indicate at each given time all previous presidential elections since 1964. Also, t indicates the years and $k = 1, \dots, 48$ indicates a state; then $swing_state_{2kt} = \sum_{i=1}^N swing_last_{kt}/N$. In other words, *swing_state2* is the average of *swing_last* over all elections between 1964 and t .
- *house_maj* = dummy equal to 1 if a majority of state delegates to the House are in the majority party in the House.
- *senate_maj* = dummy equal to 1 if a majority of state delegates to the Senate are in the majority party in the Senate.

From the Official Congressional Directory and from Nelson and Bensen (1993).

- *Appropriation*: number of members in the House appropriation committee by state.
- *Budget*: number of members in the House Budget committee by state.
- *Rules*: number of members in the House Rules committee by state.
- *Ways & Means*: number of members in the Ways and Means committee by state.
- *Armed Services*: number of members in the House Armed Services committee by state.

Other

- *Dempres*: dummy variable equal to 1 when the President is democratic, and zero when the President is republican.
- *Gov_electionyear*: dummy variable equal to 1 during a governor election year and zero otherwise.

References

- [1] Alvarez, Michael R. and Jason L. Saving. 1997. Congressional committees and the political economy of federal outlays, *Public Choice* 92: 55-73.
- [2] Anderson, Gary. M. and Robert D. Tollison.1991. Congressional Influence and Patterns of New Deal Spending, *Journal of Law and Economics* 34: 161-75.
- [3] Atlas, Cary M., Thomas W. Gilligan, Robert J. Hendershott and Mark A. Zupan. 1995. Slicing the Federal Government Net Spending Pie: who wins, who loses, and why, *American Economic Review* 85: 624-629.
- [4] Besley, Timothy. and Anne Case. 2003. Political Institutions and Policy Choices: Evidence from the United States, *Journal of Economic Literature* 41: 7-73.
- [5] Bickers Kenneth N. and Robert M. Stein. 2000. The Congressional Pork in a Republican Era, *Journal of Politics* 62: 1070-1086.
- [6] Bond, James .R., Emily M. Bonneau, and Jon B.Cottril. 2004. The House Public Works Committee and the Distribution of Pork-Barrel Projects. Chicago: *APSA meeting Proceedings*.
- [7] Carsey Thomas M., and Gavin Wright. 1998. State and National Factors in Gubernatorial and Senatorial Elections, *American Journal of Political Science* 42:994-1002.
- [8] Carsey Thomas M. , and Barry Runquist. 1999. Party and Committees in Distributive Politics: Evidence from Defence Spending, *Journal of Politics* 61:1156-1169.
- [9] Copeland, Gary W. 1983. When Congress and President Collide: why Presidents veto legislation, *Journal of Politics* 45:696-710.
- [10] Couch, Jim F. and William F. Shugart II .1998. *The Political Economy of New Deal Spending*, Cheltenham, UK: Edward Elgar.
- [11] Cox, Gary W. and Matthew D. McCubbins. 1986. Electoral Politics as a Redistributive Game, *Journal of Politics*, 48: 370-389.
- [12] Cox, Gary W. and Matthew D. McCubbins. 1993. *Legislative Leviathan: Party government in the House*, Berkeley: University of California Press.

