

Contents lists available at ScienceDirect

Electoral Studies

journal homepage: www.elsevier.com/locate/electstud





Electoral incentives and distributive politics in young democracies: Evidence from Chile

Xabier Gainza^{a,*}, Felipe Livert^b, Raymundo Jesús Mogollón^c

- ^a Department of Applied Economics, University of the Basque Country UPV/EHU, Bilbao, Spain
- b Department of Politics and Government, University Alberto Hurtado, Santiago, Chile
- ^c Economics Department, Universidad Nacional Agraria La Molina, Lima, Peru

ARTICLE INFO

Keywords:
Distributive politics
Political budget cycle
Democracy
Chile

ABSTRACT

How do electoral incentives and institutional constraints vary as democracies consolidate? Are incumbents more inclined to behave opportunistically during transitions, or when the rules of the game are well established? Using Chile as a case study and exploiting panel data on public works investment at the municipal level, the article examines if the strategies to obtain electoral rewards have changed over time. From the first democratic elections and until the constitutional reforms of 2005, those municipalities where the coalition government won in national and local elections were systematically privileged before municipal polls. After the reforms, we find no sign of partisan preference but investment kept on rising during ballot years, indicative of the persistence of political budget cycles. Indeed, we identify stronger cycles as democracy was consolidated. The article concludes discussing the role played by institutional constraints and incentives shaping distributive politics.

1. Introduction

In the recent past, a large and growing literature on distributive politics has documented how incumbents allocate collective resources to obtain electoral advantages. The underlying assumption is that the goal of politicians is *exquisitely electoral, highly partisan, and ultimately a function of attempts at political survival* (Golden and Min, 2013, p.74). There is a wide range of practices when trying to win office. Studies of political budget cycles emphasize that fiscal policies tend to fluctuate along election cycles (De Haan and Klomp, 2013). Another strand has focused on favouritism to improve the expectations of fellow candidates (Lara and Toro, 2019; Migueis, 2013). One last venue wonders what strategy yields the highest returns in the polls, targeting core or swing constituencies (Kang, 2015; Kauder et al., 2016).

Often considered a feature of authoritarian regimes or weak democracies, data suggests that such behaviour is not restricted to certain political systems. A review of tactical redistributions includes formal democracies with authoritarian features like Mexico under the PRI (Magaloni, 2006) or AKP's Turkey (Luca and Rodríguez-Pose, 2019); developing democracies like Argentina (Remmer, 2007), Brazil (Sakurai and Menezes-Filho, 2011) and Peru (Schady, 2000); and advanced democracies like the Nordic Countries (Tavits, 2009), Spain (Curto-Grau

et al., 2018) or Greece (Rodríguez-Pose et al., 2016).

Despite the evidence, we still lack knowledge on how strategies vary in time as democratic practices settle. We know that the quality of government is better in democratic states than in authoritarian ones, but what happens in the transition? Are incumbents more inclined to be opportunistic during the early years, or when the rules of the game are well established? One may argue that greater experience eventually reduces the scope. Initially, institutions, political parties and voters need to adapt to the new scenario, and in such circumstances, incumbents will try to capture state resources and extend their control over different government tiers. Moreover, the chances for fiscal opportunism are fuelled by the absence of reliable information and well-established checks-and-balances. As democracies mature, civic culture and control mechanisms spread, hence, the possibilities for engaging in strategic policymaking vanish. However, an alternative hypothesis seems also plausible. The consolidation of democratic practices leads to higher levels of electoral competition, which increases incumbents' incentives to manipulate the economy. As a result, officeholders see their position under threat, and at that point, they will try to redistribute resources in a way that increases their chances in the next race.

This discussion indicates that the effect of democratization on distributive politics is a trade-off between incentives and constraints: as

E-mail addresses: xabier.gainza@ehu.eus (X. Gainza), flivert@uahurtado.cl (F. Livert), raymundo.mogollon@gmail.com (R.J. Mogollón).

