Decentralization and Ideology^{*}

Anna M. Wilke amw703@nyu.edu Georgiy Syunyaev g.syunyaev@vanderbilt.edu

Michael Ting mmt2033@columbia.edu

May 31, 2024

Abstract

Classic arguments about federalist governance emphasize an informational or learning role for decentralizing policy authority, but in practice, ideological outcomes frequently motivate this choice. We examine the role of ideology in the allocation of policy-making power by modeling a two-period interaction between an elected central executive and two local governments. Decentralization reduces the executive's ability to set policy and control externalities but potentially insures against future policy reversals. In this environment, partial decentralization is a common outcome. Complete decentralization arises when executives are unlikely to be re-elected, party polarization is high, and institutional hurdles to policy-making are big. These results help to clarify existing cross-national empirical findings on the determinants of centralization.

Word count: 4060

^{*}We thank Georg Vanberg, Craig Volden, and panel participants at the 2019 Annual Meeting of the Southern Political Science Association and 2020 Emory Conference on Institutions and Law Making for helpful comments. Competing interests: The authors declare none.

1 Introduction

Designers of laws and constitutions have long prioritized the issue of centralization versus decentralization. The concern is natural, as the assignment of authority is consequential for policy outcomes. Many of the trade-offs are by now familiar. Decentralization can encourage the discovery of good policies and adaption to local conditions, while centralization can control externalities, implement best practices, and prevent a wasteful "race to the bottom."

An important but less explored rationale for allocating policy-making authority is ideological objectives. Centralization may bring wayward localities into line, while decentralization can protect against adverse national-level developments. Moreover, these arrangements may be applied selectively. For example, the U.S. Clean Air Act centralized air quality regulatory authority at the federal level by superseding state standards. It also allowed California to adopt standards at least as stringent as federal ones and gave other states a choice over whether to adopt California or federal standards. This arrangement persisted for decades until the Trump administration re-centralized federal authority in 2019, only to be reversed by the Biden administration in 2022.¹

This paper develops a theory of the role of ideology in allocating policy-making powers across levels of government. While several models have considered the role of ideology in various ways (Volden, Ting, and Carpenter 2008, Crémer and Palfrey 1999, 2000), this institutional setting is, to our knowledge, unique and empirically well-grounded. Consistent with the preceding example, our model has three important institutional features. First, there is uncertainty about the ideology of future politicians. Second, institutional rigidities may bind future politicians to pre-established centralization structures. Finally, politicians have the ability to centralize only partially.

¹Decentralization is often partial. In many countries, the scope of constitutionally allocated policy-making authority has varied across subnational units and time (e.g., León and Orriols 2016, Arban 2018).

Our model features ideological policy choices in two localities over two periods. All players care about policies, which have spillovers that induce some benefit from coordination. In each period, there are three players: a right-leaning locality, a left-leaning locality, and a central executive who is either right- or left-leaning and cares about social welfare. The initial executive cares about outcomes in both periods and chooses whether to centralize or decentralize each locality's policy authority. Under the former, the executive chooses a policy, while under the latter, the locality chooses. Full centralization does not bind the executive to choose the same policies across localities. An election between periods may replace the incumbent executive with an ideological opponent

A key parameter in the model is institutional *rigidity*. With some probability, the second period executive cannot change the polity's centralization profile, and policy-making proceeds according to the first-period arrangement. Rigidity captures the idea that opportunities for changing governance arrangements are rare due to the need for political consensus in resolving fundamental (and sometimes constitutional) questions. High and low rigidity might correspond to strong and weak checks and balances systems.

The model shows that rigidity and political competition in conjunction produce greater decentralization. Centralization is desirable for a second-period executive as it allows her to impose policy and internalize externalities. For the first-period incumbent executive, the choice depends on rigidity. With high rigidity, centralization raises the risk of centrallymandated policies set by the opposition. This outcome becomes worse as polarization, or the ideological distance between left and right executives, increases.

Decentralization provides insurance against a bad electoral outcome. In equilibrium, the executive often centralizes her ideological enemy and decentralizes her ideological ally. This pattern is consistent with the U.S. practice of selectively granting state waivers for implementing alternatives to federal programs (e.g., Richardson 2019). The result contrasts with many existing models of federalism, which either assume that complete centralization

or decentralization are the only options or derive conditions for the optimality of such arrangements. At the extreme, full decentralization insulates policy completely from national election results when rigidity and polarization are high.

