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Decentralized political systems have often been linked to inefficient public benefits provision and oversized public sectors, elevated budget deficits and public debt loads, and high inflation, fiscal crisis, and macroeconomic instability (Rodden and Wibbels 2002; Treisman 2000; Wibbels 2000). Decentralization weakens intergovernmental policy coordination by empowering subnational officials to choose public benefits and spending with an eye toward their political careers, producing subnational policy divergence (Rodden and Wibbels 2002; Weingast 2014). While such policy divergence is useful for accommodating diverse subnational policy needs (Weingast 2009), the contracts regulating intergovernmental fiscal relations in these systems can create common-pool resource dynamics in subnational spending that undermine national fiscal stability (Faguet 2014; Rodden 2002, 2003; Rodden and Wibbels 2002; Weingast 2009, 2014).

When intergovernmental fiscal contracts assign national governments responsibility for generating tax revenues and funding state governments through fiscal transfers—creating vertical fiscal imbalances—state governors have an incentive to deliver benefits to constituents but without regard to efficiency. Constituents do not hold them accountable for tax-benefit distortions, forcing national governments to accept their fiscal costs (Rodden 2002, 2003; Rodden and Wibbels 2002; Weingast 2009). When fiscal contracts allow states to enjoy soft budget constraints and national governments back excess state expenditures, state officials have an incentive to raise spending. Constituents do not hold them accountable for fiscal excess, forcing national governments to accept its costs (Rodden 2002, 2003; Rodden and Wibbels 2002; Weingast 2009). Rebalancing intergovernmental relations is difficult because state governors often enjoy influence over national policy making through national legislatures, allowing them to veto changes to state policy autonomy or fiscal resources (Rodden 2002; Rodden and Wibbels 2002; Treisman 1999). State leaders’ national policy influence can force national governments to accept vertical fiscal imbalances, soft budget constraints, and common-pool resource abuses (Weingast 2014).

Decentralized political systems thus appear doomed to struggles with state fiscal profligacy, which raises the importance of finding ways to bring state fiscal policy into line with national macroeconomic goals without requiring major changes to political institutions or fiscal contracts. In this vein, scholars have noted that vertical partisan alignment between national and state governments improves state fiscal discipline. Jones, Sanguinetti, and Tommasi (2000) find in Argentina that provincial governors copartisan with national presidents tend to spend less than governors from opposition parties. They argue that presidential influence over the career paths of copartisan...
governors encourages them to moderate spending to appease national presidents concerned with macroeconomic stability. Opposition governors juxtaposed against presidents do not face such top-down pressures and, instead, raise spending to survive hostile national political environments. To make their case, Jones et al. (2000) note that unified government (in the United States) raises presidents’ capacity to encourage fiscal prudence among national legislators who view national resources in the same common-pool way that governors would (e.g., Alt and Lowry 1994; Cox and McCubbins 2001; McCubbins 1991).

Similarly, Rodden and Wibbels (2002) find that nations with greater shares of state governments copartisan with national executives enjoy greater fiscal discipline cross-nationally. However, they argue that the main political threat to state governors in some nations may come from constituents whose electoral connection leads them to punish national incumbents for macroeconomic instability. Although Rodden and Wibbels (2002) note that presidents exert leverage over copartisan governors’ careers in some systems in the way described by Jones et al. (2000), in other systems governors might moderate their tendency to overfish common-pool resources out of concern for their copartisan presidents’ macroeconomic performance and its effect on their parties’ national reputations, which can affect their own electoral fortunes. Studies showing that strong macroeconomic performance confers electoral benefits on copartisan governors in some politically decentralized systems support this link (e.g., Gélineau and Bélanger 2005; Gélineau and Remmer 2006).

Vertical partisan alignment can thus moderate the common-pool resource dynamics often plaguing decentralized political systems, although the precise mechanism through which this occurs is unclear. In this study, I explain how to distinguish between the alternative “party leader” and “party reputation” mechanisms, something that scholars have not yet been able to do (Rodden and Wibbels 2002). To this end, I theorize about how each mechanism would operate at a third, lower tier of municipal government found in most decentralized systems but that has rarely been examined for vertical partisan effects. Yet, municipal mayors often enjoy the same policy and budgetary autonomy, and vertical fiscal imbalances and soft budget constraints, as state governors, raising spending around elections for political ends (Benton and Smith 2017; Drazen and Eslava 2010; Sakurai and Menezes-Filho 2008; Veiga and Veiga 2007). If mayors can raise spending for political purposes, then vertical partisan alignment should matter to their calculations as well.

I show how comparison of the fiscal behavior of (1) municipalities that share partisan allegiance with both state and national executives to (2) municipalities that share partisan alignment with only national executives to (3) municipalities that do not share partisan allegiance with national executives can be used to distinguish whether party leader or party reputation logics drive vertical partisan effects. If municipalities aligned with both state and national governments are more fiscally disciplined than those aligned with only national incumbents, then copartisan governors affect mayoral fiscal decisions and party leader concerns matter for municipal fiscal behavior. If municipalities aligned with both state and national officials are just as fiscally disciplined as municipalities aligned with only national copartisans, then copartisan governors play no role in mayoral fiscal decisions and party reputation concerns drive municipal fiscal behavior.

I demonstrate the usefulness of this approach using data from Mexico. Mexico has a decentralized (federal) political system with three tiers of government. Three main political parties compete in national, state, and municipal elections, producing a variety of vertical partisan alignments that I leverage to discern the nature of vertical partisan effects. Statistical analysis of municipal long-term debt shows that municipalities copartisan with both national presidents and state governors spend less than municipalities only aligned with national presidents. “Party leader”—rather than “party reputation”—concerns thus drive vertical partisan effects in this nation. Importantly, the results for Mexico apply only to this case. Other countries might enjoy vertical partisan effects driven by party reputations or by both party reputations and party leaders. They might also experience no vertical partisan effects. As I explain below, where electoral systems allow party leaders to control subnational politicians’ access to political opportunities, party leader concerns will likely guide their fiscal choices. Where electoral systems raise the influence of national party reputations over subnational politicians’ political careers, party reputation concerns will likely guide their fiscal behavior. Where the influence of party leaders and party reputations on subnational politicians’ careers is limited, vertical partisan effects will likely be absent.

