

**POLITICAL ALIGNMENT AND FEDERAL
TRANSFERS TO THE US STATES¹**

Marco Migueis

Federal Reserve Bank of Richmond

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ABSTRACT

In this paper, I use financial data regarding transfers from the US federal government to US States (1982-2001) to investigate if political alignment, defined as a state governor and the US President belonging to the same political party, influences the level of federal transfers received by a state. Regression discontinuity design is used to ensure proper identification of the alignment effect. Total federal transfers to aligned states are significantly larger, with the most trustworthy estimates in the neighborhood of 3%. Most of this advantage comes from significantly larger defense transfers to aligned states (the most credible estimates indicate a 13% advantage). Finally, other types of federal transfers are not significantly affected by political alignment, namely entitlements, salaries and, perhaps surprisingly, project grants.

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1 – INTRODUCTION

A large body of research on Political Economy has been devoted to understanding the distribution of public resources. Theories regarding how electoral and partisan considerations may influence the allocation of public monies abound. Cox and McCubbins (1986) show that risk-averse politicians should prefer to favor constituencies where they benefit from significant support, as these should provide a more certain return for the allocated funds; on the other hand, Lindbeck and Weibull (1987) predict that, in winner-takes-all races, candidates will promise to favor constituencies where elections are close, as a marginal dollar transferred to these constituencies should have a larger effect in the probability of election; finally, others, such as McCarthy (2000), stress that party leaders in positions of national power (such as the US President) may feel compelled to favor local governments controlled by members of the party, in order to improve the party's image. In the US federal system, questions of distribution assume particular relevance to states, as federal transfers comprise a significant share of their budgets. In this paper, I test for a pure effect of political alignment between the US President and state governors on the allocation of federal transfers to states, with a methodology which allows me to separate the alignment effect from a potential bias on transfers to states where the President has substantial support.

Previous empirical research has shown a significant effect of alignment with the US President on federal transfers. Berry et al. (2009) found that alignment of a congressman with the US President increases transfers to his district, even more so than alignment of the congressman with the party in control of Congress; Larcinese et al. (2006) found that states led by a governor of the same party as the President received significantly more total federal transfers per capita. Nevertheless, as they calculate standard fixed-effects regressions, with no control for the winning/losing margin of the local candidates (congressmen or governors), the effect they find of alignment with the President can be due to either a pure alignment effect or to the states/districts aligned with the US President receiving extra transfers due to providing substantial support in terms of votes to the President (an effect in the spirit of Cox and McCubbins 1986). Regression discontinuity design, a more robust estimation method, is necessary to causally identify the effect of alignment on federal transfers to states and to separate it from a probable bias in transfers to aligned states due to the large number of supporters of the President in these states. Regression

discontinuity design measures the alignment effect by comparing the transfers to states where aligned governors won the gubernatorial election narrowly with the transfers to states where aligned gubernatorial candidates lost narrowly. This methodology identifies causally the alignment effect, as long as the assumption that close elections are essentially random holds (I will provide some tests for this assumption in Section 3).

In this paper, I start by presenting the results for total transfers to the US States, but I also look at how alignment influences transfers when divided between smaller aggregates. This disaggregated analysis will allow me to draw some conclusions on the potential motivations for the targeting of federal funds to aligned states. First, I look at how political alignment influences defense vs. non-defense transfers, and later, I analyze a different partition of total transfers, namely, how alignment separately influences entitlements, procurements, project grants and salaries. Finally, I compare how political alignment influenced transfers in periods of Democratic control versus periods of Republican control.