Our model suggests two ways to sharpen empirical tests of the determinants of centralization. A large body of literature examines the relationship between electoral prospects and decentralization (e.g., Escobar-Lemmon 2003, Dickovick 2007, Mardones 2007, Sorens 2009, Moscovich 2015). In particular, O'Neill (2003, 2005) finds that incumbents across Latin America were more likely to decentralize when their party's national vote share decreased or the number of subnational electoral contests their party won increased. Tellingly, most countries in these studies have presidential systems, where multiple veto players could thwart re-centralization attempts. Additionally, we are not aware of work linking ideological polarization with decentralization. Studies of ethnic fragmentation, which may play a similar role, have produced mixed results (Treisman 2006, Blume and Voigt 2011, Spina 2013). Our model predicts that polarization and rigidity are both necessary for decentralization.

The literature on political centralization is vast enough to have spawned multiple review articles (Oates 1999, Bednar 2011, Graham, Shipan, and Volden 2012, Mookherjee 2015, Gilardi 2016). Most previous theoretical work focuses on quality. In these models, centralization allows the imposition of better policies, while decentralization aids in their discovery (e.g., Kollman, Miller, and Page 2000, Strumpf 2002, Volden, Ting, and Carpenter 2008, Cai and Treisman 2009, Callander and Harstad 2015, Cheng and Li 2019). Our model suppresses uncertainty over the quality of policies and thus is more appropriate for settings like the Clean Air Act example above, which had seemingly more to do with ideological conflict than policy failures.

In Oates's (1972) seminal model, centralization helps a welfare-oriented center control externalities, but decentralization allows local units to produce superior public goods. To focus on ideology, our outputs are ideological policies and not public goods. Our model provides for – but does not require – the presence of cross-unit policy spillovers and executive welfare motivations. We show that policy motivation, coupled with rigidity and electoral concerns, can be an alternative driver of decentralization in an otherwise similar framework.

While we are not the first to consider the role of ideology, the literature on the interactions between ideology and centralization remains small (e.g., Bulman-Pozen 2014, von Wilpert 2017, Gordon and Landa 2021). Perhaps the closest models to our paper are Crémer and Palfrey (1999, 2000), who show that centralization can reduce policy risk but also reduce welfare. These models share with ours the idea that centralization can be a tool for achieving ideological gains but focus on voters in a single period. Instead, we examine elites who face incentives to insulate policy over time.

The paper proceeds as follows. Section 2 describes the model, Section 3 presents our results, and Section 4 concludes. The appendix develops an infinite horizon extension.

2 Model

We consider a two-period game of policy-making across two localities. The players are an incumbent executive I, her opponent O, who can replace the incumbent in the second period, and two local governments, denoted by $i \in \{1, 2\}$. In each period $t \in \{1, 2\}$, a policy vector $\mathbf{x}_t = (x_{1,t}, x_{2,t})$ is chosen, where $x_{i,t}$ is implemented in locality i. There is no discounting.

All players derive utility from policy choices. Local government *i* has an ideal point y_i , where $y_1 < 0 < y_2$ and, for tractability, $y_2 \equiv -y_1$. Each receives utility over \mathbf{x}_t according to:

$$U_{i}(\mathbf{x}_{t}, y_{i}) \equiv -\gamma \left(x_{i,t} - y_{i}\right)^{2} - (1 - \gamma) \left(x_{-i,t} - y_{i}\right)^{2}.$$
 (1)

Local governments assign weight $\gamma \in (0,1]$ to their policy, and $1 - \gamma$ to the policy in the

other locality.² Allowing localities to care about policy in other jurisdictions connects our framework to models of centralization that feature cross-unit externalities (e.g., Oates 1972).

