KYKLOS, Vol. 74 – February 2021 – No. 1, 103–125

The Impact of Career Politicians: Evidence from US Governors

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I. INTRODUCTION

The professionalization of politics refers to a set of particular values and standards that politicians hold themselves to in order to increase likelihood of success in their profession (Black, 1970). Beyond these values, career experience may also have a role in determining how effective or successful a politician can be. In the political sphere today there exists many so-called "career politicians". A term used to label politicians that solely pursue political office and have not made a career outside of government or political bubbles. A small body of work has tried to explain whether these type of politicians differ in their behaviour, for example, Dreher et al. (2009) explain the extent to which career politicians may implement pro-liberal policy changes. Other literature explains the existence of career politicians (Mattozzi and Merlo, 2008) and how they make career decisions (Keane and Merlo, 2010). The previous approach has been to combine all types of political career into one universal definition, an approach that often finds no robust result and obscures heterogeneity. A more disaggregated approach to political careers may be required as different careers develop different sets of skills.

In this paper I use Congressional experience in US governors to establish a link between political career experience and intergovernmental transfers. The transfer system in the US offers an exceptional opportunity to identify the effect that career politicians can have. Specifically, I focus on a prior career in Congress – having served in either the lower or upper legislative house in the US. I develop a competency-based theory. I form the testable hypothesis that governors

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with Congressional experience have more political nous, and, therefore, are more effective at lobbying the president for federal funds.

The existing literature has comprehensively analysed how the federal budget is allocated to states (see e.g., Berry et al., 2010; Albouy, 2013). However, beyond the role of partisan alignment, the relevant characteristics of the governor in the receiving state are unknown. These are of interest as it allows one to build a picture of the factors that contribute to a politician's human capital stock and explain how politicians act.[1] Currently, there is only sparse evidence regarding the role of the sub-national leader's characteristics on the receipt of intergovernmental transfers (Veiga and Pinho, 2007).

I use a long panel dataset on federal-to-state transfers in the US over the 1950-2008 period. I gather data on US governors Congressional service and personal background from their online profiles on the National Governors Association (NGA) website. In order to identify the impact of Congressional experience on transfers, I use a difference-in-differences style approach and test for a number of threats to identification. In sum, I find that governors who have previously served as members of Congress, on average, increase the growth rate of transfers to their state by 0.8 percentage points. I perform an event-study to assess the common trends assumption and find no indication of problematic pre- or post-treatment trends. I address selection concerns by showing that the election of experienced governors appears idiosyncratic and therefore unproblematic. The selection on unobservables would also have to be implausibly high to completely explain away the effect. I conduct a placebo test using random treatment assignment and find no evidence of a systematic error. Moreover, I repeat the main analysis using an alternate dependent variable based on a state's share of total federal transfers and the relationship persists. To ensure random assignment of the treatment, I explore the robustness of the result in close elections. I then conduct a battery of sensitivity checks to ensure that the result is not driven by outliers in the explanatory variable. For example, states that elect an experienced governor more often or periods when governors with experience are more prevalent. I also show that outliers in the distribution of transfers are not driving the relationship. When exploring which governors may be driving this result, I find that it is mostly the Republican governors and provide an explanation as to why this may be.

This paper proceeds as follows. Section II reviews the relevant literature and provides a theoretical groundwork; Section III briefly describes the institutional setting; Section IV presents the data and empirical approach; Section V presents the results; Section V shows some evidence on a potential channel;

[1] There is also a body of work that shows that the intergovernmental transfer system is subject to manipulation by politicians in countries beyond the US (see Veiga and Pinho (2007) for Portugal, Fouirnaies and Mutlu-Eren (2015) for the UK and Gonschorek et al. (2018) for Indonesia).

and Section VI conducts robustness checks. Section VII concludes and discusses the opportunities for future research.

II. RELATED LITERATURE AND THEORETICAL CONSIDERATIONS

This paper relates to the literature on political leaders (Jones and Olken, 2005; Besley et al., 2011) and the allocation of transfers (Larcinese et al., 2006; Veiga and Pinho, 2007). The latter shows how sub-national transfer systems are affected by political manipulation, specifically that transfers are directed toward co-partisans of the politician who sends the funds. Whilst the former papers both use random leadership transitions owing to death or illness to show that the national leader has an effect on the economic performance of their country. Besley et al. (2011) proceed to explore how a certain characteristic, the educational attainment level, of the leader matters for economic growth. This paper connects these two distinct literatures.

Leaders in general matter and so do their socio-economic backgrounds. Hayo and Neumeier (2016) show that the tenures of lower-class leaders are associated with a high deficit-to-GDP ratio relative to upper-class leaders. The authors also show that this is the case for German state prime ministers (Hayo and Neumeier, 2014). Ruske (2015) shows that the type of education can matter, as politicians holding a degree in economics tend to be more corrupt. Biology can also affect decision making. Kozlov et al. (2018) find that Russian governors with more testosterone exposure exhibit higher levels of repressiveness in their region. With respect to gender, Ferreira and Gyourko (2014) find no difference between female and male US mayors in the size of government, composition of expenditures or crime rates. They do, however, show that females have superior political skill compared to equivalent males. Likewise, Jochimsen and Thomasius (2014) find no evidence that female finance ministers in German states have different deficits relative to males. Also in Germany, Hayo and Neumeier (2012) show that state governments led by a prime minister from a poor background employ policies aimed at evening out inequalities.[2]

Regarding on-the-job experience, Moessinger (2014) show that a more experienced finance minister, measured by the number of years in the position, have smaller increases in the debt-to-GDP ratio. Similarly, Fuchs and Richert (2017)

[2] There is also a growing literature on leader origin, which shows that regions that provide national ministers or representatives are favoured. Hodler and Raschky (2014) show that the political leader favours the sub-national region they were born in. Whilst Dreher et al. (2016) demonstrate that African leaders' birthplaces receive more funding from China than elsewhere. Similarly, Franck and Rainer (2012) find that African leaders favour areas that have the same ethnic background as them. Jennes and Persyn (2015) show that the transfers to electoral districts in Belgium are increasing with federal minister representation from that district. On the supranational level, Gehring and Schneider (2018) show that the EU commissioner for agriculture increases their country's share of the overall EU budget.

show that more experienced development ministers obtain larger aid budgets because the longer time in office strengthens their ability to negotiate. On the sub-national level, Freier and Thomasius (2016) identify that German mayors who have prior experience in office reduce public debt, lower expenditure and decrease local tax rates.