That vertical partisan effects work through different logics—and sometimes might not be present at all—has important policy implications for decentralized political systems. To foreshadow the conclusion, the study suggests that the top-down and bottom-up rules-based approaches most often recommended for curtailing subnational common-pool resource abuses may work best when vertical partisan effects follow either party leader or party reputation logics, respectively. Otherwise, market-based approaches may work better for reining in fiscal excess. In making this point, the study contributes to debates about the best policy approaches to managing subnational fiscal excess—and the subnational capital markets that finance it—in decentralized political systems.
MECHANISMS DRIVING VERTICAL PARTISAN EFFECTS

There are four possible vertical partisan alignments in three-tiered decentralized political systems, shown in table 1. Among mayors aligned with national presidents, mayors might share partisan affiliation with state governors, or they might not. Municipalities whose mayors share partisan affiliation with both state and national executives are called NSM municipalities (N = national, S = state, M = municipal); those that share partisan affiliation with only national presidents are called NM municipalities. Among mayors not aligned with national presidents, mayors might share partisan affiliation with state governors, or they might not. Municipalities whose mayors share partisan affiliation with only state governors are called SM municipalities; those that do not share partisan affiliation with state or national executives are M municipal orphans.

Party leader concerns

I begin by considering relative NSM, NM, SM, and M municipal spending under the “party leader” mechanism. The core theoretical mechanism driving “party leader” vertical partisan effects is grounded in political ambition theory and how politicians build careers in vertically organized territorial-based decentralized political systems where party leaders control access to political opportunities (e.g., Samuels 2003; Schlesinger 1966). Here, party leaders at each level of the system control access to political opportunities within their territorial spheres of authority, promoting politicians up (and down) the hierarchical political career ladder. In such systems, politicians seek to appease their most proximate party leaders to ensure access to elected and appointed government and party posts, and party leaders look to their most proximate copartisan subordinates to fill them (Kerevel 2015; Schlesinger 1966). Off-path promotions that bypass rungs on the hierarchical political career ladder risk discord and are fairly rare. National party leaders are unlikely to promote municipal politicians to state posts if this means usurping the role of state copartisans aspiring to these posts. State party leaders are unlikely to promote municipal politicians to state posts if this means passing over state copartisans seeking these positions. This jibes with research showing the hierarchical paths of political promotion in party-leader-dominated politically decentralized systems (Kerevel 2015), in contrast to systems in which party leaders play no role in political promotions and politicians are free to seek off-path posts (Borchert 2011; Samuels 2003).

From the perspective of NSM and NM municipal mayors, this means two things. First, national party leaders leave copartisan state party leaders to oversee their NSM and NM mayors’ political careers. Second, NSM and NM mayors’ prospects for promotion at the hands of state party leaders determine whether these mayors seek to appease them. State governors (i.e., state party leaders controlling state government) with access to both state government and state party resources are better able to promote copartisan NSM mayors because they control access to resources for winning municipal elections, elected state government and appointed state bureaucratic posts, and state party positions. NSM mayors thus find it politically expedient to engage in fiscal discipline to appease copartisan state governors (who seek to appease copartisan national presidents concerned with macroeconomic stability). In contrast, out-of-power state party leaders have little to offer their NM mayors. Without access to state government, out-of-power state party leaders cannot appoint their NM mayors to state bureaucratic posts or ensure that they retain municipal power or secure election to state offices. Elected state offices, along with appointed state party posts, are monopolized by state copartisans awaiting the election of copartisan governors or promotion to elected or appointed national positions. With limited career prospects in state government—or in national government thanks to copartisan presidents’ reluctance to pass over state copartisans—NM mayors have little interest in fiscal discipline, especially if it could spell the loss of municipal political control. Instead, NM mayors find it expedient to raise fiscal spending to ensure their municipal electoral survival in hostile state political environments, while working toward the election of copartisan state governors.

The logic of party leader concerns thus suggests that NSM mayors will be driven toward greater fiscal discipline than NM mayors, who will spend similarly to SM and M mayors, if this mechanism drives vertical partisan effects. The presence of fiscally profligate opposition state governors juxtaposed against national presidents—who are thus free to use public spending to retain state power and to unseat NM mayors—encourages NM mayors to spend similarly to SM (and M) mayors to survive in municipal government. Without copartisan national presidents, SM mayors’ copartisan state gov-

Table 1. Municipal Vertical Partisan Alignments

<table>
<thead>
<tr>
<th>Level of Government</th>
<th>Possible Vertical Partisan Alignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>S S S S</td>
</tr>
<tr>
<td>State</td>
<td>M M M M</td>
</tr>
<tr>
<td>Municipal</td>
<td>NSM NM SM M</td>
</tr>
</tbody>
</table>

Note. Hypothetical party 1 in bold, party 2 italicized, party 3 underlined. N = national, S = state, and M = municipal level of government.
Party leader concerns

I now consider relative NSM, NM, SM, and M municipal spending under the “party reputation” mechanism. The core theoretical mechanism driving “party reputation” vertical partisan effects is grounded in retrospective economic voting theory (e.g., Lewis-Beck 1988) and how politicians build careers in vertically organized territorial-based politically decentralized systems in which national macroeconomic performance determines access to political opportunities. Here, poor national macroeconomic performance undermines voter support for national incumbents (LeDuc and Pammett 2013; Singer 2013) and their subnational copartisans (Gélineau and Bélanger 2005; Gélineau and Remmer 2006). Although elected and appointed government and party positions exist at all levels, the chance that politicians will rotate through them depends on national macroeconomic performance and whether their parties are responsible for it. Strong macroeconomic performance strengthens national incumbent reputations and electoral support, increasing the political opportunities available to subnational copartisans. Weak national macroeconomic performance weakens national incumbent reputations and electoral support, reducing the opportunities available to subnational copartisans.