Executive $j \in \{I, O\}$ has a time-invariant ideal point z_j , where (without loss of generality) the incumbent executive is left-leaning, i.e., $z_I < 0$. These ideal points are symmetric around 0: $z_I = -z_O$. Consequently, lower values of z_I increase polarization. In a given period a party j executive earns the following utility from \mathbf{x}_t regardless of whether she holds power:

$$U_{j}^{e}(\mathbf{x}_{t}, \mathbf{y}) \equiv -\omega \sum_{i=1}^{2} (x_{i,t} - z_{j})^{2} + (1 - \omega) \sum_{i=1}^{2} U_{i}(\mathbf{x}_{t}, y_{i}).$$
(2)

 $U_j^e(\cdot)$ combines policy utility and concern for locality-level welfare, with the former weighted by ω . The concern for welfare internalizes externalities across localities and resembles that of Oates (1972) in the special case of $\omega = 0$. To focus on the role of ideology, we assume $\omega \in (0, 1]$.³

Each locality can be either *centralized* or *decentralized*. Under centralization, the executive chooses the locality's policy, while the locality chooses under decentralization. We denote the centralization status of locality *i* in period *t* by $c_{i,t} \in \{0,1\}$, where 0 corresponds to decentralization and 1 corresponds to centralization. A *centralization profile* $\mathbf{c}_t = (c_{1,t}, c_{2,t})$ is the set of period *t* centralization statuses. We denote the set of possible centralization profiles as $\mathcal{C} = \{0,1\} \times \{0,1\}$.

The game proceeds as follows. At the beginning of period 1, the incumbent executive chooses a centralization profile c_1 . Next, the actors with policy-making authority simultaneously choose local policies \mathbf{x}_1 . At the end of period 1, there is an election, where the incumbent executive I remains in office in period 2 with probability p and is replaced by O otherwise.

Whether the period 2 executive can change the centralization profile depends on institutional features and political conditions. With known probability q > 0, the period 2 executive is

²Our results hold under $\gamma = 1$.

³Our results hold under $\omega = 1$.

weak and cannot change the centralization profile, and thus $\mathbf{c}_2 = \mathbf{c}_1$. With probability 1 - q, the period 2 executive is *strong* and free to choose \mathbf{c}_2 . We refer to q as *rigidity*. After \mathbf{c}_2 is determined, the actors that have policy-making authority simultaneously choose local policies \mathbf{x}_2 and the game ends.

We derive the unique subgame perfect Nash equilibrium of this game. For localities and executives in each period, this consists of optimal policy choices from \mathbb{R} when decentralized and centralized, respectively. Additionally, the period 1 executive chooses the initial centralization profile from \mathcal{C} , and the period 2 executive chooses a centralization profile if she is strong.

3 Equilibrium

3.1 One Period

We begin by characterizing actors' policy preferences. For a local government, maximizing equation (1) produces its ideal point:

$$x_i^* = \underset{x_i}{\arg\max} U_i(\mathbf{x}, y_i) = y_i.$$
(3)

Maximizing equation (2) produces an executive's optimal policy for a centralized locality:

$$x_i^* = \operatorname*{arg\,max}_{x_i} U_j^e(\mathbf{x}, \mathbf{y}) = \omega z_j + (1 - \omega) \left[\gamma y_i + (1 - \gamma) y_{-i}\right].$$

$$\tag{4}$$

The executive's optimal policy takes externalities into account and thereby deviates from her ideal point. Changes in γ shift the policy that each executive desires by the same amount. Thus, externalities do not affect policy conflict between executives but increase policy conflict between each executive and the more ideologically distant locality (hereafter *adversary*).

When executives' preferred policies are less extreme than those of the localities, externalities also increase policy conflict between each executive and the more ideologically proximate locality (hereafter *ally*). Stronger welfare concerns (lower ω) move the ideal policies of the two executives closer together and thus reduce policy conflict on the executive level. Note also that the executive's optimal policy for each locality does not depend on whether the other locality is centralized.

While centralization profiles may persist across the two periods, there is no policy persistence. Therefore, policy choices in period 1 have no implications for any player's payoffs from period 2. This implies that conditional upon \mathbf{c}_t , the myopic optimal policies given in equations (3) and (4) fully describe policy choices in both periods.

To characterize executives' preferences over centralization profiles in a single period, we begin with a simple intuition. Centralization in the first period raises the incumbent executive I's cost of losing power in the second period. Party control of the executive is irrelevant for policy under complete decentralization ($\mathbf{c}_t = (0,0)$). The relative benefit of holding power increases under the partial centralization profiles $\mathbf{c}_t = (1,0)$ and $\mathbf{c}_t = (0,1)$, and are maximized under full centralization ($\mathbf{c}_t = (1,1)$).⁴ Hence, decentralization can reduce the stakes of an election loss and play an insurance role for I.

