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How bureaucratic leadership shapes policy outcomes: partisan politics and affluent citizens' incomes in the American states*

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Abstract

We maintain that political institutions' policy objectives are best met under conditions when they are unified, and also when their administrative leadership is effective. We apply this argument to the understanding of how unified Democratic and Republican governments in the American states have influenced the incomes of affluent citizens. We find that affluent income gains occur under unified Republican state governments when compensation to executive agency heads is sufficiently high. These income gains are notable relative to both divided and unified partisan control of state governments. The evidence highlights the asymmetric role that bureaucratic leadership plays in attaining policy outcomes consistent with political institutions' policy preferences, while underscoring the limits of electoral institutions to shape policy outcomes of their own accord. Efforts to lower the capacity of the administrative leadership constrain unified political institutions from converting their policy objectives into policy outcomes.

Keywords American states; bureaucratic leadership; income distribution; partisan control of government; policy outcomes; separation of powers arrangements

Francis Fukuyama (2013, 350) notes that governance quality reflects the extent to which administrative actors can execute the policy goals of their political principals. Bureaucratic capacity, which can be thought of as the bureaucracy's ability to accomplish intended actions (Huber and McCarty 2004, 481), serves as a critical ingredient for understanding why public agencies become less effective at facilitating the conversion of politicians' policy objectives into policy outcomes

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(Krause and Woods 2014). Yet, little is known regarding how bureaucratic capacity affects the conversion of politicians' policy objectives into policy outcomes. Addressing this issue can offer insight into how institutional arrangements translate government policies into policy outcomes consistent with the aims of political institutions.

It is firmly accepted that executive agency heads in the American states play a vital role in shaping public policies (e.g. Schneider et al. 1997; Bowling and Wright 1998, 431; Brudney and Wright 2010; Boushey and McGrath 2017). In this study, we argue that when agency heads are not highly capable, political institutions find it difficult to coordinate their policy intentions through layers of the administrative state and, thus, considerable slippage may exist between politicians' policy objectives and actual policy outcomes. Highly capable bureaucratic leaders thus represent a necessary, albeit not sufficient, condition that offers politicians their best hope of attaining their policy goals.

Specifically, we argue that highly capable bureaucratic leaders (termed henceforth as *bureaucratic leadership capacity*) are well positioned to convert politicians' policy objectives into policy outcomes in the presence of unified partisan political institutions since public agencies obtain greater delegated authority (e.g. Epstein and O'Halloran 1999), and also obtain coherent direction for the purpose of achieving their common policy goals (e.g. Hammond and Knott 1996; Miller and Whitford 2016, 167). Administrative institutions led by capable agency heads can attain policy outcomes that more closely reflect the wishes of unified partisan governments since they will be *both* empowered and capable of successfully exercising delegated authority for achieving the policy goals of political institutions.

To test this thesis, we analyse a policy outcome generally understood that politicians have clear policy differences among partisan lines, but the evidence is mixed with respect to observable policy outcomes – income variations among affluent citizens. It is generally believed that left-wing (Democratic) parties are pro-labour income and thus prefer outcomes limiting the incomes of the most affluent, while right-wing parties (Republicans) are pro-capital income and instead prefer outcomes that do not restrict the incomes of the most affluent. Yet, the evidence that particular parties actually shape the incomes of the most affluent American citizens is decidedly mixed (Bartels 2008; Kelly and Witko 2012) and around the world (Scheve and Stasavage 2009). Focussing on affluent citizens is important for representation purposes since this subset of the mass public obtains policy outcomes much closer to their policy preferences than for both moderate and low-income citizens in the United States (US) (Gilens 2012).

The data employed to test this thesis are aggregate household income panel data for citizens residing in the top 10% of the income distribution for 49 American states during the 1986–2008 period.¹ This is both the segment of the population and historical period where income inequality has surged most during the postwar era in the US (e.g. Piketty and Saez 2003; Sommeiller and Price 2014), as well as around the world (e.g. Piketty and Saez 2006; Leigh 2007; Atkinson and Piketty 2010). The American states offer a suitable empirical setting to analyse the importance of bureaucratic leadership capacity on policy outcomes given long-standing efforts at federal policy-making devolution (Conlan 1998), heightened interstate policy competition (Eisinger 1988; Dye 1990) and fiscal decentralisation (Mikesell 2007; US Government Accountability Office 2010, 28–30).

¹We exclude Nebraska since it possesses a unicameral, nonpartisan legislature.

State governments also confront strong incentives for acquiring greater administrative expertise in response to eroding legislative professionalism (Boushey and McGrath 2017), coupled with fiscal constraints that place greater pressure on state government agencies to both provide and administer public policies (Stark 2010, 961–962). Accordingly, constitutional law scholar Miriam Seifter (2018, 111–112, 128–134) contends that state executive agencies are the dominant force for enacting policy in modern American governance. The market for capable agency heads has become increasingly competitive, and, thus states must offer competitive salaries (Boushey and McGrath 2017).

Our statistical evidence reveals that lower levels of state executive agency head compensation under unified partisan government are associated with income variations for affluent citizens that run directly counter to each party's preferred policy outcomes. Higher levels of average state executive agency head compensation, however, uncover an asymmetric partisan outcome effect. Unified Republican state governments are associated with income surges for affluent citizens above and beyond a divided partisan government control baseline. Unified Democratic state governments obtain their preferred outcome of declining incomes for affluent citizens as state executive agency head compensation rises but this pattern is restricted only at lower levels of compensation. The normative takeaway from this study is that efforts at dismantling the administrative state by lowering bureaucratic capacity at the top levels of public agencies undermines political institutions' efforts at furthering their own policy objectives. These consequences are ironically most severe when political institutions are best positioned to convert majoritarian preferences into policy outcomes.

Converting partisan policy objectives into outcomes: the role of bureaucratic leadership

Agency leaders operate on a fulcrum between politics and administration. Thus, the capacity of politicians to realise their policy objectives heavily depends upon the capacity (competence) of their bureaucratic leaders. Because low capacity agency heads can neither successfully cultivate nor utilise any policy-making authority that politicians delegate to them (Huber and McCarty 2004; Krause and Woods 2014), they confront a chasm between politicians' policy objectives and just how to administer these policies for the purpose of attaining these preferred policy outcomes. *Ceteris paribus*, as the capacity of bureaucratic leaders rises, they acquire greater authority from politicians since they are viewed as being both more capable and willing to exercise policy-making authority to serve the policy interests of political principals.

Executive agency heads in the American states are strongly engaged in policy-making with political institutions and external interests, as well as leading their respective agencies in policy implementation.² State agency heads are capable of playing a critical policy-making role that can shape economic outcomes in three complementary ways: (1) policymaking, (2) resource allocation and

²Survey evidence consistently shows that these policy actors spend approximately half of their work effort on political and policy activities external to the agency, while the remaining half is spent on internal management and policy guidance within the agency (e.g. Bowling and Wright 1998, 435; Brudney and Wright 2010; see also, Abney and Lauth 1986).

(3) rulemaking. First, agency heads provide policy expertise when it comes to policy formulation. Survey evidence from the longstanding American State Administrators Project (ASAP) taken during the 1980s, 1990s and 2000s finds that agency heads are consistently ranked the most critical actor for making major policy decisions, ahead of both governors and legislatures (Brudney and Wright 2010, 29–30). ASAP survey evidence suggests that 50% of the legislation introduced by state governments originates in state agencies, compared to 33% and 10% originating, respectively, in the legislature and the governor's office (Bowling and Wright 1998, 436). This pattern coincides with increased lobbying of state agencies conducted by private sector interests (Lowery and Gray 2001; Seifter 2018, 134–140).

Second, state agency heads play a key role in resource allocation decisions (Bowling and Wright 1998; Brudney and Wright 2010). The allocation of these resources can affect the most affluent incomes as state agency heads play a critical role in determining which clientele groups obtain benefits from the those that do not. One mechanism for channelling these resources for the purpose of delivering policy benefits to core constituent groups occurs when state agencies contract out services to third-parties for the provision of state government goods and services (Brudney et al. 2005; Kelleher and Yackee 2009). Approximately 75% of state agencies engage in contracting decisions as a tool of governance (Salamon 2002; Brudney et al. 2005). Contractor recipients represent organised interests that range across key sectors such as local governments, banks, insurance companies, businesses and nonprofit organisations, but to name a handful (Salamon 2002; Kelleher and Yackee 2009).

In addition, state agencies are also responsible for both the distribution and management of large sums of federal aid revenues that affords agency heads considerable policy-making discretion (Brudney and Wright 2010, 32–33; see also, Cho and Wright 2007). State agencies can also exert influence over income distribution through conferring policy-making benefits to targeted constituent groups through tax expenditures. Langer (2001), for example, shows that state-level demand-side economic policies promoting research and development, technological advances and trade exports produce a more equitable distribution of income in the American states than supply-side policies entailing tax abatements and capital subsidies. These programmes are largely governed by state executive agencies and often fall under the radar of scrutiny from the media and other civil-society oversight institutions, they are uniquely situated to serve their governors and participate in the enactment of these policies (Seifter 2018). In Texas, for instance, the Texas Enterprise Fund which was created in September 2003 to award tax breaks and other financial incentives to large corporations having operations within the state. During the subsequent years, the Republican controlled state government had state agency heads with relatively high levels of compensation administering policy on their behalf. For example, in 2004–2005 the Texas Enterprise Foundation issued grants ranging from \$5 million dollars to \$38 million dollars to major corporations with highly compensated upper-level executive teams such as Citgo Petroleum Corporation, Triumph Aerostructures, LLC, JP Morgan Chase Bank and Co, Bank of America, Home Depot and Tyson Fresh Meats (Texas State Auditor's Office (John Keel, CPA, State Auditor) 2014, 66–90). This example illustrates how state governments can facilitate greater wealth for their affluent citizens.