More specific to this research, previous work has shown that the professional background of political leaders affects the decisions they make when in office. For instance, Dreher et al. (2009) shows that leaders who have a background as an entrepreneur are more likely to implement pro-market liberalizing reforms. Whilst Göhlmann and Vaubel (2007) show that former central bank staff prefer lower inflation rates than former politicians. And Stadelmann et al. (2015) find that politicians with a military background exhibit a higher chance of voting pro-military. In light of these findings, I hypothesize that a relevant experience in politics, in this context Congress, should influence the work of governors. There are at least two reasons why specifically Congressional experience may be positively related to federal-state transfers. First, governors who have spent time in Congress will have been able to hone and build their political capital working in the legislature on fiscal and legal agendas. Dahl and Lindblom (1953) argue that bargaining, negotiation and comprise are the most critical skills for success as a politician in the US. Technical experience in Congress should have provided an insight into how the political machine works and will develop these three skills on a daily basis. In order for a politician to be successful, they have to bargain and negotiate with a variety of political actors that hold a variety of interests. Thus, a less experienced politician may be unwilling to compromise and resort to an ideological coalition. Developing these political skills will give them an edge on the competing governors, holding all else constant. Second, spending time in the legislature may have provided an insight into the usefulness of extra funds for governors. Given that the federal budget has to be debated and voted on in both the House of Representatives and Senate, not to mention numerous committees and sub-committees, all Congress members should be acutely aware of state funding. Assuming that governors wish to increase their state's economic performance, the federal transfers system represents one channel that the governors may wish to exploit.

While there is burgeoning body of work regarding how particular types of background affect various economic outcomes, there exists very little work that explores a specific type of prior job. This is likely a result of being unable to find a sufficient link between an earlier career and one's current role as a politician – an area that this paper contributes to. Moreover, whilst some work has focused on sub-national leaders, none have so far explored how sub-national leader's prior political experience affects the transfers to their locality. The most related study to this is Veiga and Pinho (2007), who briefly address whether the number of years in office as mayor in Portugal affects the transfers they receive from the

central government and find a positive but insignificant effect. I also build on the work by Dreher et al. (2009) who find no effect for the impact of a previous career in politics in general on pro-market reforms. Their political career variable captures an array of political careers, whereas in actuality, it could be that specific types of political jobs are more useful than others. Hence, more work is required to identify the jobs that develop political capital.

III. INSTITUTIONAL SETTING

The federal budget in its current form is governed by the Budget and Impoundment Act of 1974. It came after President Nixon sought to reduce the budget deficit by not spending funds that Congress had allocated in 1972. This act aimed to strengthen Congress' budget authority and reduce the president's impoundment ability. Despite this, the budgetary process is one legal scholars argue that the president maintains significant control over the budget due to the threat of veto, which can only be overturned by a two-thirds majority in each legislative chamber (McCarty, 2000). Previous work has acknowledged the role of the president in the distribution of federal resources. Levitt and Snyder (1997) point out that "The inflow of federal funds to a district is affected by the decisions of a large number of actors… The president plays major role, both in the budget process and as chief executive". Historical evidence of presidential influence over the distribution of federal funds have been provided by scholarly work on the New Deal. Anderson and Tollison (1991) and Couch and Shughart II (1998) find a positive relationship between vote share and state-level spending. Wallis (1987) finds that states with more swing voters are targeted with more federal money. Whereas, Fishback et al. (2003) find evidence that the president targets both loyal voters and swing voters. At the state level, Larcinese et al. (2006) show that presidents engage in tactical redistribution of federal funds by rewarding states that supported them in previous elections and those that have a co-partisan governor. At the county and congressional district level, Berry et al. (2010) show that areas represented by a president's co-partisan legislator receive more federal funds. Whilst Kriner and Reeves (2012) show that counties that receive more federal grants reward the incumbent president or his party. Other work has focused on state representation in Congress. Albouy (2013) show that states represented by members of Congress in the majority party receive greater federal grants as they have greater proposal power or form coalitions with each other.

Although the literature on the US federal budget has highlighted the president's influence, no paper has yet investigated the role of the governors in a recipient state. The governors are the head of the executive branch of the state government. They have a high degree of autonomy on state administration, such as the budget, policies and legislation, and departmental appointments. Regarding the link between the governors and the federal budget, consider the following

statement from Mitt Romney in 2004, then governor of Massachusetts. "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 gave otherwise had, and that's of course helpful".[3] Despite the partisan tone, this ex- ample illustrates how governors can communicate with and influence the president to alter federal expenditure. Moreover, at the 2017 Governor's Ball, President Trump remarked, in reference to a meeting with the state governors that "Everybody is different, every state is different, and different requirements, but I think we have something that's going to be really excellent… But tomorrow morning, we're going to meet and have some pretty big sessions on healthcare and other things – whatever is on your mind." An admission that depicts the president and governors interacting with one-another and intent to explicitly discuss federal funding plans. The president has also tweeted "Big dinner with Governors tonight at White House. Much to be discussed, including healthcare." This is further evidence of communication between the president and governors regarding the federal spending agenda.