My findings are in-line with most of the previous literature, as estimates of the effect of alignment on total federal transfers are positive and significant in all specifications, ranging from 1.3% to 3.5%. Defense transfers are affected even more so by political alignment, with estimates of this effect ranging from 2.3% to 14%, while project grants are not significantly affected by alignment and, if anything, show a negative effect of alignment. As the allocation of defense money is completely out of the control of state governors, whereas project grants can, very often, be re-allocated at a state-level, these asymmetrical effects hint to “credit-claiming” as the main driver of the political targeting of federal funds by the President to aligned states, rather than the potential sharing of political goals by the President and aligned state governors. Other components of the federal transfer mix – entitlements and salaries paid by the federal government – are positively, but not significantly, affected by political alignment, which is surprising in the case of entitlements. Section 2 of this paper discusses the influence of the US President in the budgetary process; section 3 of the paper presents the data used and the empirical methodology; section 4 presents the results; and finally, in section 5, I make concluding remarks.

2 – THE US PRESIDENT AND THE FEDERAL BUDGET

In the United States, since the Budget and Accounting act of 1921, the President has enjoyed significant control over the budget, and therefore over the allocation of resources. The US President starts the budgetary process by making a proposal to Congress, and after Congress finishes the amendment process, and approves a final bill, the President still has the power to veto, a veto that can only be overturned by a two-third majority in Congress. The proposed budget is drafted with strong consideration of the spending priorities of the President; federal agencies have to submit their spending needs to the Office of Management and Budget, which works closely with the President, rather than directly to Congress. Post-approval of the budget, the President still has substantial room to target federal funds, as most of the funds allocated to federal agencies do not have strictly pre-determined use, and therefore, the executive appointees in charge of these agencies can significantly influence the destination of federal dollars. In 1974, the Budget Impoundment and Control Act was approved with the objective of shifting power back to Congress, but even after this act, most experts (see Copeland 1983 or McCarthy 2000) still agree that the President has a significant influence over the US budget.

Numerous theories have been developed to explain how electoral and partisan considerations influence the allocation of governmental resources. Cox and McCubbins (1986) developed a model showing that politicians in control of a central government, when risk averse, should favor constituencies where they have substantial support, as those constituencies will bring a more certain return for the funds invested. Linbeck and Weibull (1987) showed that politicians should target constituencies where elections are close, as these constituencies are more likely to shift in their favor with the help of extra funding. McCarthy (2000) argues that party leaders are compelled to favor constituencies controlled by the members of the party. Also, if a local level of government has control over policy, the more central level of government should prefer to provide more resources to those more likely to implement policies in accordance with the central-level goals. Ultimately, empirical research is needed to verify which theoretical predictions most resemble real world outcomes.

Many empirical papers have tackled the question of whether political considerations influence the level of intergovernmental transfers in the US. Ansolabehere and Snyder (2006), while analyzing transfers from US States to counties, found that counties where elections are

close did not receive significantly more funds than other counties, while counties where the vote shares of the party in control of the state legislature or with the incumbent governor tended to receive larger transfers. Similarly, Levitt and Snyder (1995) found that federal transfers to districts were larger when given to districts under Democratic control, during a period where the US Congress was dominated by the Democratic Party. Larcinese et al. (2008), look at the allocation of federal funds to states, and using survey variables instead of voting data, also conclude that the swing-voter hypothesis does not explain the distribution of federal monies as well as the partisan hypothesis (national political leaders favor constituencies where they have substantial support). They also argue that using political outcomes as explanatory variables for budgetary outcomes is problematic, due to potential endogeneity between electoral results and the allocation of public financial resources. Barry et al. (2009), in their analysis of federal transfers to US districts, found that the Washington decision-maker who appears to have the most sway over the distribution of federal funds is the President, rather than the party in control of congress or the Congressmen in control of the various committees. Their results support my choice to focus on the alignment with the US President as the crucial political variable to influence federal transfers to states. Finally, the most closely related paper to this work is Larcinese et al. (2006), which found that US states with a governor politically aligned with the US President received on average more transfers than other states did. However, in their regressions, they do not control simultaneously for the vote shares in gubernatorial elections. Therefore, their estimates may pick up either the direct effect of alignment or the desire to provide more funds to states generally supportive of the President. Moreover, their research design does not ensure causal identification of an alignment effect, as political alignment may be endogenously determined together with federal transfers. To ensure causal identification and to distinguish between the pure alignment effect and the effect of the President having substantial support in a state, I go beyond the simple correlation calculated by Larcinese et al. (2006), by using the robust method of regression discontinuity design to measure the effect of political alignment on federal transfers.