Finally, state agencies can easily rewrite and rescind rules because the press and other nongovernmental institutions do not carefully monitor them (Seifter 2018). Because both proposed and enacted agency rule-making activity is positively associated with state agency head capacity (Boushey and McGrath 2017, 97–99), greater bureaucratic leadership capacity corresponds to greater activist policy-making by administrative agencies.

We maintain that state governments offer competitive compensation to state executive agency in order to attract talent. Boushey and McGrath (2017, 91–92) note that compensation yields and, hence, without adequate compensation it will be more difficult to recruit *able*, quality personnel who are willing to remain in an agency and cultivate expertise (Gailmard and Patty 2013), while refraining from more lucrative career options (Teodoro 2011). The importance of attracting and retaining a professionalised, skilled public sector workforce is embodied in the charters of state political compensation commissions (Boushey and McGrath 2017, 90). This is an especially critical issue considering the rapid growth of state agencies in recent decades (Moncrief and Squire 2013), coupled with greater centralisation efforts undertaken by governors for harnessing the power of state administration (Seifter 2017).

The importance of the relationship between compensation and robust administrative capacity in state government is a long-standing concern voiced by professional associations representing state administrators focussing on the recruitment and retention of skilled individuals (National Association of State Personnel Executives 2013, 2016). This problem has been exacerbated through time for state executive agency heads since they have the highest turnover, as well as the most attractive outside market opportunities (Bowling and Wright 1998, 439; Brudney and Wright 2010). In response to these pressures, Boushey and McGrath (2017, 90–91) chronicle the surge in state executive agency heads' compensation levels in recent decades.

State executive agency compensation levels serve as a proxy measure for bureaucratic leadership capacity. In turn, this capacity is critical for shaping policy outcomes when a single party controls both the chief executive and legislative branches since administrative agencies obtain greater policy-making authority (e.g. Epstein and O'Halloran 1999; Volden 2002). Conversely, bureaucratic leadership capacity will be less consequential for facilitating political principals' policy goals during times of divided party government since not only will these institutions offer less coherent guidance to public agencies (Hammond and Knott 1996; Miller and Whitford 2016, 167) but also can effectively check one another's power through a variety of mechanisms ranging from appointments to lawmaking to oversight (e.g. Persson et al. 1997; Acemoglu et al. 2013).

In short, political institutions have the best chance of enacting their most preferred policies when a single party controls state government, conditional on having highly capable bureaucratic agency heads to enact their policy goals. Next, we apply this logic to understanding how alternative political-bureaucratic arrangements across the American states shape the incomes of the most affluent citizens. We begin with a discussion centred on the mixed evidence obtained from analysing partisan income differences at the subnational, national and cross-national levels. We posit that bureaucratic leadership capacity provides a mechanism to understand the precise conditions that enable political parties to attain their preferred policy outcomes over incomes among affluent citizens.

Partisan politics of income distribution: a view from the American states

The tide of rising income inequality observed in recent decades, both in the US and developed democracies around the world, is attributed to the sharp income gains for the most affluent citizens (e.g. Piketty and Saez 2003, 2006; Leigh 2007; Scheve and Stasavage 2009; Atkinson and Piketty 2010). In the US, for example, unified partisan control of government by Democrats should empower them to better protect their core constituents comprised of the working class, unions, and robust product and financial market regulations, while Republicans advocate for market deregulation and owners of capital at the expense of labour (e.g. Brady and Leicht 2008, 80–82; see also, Gelman et al. 2010, 1203).

These differences in partisan policy preferences lie with a starkly opposed understanding of the relationship between inequality and economic growth. A leading liberal economist, Nobel Laureate Joseph Stiglitz, asserts that “Increasing Inequality means a weaker economy, which means increasing inequality, which means a weaker economy” (Lowery 2012, B1). Conversely, conservative economists such as the Heritage Foundation’s Rea S. Hederman are of the view that “the problem is that the policies that encourage growth also encourage inequality” (Lowery 2012, B1). Partisan differences should be reflected in the distribution of income – most notably, the income of affluent citizens. Partisan differences should be greatest at either end of the income distribution since both parties must compete for the median voter (Meltzer and Richard 1981). Converting partisan policy preferences into actual state policies thus requires sufficient institutional control by a single political party (Barrilleaux et al. 2002).

The statistical evidence, however, is decidedly mixed for whether differences arising from partisan policy preferences are observed in policy outcomes. In the US, partisan control of the executive branch, at the federal or state levels, is associated with reductions or gains in income inequality (e.g. Bartels 2008; Kelly and Witko 2012), while others contend that the partisan control of legislative institutions is influential for altering the share of income going to the top 1% of the income distribution (Volscho and Kelly 2012). Moreover, at the cross-national level, partisan control of the executive branch has a negligible impact on rising incomes for affluent citizens based on cross-national data (Scheve and Stasavage 2009).

Past studies, however, fail to consider the role that bureaucratic leadership capacity plays in facilitating the policy objectives of partisan politicians, as well as the conditions that determine the exercise of administrative expertise. To be more precise, we maintain that the capacity of bureaucratic leaders enables unified partisan majorities to enact their preferred policy outcomes. When a single party controls political institutions, administrative institutions obtain greater authority from political principals and they are also more politically constrained when exercising policy-making authority under these conditions. Applied to the case of affluent citizens’ incomes in the American states, the extent to which partisan-based income differences occur among affluent citizens will be contingent on bureaucratic leadership capacity under unified party government. This logic yields the following testable hypotheses:

- H1:** Incomes for affluent citizens will be rising (falling) in the presence of unified Republican (Democratic) partisan control of state political institutions as bureaucratic leadership capacity increases.

The empirical implications associated with Hypothesis 1 predict that incomes for affluent citizens will be positively associated with bureaucratic leadership capacity under unified Republican partisan control of state political institutions, while inversely associated with bureaucratic leadership capacity under unified Democratic partisan control of state political institutions. This logic presumes that political institutions can leverage state agencies to advocate partisan policy platforms on their behalf as maintained by Seifter (2017, 486, 536), and that the effectiveness of such efforts is contingent upon the capacity of bureaucratic leaders.

Research design, data and econometric methods

These hypotheses are tested using panel data on the average state-level real adjusted real gross income (ARGI) reported on US Internal Revenue Service (IRS) tax returns within a given income fractile group among the top decile of the income distribution covering 1986–2008 (Sommeiller and Price 2014).³ These data best capture the underlying source of economic inequality in the US and around the world – affluent citizens in the top decile of the income distribution.⁴ These measures constitute the prefiscal redistribution market income since personal current transfer receipts are excluded, capital income is included and modest upward adjustments are made for income deductions relating to various personal individual contributions to pensions and retirement plans, health saving accounts, plus moving expenses (Sommeiller and Price 2014, 21–22).⁵ Further, the ARGI-IRS type measure adopted here is preferable to *Current Population Survey (CPS)* which underestimates incomes in the top decile due to top-coding, undercoverage and underreporting (Burkhauser et al. 2012, 371–372).⁶

The state average ARGI measures for *High Affluent Citizens* are denoted for the following three income fractiles covering the upper half-percentile (i.e. the top 0.5% in a given state-year) of the income distribution (see Online Appendix Table: Descriptive Statistics for Variables Employed in Study): Top 0.01%, Top 0.1%:Top

³Because these IRS tax data are not available for the 1983–1985 period (see Sommeiller and Price 2014, 9, Figure A), we begin the temporal sample with 1986 data. We end our temporal sample in 2008 due to the sizable (and anomalous) economic shocks that occurred in late 2008. Unless noted otherwise, all income data are converted into 2003 constant dollars. We thank Estelle Sommeiller for generously making her data available to us.

⁴During the 20 plus years before the Great Recession, average real-adjusted income total growth between 1986 and 2008 rose by just under 20% for those in the top 10–1% of the US income distribution. This growth escalates from 33.6 to 45.4% to almost 59% for successively more affluent income fractiles. Meanwhile, the most affluent citizens in the top 0.01% of the income distribution have experienced a 109.5% growth in real income.

⁵The “adjusted” portion of gross income based on such income deductions are small in relative magnitude and decline in relative importance with income for the top decile of the income distribution (Sommeiller and Price 2014, 22). The minor upward “adjustments” made in this measure are attributable to income deductions ranging from individual retirement accounts to moving expenses (Sommeiller and Price 2014, 22).

⁶Although the CPS data underestimates income for the upper 10% of the income distribution, Burkhauser et al. (2012) note that the ARGI-IRS and CPS series trends also diverge when analysing the top 1%. Burkhauser et al. (2012, 380) note that the ARGI-IRS data for the top 1% are largely consistent with data from the Survey of Consumer Finance (SCF). Therefore, the ARGI-IRS data represent an unbiased estimate for the top 1% *vis-à-vis* the SCF data, while more accurately capturing incomes of affluent citizens than the CPS data.

0.01% and Top 0.5%:Top 0.1%. The three lower income fractiles covering the remainder of the upper decile of the income distribution (between the top 10% and to 0.5% in a given state-year), termed *Low Affluent Citizens*, consists of the Top 1%:Top 0.5%, Top 5%:Top 1% and Top 10%:Top 5%. Considerable variations exist for real income growth across the American states. For example, during the 1979–2007 period, Sommeiller and Price (2014, 7, Table 1) demonstrate that the Top 1% fractile experienced a real income growth surge of nearly 415% in Connecticut (maximum), 163.5% in South Carolina (median rank) and 74% in West Virginia (minimum).