IV. DATA AND EMPIRICAL STRATEGY

This section provides a description of the variables of interest and motivates the relevant control variables. I use a balanced panel of the 48 contiguous states from the year 1950 up to the year 2008 - the complete time span of the data that is available. I also discuss the empirical strategy used to identify the effect of interest.

I. Data

The dependent variable in the analysis is the growth rate of federal-to-state transfers per capita in real terms.[4] These are funds that are ultimately allocated by the president in the federal budget and are used for specific functions, general financial assistance or as a share of tax proceeds.[5] The transfers are comprised of grants, aid, shared taxes, and contingent loans and advances. The federal grants are the type of spending most susceptible to political control (Berry et al., 2010). These data are obtained from the *US Census of Governments*. Given that different states have different needs and economic situations, there is considerable variation in the amount of transfers awarded to the states in a given year. The median growth rate is 3.7 percentage points per year. Transfers are

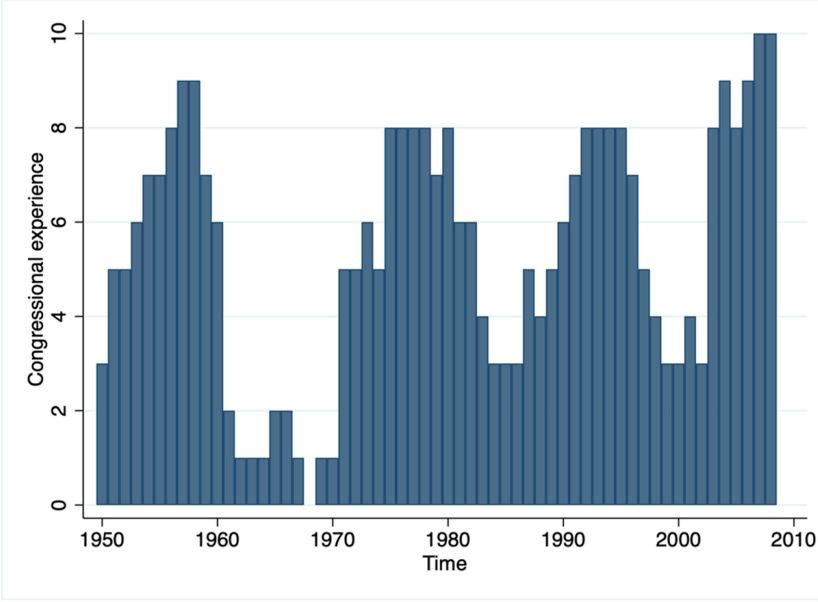
[3] Speaking after the re-election of President G. W. Bush in 2004.

[4] I use the growth rate rather than levels as I wish to capture short-run changes in the transfers. Estimation in levels is more suited to capturing longer-term trends. Moreover, real per capita transfers in levels are non-stationary i.e. display a unit-root.

[5] Full for a complete breakdown of what is included and excluded in each category see https://www.census.gov/govs/www/class_ch7_ir.html

Figure 1

The number of governors who have Congressional experience per year. [Colour figure can be viewed at wileyonlinelibrary.com]



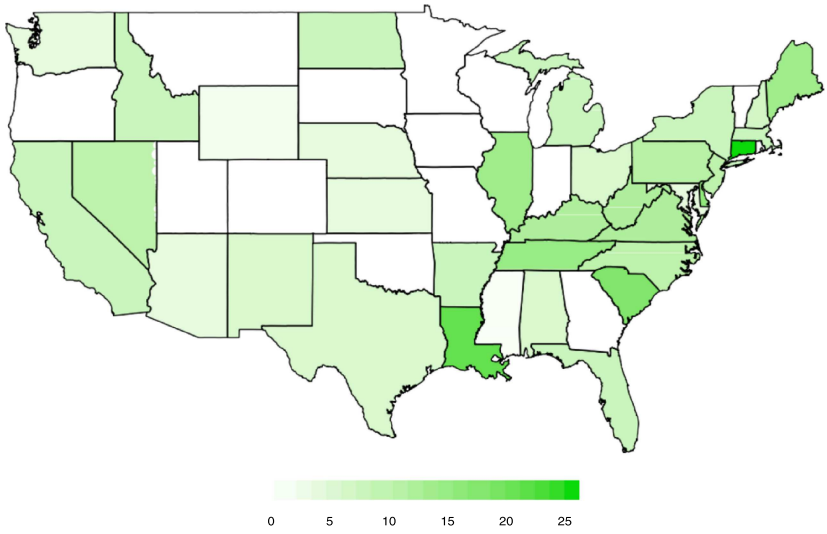
conventionally used to alleviate fiscal difficulty and to increase state welfare, however, given the political involvement, it is important to explore how much political manipulation can explain the differences across states.

The variable of interest in the analysis is a dummy variable denoted 'Congressional experience'. This takes the value 1 if a state governor has previously served in either the House of Representative or the Senate prior to taking office as state governor, and 0 otherwise. These data are hand collected from the website of the NGA (see Figure A1 for an example of a governor's profile). There are 61 governors who are ex-members of Congress which equates to 318 state-year observations.[6] Figure 1 depicts the evolution of the number of governors with Congressional experience over time, with the mean number being 5.4 governors per year. The spatial distribution of the total number of observations of governors with Congressional experience is presented in Figure 2. There are a number of states that have not elected an experienced governor, for example Wisconsin and Utah, and two states that have over 20 years with an experienced governor, Connecticut and Louisiana.

[6] The names of these governors are listed in Table A1.