We state our result from the perspective of I; a symmetric result holds for the opponent O. The result depends on the following threshold values of z_I :

$$\underline{z}_I = \left(2\gamma + \frac{2(1-\gamma)}{\omega} - 1\right)y_1,\tag{5}$$

$$\overline{z}_I = \frac{1}{3} \left(2\gamma + \frac{2(1-\gamma)}{\omega} - 1 \right) y_1. \tag{6}$$

Note that the parenthesized term is at least 1 and hence $\underline{z}_I < y_1$ and $\underline{z}_I < \overline{z}_I < 0$.

Lemma 1 (Executive Preferences in a Single Period). For the incumbent executive I:

⁴The expressions supporting this claim are shown in the proof of Lemma 1 in Appendix A.

- (i) When I is in power, $(1,1) \succ (0,1) \succ (1,0) \succ (0,0)$.
- (ii) When O is in power,

$$(1,1) \succ (0,1) \succ (1,0) \succ (0,0) \text{ if } \overline{z}_I < z_I < 0,$$
$$(0,1) \succ (1,1) \succ (1,0), (0,1) \succ (0,0) \succ (1,0) \text{ if } \underline{z}_I < z_I < \overline{z}_I,$$
$$(0,0) \succ (0,1) \succ (1,0) \succ (1,1) \text{ if } z_I < \underline{z}_I.$$

An executive in power has a unique preference ordering over centralization profiles, with more centralization preferred to less. In a single period, an executive can always increase her utility by centralizing a locality. Thus, the period 2 executive will attempt complete centralization. Moreover, whether in power or not, executives prefer centralizing their adversary to centralizing their ally.

The non-incumbent executive's preference ordering additionally depends on the degree of polarization, as given by the location of z_I relative to \underline{z}_I and \overline{z}_I . When polarization is low $(\overline{z}_I < z_I < 0)$, she prefers full centralization, and when it is high $(z_I < \underline{z}_I)$, she prefers full decentralization. As $\underline{z}_I < y_1$, the preference for full decentralization arises only if executives are more polarized than the localities. This is because a decentralized adversary locality would choose a more moderate policy than the opposing executive. When localities are more polarized than executives, a non-incumbent executive prefers the opposing executive's policy choice, thus centralizing her adversary. In this manner, high polarization incentivizes the first-period incumbent to decentralize to guard against a transition of power.

3.2 Two Periods

In the full game, the incumbent executive I may be replaced by the opponent executive O in period 2. A strong election winner will choose full centralization ($\mathbf{c}_2 = (1, 1)$) and implement her optimal policy for both localities. A weak winner will set second-period policies under the centralization profile \mathbf{c}_1 implemented in period 1. This implies the following two-period objective $V_I(\mathbf{c}_1)$ for I:

$$V_{I}(\mathbf{c}_{1}) = U_{I,I}^{e}(\mathbf{x}^{*}(z_{I}, \mathbf{c}_{1})) + p \left[q U_{I,I}^{e}(\mathbf{x}^{*}(z_{I}, \mathbf{c}_{1})) + (1 - q) U_{I,I}^{e}(\mathbf{x}^{*}(z_{I}, (1, 1))) \right] + (1 - p) \left[q U_{I,O}^{e}(\mathbf{x}^{*}(z_{R}, \mathbf{c}_{1})) + (1 - q) U_{I,O}^{e}(\mathbf{x}^{*}(z_{R}, (1, 1))) \right].$$
(7)

Note that her predecessor's centralization profile does not constrain a strong second-period executive. What matters for the incumbent's first-period choice of centralization profile is thus the case in which the period 2 executive is weak.

Recall that (1,0) is dominated for the incumbent executive I in a single period. Hence, setting $\mathbf{c}_1 = (1,0)$ is never optimal, and I effectively chooses between three "increasing" levels of centralization ((0,0), (0,1), and (1,1)). The incumbent can maximize her period 1 utility by setting $\mathbf{c}_1 = (1,1)$. In period 2, however, she may no longer be in office, and greater centralization increases the stakes of losing power. The incumbent, therefore, trades off the benefit of choosing policy today and potentially tomorrow against the risk of having her opponent set policies in centralized localities tomorrow.