Unified partisan control of both governors and the legislature is critical given that each party's ability to obtain their preferred policy outcomes requires inter-branch coordination in a separation of powers system. *Unified Republican Control (URC)* is equal to 1 when both the Governor and both legislative chambers are controlled by this party for a given state-year, and equal to 0 otherwise. *Unified Democratic Control (UDC)* is equal to 1 when both the Governor and both legislative chambers are controlled by this party for a given state-year, and equal to 0 otherwise. *Divided Partisan Control* is captured in the intercept term.

As noted previously, bureaucratic leadership capacity in US state governments is measured using executive agency head salary compensation (Boushey and McGrath 2017). Although the institutional means by which executive agency heads' compensation is determined varies across states,⁷ the level of compensation does affect the capacity of candidates who are willing to serve in these positions.⁸ Boushey and McGrath (2017: 90) note that "... There is a broad consensus that maintaining competitive salaries is essential for securing a professional and expert workforce". This measure parallels studies analysing the impact of state legislative capacity on policymaking that relies on legislators' compensation (e.g. Huber and Shipan 2002).

Our key conditioning covariate is termed *Bureaucratic Leadership Capacity*. This variable is operationalised as the median year 2000 constant-dollar adjusted salary compensation for major state agency heads across 35 high-level executive offices that pertain to major administrative functions of each state for a given year.⁹ We exclude several offices that are routinely engaged in political activities (e.g. Attorney General, Secretary of State), or offices that engage in administrative tasks that should exert little, if any, bearing on policy administration that would influence the income earnings among affluent citizens in a given US state (e.g. historic

⁷In Minnesota, for instance, the governor proposes executive agency head salaries within legal statutory defined limits (<http://www.house.leg.state.mn.us/hrd/pubs/ss/ssagsal.pdf>). In Texas, some positions' salaries are set by the legislature while others are determined by an agency's governing board consistent with provisions from statutes or the General Appropriations Act (<https://www.sao.texas.gov/reports/main/14-705.pdf>).

⁸Disparities that arise regarding compensation in external labour markets across states for executive agency head talent are not problematic for comparability purposes since our statistical models account for state-level economic conditions using two distinct income-based measures. These models also incorporate state-level fixed effects that net out cross-state variations of affluent citizens' incomes that should be correlated with external labour market compensation for these top executive agency officials whose private sector incomes should fall in the top decile.

⁹The data for the 1986–1989 period come from state-year taken from the *Book of the States* (1986–1991) and compiled by the authors. The data for the 1990–2008 period were compiled by Boushey and McGrath (2017). We thank Graeme Boushey and Rob McGrath for generously sharing their data with us.

preservation, public libraries, elections administration).¹⁰ Because this measure focusses on a common set of administrative functions performed by US state governments, it allows us to comparatively gauge aggregate bureaucratic capacity across a broad swath of administrative agencies (Fukuyama 2013, 355). These data exhibit more between-state variation than within-year variation ($SD_{State}/SD_{Year} = 1.74$), and also exhibit a stationary time series process based on heterogeneous panel unit root tests (Im, Pesaran, and Shin (2003) test (four lags): $W_{t-\bar{bar}} = -1.96$, $p = 0.025$).

Figure 1 provides a summary graphical portrait of these data with Box-Whisker plots. At the poles, the states with the lowest median executive agency head salary compensation are typically less populous states. For instance, Montana has the lowest median level of executive agency head salary compensation while California's is the largest between 1986 and 2008. Tennessee is at the median value of executive agency head salary compensation during this period. Although states paying the highest and lower compensation to their executive agency heads do considerably vary by income and cost of living, abundant between-state variation exists that does not fit this pattern. For example, it is worth noting that eight southern states are above the grand state median value of executive agency head salary compensation, including states such as South Carolina, Georgia and Virginia. Generally, states exhibiting either low or high executive agency head compensation values tend to exhibit less within-state temporal variation compared to those states that lie in the interquartile range of states.

We also control for other covariates that may also explain income variations among affluent citizens in the American states. Changes in income among affluent citizens in the American states may also be a function of marginal tax rates (Saez et al. 2012).

To address this potential confounder, each statistical model contains a panel-based covariate, *Marginal Tax Rate*, that represents the estimated dynamic marginal tax rates for a given state-year based on the methodology advanced by Reed et al. (2011).¹¹ Controlling for state marginal tax rates as a potential confounder

¹⁰The following state executive agency offices are included: *administration, agriculture, banking, budget, commerce, comptroller, computer services, consumer affairs, economic development, education, employment services, energy, environmental protection, finance, general services, health, higher education, highways, insurance, labour, licensing, natural resources, personnel, planning, postaudit, preaudit, public utilities, public welfare, purchasing, revenue, social services, solid waste, state police, tourism and transportation*. Sensitivity analysis was also conducted that reduced the number of agencies from 35 to 18 (in black boldface) that cover several economic sectors of state economies related to economic expansion. In addition, we pared this list down further to eight (8) major economic and finance (in *black boldface italicised* type). The results from the subset of state executive agencies are largely consistent with those reported in the manuscript (see 3. *Robustness Checks 3: Abbreviated List of State Agencies for Measuring Executive Agency Head Compensation* in the *Supporting Information* document).

¹¹The procedure implemented here was proposed by Reed et al. (2011). This method derives a between (state) and within (time) varying measure of marginal tax rates for American states. This measure estimates each state's average marginal tax rate for a given year using corporate income taxes, personal income taxes, sales taxes, property taxes and all other remaining taxes, and then subsequently aggregates the estimates from each of these five components into an overall index. Personal income data come from the Bureau of Economic Analysis, http://www.bea.gov/iTable/index_regional.cfm?state; the source for state tax revenues and state and local tax revenue (which include personal income tax revenue, corporate income tax revenue, sales tax revenue, property tax revenue and total tax revenue) is <http://www2.census.gov/pub/outgoing/govs/special60/>, then download "Govt Finances.zip"; the source for average marginal tax rates (including marginal tax rates on wages, dividend income and pension income) is NBER TAXSIM

ensures that the effects of bureaucratic leadership capacity on income changes for affluent citizens under alternative partisan government regimes are independent of tax policy variations.

Besides this potential state marginal tax rate confounder, additional ancillary control variables are modelled to represent factors that often correlate to income for affluent citizens in the American states. Accounting for these covariates is especially critical when analysing affluent citizens whose incomes will be affected more by market economic conditions compared to middle class and lower income groups. *State Real Per Capita Income* is expected to exert a positive impact on a state's affluent citizens' incomes since richer (poorer) states tend to have more (less) affluent citizens for a given level of citizen affluence represented by their respective income fractile group. *NonFarm Income Share* should be positively related to affluent citizens' income for a given level of citizen affluence. States that derive a larger share of total income from agriculture possess affluent citizens with lower income levels compared to their state counterparts that derive a larger share of their income from manufacturing or technology.

State Citizen Ideology (Berry et al. 1998) may influence income for affluent citizens as a potential confounding factor with the partisan control of government.¹² Because income redistribution favours a left-leaning median voter (Kenworthy and Pontusson 2005), affluent citizens in states comprised of more liberal (conservative) constituents will tend to have lower (higher) incomes, *ceteris paribus*. This covariate should yield more reliable estimates of the theoretical hypotheses of interest given that the extra variation due to electoral changes captured by this measure will better account for income shifts that may otherwise be falsely attributed to discrete unified partisan control shifts.

The methodological approach adopted here is to estimate a series of first-order autoregressive distributed lag panel regression models using both time and state fixed effects.¹³ In addition, we compare the robustness of the model specifications reported in the manuscript to those based on a generalised ARDL(1,1)-error correction modeling approach that accounts for distinct short and long-run relationships (e.g. see Kelly and Witko 2012).¹⁴ Although the estimates vary somewhat in certain instances, the total long-run marginal effect results from this alternative dynamic model specification offer substantively similar support for Hypothesis 1 compared to the evidence presented in the next section based on a more

(<http://users.nber.org/~taxsim/marginal-tax-rates/>), corporate income tax (including the number of corporate income tax brackets and the maximum statutory tax rate on corporate profits) comes from the Tax Foundation (<http://taxfoundation.org/article/state-corporate-income-tax-rates>); sales tax data (including the overall state-level sales tax rate and the state-level tax on food: via Council on State Governments, Knowledge Center (<http://knowledgecenter.csg.org/kc/category/content-type/bosarchive>); and, property tax revenues (DC Office of Revenue Analysis: <http://cfo.dc.gov/page/taxburdens-comparison>).

¹²This state citizen ideology measure is based on the method described in Berry et al. (1998, 330–331) and these data were obtained via Richard C. Fording's website (<http://www.bama.ua.edu/~rcfording/stateideology.html>, *ideo6008.xlsx*, *citi6008* variable).

¹³Ordinary least squares (OLS) Estimation of Equation 1 is not problematic in panels with sufficiently large number of time points. Beck and Katz's (2011, 342) Monte Carlo evidence demonstrates the advantages of OLS estimation in the presence of lagged dependent variables with $T \geq 20$.

¹⁴See *Supporting Information* document (2. *Robustness Checks: Comparison of Reported Model Results to Alternative Model Specifications and Functional Forms* section).