From the perspective of NSM and NM municipal mayors, this means that national macroeconomic instability stands to undermine not only their national parties’ electoral support but also their individual political career prospects. As a result, and to paraphrase Rodden and Wibbels (2002, 508), NSM and NM mayors will have an incentive to make fiscal decisions that support national macroeconomic stability when their electoral and political fates are directly tied to those of copartisan national presidents and national party reputations. It is counterproductive for NSM and NM mayors to sabotage copartisan presidents’ efforts to ensure macroeconomic stability with municipal fiscal excess. Instead, it is more politically expedient for them to make fiscal policy choices that contribute to balanced national budgets, low inflation, macroeconomic stability—and thus their parties’ national reputations—in the interest of their political careers.

The logic of party reputation concerns suggests that both NSM and NM mayors will be equally driven toward greater fiscal discipline, compared to SM and M mayors facing incentives toward fiscal excess, if this mechanism drives vertical partisan effects. Of course, copartisan state governors concerned with the effect of their parties’ national reputations on their own electoral prospects might seek to strengthen their NSM mayors’ awareness of the electoral benefits of fiscal prudence. However, the same could be said for out-of-power state party leaders and their copartisan NM mayors. If NSM and NM mayors’ future political opportunities are determined by the ability of copartisan national presidents to deliver macroeconomic stability, any additional appeals by copartisan state governors or out-of-power state party leaders are unlikely to affect NSM or NM mayors’ political calculations, especially if they have already benefited electorally from sound national macroeconomic performance and their own fiscal contribution to it. As such, both NSM and NM mayors will be driven to greater fiscal discipline compared to SM and M mayors who are juxtaposed against national presidents and do not benefit electorally from—and are in fact electorally harmed by—national macroeconomic stability. NSM and NM mayors face national party reputation effects, whereas SM and M mayors do not. In short (see table 2):

<table>
<thead>
<tr>
<th>Causal Mechanism</th>
<th>Relative Fiscal Spending Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of vertical partisan effects:</td>
<td></td>
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<tr>
<td>Party leader mechanism</td>
<td>NSM &lt; NM = SM = M</td>
</tr>
<tr>
<td>Party reputation mechanism</td>
<td>NSM = NM &lt; SM = M</td>
</tr>
<tr>
<td>Both party leader and party reputation mechanics</td>
<td>NSM &lt; NM &lt; SM = M</td>
</tr>
<tr>
<td>Absence of vertical partisan effects:</td>
<td></td>
</tr>
<tr>
<td>Vertical partisan spending</td>
<td>NSM ≤ NM ≤ SM &lt; M</td>
</tr>
<tr>
<td>Vertical partisan national bailouts/access</td>
<td>NSM = NM &gt; SM = M</td>
</tr>
<tr>
<td>Vertical partisan national and state bailouts/access</td>
<td>NSM ≥ NM ≥ SM &gt; M</td>
</tr>
<tr>
<td>No vertical partisan logic</td>
<td>NSM = NM = SM = M</td>
</tr>
<tr>
<td>(nonpartisan bailouts/access)</td>
<td></td>
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</tbody>
</table>

Note. N = national, S = state, and M = municipal level of government.
Party Reputation Concerns: If party reputation concerns drive subnational fiscal behavior, NSM and NM mayors will be equally fiscally disciplined, with both NSM and NM mayors more fiscally disciplined than SM and M mayors (who will be equally fiscally undisciplined).

Party leader and party reputation concerns
It is possible that both party leader and party reputation concerns might drive NSM and NM fiscal behavior, that is, that both party leaders and national party reputations might affect subnational politician’s political career opportunities. Rodden and Wibbels (2002) suggest this but do not elaborate. Adding together the fiscal behavior of these two logics leads to (see table 2):

Party Leader and Party Reputation Concerns: If party leader and party reputation concerns drive subnational fiscal behavior, NSM mayors will be more fiscally disciplined than NM mayors, with both NSM and NM mayors more fiscally disciplined than SM and M mayors (who will be equally fiscally undisciplined).

No vertical partisan effects
It is also possible that political careers in politically decentralized systems might not depend on party leaders or party reputations, undermining the incentive for subnational politicians to reduce spending on the basis of either of these concerns. Evidence that NSM, NM, SM, and M mayors all succumb to common-pool resource dynamics and are similarly fiscally undisciplined would show this. This would also suggest the presence of vertical nonpartisan bailout expectations, where vertical partisan alignment plays no role in moderating relative municipal fiscal behavior. Evidence that NSM mayors spend more than NM ones, who spend similarly to or more than SM ones, who spend more than M ones, would suggest the presence of vertical partisan national and state bailout expectations, where municipalities with higher-level copartisans expect bailouts and thus enjoy preferential access to debt for financing fiscal excess (see table 2).

Evidence that NSM mayors spend similarly to or less than NM ones, who spend similarly to or less than SM ones, who spend less than M ones, would show that vertical partisan spending drives municipal fiscal behavior. Here, higher-level government spending in copartisan municipalities enables NSM, NM, and SM mayors to spend less than M ones. Greater M spending compared to NSM, NM, and SM spending distinguishes vertical partisan spending from vertical partisan effects. Where vertical partisan effects are present, SM and M mayors are similarly fiscally undisciplined because they are juxtaposed against national presidents (see table 2). Table 2 is not meant to be exhaustive but to show how other political logics would produce relative NSM, NM, SM, and M fiscal discipline different from that under vertical partisan effects.

EMPIRICAL STRATEGY
Mexico satisfies three conditions for examining theories about vertical partisan effects: its federal system includes three tiers of government, (at least) three main parties regularly win national and subnational executives, and loopholes in its federal fiscal contract allow subnational governments to overspend. Mexico is divided into 31 states and a federal district (designated a state in 2016), with states divided into about 2,440 municipalities (depending on the year). The Institutional Revolutionary Party (PRI) controlled Mexico during much of the twentieth century, losing the presidency in 2000 but regularly winning state and municipal offices. Two other national parties also regularly win state and municipal elections: the National Action Party (PAN), which won the 2000 and 2006 presidential races, and the Democratic Revolution Party (PRD). The PRI reassumed the presidency in December 2012 (term ending in December 2018).