3 – DATA AND EMPIRICAL METHODOLOGY

I analyze the impact of alignment on federal transfers using a panel of 47 US States for the period 1982-2001.² Data for federal outlays and the demographic and economic controls used³ can be found in the Statistical Abstract of the United States. Data from the gubernatorial races was compiled by James Snyder and Stephen Ansolabehere from various sources. Population data was taken from the US Bureau of Economic Analysis (BEA).

My analysis of the effect of political alignment on federal transfers will first address total transfers per capita to the states, in order to verify the findings of previous research utilizing a regression discontinuity design. Subsequently, I investigate how the alignment effect is split between the different components of federal outlays; first, I look at how alignment affects defense transfers vs. non-defense transfers; then, I examine separately how political alignment influences federal outlays to states to finance project grants, procurements, salaries and entitlements. Table 1 shows the summary statistics for the different partitions of federal outlays per capita. It is surprising that, if considering only raw averages, states not aligned with the US President receive larger amounts for all types of federal transfers, especially because this result cannot simply be explained by the same states always being aligned, as the period of analysis is split between years of Democratic and Republican control of the White House (first the Reagan/Bush years, then the Clinton years). Nevertheless, results in the next section will demonstrate that this advantage of unaligned states is, in many cases, reversed once regression discontinuity design and state-fixed effects are employed.

Federal transfers and state election results may be endogenously determined together, as they might reinforce each other, or both be influenced by other factors. Therefore, a methodology robust to this potential endogeneity is needed to ensure causal identification of the effect of alignment on federal transfers to states. Regression discontinuity design, which measures the effect of alignment between a state and the US President, by comparing the transfers received by states where an aligned gubernatorial candidate won narrowly with the

² To ensure comparability with previous studies and due to their specificities, which ensure they always receive more federal transfers per capita than other states, Alaska, Hawaii and the District of Columbia are excluded from my analysis. Louisiana is excluded because their gubernatorial elections are open to many candidates of the same party.

³ Other controls used are state income per capita, percentage of children aged 5-17, percentage of elderly aged 65+ and unemployment rate.

transfers received by states where an aligned gubernatorial candidate lost narrowly, overcomes the endogeneity problem, as long as the election outcome is random for very close races. One possible test of the randomness of close elections is to compare the distributions of other characteristics of states where the elections were close. I use a regression discontinuity design, similar to the one used to measure the effect of alignment on transfers, to check if states politically aligned differ significantly in terms of some socio-economic characteristics (state population, real income per capita, percentage of unemployed, percentage of children 5-17 and percentage of elderly aged 65+) from unaligned states. Results are presented in Table 2: population, percentage of children, percentage of elderly and percentage of unemployed showed no relation to political alignment; on the other hand, state income per capita was significantly smaller in states where aligned governors won narrowly. This result suggests that the outcome of close elections may not be completely random, and questions the causality of the effect of alignment on transfers, as this effect might actually be caused by the state income level. In order to minimize the potential omitted variable problem, state income per capita is included in most specifications.

Regression discontinuity is implemented in this paper by using high-order polynomial functions to control for the margin of victory/loss of the aligned gubernatorial candidate (the “forcing variable” in regression discontinuity terminology). This is done to increase the statistical power of the results, as this method allows for the use of the full sample. The use of the full sample also allows me to include state fixed effects, which certainly explain a significant part of the federal outlays variation, and make up for the lack of more control variables. The main specifications used on this paper are of the form:

$$LT_{it} = c + \theta_i + \tau_t + \beta Aligned_{it} + f^j \left(Mrg_{it} \right) + \Phi X_{it} + \varepsilon_{it}$$

where LT_{it} is the logarithm of real per capita federal outlays, θ_i is a state fixed effect, τ_t is a year effect, $Aligned_{it}$ ⁴ is a binary variable that assumes value 1 if the state governor is aligned with the US President and 0 otherwise, $f^j \left(Mrg_{it} \right)$ is a two-sided j^{th} degree polynomial of the margin between the aligned gubernatorial candidate and the most-voted non-aligned gubernatorial candidate, and finally, X_{it} is a vector of demographic and economic controls. I