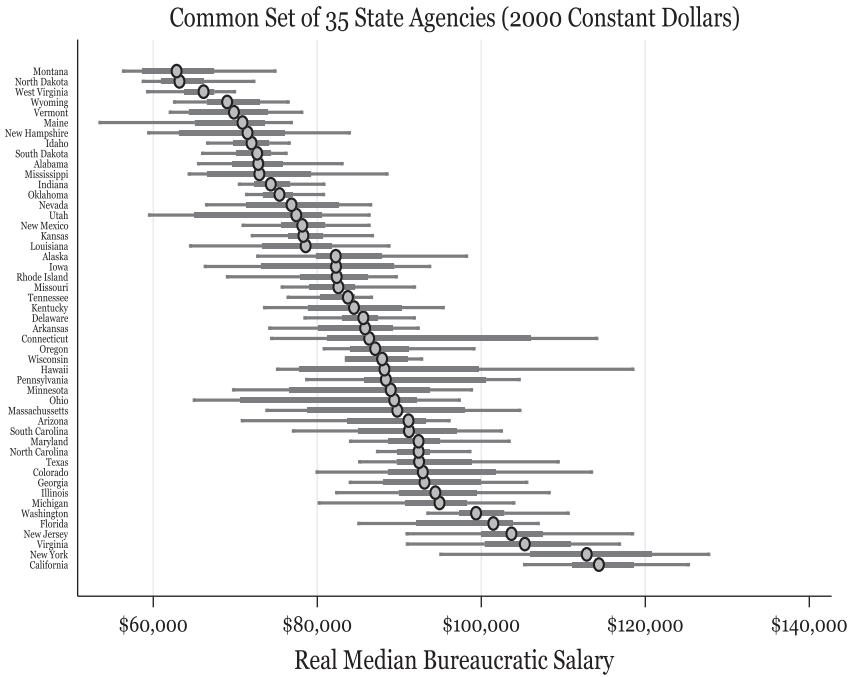


Figure 1. Executive agency head compensation by state (1986–2008) common set of 35 state agencies (2000 constant dollars).
 Note: Large dots represent state median values.

parsimonious approach that is desirable given the stationarity properties of the *Bureaucratic Leadership Capacity* measure.

Both unobserved state-level and temporal heterogeneity are accounted for by specifying two-way fixed effects in all model specifications. This aspect of our identification strategy is critical for our substantive problem to ensure that the estimates are not confounded by omitted variable bias attributable to common national government forces that impact all states at a given point in time, nor unobserved time invariant state-level characteristics, as well as allowing for meaningful comparisons both across states and time. This modelling approach allows for direct relationship comparisons, for example, between unified Democratic control of Alabama state government in 1993 with unified Democratic control of California state government in 2003. Controlling for state fixed effects should account for nonexpertise variations associated with executive agency head compensation (Boushey and McGrath 2017, 94).

The general form of the statistical model specification employed is:

$$\begin{aligned}
 ARGI_{i,t} = & \alpha_0 + \alpha_1 ARGI_{i,t-1} + \beta_1 URC_{i,t-1} + \beta_2 UDC_{i,t-1} + \beta_3 BLC_{i,t-1} + \beta_4 BLC_{i,t-1}^p \\
 & + \beta_5 (URC_{i,t-1} \times BLC_{i,t-1}) + \beta_6 (URC_{i,t-1} \times BLC_{i,t-1}^p) \\
 & + \beta_7 (UDC_{i,t-1} \times BLC_{i,t-1}) + \beta_8 (UDC_{i,t-1} \times BLC_{i,t-1}^p) \\
 & + \gamma_k Z_{k,i,t-1} + \psi_i S_i + \eta_t T_t + \epsilon_{i,t}
 \end{aligned} \tag{1}$$

The dependent variable $ARGI_{i,t}$ is the adjusted real gross income by household for state i in year t (see Sommeiller and Price 2014). $URC_{i,t}$ is unified Republican control in state i and year t , $UDC_{i,t}$ is unified Democratic control in state i and year t , $BLC^p_{i,t}$ represents the p th higher order polynomial of *Bureaucratic Leadership Capacity* in state i and year t , $Z_{ki,t}$ consists of a k th vector of ancillary control variables in state i and year t , S_i a vector of state-level fixed effects, T_t a vector of time fixed effects and ε_i a residual term. The covariates are modelled as operating on a one-year lag effect on affluent citizens' market incomes since both policy and implementation lags will necessarily create temporal friction in the conversion of political and policy conditions into policy outcomes. The p th higher order polynomial of *Bureaucratic Leadership Capacity* covariates account for potential nonlinearities present for the conditional interaction effects for various partisan control regimes. If such nonlinearities are not present in these data, then these terms are excluded from the relevant model specifications.¹⁵

Recalling Equation 1, the total long-run marginal effect of unified Republican partisan control on affluent citizens' incomes relative to the divided partisan control baseline is: $([\beta_1 + \beta_5 \times BLC_{i,t-1} + \beta_6 \times BLC^p_{i,t-1}]/[1 - \alpha_1])$, where evidence of Hypothesis 1 occurs when $(\beta_5 + \beta_6)/[1 - \alpha_1] > 0$. That is, executive agency head compensation has the long-term marginal effect of *increasing* affluent citizens' incomes when major political branches are controlled by the Republican party. Similarly, the total long-run marginal effect of unified Democratic partisan control on affluent citizens' incomes relative to the divided partisan control baseline is: $([\beta_2 + \beta_7 \times BLC_{i,t-1} + \beta_8 \times BLC^p_{i,t-1}]/[1 - \alpha_1])$, where Hypothesis 1 obtains empirical support if $(\beta_7 + \beta_8)/[1 - \alpha_1] < 0$. Put simply, the capacity of executive agency heads will translate into *decreasing* incomes for affluent citizens relative to the divided partisan control baseline. Total long-run marginal partisan income differences accrued between unified Republican and unified Democratic regimes is given by $\{[\beta_1 + \beta_5 \times BLC_{i,t-1} + \beta_6 \times BLC^p_{i,t-1}]/[1 - \alpha_1]\} - \{[\beta_2 + \beta_7 \times BLC_{i,t-1} + \beta_8 \times BLC^p_{i,t-1}]/[1 - \alpha_1]\}$. These total long-run effects of institutional arrangements of state governments exerts a multiplier effect on affluent citizens' incomes through time over multiple periods, with the degree of persistence or accumulation increasing in α_1 . In the limiting case where $\alpha_1 = 0$, all such institutional effects will manifest in a single year.

In the *Supporting Information* document (2. *Robustness Checks: Comparison of Reported Model Results to Alternative Model Specifications and Functional Forms* section), we consider the possibility of potential endogeneity between governmental conditions and income variations among affluent citizens by implementing placebo-based reverse causality tests. These tests augment the existing model specifications by incorporating one-year ahead leads for these relevant covariates (including interactions and power terms) as potential confounders. The findings from this sensitivity analysis are consistent with the results reported below in the next section of the manuscript. Next, we present the empirical results.

¹⁵Robustness checks comparing the reported model results compared to either symmetric linear or quadratic conditional effects provide substantively similar findings regarding Hypothesis 1 (see 2. *Robustness Checks: Comparison of Reported Model Results to Alternative Model Specifications and Functional Forms* section in the *Supporting Information* document).

Statistical findings

Table 1 reports the regression estimates for the statistical models that test the theory's predictions. One notices that the lack of statistical significance for the *Bureaucratic Leadership Capacity* additive coefficients suggests that the level of executive agency head compensation in the American states has little bearing on policy outcomes under divided partisan control of state governments. For the highest income fractile (*Top 0.01%*), the pattern of coefficients associated with *URC* covariates indicate that a U-shaped income surge for this group arises at sufficiently high levels of bureaucratic capacity. For the remaining five income fractile models below the *Top 0.01%*, the positive and statistically significant coefficients for the *URC* × *Bureaucratic Leadership Capacity*. Although the coefficients associated with the *UDC* × *Bureaucratic Leadership Capacity* covariate is the correct hypothesised sign in every instance, it is only estimated with sufficient precision for the *Top 5%:Top 1%* income fractile. These coefficient patterns reveal an asymmetric pattern regarding Hypothesis 1, whereby incomes are rising in a state's level of executive agency head compensation under unified Republican partisan control regimes, but are more variable in the extent to which they fall under unified Democratic partisan control of state government.¹⁶

Direct evaluation of Hypothesis 1 requires analyses of the total marginal partisan income differences under *URC* of state political institutions versus a baseline of divided partisan control for a given income fractile group, conditional on varying levels of bureaucratic leadership capacity. If Hypothesis 1 is supported by these data, then income differences should be upward sloping with respect to the bureaucratic capacity displayed by agency leaders. This is graphically portrayed in Figure 2. Figure 2a displays the conditional average impact of bureaucratic leadership capacity on incomes for the most affluent subset of citizens (*Top 0.01%*) under this unified partisan regime. Incomes are higher than the divided partisan control baseline under very low levels of bureaucratic leadership capacity before declining at moderate levels.

What is worth noting in Figure 2a is that incomes noticeably surge at the 90th percentile value under *URC* regimes ($\pi_{BLCURC} \geq 0.90$). For instance, income rises by \$3.95 million, on average, when bureaucratic leadership capacity is at the 90th percentile value for this type of partisan regime ($\pi_{BLCURC} = 0.90$) compared to the divided partisan control baseline. The patterns for those affluent citizens whose incomes fall below the *Top 0.01%* group reveal a similar pattern. Contrary to their partisan preferences, incomes for affluent citizens during times of *URC* of state institutions is significantly lower than compared to divided partisan control eras only when bureaucratic leadership capacity is moderate ($\pi_{BLCURC} = 0.50$) predicated on the nonlinear functional form.¹⁷

¹⁶The regression coefficient entries for the additive unified partisan regime covariates listed in Table 1 represent unified partisan control income differences when bureaucratic leadership capacity is constrained to its minimum observed value. These effects are graphically represented as the first (leftmost) value on the horizontal axis for the conditional coefficient plots appearing in Figures 2–4.