Mexico’s federal fiscal contract dates to fiscal, public debt, and banking reforms made between 1997 and 2000 that operated mostly intact from 2001 to 2016, when a new public debt law was approved. The 2001–16 fiscal contract purposefully strengthened vertical fiscal imbalances: the national government retained most tax rights and funded states through fiscal transfers (Díaz-Cayeros 2006); states redistributed a set share of federal transfers to municipalities (Timmons and Broid 2013). States and municipalities enjoyed some tax rights, but they were insufficient for meeting policy obligations. The perverse fiscal incentives of Mexico’s vertical fiscal imbalances are well known (Cabrero and Carrera 2002; Giugale, Hernández-Trillo, and Oliveira 2000).

Even so, the 2001–16 fiscal contract aimed at eliminating the soft budget constraints of prior decades, implementing a hybrid rules- and market-based system for managing access to the subnational capital market (Giugale et al. 2000; Revilla 2013). However, several loopholes allowed subnational fiscal profligacy to persist. By law, states and municipalities were not authorized to run fiscal deficits, although they could use short-term loans for cash management and to close year-end fiscal accounts (Revilla 2013). In practice, however, short-term loans were unregulated and could remain unreported to national authorities in subnational fiscal accounts, allowing subnational governments to run fiscal deficits by leaving these loans to accumulate (often unpaid) and refinancing them with long-term debt (Fitch Ratings 2011; Hernández-Trillo and Smith-Ramirez 2009; Hurtado and Zamarripa 2013; Revilla 2013).
By law, subnational governments were authorized to finance “economically productive” public investment (outlined in the national constitution) with long-term debt in Mexican pesos, from authorized financial institutions, and report it to the secretary of the treasury and public credit (Secretaría de Hacienda y Crédito Público [SHCP], http://www.shcp.gob.mx). Unreported long-term debt would be risk reweighted automatically by the SHCP’s National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores [CNBV]), raising bank capitalization requirements (Giugale et al. 2000; Revilla 2013).

Reflecting the rules-based aspect of Mexico’s approach to managing subnational capital markets, state legislatures were responsible for setting limits to state and municipal long-term debt and for authorizing state and municipal long-term loans. The approval of municipal councils was also needed for municipal long-term debt. In practice, however, governors controlled state legislatures and bureaucracies, and mayors, municipal councils and bureaucracies, weakening oversight over debt decisions and allowing long-term debt obligations to exceed formal limits (enacted in only about half of the states and usually unenforced; Hurtado and Zamarripa 2013). At the municipal level, electoral laws in all but six states guaranteed mayors absolute majorities in municipal councils, while municipal administrative structures guaranteed all mayors absolute control over their bureaucracies (Merino 2006; Meza 2015; Pérez Durán 2008). Weak oversight and strong bureaucratic control allowed subnational governments to run up ever larger debt.

By law, subnational borrowing had to be based on fiscal solvency, with lenders holding capital reserves tied to it, reflecting the market-based side of Mexico’s approach to managing its subnational capital market (Hernández-Trillo and Smith-Ramírez 2009; Revilla 2013). Subnational governments seeking loans from private lenders had to secure formal credit ratings (with one exception; see below) from authorized agencies to prevent their loans from automatic capital risk reweighting (Hernández-Trillo and Smith-Ramírez 2009; Revilla 2013). Those seeking loans from public banks faced internal bank fiscal appraisals, with these loans scrutinized by the CNBV and capital risk reweighted as needed (Giugale et al. 2000). In practice, however, subnational fiscal accounts were nontransparent, with arrears to service providers and public employees, other contingent liabilities (like pension obligations), and (unsanctioned) fiscal deficits (and the short-term loans financing them) unreported (Hernández-Trillo and Smith-Ramírez 2009; Hurtado and Zamarripa 2013). Subnational governments also shopped for credit ratings to guarantee good reports and postponed bad ones, while competition between agencies for clients inflated ratings (Rosado Buenfil 2017). Subnational credit ratings and fiscal assessments were often—if not usually—inconsistent with true subnational fiscal positions (Hernández-Trillo and Smith-Ramírez 2009; Rosado Buenfil 2017), with states and municipalities accessing credit lines disproportionate to their fiscal capacity to repay.

Much of this was likely widely known, but subnational governments could collateralize long-term debt with unmarked and earmarked fiscal transfers and own-source revenues, with these resources intercepted by fiduciaries and debt payments made before reaching subnational treasuries, reducing the risk to repayment. In practice, however, debt collateralization did not prevent subnational governments from assuming debt obligations that neared the limit of or exceeded the resources available for collateralization. The resources collateralizing debt also declined during economic downturns, affecting repayment. There were no hard bailouts during the period under analysis, but soft bailouts occurred when subnational governments were allowed to refinance short-term loans using long-term debt or to restructure long-term debt to reduce payments (Fitch Ratings 2011; Hurtado and Zamarripa 2013; Revilla 2013). National and state governments often helped municipalities orchestrate access to long-term credit and interpreted the constitution’s “economic productivity” clause to include debt refinancing and restructuring (Fitch Ratings 2011; Hernández-Trillo and Smith-Ramírez 2009; Hurtado and Zamarripa 2013; Revilla 2013). Loopholes in Mexico’s approach to managing its subnational capital market thus created opportunities for subnational fiscal excess (Benton and Smith 2017; Espinosa and Martell 2015; Giugale et al. 2000; Hernández-Trillo, Díaz-Cayeros, and Gamboa González 2002).