Figure 2

The number of governors who have previously served as a member of Congress by state from 1950-2008. [Colour figure can be viewed at wileyonlinelibrary.com]



I include a newly collected set of governor characteristics that are potentially correlated with Congressional experience and transfers. I control for the age of the governor and whether they are female to account for demographic differences. In addition, I control dichotomously for military service. In the US in particular, military service commands respect from politicians and therefore veterans may be duly rewarded in the transfer system. Alternatively, they may receive fewer transfers as they may be perceived to be better leaders. I include a measure of the number of years

of on-the-job experience as more experienced governors are more likely to receive more transfers. Gubernatorial election year dummies are included to account for increased lobbying effort in a governor's election year. I also include a dummy to represent whether they are a "lame duck" and would therefore be subject to fewer transfers. A lame duck is defined as whether or not the governor is in the last year of their binding term limit. In terms of checks and balances, I use a dummy for whether the two state legislative houses are controlled by different parties, which may mean the governor receives less transfers because they are politically restrained. I also account for whether the governor is politically aligned to the president as co-partisan governors may be likely to receive more federal funds.

At the state-level I control for incumbent president's two-party margin of victory from the last presidential election. This accounts for presidents rewarding states that provided them with more popular support. I include the previous year's per capita growth rate of: personal income, a state's total own tax revenue and population from the previous year as covariates to control for state economic performance and size.[7] The descriptive statistics are provided in Table A2.

II. Empirical strategy

The basic equation I estimate is as follows:

$$y_{st} = \beta_1 \text{'Congressional experience'}_{sgt} + \beta_2 X_{gt} + \beta_3 Z_{st} + \mu_s + \tau_t + \epsilon_{sgt} \quad (1)$$

where y_{st} the growth rate of real per capita transfers to state s at time t; 'Congressional experience'$_{gst}$ is the main explanatory variable that indicates whether governor g in state s at time t has previously served as a member of Congress; X_{gt} is a vector of governor characteristics; Z_{st} is a vector of state-level control variables; $\mu_s$and τ_t are state and year fixed effects, respectively; and ϵ_{sgt} is the error term. The state and year fixed effects are included to account for unobserved year-specific and state-specific shocks that could bias the estimate of β_1. The strategy is comparable to a difference-in-differences style equation and therefore relies on the assumption of common trends in treated and untreated states to establish a causal relationship. For the standard errors, I use two-way clustering at the state and year level (Cameron et al., 2011; Cameron and Miller, 2015). This is because the dependent variable is effectively a share of total transfers to all states, so correlation across states at each year will exist.[8]

V. RESULTS

I. Main results

Table 1 presents the main results. In column (1), I estimate the effect of Congressional political experience on transfers without additional observable controls. In columns (2) and (3), I include governor characteristics and then state controls as well, respectively. In column (4) I include a lagged dependent variable in levels as in growth equations. The coefficient of 'Congressional experience' is positive and significant at the 1 percent level of significance in all columns. This is interpreted as follows: when the governor has previously served as a member of Congress, this leads to a 0.8 percentage point increase in the growth rate of

[7] Changing whether these growth rates are at time t or $t-1$ does not affect the main result.
[8] When clustering at only the state level, the results remain the same, see Table A3.

Table 1

The effect of experience on transfers

	(1)	(2)	(3)	(4)
Congressional experience	0.008*** (0.001)	0.008*** (0.002)	0.008*** (0.001)	0.010*** (0.003)
Alignment		0.006* (0.003)	0.005* (0.003)	0.005 (0.003)
Age		0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Female		0.000 (0.010)	-0.000 (0.010)	-0.001 (0.009)
Years experience		0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Military experience		-0.003 (0.003)	-0.004* (0.003)	-0.003 (0.003)
Lame duck		-0.001 (0.009)	-0.001 (0.009)	-0.005 (0.009)
Split govt.		-0.000 (0.004)	-0.002 (0.004)	-0.002 (0.004)
Gubernatorial election		0.012** (0.006)	0.011** (0.006)	0.013** (0.006)
Δ ln income$_{t-1}$			-0.154** (0.066)	-0.152** (0.066)
Δ ln revenue$_{t-1}$			0.035 (0.030)	0.025 (0.028)
Δ ln population$_{t-1}$			-0.064 (0.332)	-0.245 (0.411)
Pres. victory margin			0.000 (0.000)	-0.000 (0.000)
Level dep. var.$_{t-1}$				-0.108*** (0.020)
Year FEs	✓	✓	✓	✓
State FEs	✓	✓	✓	✓
R-squared	0.353	0.356	0.355	0.395
Observations	2,784	2,784	2,736	2,736

Notes: The table shows OLS estimates where the dependent variable in all columns is the growth rate of real per capita federal-state transfers. All columns include state and year fixed effects. The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
*$p < 0.1$;
**$p < 0.05$;
***$p < 0.01$.

transfers per capita to their state, *ceteris paribus*. For a fictive mean state, the growth rate of transfers is 4.1 percentage points, so this effect is quite sizeable.

The coefficients on the other personal characteristics are small and generally insignificant, this indicates that these do not help a governor secure more federal funds. This is consistent with findings reported in the literature (Dreher et al., 2009; Ferreira and Gyourko, 2014; Moessinger, 2014). The exception here is 'Alignment' and 'Gubernatorial election', which are positive and significant.[9] The coefficient for 'Alignment' means that when governor and president are co-partisans the governor receives more federal money, in line with the findings of Larcinese et al. (2006). The 'Gubernatorial election' coefficient indicates that in years when the governor is up for election, they receive more funds as they exert more effort lobbying for more resources to aid their or their party's re-election chances.[10]

[9] I have also experimented with interaction terms with these two variables and Congressional experience, although no significant effect is found.

[10] I have also controlled for governors behaviour in the year prior to elections, see Table A5. The pre-gubernatorial election variable appears statistically insignificant, implying that governors only exert more effort to capture federal outlays in their election years.