¹⁷The numerical values of the bureaucratic leadership capacity measure are as follows: $\pi_{BLCURC} = \text{Min}$ (\$58,495.88), $\pi_{BLCURC} = 0.10$ (\$63,229.74), $\pi_{BLCURC} = 0.25$ (\$69,908.26), $\pi_{BLCURC} = 0.50$ (\$78,503.35), $\pi_{BLCURC} = 0.75$ (\$92,092.66), $\pi_{BLCURC} = 0.90$ (\$100,189.6) and $\pi_{BLCURC} = \text{Max}$ (\$113,451.3); $\pi_{BLCUDC} = \text{Min}$ (\$55,787.34), $\pi_{BLCUDC} = 0.10$ (\$68,563.25), $\pi_{BLCUDC} = 0.25$ (\$75,625), $\pi_{BLCUDC} = 0.50$ (\$85,831.84), $\pi_{BLCUDC} = 0.75$ (\$94,808.54), $\pi_{BLCUDC} = 0.90$ (\$104,690.7) and $\pi_{BLCUDC} = \text{Max}$ (\$123,879.8).

Figure 2b reveals that the second most affluent group (Top 0.1%:0.01%) experiences lower incomes by \$455,196 ($\pi_{BLCIURC} = \text{Min}$) and \$371,198 ($\pi_{BLCIURC} = 0.10$) at lower levels of bureaucratic leadership capacity. However, under higher levels of bureaucratic leadership capacity, incomes are estimated, on average, to be \$140,949 ($\pi_{BLCIURC} = 0.75$), \$284,622 ($\pi_{BLCIURC} = 0.90$) and \$519,940 ($\pi_{BLCIURC} = \text{Max}$) higher than compared to the divided partisan control baseline, respectively. The change from the 10th–90th percentile values in bureaucratic leadership capacity results in a total long-run average income surge of \$655,820 for this group relative to divided partisan control eras. Figure 2c and 2d uncover a substantively similar pattern for the third and fourth most affluent groups (Top 0.5%:Top 0.1%; Top 1%:Top 0.5%). In each instance, incomes under unified Republican governments are noticeably lower than compared to divided party government at low levels of bureaucratic leadership capacity ($\pi_{BLCIURC} \leq 0.10$), but the pattern reverses at higher levels of this covariate ($\pi_{BLCIURC} \geq 0.75$). For instance, Figure 2d indicates that incomes for the Top 1%:0.5% fractile fall by an average of \$30,813 at the 10th percentile value of bureaucratic leadership capacity, yet rise by an average of \$21,627 at the 90th percentile value of bureaucratic leadership capacity. This \$52,440 surge of income represents a 26.18% of a standard deviation income change in this group (\$200,273) relative to the divided partisan control baseline.

Although the numerical effects are attenuated in absolute terms at lower income fractiles due to substantially lower incomes at lower levels of affluence, these general statistical patterns also hold for the pair of least affluent citizen groups (Top 5%:Top 1%; Top 10%:Top 5%) appearing in Figure 2e and 2f. Figure 2f, for example, shows that that incomes for the least affluent group drop on average by \$5,737 at the 10th percentile value of bureaucratic leadership capacity relative to a divided partisan control regime, yet rises by \$4,550 at the maximum value of this covariate. These results consistently support Hypothesis 1 in terms of the conditional linkage between unified Republican control of state government and higher incomes for affluent citizens. Moreover, this evidence reveals that low levels of bureaucratic capacity for agency leaders, reflected by executive agency head compensation, result in poor implementation of desired policy outcomes for Republican governments compared to divided partisan control of state political institutions. This pattern suggests that unified political parties' greater willingness to delegate authority to bureaucracies exhibiting low leadership capacity has deleterious consequences for attaining policy outcomes consistent with majoritarian preferences.

Figure 3 analyses the total marginal partisan income differences under unified Democratic control of state political institutions versus a baseline of divided partisan control for a given income fractile group, conditional on varying levels of bureaucratic leadership capacity. Consistent with Hypothesis 1, a downward sloping relationship should exist between such income differences and bureaucratic leadership capacity. In the top panel of graphs (Figure 3a–3c), although incomes among the Top 0.5% affluent citizens generally declines in the level of bureaucratic leadership capacity, these impacts are both modest and less precise compared to unified Republican partisan regimes for the three most affluent groups. Citizens falling below the top 1% of the income distribution threshold accrue statistically discernible income gains in times of unified Democratic partisan control in the presence of bureaucratic leadership capacity. For instance, incomes for the Top 5%:

Table 1. Explaining average real adjusted gross income for affluent citizens in the American states by income fractile (1986–2008) [ARDL(1,1) dynamic multiplicative model specification: OLS with both state and year fixed effects]

	Top 0.01%	Top 0.1%:Top 0.01%	Top 0.5%:Top 0.1%	Top 1%:Top 0.5%	Top 5%:Top 1%	Top 10%:Top 5%
<i>Unified Republican Control</i> _{t-1}	1.14E+07 (8,302,223)**	-345,159 (125,370)**	-86,992 (22,617)***	-35,919 (10,211)***	-11,025 (2,399)***	-5,402 (1,412)***
<i>Unified Democratic Control</i> _{t-1}	1,196,459 (1,319,017)	300,173 (350,487)	147,247 (98,782)	62,543 (42,452)	26,682 (12,489)**	12,048 (6,683)
<i>Bureaucratic Leadership Capacity</i> _{t-1}	-1.98 (122.55)	-0.69 (9.15)	-0.32 (2.10)	-0.11 (0.82)	-0.01 (0.28)	0.07 (0.10)
<i>Bureaucratic Leadership Capacity</i> ² _{t-1}	-0.00001 (0.0007)	-4.73E-06 (0.00006)	-1.68E-06 (0.00001)	-8.98E-07 (4.974E-06)	-3.20E-07 (1.72E-06)	-6.56E-07 (6.02E-07)
<i>Unified Republican Control</i> _{t-1} × <i>Bureaucratic Leadership Capacity</i> _{t-1}	-322.54 (197.11)	4.10 (1.45)***	1.03 (0.27)***	0.42 (0.10)***	0.13 (0.03)***	0.06 (0.02)***
<i>Unified Republican Control</i> _{t-1} × <i>Bureaucratic Leadership Capacity</i> ² _{t-1}	0.0022 (0.0012) [†]	-	-	-	-	-
<i>Unified Democratic Control</i> _{t-1} × <i>Bureaucratic Leadership Capacity</i> _{t-1}	-14.28 (15.59)	-6.26 (7.87)	-3.24 (2.25)	-1.38 (0.98)	-0.55 (0.29) [†]	-0.26 (0.16)
<i>Unified Democratic Control</i> _{t-1} × <i>Bureaucratic Leadership Capacity</i> ² _{t-1}	-	0.00003 (0.00004)	0.00002 (0.00001)	7.32E-06 (5.55E-06)	2.72E-06 (1.65E-06)**	1.40E-06 (9.10E-07)
<i>State Per Capita Real Income</i> _{t-1}	9,218 (16,181)	1,563 (1,397)	699 (423.58)	477.03 (222.94)**	104.88 (53.08) [†]	45.70 (15.80)***
<i>Marginal Tax Rate</i> _{t-1}	9.26E+07 (8.93E+07)	6,913,862 (7,258,673)	1,621,471 (1,623,236)	672,249 (626,317)	289,899 (148,074) [†]	4,381 (45,529)
<i>NonFarm Income Share</i> _{t-1}	8,800,226 (1.52E+07)	843,778 (971,207)	137,108 (196,057)	-10,916 (76,000)	-954 (29,598)	10,664 (13,557)
<i>State Citizen Ideology</i> _{t-1}	-5,277 (15,039)	-162.89 (1,038) _{..}	-56.13 (255.46)	-17.29 (113.55)	11.56 (36.83) _{..}	-14.68 (17.57) _{..}
<i>Average Real Adjusted Gross Income</i> _{t-1}	0.77 (0.04) [†]	0.77 (0.04) [†]	0.73 (0.06) [†]	0.70 (0.08) [†]	0.78 (0.06) [†]	0.71 (0.04) [†]
Overall Model R ²	0.866	0.916	0.930	0.941	0.948	0.969
Model F-Statistic [p-value]	1,190 [0.000]***	1,190 [0.000]***	1,275 [0.000]***	1,145 [0.000]***	2,016 [0.000]***	3,697 [0.000]***
Effective Sample Size (N = 49, T = 22)	1,078	1,078	1,078	1,078	1,078	1,078

Note: Models estimated by ordinary least squares (OLS) with robust standard errors clustered by state appearing inside parentheses. All regressions include both state and year fixed effects binary dummy indicators (not reported). Nebraska is dropped from the sample because it is the only state that has a unicameral and nonpartisan state legislature.