How the incumbent resolves this trade-off depends on her re-election probability p. Centralization will be more appealing if she is likely to remain in office; otherwise, greater decentralization will be more attractive. Indeed, the expected two-period utility of the incumbent increases linearly with p, and more so with higher period 1 centralization levels. Since the benefits of greater centralization are increasing in the incumbent's electoral prospects, equilibrium centralization must be monotonically increasing in p.

To derive conditions under which the incumbent switches between centralization profiles, we compare $V_I(\mathbf{c}_1)$ under different centralization profiles and find the values of p at which she

is indifferent. Indifference between (0,0) and (0,1) obtains when p equals:

$$\underline{p} = 1 - \frac{1+q}{q} \left(\frac{z_I + (2\gamma + 2(1-\gamma)/\omega - 1)y_1}{2z_I} \right)^2.$$
(8)

Analogously, indifference between (1,1) and (0,1) requires p to be:

$$\overline{p} = 1 - \frac{1+q}{q} \left(\frac{z_I - (2\gamma + 2(1-\gamma)/\omega - 1)y_1}{2z_I} \right)^2.$$
(9)

The following result summarizes the incumbent's optimal choice of centralization profile given her electoral prospects.

Proposition 1 (Optimal Centralization). The optimal centralization profile for the firstperiod executive I is:

$$\mathbf{c}_{1}^{*} = \begin{cases} (0,0) & if \ p < \underline{p} \\ (0,1) & if \ \underline{p} \le p < \overline{p} \\ (1,1) & if \ p \ge \overline{p}. \end{cases}$$
(10)

Proposition 1 confirms our intuition about the insurance value of decentralization: incumbent executives who are unlikely to be re-elected decentralize the ally or even both localities to insure against losing office. With some rigidity, this choice deprives their opponent of future policy-making power. By contrast, a high probability of re-election makes executives more "greedy." Full centralization becomes appealing in period 1 because rigidity might not allow them to change the centralization level after re-election.

It is clear from equations (8) and (9) that $\underline{p} < \overline{p} \leq 1$. Proposition 2 characterizes the conditions under which either cutoff is interior such that partial or, respectively, full decentralization can arise in equilibrium. The result distinguishes between two kinds of polities:

Definition 1 (Rigidity). A polity has high rigidity if $q > \frac{1}{3}$ and low rigidity if $q < \frac{1}{3}$.

In addition, the result depends on two critical values of z_I .

Proposition 2 (Polarization and Centralization). There exists z_c and z_p , where $z_p < z_c$, such that:

- (i) if $z_I \ge z_c$, then $\overline{p} \le 0$ and thus $c^* = (1, 1)$.
- (ii) if $z_I \in [z_p, z_c)$, then $\overline{p} > 0 > \underline{p}$ and thus $c^* \neq (0, 0)$.
- (iii) if $z_I < z_p$ and rigidity is low, then $\overline{p} < 0$ and thus $c^* = (1, 1)$.
- (iv) if $z_I < z_p$ and rigidity is high, then $\underline{p} > 0$ and thus all centralization profiles are possible.

When polarization is low $(z_I \ge z_c)$, executives are ideologically moderate and would prefer the policy choices of opposing executives to those of their own ideological allies. Hence, full centralization is always preferred. As polarization becomes moderate $(z_I \in [z_p, z_c))$, the incumbent loses more if policies are set by her opponent in the second period. At the same time, the ideal policies of the incumbent and her ally roughly coincide. Rigidity may then let incumbent preserve the ally's policy autonomy. The first-period incumbent thus partially centralizes if she is pessimistic about re-election and fully centralizes otherwise.

When polarization is high $(z_I < z_p)$, the character of the equilibrium depends on rigidity. Under low rigidity, there is little point for the incumbent to give up policy-making authority today to "lock in" decentralization. Given that partial centralization is unlikely to survive, an extreme incumbent hesitates to give up present policy-making authority even to a moderate ally. Hence, the incumbent chooses full centralization. By contrast, high rigidity allows decentralization to insure against adverse electoral outcomes. An extreme first-period incumbent who is pessimistic about re-election will then find it optimal to exploit rigidity to preserve the policy autonomy of her ally or, if very pessimistic, of both localities. Full decentralization thus requires both high rigidity and polarization. Indeed, as foreshadowed in the analysis of a single period, executives must be *more* extreme than the localities ($z_I < z_p < y_1$) for full decentralization to arise.