⁴ $Aligned_{it}$ and Mrg_{it} are measured the year before the transfers take place, to take into account the lagged nature of the US federal budget allocation.

present the results for polynomials ranging from the 1st degree to the 4th degree (as well as a specification without the polynomial controlling for the winning/losing margin), but I concentrate the discussion on the results obtained with the higher-order polynomials, as only those have the necessary flexibility to ensure that the binary variable “Aligned” is not capturing differences in transfers coming from states where elections were lopsided. Therefore, this type of setup will allow me to distinguish between transfers purely motivated by political alignment and transfers due to the party of the president enjoying significant support in a state.

State fixed effects are used in all regressions in order to parse out systematic differences in transfers and in electoral outcomes between states from the estimated alignment effect, and consequently absorb a substantial share of the unexplained transfer variability. The inclusion of fixed effects guarantees that the estimate alignment coefficients are identified using only within variation, but by itself does not guarantee causal identification, or separate the pure effect of alignment from the effect of substantial support for the presidential party, as the two move together within states. Due to the correlated nature of regression residuals, when the explanatory variables do not change over a period of time (in this case, over the tenure of a state governor, if there is no change of US President), I estimate the standard errors using clustering, at the state level, with a cluster for each period between gubernatorial elections.

4 – RESULTS

Table 3 shows the results of all regressions. All specifications show a significant positive effect of political alignment between a state governor and the US president on total federal transfers per capita. The specifications with a higher-degree polynomial controlling for the voting margin (therefore more flexible) point to a 3% effect of alignment on transfers, which, considering that, on average, states received \$5,112 of federal outlays per capita in 2000 dollars, implies that political alignment is worth about \$150 per capita to a state. These results confirm the sign, statistical significance, and magnitude of the alignment effect found in Larcinese et al. (2006). The estimated alignment effect is fairly similar with or without inclusion of controls for other socio-economic characteristics of states, although its statistical significance diminishes

slightly when those are omitted. Figure 1⁵ illustrates the described discontinuity, giving credit to the prediction that alignment positively influences federal transfers.

Next, I analyze the impact of alignment in defense and non-defense transfers separately, and found that the results are remarkably asymmetrical. Estimates of the effect of alignment on defense-related transfers are consistently positive, but relatively low in the specifications with a lower-degree polynomial controlling for the winning margin of the aligned governor (less flexible specifications), while the estimate attains 13% in the most flexible specification, or even 14% when not including other socio-economic controls; 13% more is a substantial advantage in terms of defense spending, as it represents approximately \$123 more per capita at 2000 prices, or most of the total alignment effect on total transfers. Conversely, non-defense transfers are only slightly larger when alignment is present, but the coefficient associated with alignment does not even reach statistical significance on the specifications with a higher-degree polynomial. Figure 2 illustrates the relation between defense transfers and the winning/losing margin of the aligned gubernatorial candidate in the case of very close gubernatorial elections (decided by less than 5% of the vote). This figure shows that, even within this narrow range, there is still substantial variability in the level of defense transfers received by states; nevertheless, the estimated jump is of great magnitude and is statistically significant at 99% confidence.