***p ≤ 0.01; **p ≤ 0.05; *p ≤ 0.10.

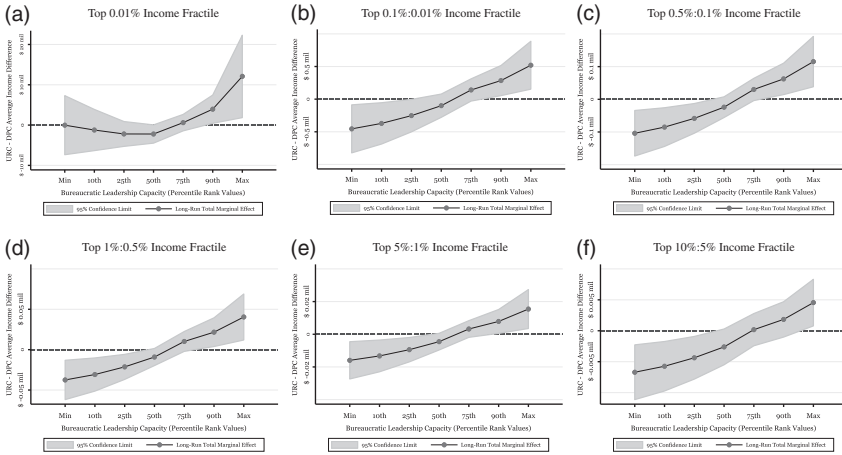


Figure 2. Analysing affluent citizens’ incomes *increasing* in bureaucratic leadership capacity: unified Republican governments in the American states.

Note: Long-run total marginal effect is computed as $([\beta_1 + \beta_5 \times BLC_{i,t-1} + \beta_6 \times BLC_{i,t-1}^p] / [1 - \alpha_1])$ from Equation 1. The comparison baseline is divided partisan control of state governor and legislative branches. $p=1$ (first-order polynomial) for all income fractiles except for top 0.01% (where $p=2$). URC=Unified Republican Control; DPC=Divided Partisan Control.

Top 1% (Figure 3e) and *Top 10%: Top 5%* (Figure 3f) are \$8,117 and \$2,406 higher than the divided partisan control baseline when bureaucratic leadership capacity is at the 10th percentile value ($\pi_{BLCIUDC} = 0.10$), respectively.

Clearly the statistical evidence shows that incomes for affluent citizens are never significantly lower under unified Democratic party state governments when bureaucratic leadership capacity is high. This asymmetric pattern may explain to some extent why reducing income inequality is challenging for unified Democratic governments, even when sufficiently high levels of executive agency head compensation are associated with converting their unified partisan policy preferences into policy outcomes. Taken together, bureaucratic capacity, in the form of state executive agency head compensation, offers the most benefits for unified Republican governments in attaining their preferred policy outcomes. Although caution are warranted for generalising these asymmetric partisan findings to other policy settings, these findings imply that unified political parties are more effective in conferring policy benefits to core constituent groups than perhaps they are at extracting costs for opposing constituent groups.

Figure 4 displays the estimated average income differences between unified Republican versus unified Democratic state governments, conditional on bureaucratic leadership capacity. These graphs allow for evaluating whether *UDC* can stem income gains compared to unified Republican governments at various levels of bureaucratic leadership capacity. Based on Hypothesis 1, income differences between this pair of unified partisan control regimes should be increasing with respect to bureaucratic leadership capacity. For the wealthiest income group (*Top 0.01%*), Figure 4a reveals that incomes are \$5.24 million higher under *URC* of state government versus single party control by the Democrats at the respective 90th percentile values of bureaucratic leadership capacity and rises to \$14.6 million at the maximum values of this covariate.

For affluent citizens below the top 0.01% (Figure 4b–4f), levels of bureaucratic leadership capacity below the 25th percentile value associated with each unified regime ($\pi_{BLCIURC} \leq 0.25$, $\pi_{BLCIUDC} \leq 0.25$) are associated with inverted partisan income differentials. The average income per fractile for these groups is significantly lower under unified Republican governments compared to unified Democratic governments. This finding underscores the adverse effects that low bureaucratic leadership capacity has for converting majoritarian preferences into policy outcomes. At higher levels of bureaucratic leadership capacity ($\pi_{BLCIURC} \geq 0.75$, $\pi_{BLCIUDC} \geq 0.75$), unified partisan income differentials are consistent with partisan policy preferences regarding incomes among the most affluent citizens in the top 0.1% of the income distribution. This difference ranges from an average low of \$254,503 (Figure 4b: $\pi_{BLCIURC} = 0.75$, $\pi_{BLCIUDC} = 0.75$) to an average high of \$14.6 million (Figure 4a: $\pi_{BLCIURC} = \text{Max}$, $\pi_{BLCIUDC} = \text{Max}$). While such differences are observed for the remaining four lower income fractile groups (Figure 4c–4f), these estimated relative differential effects are more modest and estimated with considerable imprecision that do not attain statistical significance at conventional levels.

Finally, we analyse unconditional unified partisan control differences to demonstrate that any partisan government control differences involving affluent citizens' incomes are highly contingent upon the bureaucratic leadership capacity. This analysis estimates the statistical models appearing in Table 1 but, omits all interaction terms between the bureaucratic leadership capacity covariate and unified partisan control binary indicators, as well as the squared bureaucratic leadership capacity covariate. For brevity, we only report the results for coefficient differences among state government partisan regimes in Table 2. We evaluate whether incomes under each unified partisan control regime are statistically discernible from the divided partisan control baseline, as well as between unified

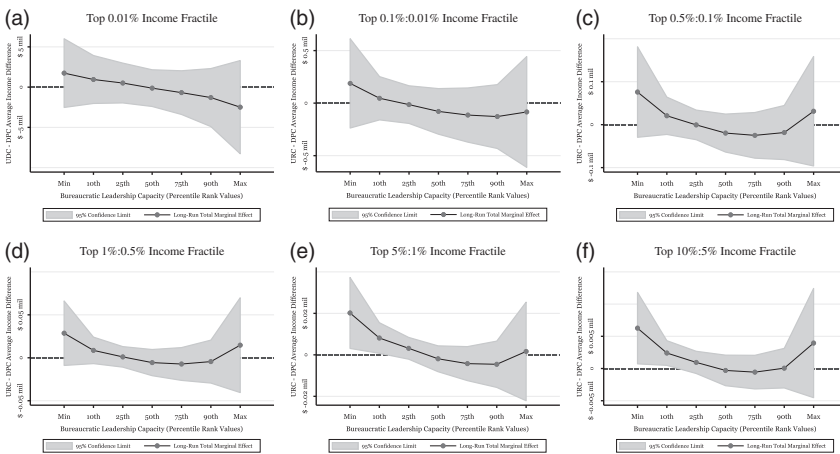


Figure 3. Analysing affluent citizens' incomes decreasing in bureaucratic leadership capacity: unified Democratic governments in the American states.

Note: Long-run total marginal effect is computed as $([\beta_2 + \beta_7 \times BLC_{i,t-1} + \beta_8 \times BLC_{i,t-1}^p] / [1 - \alpha_1])$, from Equation 1. The comparison baseline is divided partisan control of state governor and legislative branches. $p=2$ (second-order polynomial) for all income fractiles except for top 0.01% (where $p=1$). UDC = Unified Democratic Control; URC = Unified Republican Control; DPC = Divided Partisan Control.

partisan control regimes.

The evidence reveals that the magnitude of these differences is modest, especially among the more affluent groups. Moreover, we fail to uncover a single instance where income differences are attributable to partisan control of government, *independent* of bureaucratic leadership capacity. These findings reveal that unified party control of government – in isolation – does not adequately account for partisan differences in explaining income variations for affluent citizens in the American states. In other words, the data do not support standard conceptions of partisan differences between Republican and Democratic unified control of state governments. This particular evidence, coupled with the evidence presented in both the manuscript and subsequent robustness checks in the *Supporting Information* document (2. *Robustness Checks: Comparison of Reported Model Results to Alternative Model Specifications and Functional Forms* section), underscore the importance of qualified state executive agency heads for enabling political parties to achieve their preferred income distribution when they control both the governor and legislature.

Taken together, these findings support our argument that which party controls all branches of government, in conjunction with the capacity of top-level agency officials that are charged with providing administrative leadership in US state governments, shapes policy outcomes consistent with their partisan objectives. When the bureaucratic leadership capacity is low, policy outcomes run counter to majoritarian preferences. Public bureaucracies led by high capacity agency leaders offer a promising mechanism for ensuring that policy outcomes are consistent with the intention of elected officials operating under unified partisan governments. The empirical implications of Hypothesis 1 are further corroborated by a more granular analysis of these executive agency head salary compensation data employing alternative measures for both low (bottom quartile median) and high (top quartile median) data quantiles.¹⁸

The evidence obtained here provides a rather conservative test of our logic since both Democratic and Republican party organisations have supported policies for wealthier Americans in recent decades (Hacker and Pierson 2010). We surmise that the empirical findings would be sharper in the lower income fractiles for two reasons: first, our general argument predicts that high capacity executive agency heads should translate into the poorest citizens faring much better (worse) under unified Democratic (Republican) governments compared to divided partisan control regimes; and unlike wealthy citizens and groups influence over Democratic politicians noted by Hacker and Pierson (2010), those in the bottom portion of the income distribution should be comparatively less effective in influencing Republican elected officials.

Our study has several caveats that may yield fruitful avenues for future inquiry. First, this study cannot ascertain agency-specific sources of contributing income gains/losses among affluent citizens, nor demarcate between abridgement versus expansion efforts on behalf of state governments. Rather, we can only establish whether aggregate policy outcomes, reflecting political parties' different policy

¹⁸This information can be obtained in the *Supporting Information* document [3. *Robustness Checks: Comparison of Reported Model Results using Grand Median* ($\pi=0.50$), *Values of Executive Agency Head Salary Compensation with Estimates from Low Bureaucratic Leadership Capacity* (lower quartile median: $\pi=0.125$) and *High Bureaucratic Leadership Capacity* (upper quartile median: $\pi=0.875$)] section.