With a dichotomous variable of interest, I can easily evaluate the common trend assumption that is necessary for a causal interpretation of the effect. Despite using a comprehensive set of controls, state and year fixed effects, there still may exist some bias. I can test this assumption by examining whether pre-treatment or post-treatment trends exist for treated and untreated states that would indicate non-random selection. Given that political experience should only affect transfers when the governor has served in Congress only, significant lead-variables would cast doubts on the interpretation of the results thus far. Significant lag-variables are not necessarily a violation of the assumption as transfers may be contract based and take time to reverse.

To test this assumption I follow Gehring and Schneider (2018). I create two lead variables, taking the value 1 only in the year $(t-1)$ and two years $(t-2)$ before the treatment takes place, and 0 otherwise. I code four lag variables taking the value 1 for the year after the treatment has been switched off in $(t+1)$ and up to four years later $(t+4)$, and 0 otherwise. That is, the indicator at time t takes the value 1 for all years when the governor is in office as in the main analysis. The estimated specification remains the same as that in Table 1 column (3), which includes all controls, state and year fixed effects.[11] Table 2 depicts the results including different leads and lags.

In column (1), both the lead variables are insignificant, whereas the coefficient of interest re- mains statistically significant at the 1 percent level. Column (2) replaces leads for lags. Here all the lagged terms are insignificant and 'Congressional experience' remains significant at the 1 percent level. Finally, column (3) includes both leads and lags. The coefficient for 'Congressional experience' becomes 0.007, again significant at the 1 percent level. All leads and lags are insignificant, giving no indication of any pre- or post-treatment trends, whilst 'Congressional experience' remains significant throughout. This is critical for a causal interpretation of the identified relationship. The coefficients for the leads and lags for 'Congressional experience' are illustrated graphically in Figure 3.

VI. POTENTIAL CHANNELS

To uncover one of the potential channels, I focus on the grants system as a type of federal expenditure. The previous literature has shown this type of federal expenditure to be very susceptible to political manipulation (Berry et al., 2010; Kriner and Reeves, 2012; Albouy, 2013). If this type of funding is known to be susceptible to political influence, it is plausible that more experienced governors will target them. There are, however, quite possibly other channels that this

[11] The estimating equation is: $y_{st} = \alpha\text{'}Congressional\ experience\text{'}_{sgt} + \sum_{\gamma=-2}^{4}\left(\alpha_{t+\gamma}\text{'}Congressional\ experience\text{'}_{sgt+\gamma}\right) + \beta_1 X_{gt} + \beta_2 Z_{st} + \mu_s + \tau_t + \epsilon_{sgt}$

Table 2

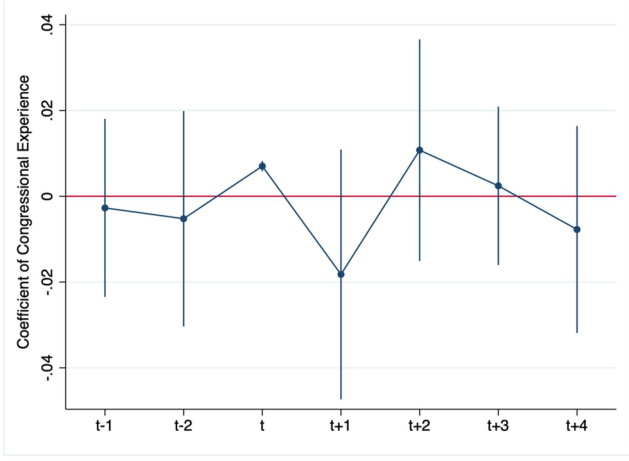
Common trends

	(1)	(2)	(3)
Congressional experience (t-2)	-0.002 (0.011)		-0.003 (0.011)
Congressional experience (t-1)	-0.005 (0.013)		-0.005 (0.013)
Congressional experience	0.008*** (0.001)	0.008*** (0.003)	0.007*** (0.001)
Congressional experience (t+1)		-0.007 (0.014)	-0.018 (0.015)
Congressional experience (t+2)		0.005 (0.014)	0.011 (0.013)
Congressional experience (t+3)		0.006 (0.009)	0.002 (0.009)
Congressional experience (t+4)		-0.007 (0.012)	-0.008 (0.012)
All controls	✓	✓	✓
Year FEs	✓	✓	✓
State FEs	✓	✓	✓
R-squared	0.355	0.402	0.356
Observations	2,736	2,736	2,736

Notes: The table shows OLS estimates where the dependent variable in all columns is the growth rate of real per capita federal-state transfers. 'All controls' correspond to the specification in Table 1 column (3). The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
*$p < 0.1$;
**$p < 0.05$;
***$p < 0.01$.

Figure 3

Leads and lags in 'Congressional experience'. *Notes:* Regression coefficients and confidence intervals are based on Table 2 column (3). [Colour figure can be viewed at wileyonlinelibrary.com]



Congressional experience effect can operate through, for instance, federal aid. The disaggregated grant data are from the Consolidated Federal Funds Report and cover the period 1983 to 2004 for all 48 contiguous states. I focus on the total

grants and a breakdown of the total grouped by the department that handles them. These are: the Department of Transportation covers, for example, highway planning and construction, airport improvement program, urban mass transportation capital improvement grants. The Department of Education covers educationally deprived children-local educational agencies and handicapped-state grants. The Department of Housing and Urban Development covers lower income housing assistance-section VII. The Department of Health and Human Service covers, Medicaid, children's health insurance program social services block grants, foster care title IV-E and head start. Grants for remaining departments are in the "Other" category, for example, Agriculture.