^{*} Corresponding author.

democracy consolidates, politicians have greater incentives to target goods electorally, but institutional constraints prevent them from taking that advantage. We argue that the answer to this puzzle lies in a recomposition of the strategy. Initially, the low rivalry and the lack of checks-and-balances lead to focus on core constituencies because it is a safer tactic to maintain the status quo that allowed winning elections. As competition increases and control mechanisms spread, a change in the procedure operates. Concentrating in strongholds is no longer enough, but to appeal a broader set of voters is needed. The strategy shifts from targeting core voters to increasing transfers across the board ahead elections.

In order to test these ideas, the paper explores the role played by electoral incentives in the distribution of investment to municipalities in Chile after Augusto Pinochet's dictatorship. The analysis inspects two types of manipulations during the democratic transition and consolidation. First, we evaluate if the municipalities lined up with the central government coalition parties were systematically benefited. In line with the reasoning above, we expect higher levels of partisan redistributions during the early years, and eventually to their disappearance once democracy took root. Second, we wonder whether allocations vary along the election cycle. Cross-country analyses show larger fluctuations in young democracies, inferring that the experience of democratization reduces political budget cycles (Brender and Drazen, 2005; De Haan, 2014; Eibl and Lynge-Mangueira, 2017; Mandon and Cazals, 2019; Shmuel, 2020). Our argument, yet, points in another direction. Since competition strengthens the incentives to convince a wider audience, distributive politics shifts from targeting core areas to generalized transfer increments just before elections.

Chile is an appropriate case to study how the institutionalization of democratic practices moulds distributive strategies. Unlike other violent regime changes, Chile was benefitted from a peaceful transition, despite the persistence of structural socioeconomic inequalities and certain legacies of Pinochet's dictatorship. From the year 2005 onwards, democratic rules entrenched, competition increased and the parliament was balanced between left and right political forces. Our dataset includes infrastructure investment at the municipal level by the Ministry of Public Works between 1989 and 2018, local and national electoral results, and socioeconomic data as control variables. We focus on the local level since previous studies have shown that municipalities are an appropriate scale for targeting spending on electoral criteria (Corvalan et al., 2018; Lara and Toro, 2019; Tavits, 2009). For analytical purposes, we differentiate two phases: from the first elections to the constitutional reforms that put an end to the last traces of Pinochet's regime (1989-2005), and the consolidation stage (2006-2018). The econometric approach relies on two-way fixed-effects (FE) heteroskedasticity and autocorrelation robust estimations with municipal and time effects.

This paper contributes to understanding the relationship between electoral stimulus and the provision of public goods in three major ways. First, the sample covers 30 years of the post-Pinochet era, which is the longest period of any study of distributive politics in Chile so far. Second, most studies have dealt with cross-country differences in terms of the degree of democracy and other institutional variables, but analyses that account for within country variations are scarcer. Third, estimations demonstrate that democratic experience does not reduce the likelihood that incumbents would engage in fiscal opportunism, but changes the targeting strategy. Contrary to former research that found larger budget cycles in new democracies, we find regular fiscal manipulations in both periods. However, cycles differ in scope and magnitude. During the transition investment rose just in aligned municipalities, yet as democracy matured, ballot years led to larger and generalized increments regardless of partisan ties. The latter uncovers the political budget cycle as a recurrent strategy to attract votes, and highlights how electoral competition and institutional constraints carve the nature and magnitude of cycles.

The paper proceeds as follows. The literature review discusses the two electoral distortions we inspect in young and old democracies. We

then operationalise the concepts of transition and consolidation that will guide our analysis, and discuss the most relevant elements of the Chilean transition. Section five explains the research design and section six presents the results. In section seven, we relate our results to the institutional changes and the evolution of electoral competition in Chile since the onset of democracy. The article concludes with a summary of the paper's contributions and a discussion on why distributive politics changed as democracy evolved.