- [13] Dahlberg, Matz and Eva Johannsson. 2002. On the Vote-Purchasing Behavior of Incumbent Governments, *American Political Science Review* 96: 27-40.
- [14] Dasgupta, Sugato, Amrita Dhillon and Bhaskar Dutta. 2001. Electoral Goals and Centre-State Transfers: A theoretical Model and Empirical Evidence from India. Unpublished Manuscript.
- [15] Dixit, Avinash and John Londregan. 1995. Redistributive Politics and Economic Efficiency, *American Political Science Review* 89: 856-66.
- [16] Dixit, Avinash and John Londregan. 1998. Ideology, Tactics, and Efficiency in Redistributive Politics, *Quarterly Journal of Economics* 113:497-529.
- [17] Edwards, George C. III.1980. *Presidential Influence in Congress*, San Francisco: W. H. Freeman.
- [18] Fenno, Richard F. 1966. *The Power of the Purse*, Boston: Little Brown.
- [19] Fenno, Richard. F.1973, *Congressmen in Committees*, Boston: Little Brown.
- [20] Ferejohn, John A. 1974. *Pork Barrel Politics*, Stanford: Stanford University Press.
- [21] Fishback, Price V., Shawn Kantor, and John J. Wallis. 2002. Can the New Deal three-R's be Rehabilitated? A county-by-county, program-by-program analysis, *NBER working paper series*.
- [22] Fleck, Robert K. 2001a. Inter-party Competition, Intra-party Competition and Distributive Politics: a model and test using New Deal data, *Public Choice* 108: 77-100.
- [23] Goss, Carol F. 1972. Military Committee Membership and Defense-Related Benefits in the House of Representatives, *The Western Political Quarterly* 25: 215-33.
- [24] Kiewiet, D. Roderick, and Matthew D. McCubbins.1985. Congressional Appropriations and the Electoral Connection, *Journal of Politics* 47: 59-82.
- [25] Kiewiet, D. Roderick, and Matthew D. McCubbins. 1985. Appropriation Decisions as a Bilateral Bargaining Game Between the President and Congress, *Legislative Studies Quarterly* 10: 181-201.

- [26] Kiewiet, D. Roderick, and Matthew D. McCubbins. 1988. Presidential Influence on Congressional Appropriation Decisions, *American Journal of Political Science* 32:713-736.
- [27] Kiewiet, D. Roderick, and Matthew D. McCubbins. 1991. *The Logic of Delegation*, Chicago: Chicago University Press.
- [28] Kiewiet, D. Roderick, and Keith Krehbiel. 2002. Heres the President, Wheres the Party? U.S. Appropriations on Discretionary Domestic Spending, 1950-1999, *Leviathan* 30: 115-37.
- [29] Krehbiel D. Roderick, 1991. *Information and Legislative Organization*, University of Michigan Press.
- [30] Krehbiel, D. Roderick, Kenneth A. Shepsle, and Barry R. Weingast. 1987. Why Are Congressional Committee Powerful, *American Political Science Review* 81: 929-945.
- [31] Kramer, Gerald H. 1964. A Decision-Theoretic Analysis of a Problem in Political Campaigning. In *Mathematical Applications in Political Science*, volume 11, ed. J.L Bernd. Dallas: Southern Methodist University.
- [32] Levitt, Steven D. and James M. Poterba. 1999. Congressional Distributive Politics and state Economic Performance, *Public Choice* 99: 185-216.
- [33] Levitt, D. Steven, and James J. Snyder. 1995. Political Parties and the Distribution of Federal Outlays", *American Journal of Political Science* 39: 958-980.
- [34] Levitt, D. Steven, and James J. Snyder. 1997. The Impact of Federal Spending on House Election Outcomes, *Journal of Political Economy* 105:30-53.
- [35] Lindbeck, Assar S. N. and Jörgen W. Weibull. 1987, Balanced-budget redistribution as the outcome of political competition, *Public Choice* 52: 273-297
- [36] Lindbeck, Assar S. N. and Jörgen W. Weibull. 1993. A Model of Political Equilibrium in a Representative Democracy, *Journal of Public Economics* 51: 195-209.
- [37] Nolan M. McCarty, Presidential Pork: Executive Veto Power and Distributive Politics, *The American Political Science Review*, 94: 117-129.