Table 3 presents the estimates using the state level grants. In column (1), there is a positive and statistically significant effect of Congressional experience on total federal grants. The estimate reveals that when the governor is one with Congressional experience, they increase the growth rate of federal grants a state receives by 1.4 percentage points. This is reassuring for the main results as this shows evidence that one specific type of federal expenditure is subject to political manipulation, and is in line with the previous literature (Albouy, 2013). When the grants are disaggregated by department, there appears to be some taste effects as the experienced governors seemingly prefer to capture more Health and Human Services grants.

VII. ROBUSTNESS CHECKS

This section sets out to address how robust the relationship is. First, I address some possible selection concerns. Secondly, I perform a placebo exercise and use an alternate dependent variable. I then explore how sensitive the result is to excluding certain years and states. Finally, I split 'Congressional experience' into two variables based on the two-party system.

I. Selection concerns

One possible concern is the selection of leaders. If certain circumstances, such as an economic or political crisis, affect both the probability of electing a governor with Congressional experience and transfers, then there is an endogeneity issue. To allay this concern, I repeat the diagnostics in Dreher et al. (2009). Results are presented in Table 4 Panel A. To be precise, I examine the probability of electing a governor with Congressional experience. It appears that the selection of experienced governors is idiosyncratic, the exception being the growth rate of personal income which is controlled for in the analysis.

As there appears to be little problem with selection on observables, I now consider the extent to which there may be a bias from selection on unobservables. To do so, I follow the methods in Altonji et al. (2005). Under the assumption that

Table 3

The effect of experience on grants

	Total	Education	Housing & Urban Development	Health & Human Services	Defense	Transportation	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Congressional experience	0.014** (0.006)	-0.008 (0.011)	-0.009 (0.016)	0.024** (0.010)	-0.121 (0.126)	-0.008 (0.014)	0.009 (0.023)
All controls	✔	✔	✔	✔	✔	✔	✔
Year FEs	✔	✔	✔	✔	✔	✔	✔
State FEs	✔	✔	✔	✔	✔	✔	✔
R-squared	0.510	0.620	0.868	0.459	0.499	0.433	0.711
Observations	1,008	1,008	1,008	1,008	1,004	1,008	1,008

Notes: The table shows OLS estimates where the dependent variable is the growth rate of real per capita grants of the category listed in the column header. 'All controls' correspond to the specification in Table 1 column (4). The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
*$p < 0.1$;
**$p < 0.05$;
***$p < 0.01$.

Table 4

Selection of leaders

	(1)	(2)	(3)	(4)
Panel A				
Δ ln income$_{t-1}$	-5.817** (2.275)	5.795** (2.251)	-5.826** (2.303)	5.822** (2.299)
Δ ln revenue$_{t-1}$	0.399 (0.461)	0.445 (0.480)	0.403 (0.457)	0.438 (0.461)
Δ ln population$_{t-1}$	0.227 (6.826)	0.882 (7.064)	0.474 (6.938)	0.646 (6.969)
Pres. victory margin	0.003 (0.004)	0.002 (0.005)	0.003 (0.005)	0.002 (0.005)
Alignment	0.100 (0.194)			0.038 (0.199)
Dem. Gov.		-0.198 (0.303)		-0.194 (0.309)
			-0.094 (0.350)	-0.050 (0.331)
Governor-house aligned			0.125 (0.402)	0.127 (0.407)
Constant	-2.032*** (0.243)	1.885*** (0.263)	-2.004*** (0.284)	1.946*** (0.355)
Observations	2,736	2,736	2,736	2,736
Panel B				
	$\beta_{limited}$	β_{full}	SR	
	0.00839** (0.00342)	0.00825** (0.00328)	55.95	

Notes: Panel A shows pooled logit estimates are conducted with standard errors clustered at the state level. The dependent variable is *Congressional experience*. Panel B shows selection ratios from Altonji et al. (2005). $\beta_{limited}$ is obtained from an OLS regression) with state and year fixed effects only, β_{full} is obtained from an OLS regression with state and year fixed effects, as well as all observable characteristics. Robust standard errors are reported in parentheses;
*$p < 0.1$
**$p < 0.05$
***$p < 0.01$.

selection on observables is equal to the selection on unobservables, this method produces the ratio of selection on unobservables to observables that would be required to explain away the 'Congressional experience' effect.

To implement this, I estimate regressions using two sets of covariates. In the first regression, I include only the treatment indicator and state and year fixed effects. In the second, I use the full set of covariates along with the fixed effects. The estimated coefficient on the treatment indicator

from the two regressions are $\widehat{\beta}_{limited}$ and $\widehat{\beta}_{full}$. Using these coefficients, I compute the selection ratio (SR) by $\frac{\widehat{\beta}_{full}}{\widehat{\beta}_{limited} - \widehat{\beta}_{full}}$.

The results are presented in Table 4 Panel B. The ratio implies that selection on unobservables needs to be 56 times as strong as the selection on observables to fully explain away the relationship between experience and transfers, this is implausibly high.

II. Placebo test and alternate dependent variables

To support that the statistical inference of the Congressional experience effect is not a result of a systematic error, I implement a randomization test. This is

particularly useful when the number of treated observations could be considered small. There are 319 treated observations, which constitutes about 11 percent of the total sample. The goal is to randomly assign treatment to control units, whilst removing the treated ones. No significant effect increases the confidence that 'Congressional experience' is correctly identified in actual treated units.

The results are presented in Table 5. Column (1) assigns treatment status to about 11 percent of the sample, column (2) 15 percent and column (3) 20 percent. As expected the coefficients are not significantly different from 0. This furthers the confidence that the experience effect has been correctly identified.

To demonstrate the robustness of this result I construct an alternate dependent variable. I use the percentage point change in a state's federal transfers as share of total federal transfer outlays. I repeat the analysis in Table 1 using the change in the state's share as the dependent variable. The results are presented in Table A4. As before, the coefficient for 'Congressional experience' is positive and significant at the 1 percent level in all columns.