Finally, I look at a different partition of transfers, namely between entitlements, procurements, federally paid salaries and wages, and project grants. Entitlement transfers fund social safety-net programs like Social Security, Medicare or Medicaid, and therefore are governed by laws that apply uniformly to all states. Consequently, it is surprising that entitlement-related transfers show a positive relation with political alignment in most specifications. Still, estimates of the political alignment's effect on entitlements are a modest 1%, significant when the polynomial considered is of a lower-degree, but non-significant when a fourth-degree polynomial is used to control for the effect of the winning margin of the aligned gubernatorial candidate on transfers. Procurements are purchases of goods and services by the federal government from private entities. Most procurements coincide with defense contracts,

⁵ In all figures, the dependent variables were first stripped of their yearly and state averages, then, these transformed dependent variables were averaged within 40 intervals and ordered by the margin of victory/loss of the aligned gubernatorial candidate. Each of the open dots seen in the figures is the average of one of these intervals, thus representing 2.5% of the sample. The solid lines represent the predicted values of the dependent variable using regression results of a specification with a fourth-degree polynomial controlling for the winning/losing margin of the aligned gubernatorial candidate and with no other socio-economic controls.

and therefore, it comes as no surprise that the sign and magnitude of political alignment's effect on procurements is similar to its effect on defense transfers. Estimates of the effect of alignment on procurements reach 15% (slightly above the estimates for defense transfers), and, therefore, procurements are the component of federal transfers to states most affected by alignment between governors and the US president. A priori, it is difficult to predict if political alignment will significantly affect the next component of federal outlays to states, salaries and wages, or not. On one hand, the extensive unionization of the public sector can contribute to some degree of uniformity and stability on public sector salaries across states; on the other hand, the President has substantial influence on the allocation of federal workers, especially in the case of defense sector workers, and thus, we can think that, through re-location of the federal workforce, the President can favor aligned states. Results seem to point to a positive effect of political alignment, although this effect is quite weak and non-significant in all specifications (estimates range between 0% and a statistically non-significant 3%). The final components of the federal transfer mix to be analyzed are project grants to states and other local governments. Grants are allocated by the federal government to fund specific projects that are seen as desirable for the welfare of the population. Given the ultimately discretionary nature of many of these grants, they are generally perceived as a mechanism primed for abuse by the executive and legislative branches of the government. Therefore, it is rather surprising that estimates of the effect of alignment on project grants are unanimously negative, ranging from 0% to -2.8%, although only in one specification does the estimate attain statistical significance.

Finally, I have also applied the regression discontinuity methodology separately to years of Republican control and to years of Democratic control. The coefficients estimated for alignment were positive for most specifications, for both parties, but in most cases were not significant. Overall, the results were inconclusive, so it would be interesting to replicate this analysis using a larger sample, considering more Republican and Democrat presidencies.

5 – CONCLUSION

The results in this paper complement the findings of Berry et al. (2009) and Larcinese et al. (2006), as political alignment with the US President proves to significantly affect the federal outlays to a state. These results are also in accordance with the findings in my analysis of

transfers from the Portuguese central government to Portuguese municipalities, using a similar regression discontinuity methodology (see Migueis 2010). Perhaps more telling is the fact that this funding advantage is mostly due to increased transfers for defense, rather than through other, non-defense, grants. One possible explanation for this disparity is that the President is interested in targeting funds to aligned states, in order to maximize “credit-claiming” by their party, but does not want to do so in a way that also increases the influence of state governors in the allocation of funds, even when these governors are of his party, and therefore likely to be sympathetic to his political goals. Defense spending is ideal to achieve both objectives at the same time, as this type of spending is completely out of the control of the state politicians, while federal grants to states are less attractive, as state governors have considerable leeway to target federal monies, received through grants, to their own priorities. It is also possible that non-defense types of “pork”, such as project grants, are more influenced by Congress, and therefore, it would be interesting to investigate in the future, using the regression discontinuity design, how alignment between states and the federal legislative branch influences the different components of federal outlays. Federal salaries and entitlements are positively, albeit weakly, affected by political alignment, which is a surprising development in the case of entitlements, as these outlays are governed by rules uniform across the nation. In conclusion, my analysis adds to the substantial empirical evidence that party alignment plays a crucial role in the distribution of funds through local levels of government, and simultaneously illustrates how regression discontinuity design can be used to identify effects of political control on policy variables.