DATA AND STATISTICAL APPROACH

To distinguish between the party leader, party reputation, and joint party leader–party reputation mechanisms underlying vertical partisan effects, I use a panel data set consisting of 1,873 municipalities in Mexico across 11 years (2005–15), with 20,603 possible observations. I exclude Oaxaca state’s 570 municipalities because a supermajority select governments using nonpartisan systems on different timetables. I exclude the Federal District, as it operated like a state.

The dependent variable is yearly total municipal long-term debt from commercial banks or nonbank financial entities (Sociedades Financieras de Objeto Múltiple, commonly known as Sofomes). The SHCP has only published subnational long-term debt obligations since 2005, so the study is limited to 2005–15 (falling under the 2001–16 fiscal contract). I transform yearly debt obligations into per capita square roots to
address nonlinearity and account for outliers. (I do not use a logarithmic transformation, as municipalities can choose zero liabilities.) Juárez, in the state of Coahuila, had per capita debt obligations nearly 40 times greater than the next-indebted municipality in 2009 and 2010, when it was under municipal and state PRI control juxtaposed against national PAN rule (making it an SM municipality). I exclude this case, as it could bias the results in favor of finding vertical partisan effects. During 2005–15, 1,315 municipalities had long-term debt, including 404 with commercial bank or nonbank financial entity debt, 1,206 with development bank debt, 208 with bond debt, and 95 with “trust” debt. Trusts are managed by third-party financial institutions, but the finance ministry does not specify the type of debt managed by them. Among municipalities with commercial bank or nonbank financial entity loans, debt from these sources averaged 107.90 pesos per capita (SD = 276.25, min = 0, max = 3,554.35). Data are from the SHCP.

I examine long-term debt from commercial banks and nonbank financial entities rather than fiscal deficits or fiscal spending. As noted, municipal fiscal deficits are unsanctioned, with municipalities not reporting deficits or spending beyond revenues. As noted, municipal governments used short-term loans from commercial banks and nonbank financial entities to run unsanctioned fiscal deficits, accumulating these loans and refinancing them with long-term credit from these same institutions. Municipalities cannot use development bank loans or bond emissions for short-term financing, reducing their capacity to refinance such loans with these institutions. Debt from commercial banks and nonbank financial entities thus serves as a good proxy for fiscal excess, with loans from these institutions widely available to subnational governments in Mexico.

Commercial banks have lent to subnational governments in Mexico since the early twentieth century, and subnational governments enjoy preexisting relationships with them because they handle other banking needs (Hernández-Trillo et al. 2002). The operation of non-deposit-taking nonbank financial entities (the Sofomes) was authorized in 2006 in an effort to deepen the nation’s credit market. These entities (27 regulated, 3,060 unregulated) operate alongside 48 licensed and regulated commercial banks (Comisión Nacional de la Protección y Defensa de los Usuarios de Servicios Financieros, http://www.condusef.gov.mx). Unlike commercial banks, nonbank financial entities need not be licensed by the CNBV and can opt out of CNBV regulation if they share no equity links with commercial banks. Otherwise, they face the same CNBV regulation as their supervisory banking institutions (OECD 2011). Among nonbank financial entities, municipal short- and long-term debt was mainly supplied by the unregulated ones targeting municipalities underserved by more traditional lenders. Unregulated nonbank financial entities could also operate without meeting CNBV capitalization requirements, facilitating their ability to lend to municipalities with low/no credit ratings but that could still collateralize debt with fiscal transfers or other revenues (thereby still attracting these lenders).

The main explanatory variables are the four structures of vertical partisan alignment. Dummy variables record whether municipalities were NSM, NM, SM, or M in their alignment each year. I considered any coalition between one of the main national PAN, PRI, or PRD parties and any small party as dominated by the main national party, which tended to be the case in most municipalities. Between 2005 and 2012, the PAN held the national presidency; between 2013 and 2015 (term ending 2018) the PRI held the presidency. The PAN, PRI, PRD (on their own or in coalition with small parties), and an infrequent PAN-PRD coalition won all state and most municipal elections. I consider state and municipal PAN-PRD coalitions to be juxtaposed against national PAN rule. Excluding Juárez, there are 3,292 NSM, 3,293 NM, 7,055 SM, and 6,888 M municipal-year observations in the data set. The number of NSM, NM, SM, and M municipal-year observations totals 20,528 (rather than 20,603) because of the creation/elimination of municipalities that reduced their lives or missing electoral data. Data are from state electoral institutes.

Municipalities might vary in their ability to access credit, regardless of their capacity to collateralize debt. Municipalities with greater fiscal resources have greater resources for debt collateralization, while more heavily populated municipalities with better access to financial institutions or larger tax bases might be better able to access loans (Benton and Smith 2017; Freire 2014; Petersen and Huertas 2004; Thau 2011). Municipal fiscal revenue (own source plus transfer revenue [square root per capita]) and its lag, as well as municipal population (square root), capture this. I do not use municipal credit ratings. Even if they were reliable (which they were likely not), only those municipalities accessing debt from commercial banks, regulated nonbank financial entities, or bond markets needed them. The inclusion of credit ratings would lead municipal-year observations with only unregulated nonbank financial entity or development bank debt obligations, or no debt obligations, to drop out of the analysis inadvertently.

Municipalities might vary in their incentive to access credit. Low human development raises the need for public investment (captured with Mexico’s marginality index; Sáez 2016). High vertical fiscal imbalances raise the incentive to
overspend (measured as the ratio of transfer revenues to total revenues; Rodden 2002, 2003; Rodden and Wibbels 2002; Weingast 2009). Low municipal administrative capacity might result in poor fiscal choices (captured with population, human development, and vertical fiscal imbalances; Avellaneda 2009; Ibarra Salazar, Sandoval Musi, and Sotres Cervantes 2001; Mendoza 2004; Smith and Benton 2017). Mayors might raise debt ahead of municipal elections or state gubernatorial races, or amid weak political mandates (captured with mayoral and gubernatorial election dummies, winning municipal margins; Benton and Smith 2017; Drazen and Eslava 2010; Sakurai and Menezes-Filho 2008; Veiga and Veiga 2007), even if vertical partisan alignment affects the relative magnitude of these effects. Partisan ideological differences might influence fiscal spending (Benton and Smith 2017), or partisan organizational differences might affect the strength of vertical partisan effects across parties (captured with partisan dummies). Data are from the National Institute of Geography and Statistics (http://www.inegi.gob.mx), its National Population Council (https://www.gob.mx/conapo), and state electoral institutes.