III. Close elections

In an ideal scenario, I would exploit the closeness of the gubernatorial election results in a regression discontinuity framework. This would follow the approach set out by Brollo and Troiano (2016) who investigate what happens when a female wins a close election. This approach requires the researchers to observe that the losing candidate is a male. In this case, I would need to observe whether the losing candidate has, or does not have, Congressional experience, which is

Table 5

Random assignment of treatment status

	11%	15%	20%
	(1)	(2)	(3)
Congressional experience [random]	0.005 (0.006)	-0.004 (0.005)	0.004 (0.003)
All controls	✔	✔	✔
Year FEs	✔	✔	✔
State FEs	✔	✔	✔
R-squared	0.350	0.350	0.350
Observations	2,425	2,425	2,425

Notes: The table shows OLS estimates where the dependent variable in all columns is the growth rate of real per capita federal-state transfers. 'All controls' correspond to the specification in Table 1 column (3). Treatment assignment is assigned using the randtreat command in Stata. In columns (1), (2) and (3) treatment is assigned to 11%, 15% and 20% of the sample, respectively. The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
$^{*}p < 0.1$;
$^{**}p < 0.05$;
$^{***}p < 0.01$.

Table 6

Close elections

	(1)	(2)	(3)
	1.5%	2%	2.5%
Congressional experience	0.102** (0.049)	0.105** (0.050)	0.096* (0.050)
All controls	✓	✓	✓
Year FEs	✓	✓	✓
State FEs	✓	✓	✓
R-squared	0.564	0.509	0.429
Observations	118	136	164

Notes: The table shows OLS estimates where the dependent variable in all columns is the growth rate of real per capita federal-state transfers. 'All controls' correspond to the specification in Table 1 column (3). The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
*$p < 0.1$;
**$p < 0.05$;
***$p < 0.01$.

unfortunately not available. However, to defensibly ensure some randomness in the assignment of Congressional experience, I repeat the analysis in a sub-sample of observations where governors were elected in a close election. This approach explores the effect of Congressional experience in a governor when it is randomly assigned at the margin of a close election victory to those governors without experience who also won a close election.

Table 6 presents the results. Columns (1) shows the results in a sample where governors where elected by less than a 1.5% margin of victory. Again, I find a positive and statistically significant relationship. When one considers slightly wider election results in the proceeding columns, 2% and 2.5%, the coefficient remains positive and significant. This is reassuring for the main result as I find the same result for experienced politicians who were randomly assigned governorships via a close election.

IV. Partisan split

As I am using data from the US, I can exploit the two-party system that dominates US politics. This will allow one to see if one party is driving the results. I split the 'Congressional experience' variable into two new variables, to identify whether the governor is a Democrat or Republican and has served as member of Congress. These are denoted 'Dem. Congressional experience' and 'Rep. Congressional experience'. Experience is about evenly distributed between the two parties. There are 159 state-year observations of Democratic governors who have served in Congress, and 155 observations of Republican governors.[12] I repeat the analysis in Table 1 but instead include the two new explanatory variables.

[12] The remaining 4 observations are an independent governor.

Table 7

Democrats versus Republicans

	(1)	(2)	(3)	(4)
Dem. Congressional experience	0.007 (0.004)	0.008* (0.004)	0.008* (0.004)	0.005 (0.005)
Rep. Congressional experience	0.011*** (0.003)	0.009*** (0.002)	0.009*** (0.002)	0.016*** (0.005)
Year FEs	✓	✓	✓	✓
State FEs	✓	✓	✓	✓
Governor controls		✓	✓	✓
State controls			✓	✓
Lagged level dep. var.				✓
R-squared	0.353	0.355	0.355	0.402
p-value: $\beta_{Dem.} = \beta_{Rep.}$	0.535	0.867	0.867	0.118
Observations	2,784	2,736	2,736	2,736

Notes: The table shows OLS estimates where the dependent variable in all columns is the growth rate of real per capita federal-state transfers. The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
*$p < 0.1$;
**$p < 0.05$;
***$p < 0.01$.

The results are presented in Table 7. Generally, it appears that the results are driven by the Republican governors. The coefficient shows that experienced Republican governors increase the transfers to their state by about 0.9 percentage points, holding all else constant. The coefficient for experienced Democratic governors is positive but only weakly significant. A test of coefficient equality confirms that they are significantly different from each other. This is surprising and contrary to what one may expect, given that state governments with more right-wing legislators prefer smaller state governments (Pickering and Rockey, 2013). One plausible explanation for this effect is as follows. As Republican governors are ideologically constrained in increasing their state's expenditure, they will therefore seek out more federal transfers as a less visible alternative using their superior political skill. Arguably, the Democratic governors do not need to lobby to the same extent and exert extra effort to capture more federal funds as they are less constrained in increasing their state's expenditures.

V. Sensitivity checks

In order to show that the relationship between experience and transfers is not sensitive to outliers in the data, I perform a number of additional checks.[13] A concern may be that the result is driven by states who are more likely to elect an

[13] In the Table A5 I include a number of other potentially relevant covariates. The result remains qualitatively the same. I also repeat the common trends check with a lagged dependent variable, see Figure A2, the result remains unaffected.