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FIGURE 1

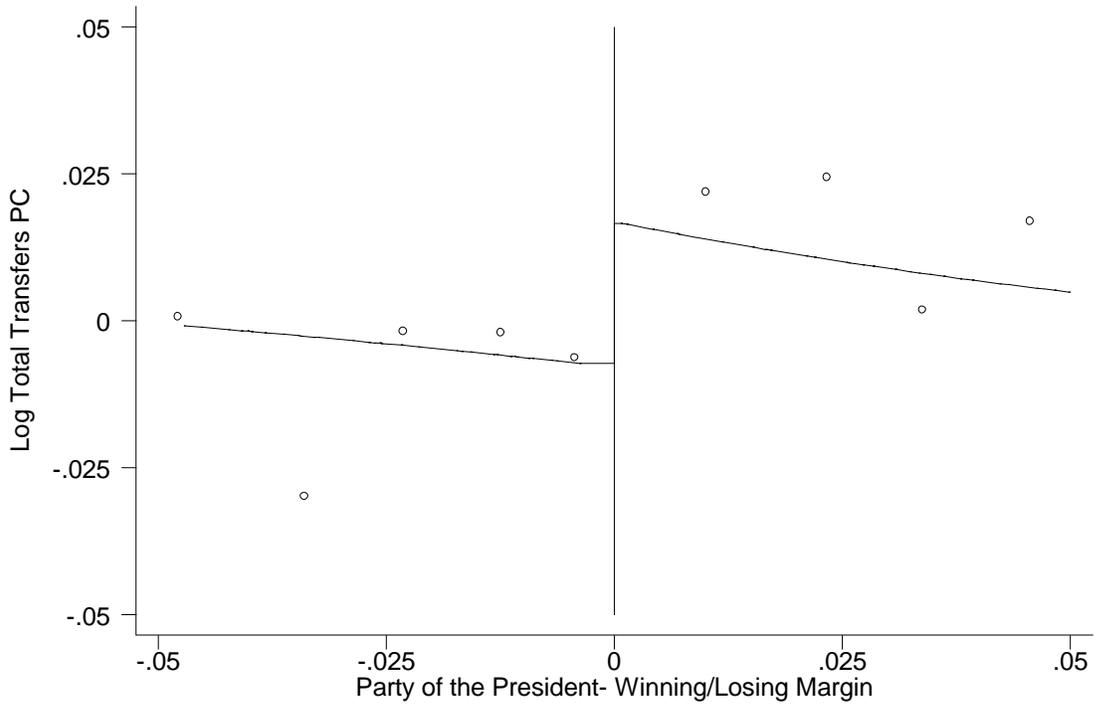


FIGURE 2

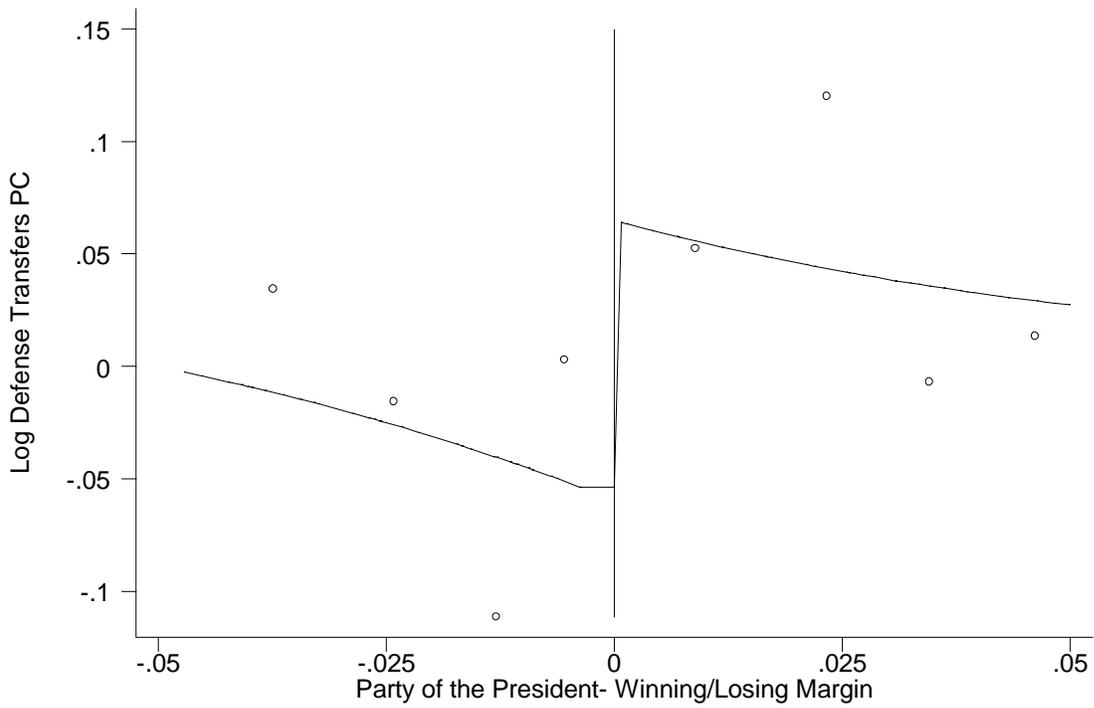


Table 1 – Summary Statistics

Variables	Mean	St. Dev.	Mean when Aligned with President	Mean when not Aligned with President
Total Federal Funds p.c.	\$5,112	\$1,017	\$4,950	\$5,223
Defense p.c.	\$945	\$631	\$883	\$988
Non-Defense p.c.	\$4,171	\$918	\$4,053	\$4,249
Entitlements p.c.	\$2,646	\$565	\$2,618	\$2,665
Procurements p.c.	\$794	\$597	\$724	\$842
State Grants p.c.	\$826	\$284	\$775	\$861
Salaries p.c.	\$679	\$389	\$646	\$702

Note: Per capita values at 2000 prices.

Table 2 – Effect of Political Alignment on Control Variables

Log State Population	.012 (.014)
Log State Real Income Per Capita (2000 Prices)	-.030*** (.010)
State Unemployed %	.003 (.003)
State 5-17 population %	-.001 (.003)
State 65+ population %	-.001 (.002)

Note: N = 938. All regressions included state, year fixed effects and fourth-degree polynomial of the aligned governor winning/losing margin. Standard errors (in parenthesis) are estimated using clustering. *** = p-value < 0.01.