- [38] McCubbins, D Matthew, Roger G. Noll, and Barry R. Weingast. 1987. Administrative Procedures as Instruments of Political Control, *Journal of Law, Economics, and Organization* 243-77.
- [39] McKelvey, Richard. D., and Peter C. Ordeshook. 1980. Vote Trading: An Experimental Study, *Public Choice* 35: 151-84.
- [40] Nelson, Garrison and Clark C. Bensen. 1993 *Committees in the US Congress, 1947-1992*, Washington, D.C. : Congressional Quarterly.
- [41] Niskanen, William. 1971 *Bureaucracy and Representative Government*, Chicago: Aldine-Atherton.
- [42] Owens, John R. and Larry L. Wade. 1984. Federal Spending in Congressional Districts, *The Western Political Quarterly* 37:404-23.
- [43] Plott, Charles. 1968. Some Organizational Influences in Urban Renewal Decisions, *American Economic Review* 58:306-311.
- [44] Ray, Bruce A. 1981. Military Committee Membership in the House of Representative and the Distribution of Federal Outlays, *Western Political Quarterly*, 34: 222-34.
- [45] Rich, Michael J. 1989. Distributive Politics and the Allocation of Federal Grants, *The American Political Science Review* 83:193-213.
- [46] Ritt, Leonard G. 1976. Committee Position, Seniority and the Distribution of Government Expenditures, *Public Policy* 24:469-97.
- [47] Rodhe, David. 1991. *Party and Leaders in the Postreform House*, Chicago: University of Chicago Press.
- [48] Rodhe, David and Dennis M. Simon. 1985. Presidential Veto and Congressional Response: A Study of Institutional Conflict, *American Journal of Political Science* 29:397-427.
- [49] Rundquist, Barry S. and David E. Griffith. 1976. An Interrupted Time-Series Test of the Distributive Theory of Military Policy-Making, *The Western Political Quarterly*, 29: 620-626.

- [50] Shepsle, Kenneth A. and Barry R. Weingast. 1987. The Institutional Foundations of Committee Power, *American Political Science Review* 81: 85-104.
- [51] Stein, Robert M. 1981. The Allocation of Federal Aid Monies: The Synthesis of the Demand-side and Supply-side explanations, *The American Political Science Review* 75: 334-343.
- [52] Strom, Gerald S. 1975. Congressional Policy-making: a test of a theory, *Journal of Politics* 37:711-735.
- [53] Strömberg, D. 2004. Radio Impact on Public Spending, *Quarterly Journal of Economics*, **119**, 189-221.
- [54] Wallis, John J. 1987. Employment, Politics and Economic Recovery in the Great Depression, *Review of Economics and Statistics* 69: 516-20.
- [55] Weingast, Barry R., and William J. Marshall. 1988. The Industrial Organization of Congress - Or, Why Legislatures, like Firms, are not Organized as Markets. *Journal of Political Economy* 96 (1): 132-163.
- [56] Wright, Gavin. 1974. The Political Economy of New Deal Spending: an econometric analysis, *Review of Economics and Statistics*, 56: 30-38.

Table 1: Summary Statistics

Variable	Obs	Mean	Std. Dev	Min	Max
fedexp	912	5066.518	983.5352	3005.729	8824.92
defense	912	953.035	626.677	174.5023	4358.978
grants	960	806.0252	262.7952	370.6745	2068.466
entitl	912	2603.238	527.2812	1343.76	5129.997
sameP	960	0.40625	0.4913883	0	1
sameH	960	0.5979167	0.4905742	0	1
sameS	960	0.5208333	0.4998262	0	1
sameGOV_H	960	0.421875	0.4941162	0	1
sameGOV_S	960	0.284375	0.4513514	0	1
same_Pres_S	960	0.2645833	0.441341	0	1
same_Pres_H	960	0.5333333	0.4991477	0	1
house_maj	960	0.5916667	0.4917816	0	1
senate_maj	960	0.3291667	0.4701555	0	1
appropriation	960	1.734375	1.430804	0	8
ways & means	960	0.5104167	0.7362899	0	4
budget	960	0.8104167	1.107137	0	6
rules	960	0.3177083	0.6161698	0	3
armed	960	1.052083	1.160434	0	7
presclose	960	0.1377484	0.1058159	0.0015169	0.5220283
Pres_share	960	0.5121536	0.0898193	0.2465447	0.7450179
elvotes	960	11	9.257075	3	54
elvotesPC	960	2.714539	1.024855	1.527064	6.616543
senatorsPC	960	0.9661192	0.9851338	0.0588056	4.411028
swing_last	960	0.2916667	0.4547666	0	1
swing_state1	912	0.3723246	0.2042428	0	1
swing_state2	912	0.2902961	0.2527709	0	1
dempres	960	0.4	0.4901533	0	1
gov_electionyear	960	0.2625	0.4402222	0	1
turnout	960	61.02875	6.571284	46.1	75.6
income	960	22954.47	4292.623	13796.28	41446.37
unemp	960	6.074167	2.200156	2.2	18
stpop	960	5217.995	5497.381	453.409	34010.38
aged	960	0.1239534	0.0199277	0.0468377	0.3663689
kids	960	0.1910132	0.0226012	0.0233483	0.6194438