How do executive welfare motivations and externalities affect our results? Because a higher

welfare motivation (lower ω) aligns executives' policy preferences, it expands the scope for centralization: \underline{p} , z_c and z_p increase in ω .⁵ In the extreme case of pure welfare motivation ($\omega = 0$), executives have perfectly aligned policy preferences and hence always desire full centralization, even when out of power.⁶ The incentive to decentralize in our model thus stems from executive policy preferences coupled with the risk of losing power – and not, as in Oates (1972), from the wish to adapt policy to local conditions. Under the standard view that politicians are office motivated and assuming that improving citizens' welfare increases popularity, one may interpret a greater welfare-orientation as a reduced form way to capture electoral concerns. Even though election probabilities are exogenous in our model, our framework thus suggests decentralization may become less likely when doing so has electoral implications.

Greater externalities (lower γ) have a similar effect on \underline{p} , z_c and z_p . Like in other models of decentralization, externalities in our model thus provide an impetus for centralization. The reason is that externalities create a divergence in policy preferences between localities and executives.

In sum, if executives and localities are more ideologically motivated (high ω and γ), the initial executive has incentives to "lock in" either full decentralization or centralization of the adversary, especially if the electoral environment is unfavorable and the second-period executive is unlikely to be strong.

4 Discussion

The allocation of policy-making authority is a key factor in determining policy outcomes. Therefore, the question of centralization versus decentralization has long been a concern to

 $^{{}^{5}\}overline{p}$ can increase or decrease with ω and γ .

⁶This preference is strict if $\gamma < 1$. Under no externalities ($\gamma = 1$) and pure welfare orientation, executives are indifferent between all centralization profiles, since executives and localities all choose policies at the localities' ideal points.

institution designers. An extensive literature has addressed the role of decentralization in producing externalities, generating information, and diffusing policies. However, as recent examples make clear, ideology is often a primary driver of such decisions. This paper isolates the roles of ideology, institutions, and electoral turnover to generate a purely political account of centralization choices.

Our simple two-period model shows that ideological polarization and re-election prospects push politicians away from centralization. The intuition is that decentralization can allow politicians to insure against their successors' efforts at imposing unfavorable policies. For this mechanism to work, institutional rigidities such as checks and balances are crucial. Majorities can easily undo decentralization in a system without rigidities, making insurance impossible. In an environment with rigidities, centralization is increasing in an incumbent's re-election prospects. We show that partial centralization is the norm, with complete decentralization predicted only when polarization is very high.

Our model produces comparative statics that align with existing evidence on in rigid presidential systems in Latin America (e.g., O'Neill 2005), and produces novel implications for empirical work. First, as full decentralization is predicted to depend on polarization, a fuller test could incorporate data on the ideological dimension of party competition. Second, several papers have examined the role of ethnic fragmentation in centralization decisions, with unclear results. Polarization and ethnic fragmentation are plausibly related because both imply the absence of mutually beneficial policies. Future work could assess whether rigidity plays a role in this relationship.

Opportunities for theoretical expansion exist as well. The appendix shows that our model's results extend to an infinite horizon setup. A more ambitious extension would endogenize elections by letting a decisive voter arise from one locality in each period. The need to both cater to this voter and react to their preferences may play an important role in disciplining the choices of national politicians.