I examine the data using linear Prais-Winston cross-sectional time-series analysis with panel-corrected standard errors. Unit-root tests (assuming a common autoregressive process) show that the data are stationary, so I keep the data in level form. Wooldridge tests for serial autocorrelation in the residuals are significant ($p < .01$), so I correct all models for a common autoregressive error process of order 1. Modified Wald tests for group-wise heteroskedasticity in the residuals are significant ($p < .01$), so I correct all models for panel-level heteroskedastic errors (assuming no contemporaneous correlation across panels). (I could not correct for panel-specific autoregressive processes or cross-panel contemporaneous correlation because of missing fiscal data.) I include a lagged dependent variable in all models to account for persistence, making the models dynamic (De Boef and Keele 2008; Williams and Whitten 2012).

Year fixed effects control for intertemporal variation in (national/international) debt dynamics common to all municipalities; tests for whether year dummies were jointly zero were significant ($p < .01$). State fixed effects control for state differences that might affect municipal debt dynamics, such as state fiscal policy, debt loads, debt ceilings, oversight over municipal borrowing, and electoral laws allowing proportional representation in municipal councils (that might raise municipal oversight). I also prefer state fixed effects to municipal fixed effects on econometric grounds: two of the main explanatory variables (the NSM and NM dummies) are time invariant in most municipalities, and some of the controls are highly sluggish (Clark and Linzer 2015). In addition to the lagged dependent variable, I include all other municipal debt types and their lags to control for any effect on commercial bank or nonbank financial entity debt.

**STATISTICAL RESULTS**

Table 3 presents the results. Model 1 examines the impact of NM, SM, and M vertical partisan alignment compared to NSM alignment (the omitted case) on the full sample of all municipalities. As shown, NM municipalities acquired greater per capita commercial bank and nonbank financial entity debt compared to their NSM counterparts, with the NM variable’s coefficient positive and significant ($p < .01$). SM and M municipalities also assumed greater commercial bank debt compared to NSM ones ($p < .05$). Overlapping confidence intervals (fig. 1A) around the NM, SM, and M coefficients show that they were not statistically different in their fiscal behavior. The results are in line with a party leader logic behind vertical partisan effects. Although I control for factors affecting municipal access to subnational capital markets, it could be that municipalities not accessing any type of debt are distinct from those accessing some kind of credit. I therefore rerun the analysis on the subsample of municipalities that accessed some kind of debt in at least one year during the period under analysis, excluding all municipalities that assumed no debt. The results in model 2 in table 3 are the same as for the full sample: NSM municipalities assumed lower commercial bank or nonbank financial entity debt than NM, SM, and M municipalities, who behaved no differently from one another (shown by their overlapping confidence intervals in fig. 1B), in line with the party leader logic.

It could also be that there is something different about municipalities accessing private sector debt compared to municipalities that rely on public development bank credit. I therefore rerun the analysis on another two subsamples. Model 3 in table 3 includes all municipalities assuming commercial bank or nonbank financial entity loans, regardless of whether they contracted public development bank debt (excluding any municipalities that only assumed development bank loans). Model 4 in table 3 examines the smaller subsample that accessed commercial bank or nonbank financial entity debt as well as public development bank loans (excluding any municipalities that only accessed commercial bank or nonbank financial entity credit). Development bank loans require technical assistance to improve fiscal reporting and debt management, with municipalities assuming these loans more transparent in their fiscal finances and use of credit. The results are the same. The results in table 3 show that NSM municipalities assume lower per capita commercial bank or nonbank financial entity debt compared to their NM, SM, and M counter-
parts, in line with party-leader-driven vertical partisan effects in the short term. To demonstrate that this persists into the longer term, I do two things. First, I estimate simple long-term effects to show that they are in line with the short-term ones (see app. 1; apps. 1–3 available online). Second, I conduct “dynamic simulations” of the long-term effects of NSM compared to NM, SM, and M vertical partisan alignment on commercial bank or nonbank financial entity debt, following the Williams and Whitten (2012) procedure. (I prefer the simple dynamic panel approach due to this procedure, but I report results for dynamic panel models in app. 3; the results are the same.)

Figure 1 presents the results for the dynamic simulations for the full sample and the subsample of municipalities with debt. The impact of NSM municipal partisan alignment in lowering commercial bank or nonbank financial entity debt compared to NM, SM, and M municipalities persists and grows over time. For example, among those municipalities with some kind of debt (fig. 1B), after just five years NM (SM or M) municipalities each count on nearly three pesos per capita more commercial bank and nonbank financial entity debt compared to their NSM counterparts (all other variables at their means). For an NM (SM or M) municipality with 10,000 people, this amounts to about 30,000 pesos (or US $2,750 at 10.89 Mexican pesos per US dollar in 2005) additional commercial bank or nonbank financial entity debt compared to a similar NSM municipality (beyond that already owed). This seemingly small sum can loom large in the eyes of mayors governing poor municipalities with other public spending and debt repayment obligations. It can also loom large in the eyes of national presidents concerned about the macroeconomic impact of debt across all municipalities over time.

ADDRESSING ALTERNATIVE EXPLANATIONS

It could be argued that NSM municipalities assume lower commercial bank or nonbank financial entity debt because they enjoy privileged access to other types of debt or benefit from “vertical partisan spending” (table 2). I dismiss these possibilities. All models include controls for all other debt types (and their lags), which account for any impact they might have on commercial bank or nonbank financial entity borrowing. All models include controls for total municipal fiscal revenues (and their lags), which account for any partisan favoritism in state and federal transfers. The commercial bank and nonbank financial entity models show that NSM mayors borrow less than NM, SM, and M mayors, with no difference between NM, SM, and M municipal borrowing. If vertical partisan spending were present but not accounted for by the controls, then NSM mayors would borrow less than NM and SM mayors, who would borrow less than M mayors deprived of higher-level copartisans (table 2). This was not the case.