Table 8

Sensitivity checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Congressional experience	0.010*** (0.004)	0.007** (0.003)	0.009*** (0.001)	0.008*** (0.002)	0.016* (0.009)	0.007*** (0.000)	0.007*** (0.001)	0.007*** (0.002)
All controls	✓	✓	✓	✓	✓	✓	✓	✓
Year FEs	✓	✓	✓	✓	✓	✓	✓	✓
State FE	✓	✓	✓	✓	✓	✓	✓	✓
Exclusion	–	States	Years	Years	Regions	Regions	Winsor [1,99]	Winsor [5,95]
Treated Obs.	311	217	254	305	82	228	310	310
R-squared	0.428	0.364	0.343	0.392	0.359	0.394	0.363	0.358
Observations	2,736	2,451	2,448	2,400	1,311	1,425	2,736	2,736

Notes: The table shows OLS estimates where the dependent variable in all columns is the growth rate of real per capita federal-state transfers. 'All controls' correspond to the specification in Table 1 column (3). Column (1) includes a lagged dependent variable in first difference as well as one in levels. Columns (2) removes states that have governors with Congressional experience for more than 15 years. Column (3) removes years when there are more than 9 governors in the US with Congressional experience, the 90th percentile. Column (4) removes years when there are less than 1 governor in the US with Congressional experience, the 10th percentile. Column (5) use only states in the West and Midwest region, while column (6) uses only states in the South and North East region. The standard errors are multiway-clustered to allow for arbitrary correlation at the state and year level and are reported in parentheses;
$^{*}p < 0.1$;
$^{**}p < 0.05$;
$^{***}p < 0.01$.

experienced governor or periods of time when there are more governors with experience in the US. Also, I explore how the results are affected by outliers in the dependent variable. I repeat the preferred specification (Table 1 column (3)) and make exclusions based on either states or years.

The results are shown in Table 8. In column (1) include a lagged dependent variable as well as a lagged dependent variable in levels. In column (2) I exclude states that provide governors with experience more than 15 times in the 59 years they are observed. This is keeping the bottom 90th percentile. The coefficient falls to 0.006 but remains statistically significant. In column (3) and

(4) I exclude high and low periods of governors with experience. Specifically, I drop years when there are more than 9 governors with political experience in column (3), this is the dropping the top 10th percentile. In column (4) I drop the bottom 10th percentile, that is, dropping years when there are no governors with experience. The coefficient remains stable at 0.008 and significant at the 1 percent level. The proceeding two columns exclude states based on which region they are in, here I split the US into two parts. Column (5) includes states in the West and Midwest regions, whilst column (6) includes only states in the South and North East. A stronger significant effect is found in the latter, although this possibly because there are much fewer treated observations in the states located in West and Midwest. Column (7) and (8) winsorize the dependent variable. This is a process that replaces extreme values in the tails of the distribution with values further down the ranks. Column (7) replaces values below (above) the 1st (99th) percentile with the 1st (99th) percentile value. Column (8) repeats this exercise with the 5th and 95th percentile. The coefficient of experience falls to 0.007 but remains statistically significant at the 1 percent level.

VIII. CONCLUSIONS

This paper has examined whether and to what extent do career politicians differ in their behaviour from non-experienced ones. Specifically using evidence from Congressional experience in US governors and assessing the extent to which this affects the amount of intergovernmental revenue their state receives from the federal government. The role of political experience has been examined in the previous literature with no clear consensus reached, whilst the political influences on sub-national transfers received little attention. Considering this gap in the literature, this is an important topic of research. This paper has gone beyond the previous literature which has focused only on a general career in politics or the number of years of on-the-job experience. Specifically, this paper is the first to explore a specific type of political experience and what effect this can have on future political economy outcomes. The specific experience refers to having served in the House of Representatives or the Senate. I hypothesized that governors who have Congressional experience should have more political capital and therefore be

better at lobbying the president for federal transfers to their state. To test that hypothesis, I use data on federal outlays to states over the period 1950-2008.

Findings show that a governor who has previously been a member of Congress increases the intergovernmental revenue to their state by 0.8 percentage points. I also show evidence for one channel that this can occur through, the federal grant system, which the previous literature has shown to be subject to political manipulation. The finding remains robust to a number of different regression specifications. Moreover, there appears no reason not to label this effect as a causal one. I find no significant effect for being a female governor or having more years of experience on-the-job. There is a weak negative relationship between a governor who served in the military and the transfers they receive. In a gubernatorial election year, governors exert more effort and thus receive more funds. I find that it is the experienced Republican governors who are driving this relationship as they seek federal money as an alternate to increasing the size of their state government.

The findings contribute to the expanding literature that shows that political leaders can have a significant influence of economic outcomes. The findings here should not necessarily be used to dismiss the benefits of having a more experienced governor. A career background in politics is very likely beneficial to one's current human capital, political skill and, in turn, state outcomes. Instead, the impact of this research should be to raise awareness about the shortcomings of a political structure that allows, and encourages, lobbying from external recipients. This paper presents a number of openings for future research in this literature. One avenue may be to delve deeper into the governor's backgrounds to explore other political jobs that increase their political capital. It would also be interesting to investigate whether ex-members of Congress have different spending or taxation priorities. Perhaps they are more likely to increase state expenditure if they know they can negotiate for more federal funds.

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SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article at the publisher's website:

Figure A1: Example profile of a governor on the NGA webpage.
Table A1: List of governors with Congressional experience
Table A2: Summary statistics
Table A3: The effect of experience on transfers: alternate clustering
Table A4: The effect of experience on transfers: alternate dependent variable
Table A5: Robustness: extra control variables
Figure A2: Leads and lags in 'Congressional experience'.

SUMMARY

This paper exploits the presence of Congressional experience in US governors that permits the identification of the relationship between political career experience and intergovernmental transfers. I assemble a novel dataset of governors' political background and match this to federal transfer data from 1950 to 2008. Governors with Congressional experience have 0.8 percentage points more transfers to their state. I show evidence for one potential channel that this may act through, the federal grants system. The findings are robust to outliers in the data, selection effects, close elections and an alternative dependent variable based on a state's share of total federal transfers