Table 2: Swing and Ideological Bias
Dependent variable: real percapita federal outlays, 1982-2000

Dep. Variable	(1) fedexp	(2) fedexp	(3) fedexp	(4) fedexp	(4) fedexp
Pres_share	1704.72 (2.24)**	1821.43 (2.75)***	1154.21 (2.66)**	1054.50 (2.22)**	1071.0051 (2.31)**
presclose	-382.10 (0.69)	-615.15 (1.46)			
swing_state1				-177.25 (1.16)	
swing_state2					-118.4638 (1.08)
swing_last			26.7635 (0.57)		
elvotes	-4.32 (0.16)				
elvotesPC		386.04 (1.72)*	370.24 (1.70)*	360.70 (1.62)	345.1407 -1.55
income	-0.1262 (3.76)***	-0.1278 (3.71)***	-0.1278 (3.76)***	-0.1254 (3.85)***	-0.1261 (3.76)***
unemp	-7.3322 (0.35)	-0.2502 (0.01)	-1.3735 (0.06)	1.4478 (0.07)	-0.4773 -0.02
stpop	-0.1318 (2.51)**	-0.154 (3.14)***	-0.1462 (3.00)***	-0.1459 (3.02)***	-0.1441 (3.04)***
aged	18229.94 (3.37)***	17735.80 (3.39)***	17631.24 (3.34)***	17208.41 (3.19)***	17130.5977 (3.18)***
kids	-7982.30 (2.74)***	-7871.81 (2.81)***	-7723.94 (2.71)***	-7436.70 (2.55)**	-7429.2775 (2.57)**
Constant	YES	YES	YES	YES	YES
State fixed effect	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES
Observations	864	864	864	864	864
R-squared	0.9313	0.9353	0.9348	0.9347	0.9347

OLS regressions; Robust t statistics in parentheses (* significant at 10%; ** significant at 5%; *** significant at 1%)

Table 3: Alignment
Dependent variable: real percapita federal outlays, 1982-2000

Dep. Variable	(1)	(2)	(3)	(4)	(5)
	fedexp	fedexp	fedexp	fedexp	fedexp
sameP	134.904 (2.35)**				137.917 (2.52)**
sameH	100.720 (1.54)				100.078 (1.56)
sameS	12.3287 (0.28)				36.8956 (0.86)
sameGOV_H		-39.4412 (0.99)			-5.3423 (0.11)
sameGOV_S		-74.9903 (1.39)			-99.7257 (1.60)
samePres_S			15.6720 (0.27)		22.1627 (0.39)
samePres_H			175.688 (3.13)***		235.273 (3.02)***
house_maj				-154.624 (2.61)**	71.001 (0.93)
senate_maj				-5.9300 (0.14)	36.5556 (0.76)
income	-0.1001 (3.02)***	-0.1059 (3.29)***	-0.1179 (3.73)***	-0.1145 (3.59)***	-0.1241 (3.86)***
unemp	-7.1561 (0.32)	-5.5811 (0.24)	-4.7981 (0.21)	-7.4440 (0.33)	0.8093 (0.04)
stpop	-0.1301 (3.01)***	-0.1265 (2.74)***	-0.1574 (3.15)***	-0.1507 (3.09)***	-0.1540 (3.27)***
aged	17,144.50 (3.31)***	17,680.16 (3.29)***	17,384.03 (3.07)***	17,458.60 (3.02)***	17,346.77 (3.08)***
kids	-7,079.91 (2.49)**	-7,570.45 (2.54)**	-7,574.20 (2.49)**	-7,584.51 (2.42)**	-7,670.81 (2.52)**
Constant	YES	YES	YES	YES	YES
State fixed effect	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES
Observations	864	864	864	864	864
R-squared	0.9273	0.9271	0.9302	0.9292	0.9326