2. Distributive politics in old and young democracies

Over the past few decades, research on distributive politics has brought to light the different ways in which office-seeking politicians use fiscal variables to improve their electoral expectations. One of the most spread tactic is targeting the areas where they enjoy political support (Bonvecchi and Lodola, 2010; Brollo and Nannicini, 2012; Livert and Gainza, 2018; Luca and Rodríguez-Pose, 2015). Two complementary rationales provide sound arguments in those regards. Incumbent parties may want to reward their bulwarks for their past loyalty and keep their electoral base connected for future disputes. Besides, they can use collective goods to spread the party's power across the territory for the mutual advantage of mayoral and presidential candidates: by showering areas dominated by akin counterparts, they can bolster the image of fellow politicians, which, in turn, is likely to enhance the party's expectations in the national clash (Tavits, 2009). In other words, controlling local politics helps winning national elections.

Taking into account the fiscal dependence of local authorities, incumbents hold an array of instruments to target municipalities. These include not only regular transfers from the central to the local level, but also public goods geared to particular population subgroups (i.e., employment, social assistance programs) or areas (i.e., infrastructure). Public works are particularly appropriate for the distributive game. Transfers are often allocated on a formula basis, restraining the possibilities for selecting beneficiaries voluntarily. Conversely, the allocation of public works (roads, basic social infrastructure) is more open to arbitrariness, which allows politicians to select jurisdictions based on political criteria, for example, the partisan affiliation of local officials (Diaz-Cayeros et al., 2016). Moreover, public works is highly visible to the electorate. Indeed, the partisan use of infrastructure is backed by ample anecdotal evidence. Between 1979 and 1984 the Brazilian government paved 6000 km of new roads while leaving another 8000 km unmaintained, so that by 1985 the quality of its infrastructure had deteriorated (Jordan and Livert, 2016). Through ethnographic research, Diamond (2021) reports on the clientelistic practices established between Colombian mayoral candidates and the electorate. He describes a wide range of exchanges in which voters contributed in various ways to electoral campaigns, contributions they expected to give them privileged access to public goods when their candidate won.

Another way to improve the electoral chances is adopting expansionary practices ahead elections, known as political budget cycles (PBC). The basic proposition is that the electorate is backward looking and evaluates the government's recent actions (Alesina, 1989); as a result, favourable conditions will boost incumbents' re-election chances.

PBC scholarship assumes that cycles depend on certain economic, political and institutional conditions (De Haan and Klomp, 2013). Cross-country analyses have found larger budget cycles in developing countries than in developed economies (Shi and Svensson, 2006; Streb et al., 2009). Regarding institutions, Alt and Rose (2006) indicate that cycles' magnitude is context-conditional, i.e., a function of the circumstances under which policymakers have greater *incentives* and *ability* to manipulate fiscal variables. Incentives are determined by institutional constraints such as term limits or electoral competition, whereas the ability to distort government finances is shaped by different factors, including the electoral system, the lack of transparency that leads to information asymmetries between voters and politicians, and fiscal rules (for instance, bans on deficits).

A particularly relevant discussion for our research is whether a country's experience with democracy reduces the margin for discretionary spending. Most analyses seem to suggest that maturity improves institutional performance. Looking at the systematic differences between younger and older democracies, Keefer (2007) notes that the former are more corrupt and overprovide targeted spending to particular population subgroups (employment, public works) at the expense of non-targeted, general goods (education, property rights). The reason lies in the inability of competitors to make credible promises. If the electorate does not believe in electoral promises, the provision of general goods yields no gain, whereas the motivations to provide specific goods are strong as they are visible and do not require much credibility from politicians. A similar conclusion is drawn from Díaz-Cayeros et al. (2016) extensive analysis of Mexican distributive politics. During PRI's hegemony, social programs were not successful because resources were deviated to areas and population groups following the interests of the dominant party. This situation began to change when the opposition acquired power. Electoral competition restrained patronage and pork barrelling, created incentives to separate politics from the administration and encouraged policy to shift from discretionary social spending to formula-based transfer schemes (Diaz-Cayeros et al., 2016).