Table 3 – Effect of Political Alignment

	(1)	(2)	(3)	(4)	(5)	(6)
Log Total Federal Funds p.c.	.014*** (.005)	.013* (.007)	.028*** (.009)	.035*** (.011)	.027** (.013)	.029* (.017)
Log Defense p.c.	.060*** (.016)	.023 (.023)	.078*** (.030)	.105*** (.038)	.130*** (.042)	.140*** (.041)
Log Non-Defense p.c.	.016*** (.004)	.016*** (.006)	.013 (.008)	.010 (.010)	.009 (.012)	.012 (.016)
Log Entitlements p.c.	.006 (.004)	.014** (.006)	.012* (.007)	.017* (.009)	.009 (.011)	.012 (.015)
Log Procurements p.c.	.070*** (.023)	.054* (.032)	.112*** (.040)	.149*** (.051)	.151*** (.057)	.145** (.059)
Log State Grants p.c.	-.000 (.008)	-.010 (.009)	-.019 (.012)	-.028* (.016)	-.027 (.021)	-.027 (.020)
Log Salaries p.c.	-.001 (.016)	-.001 (.019)	.023 (.022)	.019 (.028)	.033 (.025)	.013 (.027)
Other controls	Yes	Yes	Yes	Yes	Yes	No
Polynomial of Winning Margin of aligned State Governor	None	First Degree	Second Degree	Third Degree	Fourth Degree	Fourth Degree

Note: N = 938. All regressions included state and year fixed effects. Standard errors (in parenthesis) are estimated using clustering. *** = p-value < 0.01; ** = p-value < 0.05; * = p-value < 0.1.