References

- Arban, Erika. 2018. "The Referenda for More Autonomy in Veneto and Lombardia: Constitutional and Comparative Perspectives." *Perspectives on Federalism* 10(1): 242-267.
- Bednar, Jenna. 2011. "The Political Science of Federalism." Annual Review of Law and Social Science 7(1): 269-288.
- Blume, Lorenz, and Stefan Voigt. 2011. "Federalism and Decentralization A Critical Survey of Frequently Used Indicators." *Constitutional Political Economy* 22: 238-264.
- Bulman-Pozen, Jessica. 2014. "Partisan Federalism." Harvard Law Review 127(4): 1077-1146.
- Cai, Hongbin, and Daniel Treisman. 2009. "Political Decentralization and Policy Experimentation." Quarterly Journal of Political Science 4(1): 35-58.
- Callander, Steven, and Bård Harstad. 2015. "Experimentation in Federal Systems." Quarterly Journal of Economics 130(2): 951-1002.
- Cheng, Chen, and Christopher Li. 2019. "Laboratories of Democracy: Policy Experimentation under Decentralization." *American Economic Journal: Micro* 11(3): 125-154.
- Crémer, Jacques, and Thomas R. Palfrey. 1999. "Political Confederation." American Political Science Review 93(1): 69-83.
- Crémer, Jacques, and Thomas R. Palfrey. 2000. "Federal Mandates by Popular Demand." Journal of Political Economy 108(5): 905-927.
- Dickovick, J. Tyler. 2007. "Municipalization as Central Government Strategy: Central-Regional-Local Politics in Peru, Brazil, and South Africa." *Publius: The Journal of Federalism* 37(1): 1-25.
- Escobar-Lemmon, Maria. 2003. "Political Support for Decentralization: An Analysis of the Colombian and Venezuelan Legislatures." American Journal of Political Science 47(4): 683-697.
- Gilardi, Fabrizio. 2016. "Four Ways We Can Improve Policy Diffusion Research." State Politics & Policy Quarterly 16(1): 8-21.

- Gordon, Sanford C., and Dimitri Landa. 2021. "National Conflict in a Federal System." Journal of Politics 83(3): 961-974.
- Graham, Erin R., Charles R. Shipan, and Craig Volden. 2012. "Review Article: The Diffusion of Policy Diffusion Research in Political Science." *British Journal of Political Science* 43: 673-701.
- Kollman, Ken, John H. Miller, and Scott E. Page. 2000. "Decentralization and the Search for Policy Solutions." *Journal of Law, Economics, and Organization* 16(1): 102-128.
- León, Sandra, and Lluis Orriols. 2016. "Asymmetric federalism and economic voting." European Journal of Political Research 55(4): 847-865.
- Mardones, Rodrigo. 2007. "The Congressional Politics of Decentralization: The Case of Chile." *Comparative Political Studies* 40(3): 333-358.
- Mookherjee, Dilip. 2015. "Political Decentralization." Annual Review of Economics 7: 231-249.
- Moscovich, Lorena. 2015. "Decentralization and Local Government in Latin America." In: Millett, Richard L., Holmes, Jennifer S., Perez, Orlando J. (eds.). Latin American Democracy: Emerging Reality or Endangered Species. New York: Routledge, pp. 134-150.
- Oates, Wallace E. 1972. Fiscal Federalism. Books, Harcourt Brace Jovanovich.
- Oates, Wallace E. 1999. "An Essay on Fiscal Federalism." *Journal of Economic Literature* 37(3): 1120-1149.
- O'Neill, Kathleen. 2003. "Decentralization as an Electoral Strategy." *Comparative Political Studies* 36(9): 1068-1091.
- O'Neill, Kathleen. 2005. Decentralizing the State: Elections, Parties, and Local Power in the Andes. Cambridge: Cambridge University Press.
- Richardson, Lilliard E. 2019. "Medicaid Expansion During the Trump Presidency: The Role of Executive Waivers, State Ballot Measures, and Attorney General Lawsuits in Shaping Intergovernmental Relations." *Publius: The Journal of Federalism* 49(3): 437-464.
- Sorens, Jason. 2009. "The Partisan Logic of Decentralization in Europe." Regional & Federal Studies 19(2): 255-272.

- Spina, Nicholas. 2013. "Explaining Political Decentralization in Parliamentary Democracies." Comparative European Politics 11: 428-457.
- Strumpf, Koleman S. 2002. "Does Government Decentralization Increase Policy Innovation?" Journal of Public Economic Theory 4(2): 207-241.
- Treisman, Daniel. 2006. "Explaining Fiscal Decentralisation: Geography, Colonial History, Economic Development and Political Institutions." Commonwealth & Comparative Politics 289-325.
- Volden, Craig, Michael M. Ting, and Daniel P. Carpenter. 2008. "A Formal Model of Learning and Policy Diffusion." American Political Science Review 102(3): 319-332.
- von Wilpert, Marni. 2017. "City governments are raising standards for working people —
 and state legislators are lowering them back down." Economic Policy Institute.
 https://www.epi.org/publication/city-governments-are-raising-standardsfor-working-people-and-state-legislators-are-lowering-them-back-down/.