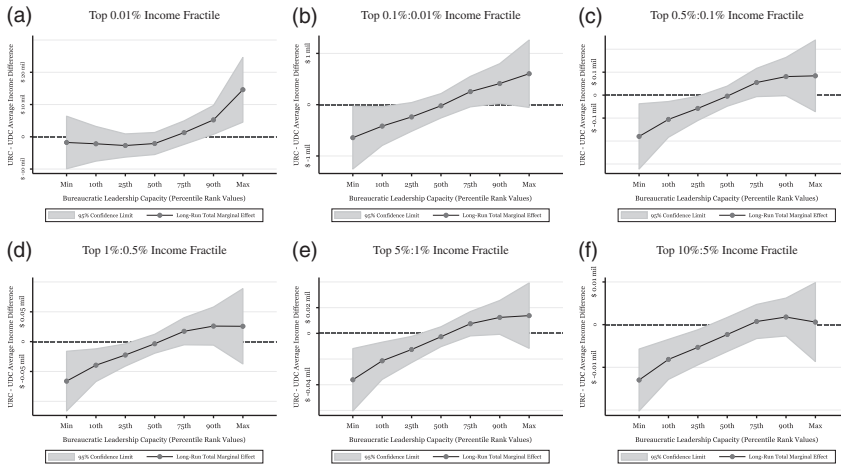


Figure 4. Analysing differences between affluent citizens' incomes between alternative unified Partisan control governments in the American states, conditional on bureaucratic leadership capacity [unified Republican control (URC) – unified Democratic control (UDC)].

Note: Long-run total marginal effect is computed as $\{[\beta_1 + \beta_5 \times BLC_{i,t-1} + \beta_6 \times BLC_{i,t-1}^p] / [1 - \alpha_1]\} - \{[\beta_2 + \beta_7 \times BLC_{i,t-1} + \beta_8 \times BLC_{i,t-1}^p] / [1 - \alpha_1]\}$ from Equation 1. The comparison baseline is an absence of a unified partisan control income difference. Unified Republican partisan control: $p=1$ (first-order polynomial) for all income fractiles except for top 0.01% (where $p=2$). Unified Democratic partisan control: $p=2$ (second-order polynomial) for all income fractiles except for top 0.01% (where $p=1$).

preferences, are consistent with the overall capacity of each state government's bureaucratic leadership team. Because we cannot trace how specific policies in the American states (e.g. disbursement of specific contracting decisions or inter-governmental aid revenues to particular constituencies) map to affluent citizens' incomes, we cannot infer which specific agencies are most responsible for influencing aggregate economic outcomes due to a cross-level inference problem that affects research on this topic.

Second, because this study restricts its focus to a single dimension of bureaucratic performance – the extent to which public agencies can administer policies that convert partisan politicians' policy objectives into corresponding policy outcomes – other dimensions for evaluating bureaucratic performance (e.g. social equity concerns, professional norms) can yield novel insights beyond this study. Finally, future studies may wish to explore the role of lower organisational layers within public agencies and the slippage that ensues within administrative institutions seeking to attain policy outcomes consistent with political institutions' objectives.

Discussion

Speaking to the issue of policy execution in *Federalist 70*, Alexander Hamilton asserted “And a government ill executed, whatever it may be in theory, must be in practice a bad government” (*The Federalist Papers* 1982, 355). Much of Hamilton's advocacy of a robust unified executive branch is rooted in the simple idea that effective governance requires the conversion of unity of purpose into action. Speaking of the critical role required of effective administration in a democracy,

Table 2. Testing for *unconditional* unified Partisan control differences: explaining average real adjusted gross income for affluent citizens in the American states by income fractile (1986–2008) [ARDL(1,1) dynamic additive model specification: OLS with both state and year fixed effects]

	Top 0.01%	Top 0.1%:Top 0.01%	Top 0.5%:Top 0.1%	Top 1%:Top 0.5%	Top 5%:Top 1%	Top 10%:Top 5%
Wald Tests of Unified Partisan Control Differences						
Unified Republican Partisan Control–Divided Partisan Control Baseline Difference	377,007 [0.736]	1,862 [0.983]	–1,553 [0.926]	–1,167 [0.845]	–1,089 [0.671]	–1,530 [0.335]
Unified Democratic Partisan Control–Divided Partisan Control Baseline Difference	–387,870 [0.736]	–80,205 [0.406]	–12,282 [0.525]	–2,778 [0.685]	–365 [0.896]	368 [0.693]
Unified Republican Partisan Control–Unified Democratic Partisan Control Difference	764,877 [0.616]	82,607 [0.502]	10,730 [0.649]	1,611 [0.853]	–724 [0.834]	–1,897 [0.326]

Notes: Coefficient entries represent total long-run marginal effect differences in constant dollar terms: *Unified Republican Partisan Control–Divided Partisan Control Baseline*: $\beta_{URC}/(1-\alpha_1)$; *Unified Democratic Partisan Control–Divided Partisan Control Baseline*: $\beta_{UDC}/(1-\alpha_1)$; and *Unified Republican Partisan Control–Unified Democratic Partisan Control*: $[\beta_{URC}/(1-\alpha_1) - \beta_{UDC}/(1-\alpha_1)]$, where α_1 equals the coefficient on the lagged dependent variable (average real adjusted gross income per fractile).

Probability values are listed inside brackets. Models estimated by ordinary least squares (OLS) with robust standard errors clustered by state appearing inside parentheses. All regressions include the set of covariates included in the Table 1 models reported in the manuscript (including both state and year fixed effects), except for omitting squared bureaucratic leadership capacity and interaction terms between the linear bureaucratic leadership capacity covariate and the unified partisan control binary indicators. Nebraska is excluded from the sample because it is the only state that has a unicameral and nonpartisan state legislature.

Norton Long perceptively proscribed decades ago “Attempts to solve administrative problems in isolation from the structure of power and purpose in the polity are bound to prove illusory” (1949: 264). Motivated by these complementary insights, we maintain that unity of purpose among elected officials cannot guarantee policy success without the support of capable agency leaders who are willing to act on behalf of their policy interests.

Elected officials seeking to ensure that their policy objectives are carried out through the administrative state face a daunting task. In this study, we propose that a combination of unified party government and sufficiently high levels of bureaucratic capacity associated with executive agency heads are necessary to obtain policy outcomes consistent with majoritarian preferences. We test this proposition by analysing income variations among several affluent income groups across the American states. Not only do clear partisan policy preference differences arise over these policy outcomes (e.g. Bartels 2008; Brady and Leicht 2008, 80–82; Gelman et al. 2010), but these affluent groups are most responsible for the surge in income inequality that has transpired in the US (Piketty and Saez 2003; Sommeiller and Price 2014), and also around the world (e.g. Piketty and Saez 2006; Leigh 2007; Atkinson and Piketty 2010).

Our statistical evidence reveals that low levels of capacity for executive agency heads undermine elected officials’ efforts at attaining their policy goals when the latter share common policy objectives. Higher levels of bureaucratic leadership capacity are generally associated with policy outcomes that more closely cohere to politicians’ policy preferences when the Republican party controls each of the major electoral branches of government, but not when the Democratic party possesses such unified control. This asymmetric pattern may explain, in part, why income inequality has grown through time given that Democratic partisan efforts have been ineffective at offsetting income gains made by affluent citizens under unified Republican governments possessing highly capable bureaucratic leaders. In turn, a necessary, but not always sufficient condition for attaining partisan policy objectives occurs when politicians share a unity of purpose, in conjunction with executive agency heads that are *both* able and willing to facilitate policy-making authority on their behalf.

A major lesson from this study is that bureaucratic capacity is normatively desirable for executing the popular will of majorities in representative democracies. For public laws and executive actions to achieve their intended policy consequences, it requires government agencies to interpret, implement and enforce such policies. In recent decades, politicians and citizens’ groups alike have advocated efforts to “hollow out” the administrative state for stated purposes of bringing about a closer connection between democratic preferences and policy outcomes (e.g. Peters and Pierre 1998; Terry 2005). Yet, political efforts to undermine the authority of the administrative state work at cross-purposes for obtaining policy outcomes consistent with majoritarian preferences. Bureaucratic capacity, especially among top agency officials, can therefore be viewed as a critical ingredient for enhancing substantive representation over policy outcomes whenever elected officials possess a unity of purpose since it provides a means for the effective exercise of policy-making authority by governments.