It could be argued that some factor underlying vertical partisan alignment—rather than vertical partisan alignment itself—drives the difference between NSM compared to NM, SM, and M municipalities in commercial bank or nonbank financial entity borrowing. If this is the case, then we should observe the same vertical partisan effects across other types of debt. If it is not, then we should not observe the same vertical partisan effects across other types of loans. I therefore examine development bank and bond debt—where vertical partisan effects should be absent—in a placebo test. Public development bank loans rank alongside commercial bank debt as the oldest type of subnational financing in Mexico. National governments likely push all or just copartisan
Table 3. Vertical Partisan Effects and Municipal Debt in Mexico, 2005–2015

<table>
<thead>
<tr>
<th></th>
<th>Commercial Bank and Nonbank Financial Entity Debt</th>
<th>Development Bank Debt</th>
<th>Bond Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Sample of All Municipalities</td>
<td>Municipalities with Commercial Bank and/or Nonbank Financial Entity Debt</td>
<td>Municipalities with Commercial Bank and/or Nonbank Financial Entity Debt and Development Bank Debt</td>
</tr>
<tr>
<td>NSM municipality</td>
<td>Omitted</td>
<td>Omitted</td>
<td>Omitted</td>
</tr>
<tr>
<td>NM municipality</td>
<td>.468*** (.133)</td>
<td>.643*** (.185)</td>
<td>1.329*** (.425)</td>
</tr>
<tr>
<td>SM municipality</td>
<td>.275** (.111)</td>
<td>.350** (.154)</td>
<td>.615* (.355)</td>
</tr>
<tr>
<td>M municipality</td>
<td>.240** (.110)</td>
<td>.315** (.150)</td>
<td>.636* (.355)</td>
</tr>
<tr>
<td>Lag commercial bank or nonbank financial entity debt</td>
<td>.493*** (.0245)</td>
<td>.528*** (.0236)</td>
<td>.641*** (.0203)</td>
</tr>
<tr>
<td>Commercial bank or nonbank financial entity debt</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Development bank debt</td>
<td>.578*** (.00651)</td>
<td>.0670*** (.00686)</td>
<td>.221*** (.0218)</td>
</tr>
<tr>
<td>Lag development bank debt</td>
<td>.225*** (.00645)</td>
<td>.0201*** (.00674)</td>
<td>.129*** (.0222)</td>
</tr>
<tr>
<td>Bond debt</td>
<td>.0604* (.0353)</td>
<td>.0537 (.0360)</td>
<td>.116** (.0575)</td>
</tr>
<tr>
<td>Lag bond debt</td>
<td>.0344 (.0350)</td>
<td>.0406 (.0357)</td>
<td>.0172 (.0570)</td>
</tr>
<tr>
<td>Trust debt</td>
<td>.0451 (.140)</td>
<td>.0123 (.134)</td>
<td>.0562 (.123)</td>
</tr>
<tr>
<td>Lag trust debt</td>
<td>.0531 (.140)</td>
<td>.00862 (.134)</td>
<td>.00564 (.123)</td>
</tr>
<tr>
<td>Margin of victory</td>
<td>.408 (.280)</td>
<td>.565 (.391)</td>
<td>1.211 (1.067)</td>
</tr>
<tr>
<td>Mayoral election year</td>
<td>.170*** (.0566)</td>
<td>.268*** (.0827)</td>
<td>.544*** (.226)</td>
</tr>
<tr>
<td></td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Gubernatorial election year</td>
<td>-.0674 (.0740)</td>
<td>-.0793 (1.10)</td>
<td>-.288 (3.41)</td>
</tr>
<tr>
<td>PRI municipality</td>
<td>Omitted</td>
<td>Omitted</td>
<td>Omitted</td>
</tr>
<tr>
<td>PAN municipality</td>
<td>-.323 (.101)</td>
<td>-.466 (.142)</td>
<td>-.856 (.344)</td>
</tr>
<tr>
<td>PRD municipality</td>
<td>-.271 (.0821)</td>
<td>-.379 (.111)</td>
<td>-.898 (.281)</td>
</tr>
<tr>
<td>PAN-PRD municipality</td>
<td>.170 (.143)</td>
<td>.173 (.171)</td>
<td>.797 (.517)</td>
</tr>
<tr>
<td>Other party municipality</td>
<td>-.0961 (.108)</td>
<td>-.184 (.138)</td>
<td>-.070 (.448)</td>
</tr>
<tr>
<td>Fiscal assets (per capita)</td>
<td>-.00351 (.00410)</td>
<td>-.00811 (.00775)</td>
<td>-.0395 (.0286)</td>
</tr>
<tr>
<td>Lag fiscal assets (per capita)</td>
<td>.0148 (.00441)</td>
<td>.0255 (.00814)</td>
<td>.0916 (.0296)</td>
</tr>
<tr>
<td>Vertical fiscal imbalance</td>
<td>-1.844 (.420)</td>
<td>-2.368 (.551)</td>
<td>-3.889 (.1432)</td>
</tr>
<tr>
<td>Lag vertical fiscal imbalance</td>
<td>-1.362 (.443)</td>
<td>-1.390 (.573)</td>
<td>-1.043 (.1457)</td>
</tr>
<tr>
<td>Human development</td>
<td>.0399 (.0477)</td>
<td>.0337 (.0604)</td>
<td>-.0909 (.217)</td>
</tr>
<tr>
<td>Total population</td>
<td>.00648 (.686)</td>
<td>.00580 (.845)</td>
<td>.00341 (.1677)</td>
</tr>
<tr>
<td>Constant</td>
<td>.977 (.686)</td>
<td>1.189 (.845)</td>
<td>.729 (.1677)</td>
</tr>
<tr>
<td>Year fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>State fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>17,261 12,314</td>
<td>3,865 17,261</td>
<td>12,314 17,261</td>
</tr>
<tr>
<td>Number groups</td>
<td>1,867 1,313</td>
<td>403 1,867</td>
<td>1,313 1,867</td>
</tr>
<tr>
<td>Minimum observations</td>
<td>1 1 1</td>
<td>2 1 1</td>
<td>1 1 1</td>
</tr>
<tr>
<td>Maximum observations</td>
<td>10 10 10</td>
<td>10 10 10</td>
<td>10 10 10</td>
</tr>
<tr>
<td>χ²</td>
<td>2371.1*** 2805.3*** 3581.7*** 3019.8*** 20690.9 13973.8 12216.9 12550.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