OLS regressions; Robust t statistics in parentheses (* significant at 10%; ** significant at 5%; *** significant at 1%)

Table 4: Robustness Check
Dependent variable: real percapita federal outlays by program, 1982-2000

Dep. Variable	(1) fedexp	(2) fedexp	(3) fedexp	(4) defense	(5) grants	(6) direct
sameP	130.328 (2.59)**	117.031 (2.36)**	138.071 (2.91)***	77.259 (1.94)*	-12.569 (0.83)	22.020 (1.55)
sameH	79.655 (1.21)	71.150 (1.08)	100.503 (1.58)	71.971 (1.21)	-15.859 (1.06)	25.739 (1.43)
sameS	15.453 (0.36)	15.536 (0.36)	-6.921 (0.16)	-17.659 (0.51)	18.167 (1.66)	3.569 (0.26)
samePres_H	84.470 (1.75)*	94.023 (1.89)*	96.102 (1.99)*	36.688 (1.02)	23.292 (1.05)	36.415 (1.35)
Pres_share	931.566 (2.28)**	988.829 (2.45)**	850.603 (2.24)**	-140.408 (0.45)	266.471 (2.06)**	31.926 (0.17)
elvotesPC	338.140 (1.42)	363.786 (1.50)	-82.625 (0.37)	-66.622 (0.66)	20.360 (0.42)	-36.110 (0.41)
appropriation		4.354 (0.12)	19.372 (0.54)	10.859 (0.34)	-2.562 (0.23)	-0.067 (0.00)
ways&means		68.352 (1.82)*	76.484 (2.27)**	31.986 (1.19)	8.730 (0.87)	12.752 (0.90)
budget		-23.472 (0.95)	-19.521 (0.89)	-30.135 (1.43)	8.733 (0.98)	5.706 (0.57)
rules		39.090 (0.68)	37.463 (0.65)	37.808 (0.91)	4.870 (0.33)	3.570 (0.25)
armed services				-36.088 (1.45)		
senatorsPC			1,230.530 (2.66)**	145.843 (0.67)	155.944 (1.32)	548.605 (3.56)***
gov_electionyear			-5.257 (0.35)	6.817 (0.74)	6.589 (1.82)*	4.947 (0.49)
dempres			1,010.299 (10.51)***	19.999 (0.19)	358.487 (8.70)***	1,217.989 (13.43)***
turnout			6.802 (0.69)	1.327 (0.23)	-2.833 (1.26)	4.529 (1.01)
income	-0.134 (3.85)***	-0.134 (3.73)***	-0.126 (3.65)***	-0.064 (1.89)*	-0.011 (1.53)	-0.032 (3.58)***
unemp	0.440 (0.02)	-0.924 (0.04)	10.002 (0.46)	-37.844 (1.96)*	10.784 (2.12)**	22.740 (2.64)**
stpop	-0.158 (3.37)***	-0.157 (3.28)***	-0.164 (3.33)***	-0.078 (1.93)*	-0.016 (1.19)	-0.073 (3.03)***
aged	17,849.20 (3.34)***	18,517.58 (3.56)***	18,060.14 (3.49)***	4,684.99 (1.51)	3,694.08 (3.13)***	6,509.35 (2.70)***
kids	-7,919.51 (2.76)***	-8,355.98 (2.99)***	-8,273.2 (3.06)***	-2,706.85 (1.90)*	-1,516.7 (2.46)**	-2,998.7 (2.31)**
Constant	YES	YES	YES	YES	YES	YES
State fixed effect	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES
Observations	864	864	864	864	864	912
R-squared	0.9367	0.9377	0.9411	0.9231	0.9384	0.9489

OLS regressions; Robust t statistics in parentheses (* significant at 10%; ** significant at 5%, *** significant at 1%)