Supplementary materials. To view supplementary material for this article, please visit <https://doi.org/10.1017/S0143814X18000405>

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References

- Abney G and Lauth TP** (1986) *The Politics of State and City Administration*. Albany, NY: SUNY Press.
- Acemoglu D, Robinson JA and Torvik R** (2013) Why Do Voters Dismantle Checks and Balances? *Review of Economic Studies* **80**, 845–875.
- Atkinson AB and Piketty T** (eds.) (2010) *Top Incomes: A Global Perspective*. Oxford and New York: Oxford University Press.
- Barrilleaux C, Holbrook TM and Langer L** (2002) Electoral Competition, Legislative Balance, and American Welfare State Policy. *American Journal of Political Science* **46**, 415–427.
- Bartels LM** (2008) *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton, NJ: Princeton University Press.
- Beck N and Katz JN** (2011) Modeling Dynamics in Time-Series Cross-Section Political Economy Data. *Annual Review of Political Science* **14**, 331–352.
- Berry WD, Evan JR, Fording RC and Hanson RL** (1998) Measuring Citizen and Government Ideology in the American States, 1960–1993. *American Journal of Political Science* **42**, 327–348.
- Boushey GT and McGrath RJ** (2017) Experts, Amateurs, and Bureaucratic Influence in the American States. *Journal of Public Administration Research and Theory* **27**, 85–103.
- Bowling CJ and Wright DS** (1998) Change and Continuity in State Administration: Administrative Leadership across Four Decades. *Public Administration Review* **58**, 429–444.
- Brady D and Leicht KT** (2008) Party to Inequality: Right Party Power and Income Inequality in Affluent Western Democracies. *Research in Social Stratification and Mobility* **26**, 77–106.
- Brudney JL, Fernandez S, Ryu JE and Wright DS** (2005) Exploring and Explaining Contracting Out: Patterns Among the American States. *Journal of Public Administration Research and Theory* **15**, 393–419.
- Brudney JL and Wright DS** (2010) The “Revolt in Dullsville”: Lessons for Theory, Practice, and Research from the American State Administrators Project, 1964–2008. *Public Administration Review* **70**, 26–37.
- Burkhauser RV, Feng S, Jenkins SP and Larrimore J** (2012) Recent Trends in Top Income Shares in the United States: Reconciling Estimates from March CPS and IRS Tax Return Data. *Review of Economics and Statistics* **94**, 371–388.
- Cho C-L and Wright DS** (2007) Perceptions of Federal Aid Impacts on State Agencies: Patterns, Trends, and Variations Across the 20th Century. *Publius: The Journal of Federalism* **37**, 101–130.
- Conlan TJ** (1998) *From New Federalism to Devolution: Twenty-Five Years of Intergovernmental Reform*. Washington, DC: Brookings Institution.
- Dye TR** (1990) *American Federalism: Competition Among Governments*. Lexington, MA: Lexington Books.
- Eisinger PK** (1988) *The Rise of the Entrepreneurial State: State and Local Economic Development Policy in the United States*. Madison, WI: University of Wisconsin Press.
- Epstein DL and O’Halloran S** (1999) *Delegating Powers: A Transaction Cost Politics Approach to Policymaking Under Separated Powers*. New York: Cambridge University Press.
- The Federalist Papers** (1982) *The Federalist Papers* by Alexander Hamilton, James Madison, and John Jay. New York: Bantam Books.
- Fukuyama F** (2013) What is Governance? *Governance: An International Journal of Policy, Administration, and Institutions* **26**, 347–368.

- Gailmard S and Patty JW** (2013) *Learning While Governing: Expertise and Accountability in the Executive Branch*. Chicago, IL: University of Chicago Press.
- Gelman A, Kenworthy L and Su Y-S** (2010) Income Inequality and Partisan Voting in the United States. *Social Science Quarterly* **91**, 1203–1219.
- Gilens M** (2012) *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton, NJ: Princeton University Press.
- Hacker JS and Pierson P** (2010) *Winner-Take-All Politics: How Washington Made the Rich Richer and Turned its Back on the Middle Class*. New York: Simon and Schuster.
- Hammond TH and Knott JH** (1996) Who Controls the Bureaucracy? Presidential Power, Congressional Dominance, Legal Constraints, and Bureaucratic Autonomy in a Model of Institutional Policymaking. *Journal of Law, Economics, and Organization* **12**, 119–166.
- Huber JD and Shipan CR** (2002) *Deliberate Discretion? The Institutional Foundations of Bureaucratic Autonomy*. New York: Cambridge University Press.
- Huber JD and McCarty N** (2004) Bureaucratic Capacity, Delegation, and Political Reform. *American Political Science Review* **98**, 481–494.
- Im KS, Pesaran MH and Kim Y** (2003) Testing for Unit Roots in Heterogeneous Panels. *Journal of Econometrics* **115**, 53–74.
- Kaufman H** (1981) *The Administrative Behavior of Federal Bureau Chiefs*. Washington, DC: Brookings Institution Press.
- Kelleher CA and Yackee SW** (2009) A Political Consequence of Contracting: Organized Interests and State Agency Decision Making. *Journal of Public Administration Research and Theory* **19**, 579–602.
- Kelly NJ and Witko C** (2012) Federalism and American Inequality. *Journal of Politics* **74**, 414–426.
- Kenworthy L and Pontusson J** (2005) Rising Inequality and the Politics of Redistribution in Affluent Countries. *Perspectives on Politics* **3**, 449–471.
- Krause GA and Woods ND** (2014) Policy Delegation, Comparative Institutional Capacity, and Administrative Politics in the American States. In Haider-Markel DP (ed.), *Oxford Handbook of State and Local Government*. New York: Oxford University Press, 363–396.
- Langer L** (2001) The Consequences of State Economic Development Strategies on Income Distribution in the American States, 1976–1994. *American Politics Research* **29**, 392–415.
- Leigh A** (2007) “How Closely Do Top Income Shares Track Other Measures of Inequality? *Economic Journal* **117**(524): F619–F633.
- Long NE** (1949) Power and Administration. *Public Administration Review* **9**, 257–264.
- Lowery A** (2012) Costs Seen in Income Inequality. *New York Times*, 17 October. Section, Page: B1, <http://www.nytimes.com/2012/10/17/business/economy/income-inequality-may-take-toll-on-growth.html> (accessed 19 October 2012).
- Lowery DC and Gray V** (2001) The Institutionalization of State Communities of Organized Interests. *Political Research Quarterly* **54**, 265–284.
- Meltzer AH and Richard SF** (1981) A Rational Theory of the Size of Government. *Journal of Political Economy* **89**, 914–927.
- Mikesell J** (2007) Changing State Capacity and Tax Effort in an Era of Devolving Government, 1981–2003. *Publius: The Journal of Federalism* **37**, 532–550.
- Miller GJ and Whitford AB** (2016) *Above Politics: Bureaucratic Discretion and Credible Commitment*. New York: Cambridge University Press.
- Moncrief G and Squire P** (2013) *Why States Matter? An Introduction to State Politics*. Lanham, MD: Rowman and Littlefield.
- National Association of State Personnel Executives** (2013) Total Rewards: Preparing to Pay the Next Generation of State Government Workers, http://www.naspe.net/assets/docs/Research-and-Publications/HR/wp_total%20rewards.pdf (accessed 19 January 2018).
- National Association of State Personnel Executives** (2016) NASPE 2016 Top Five Issues Panel Discussion, <http://www.naspe.net/assets/docs/top5/2016%20white%20paper.pdf> (accessed 19 January 2018).
- Persson T, Roland G and Tabellini G** (1997) Separation of Powers and Political Accountability. *Quarterly Journal of Economics* **112**, 1163–1202.
- Peters BG and Pierre J** (1998) Governance Without Governing? Rethinking Public Administration. *Journal of Public Administration Research and Theory* **2**, 223–243.

- Piketty T and Saez E** (2003) Income Inequality in the United States, 1913– 1998. *Quarterly Journal of Economics* **118**, 1–39.
- Piketty T and Saez E** (2006) The Evolution of Top Incomes: A Historical and International Perspective. *American Economic Review* **96**, 200–205.
- Reed WR, Rogers CL and Skidmore M** (2011) On Estimating Marginal Tax Rates for U.S. States. *National Tax Journal* **64**, 59–84.
- Rosen H** (2002) *Public Finance*, 6th ed. Boston, MA: McGraw-Hill Irwin.
- Saez E, Slemrod J and Giertz SH** (2012) The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review. *Journal of Economic Literature* **50**, 3–50.
- Salamon LM** (ed.) (2002) *The Tools of Government*. Oxford: Oxford University Press.
- Scheve K and Stasavage D** (2009) Institutions, Partisanship, and Inequality in the Long Run. *World Politics* **61**, 215–253.
- Schneider SK, Jacoby WG and Cogburn JD** (1997) The Structure of Bureaucratic Decision in the American States. *Public Administration Review* **57**, 240–249.
- Seifter M** (2017) Gubernatorial Administration. *Harvard Law Review* **131**, 483–542.
- Seifter M** (2018) Further from the People? The Puzzle of State Administration. *NYU Law Review* **93**, 107–174.
- Sommeiller E and Price M** (2014) The Increasingly Unequal States of America: Income Inequality by State, 1917 to 2011. Economic Analysis and Research Network (EARN) Report, <http://www.epi.org/publication/unequal-states/> (accessed 13 February 2014).
- Stark KJ** (2010) Rich States, Poor States: Assessing the Design and Effect of a U.S. Fiscal Equalization Regime. *Tax Law Review* **63**, 957–1008.
- Teodoro MP** (2011) *Bureaucratic Ambition: Careers, Motives, and the Innovative Administrator*. Baltimore, MD: Johns Hopkins University Press.
- Terry LD** (2005) The Thinning of Administrative Institutions in the Hollow State. *Administration & Society* **37**, 426–444.
- Texas State Auditor’s Office (John Keel, CPA, State Auditor)** (2014) *An Audit Report on The Texas Enterprise Fund at the Office of the Governor*. SAO Report No. 15-003, <https://www.sao.texas.gov/reports/main/15-003.pdf> (accessed 20 February 2018).
- US Government Accountability Office** (2010) *State and Local Governments: Fiscal Pressures Could Have Implications for Future Delivery of Intergovernmental Programs*. Report to the Ranking Member, Committee on the Budget, House of Representatives. Washington, DC: Government Accountability Office.
- Volden C** (2002) A Formal Model of the Politics of Delegation in the Separation of Powers System. *American Journal of Political Science* **46**, 111–133.
- Volscho TW and Kelly NJ** (2012) The Rise of the Super – Rich: Power Resources, Taxes, Financial Markets, and the Dynamics of the Top 1 Percent, 1949–2008. *American Sociological Review* **77**, 679–699.