* p < .10.
** p < .05.
*** p < .01.
municipalities toward public development bank debt to meet priorities in six-year national development plans. Development bank debt thus should be devoid of vertical partisan effects. Models 5 and 6 in table 3 show that the NM term was insignificant in the full sample and both the NM and SM terms insignificant in the subsample with debt (see also app. 2). Research is needed to understand development bank debt dynamics but, at least for the purposes here, the point is clear: development bank debt is free from vertical partisan effects.

Bond emissions are much less frequent, newer (dating to 2001), and less well known. Many financial institutions specializing in them do not provide short-term financing or other banking services, so they do not enjoy the same ties to municipalities as commercial banks (or nonbank financial entities catering to low-income individuals). However, municipal bond emissions likely benefit from higher-level copartisan governments due to their help in organizing access to this source of credit. Bond emissions should thus be devoid of vertical partisan effects. Models 7 and 8 in table 3 (and app. 2) show that NM and SM municipalities enjoyed lower bond debt than NSM ones. Research is needed to unpack municipal bond dynamics but, for the purposes of this study, the point is clear: bond emissions are free from vertical partisan effects.

**Electoral Systems and Vertical Partisan Effects**

That Mexico would enjoy party-leader-driven vertical partisan effects is not surprising. Mexico is a politically decentralized system where party leaders act as gatekeepers to elected and appointed government and party offices, leading politicians to appease their most proximate party leaders to ensure their political careers (Kerevel 2015; Langston 2010). The absence of immediate reelection rights for municipal mayors and councilors (and for state and national legislators) during the period under study, alongside the absence of all reelection rights for state governors, reinforced party leaders’ influence over their subordinates (Kerevel 2015; Langston 2010).

It is likely that in politically decentralized systems where party leaders control executive and legislative ballots and votes are cast for parties—such as where party leaders determine candidates for executive office and use closed party lists to fill legislative seats—subnational politicians’ careers will depend on appealing party leaders, producing party-leader-driven vertical partisan effects. Where party leaders do not control executive or legislative ballots and votes are cast for candidates—such as where politicians determine whether to run in party primaries for executive offices and whether to appear on open party lists filling legislative seats—as long as votes are pooled within parties, subnational politicians’ careers will depend on the strength of their personal support and on the strength of their parties’ national reputations, producing party-reputation-driven vertical partisan effects. Where party leaders control executive and legislative ballots but votes are cast for candidates—such as where party leaders determine participation in party primaries for executive offices and in open party lists for legislative seats—as long as votes are pooled within parties, subnational politicians’ careers will depend on party leaders and party reputations, producing joint party leader-party reputation vertical partisan effects.

The proliferation of political parties should weaken the impact of vertical partisan alignment on fiscal behavior, as politicians find it difficult to determine whom to appease to ensure promotion (under the party leader logic) or to take credit for national macroeconomic stability (under the party reputation logic) amid multiparty coalition governments. In politically decentralized systems where party leaders do not control executive or legislative ballots and votes are cast for candidates—such as where politicians determine whether to run in party primaries for executive offices or appear on open party lists for legislative seats—as long as votes are not pooled within parties, subnational politicians’ careers will depend on the strength of their personal support and not on party leaders or party reputations, with no vertical partisan effects present.

**Conclusion**

I leverage the presence of three tiers of government in politically decentralized systems to distinguish how vertical partisan effects moderate subnational fiscal profligacy. If municipalities aligned with state and national governments are more fiscally disciplined than those aligned with only national presidents, then copartisan governors drive mayoral fiscal decisions and party leader concerns affect fiscal behavior. If municipalities aligned with state and national executives are as fiscally disciplined as municipalities with only national copartisans, then copartisan governors play no role in mayoral fiscal decisions and national party reputation concerns affect fiscal behavior. Examination of the debt types most often used to finance subnational fiscal excess in Mexico shows that party leader concerns drive municipal fiscal choices there, although mayors in other nations may respond to party reputation concerns (or both or neither), depending on how electoral rules shape subnational politicians’ strategies for building political careers.

In showing how to distinguish between different vertical partisan effects, the study contributes to debates about whether rules- or market-based approaches are best for managing common-pool resource dynamics in decentralized political...
systems (Kelemen and Teo 2014; Martell and Guess 2006). Systems in which vertical partisan effects are present might benefit from a rules-based approach to preventing subnational fiscal excess. If subnational leaders facing copartisan national presidents are influenced by top-down party leader concerns to engage in fiscal discipline, national governments can encourage fiscal discipline using a top-down rules-based approach, like strengthening subnational budgeting rules that improve national fiscal behavior in some systems (e.g., Alesina and Perotti 1996; Alt and Lassen 2006). Systems facing both party leader and party reputation vertical partisan effects might consider a combination of top-down and bottom-up rules-based approaches. In contrast, systems in which vertical partisan effects are absent might benefit from a market-based approach to preventing subnational fiscal excess. Financial market and banking regulations that raise the incentive and capacity for subnational governments to disclose information about their fiscal positions, raise financial institutions’ capitalization requirements attached to subnational lending, and strengthen the link between subnational fiscal positions, bank capitalization requirements, and the terms/conditions attached to loans can raise the costs of fiscal excess to subnational borrowers and the lenders that make it possible (Freire and Petersen 2004).

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