PBC scholarship has also found sharper fluctuations in younger democracies than in mature ones (De Haan, 2014). In a ground-breaking paper, Brender and Drazen (2005) used a sample of countries to test if being a new or old democracy has a compelling impact on fiscal opportunism. They found larger cycles in new democracies compared to established regimes, and linked these results to electorate's inexperience with politics and the lack of information needed to evaluate fiscal manipulations. Likewise, Shmuel (2020) analysed PBCs in different regimes and hypothesized a non-linear relationship between the degrees of democracy and the extent of budget cycles. He argues that the magnitude depends on its leaders' incentives to win elections and how capable of manipulating the economic instruments they are. Strong autocrats have the ability to intervene the economy at will, but they are not particularly interested since they do not face a credible opposition; on the contrary, leaders in strong democracies have incentives to manipulate, but institutional constraints prevent them from taking those steps. As a result, PBCs are greater in weak autocracies and weak democracies rather than in strong regimes.

A number of institutional constraints have been identified explaining why young democracies exhibit stronger cycles. Several studies have highlighted the role of transparency. For instance, Veiga et al. (2017) relate country differences to information asymmetries amid politicians and the electorate. In particular, they identify media freedom as the most critical factor. Their major conclusion is that, when media freedom is low, information about incumbents' fiscal policy is scarcer and the electoral effect stronger. In their analysis of Russia's early democratic years, Akhmedov and Zhuravskaya (2004) come to a similar conclusion when they stress government transparency and media freedom as key determinants for reducing cycles' magnitude.

The importance of checks-and-balances has also been raised. Compared to new democracies, well established democracies have stronger oversight mechanisms that limit governments' discretion. Using Brender and Drazen's (2005) database, Streb et al. (2009) found that effective checks-and-balances have a moderating effect on PBC, but they suggest that for these to be effective, a legislative veto player and high compliance with the law should be accomplished. Gootjes et al. (2020) focus specifically on fiscal rules and detect that these curb PBCs, even after controlling for media freedom and government debt. Nevertheless, the effect depends on the age of democracy, since their results indicate that fiscal rules constrain manipulations in established regimes, whereas in new democracies PBCs are present irrespective of these factors.

A third set of institutional features relate to the conditions under which the electoral contest occurs. Using a sample of developing countries, Prichard (2018) validates that when elections are

competitive, pre-election tax collection lessens. Shelton (2014) shifts the focus to the strength and institutionalization of party systems. In new democracies, parties are usually weaker and constituencies are not particularly bind to certain policies or organizations, which forms the breeding ground for personal candidacies and patronage. By contrast, in an institutional setting characterized by an entrenched party system the reasons for engaging in budget cycles dampen because parties have broader policy goals, voters develop stronger party identification and a personal politics that leads to clientelism is less likely to emerge.

The discussion above seems to indicate that democratic experience reduces the scope for administering resources at will, but three caveats have to be considered. First, most studies, particularly in the PBC literature, explore cross-country differences in terms of their democratic experience, but fewer account for within country variations as democracy settles down. While the former are useful in pointing out the importance of institutional factors, they do not allow us to see how distributive strategies have evolved. Furthermore, although in aggregate terms, higher levels of democracy may improve institutional performance, this does not mean that in certain circumstances, democratising processes result in higher levels of manipulation. In one of the few country studies that track variations over time, Gonzalez (2002) disclosed that in Mexico, the magnitude of the cycle was aggravated during the country's most democratic episodes. This is not just a reminder that there is no straightforward link between democracy and institutional performance, it also raises the question about what other factors make distributive strategies to vary.

The latter leads us to our second caveat: institutional constraints may dampen manipulations, but other forces operate in the opposite direction. In particular, electoral competition. If incumbents fear losing elections, they have stimulus to intervene in the economy to assure their position. As Eibl and Lynge-Mangueira (2017) explain, democratization involves the introduction of substantial constraints on the executive and an intensification of the struggle for power, two forces that have reverse effects: the first reduces incumbents' ability to manipulate fiscal variables; the second increases their incentive. Although this trade-off can lead to numerous equilibriums in different settings, we argue that competition triggers a shift in strategy. Initially, low rivalry makes focusing on strongholds a safe tactic to maintain the status quo, but as competition increases, incumbents will need to appeal to a wider and more heterogeneous electorate.

The third caveat refers to the way we operationalise *young* and old *democracies*. We discuss this point in the next section.

3. Operationalizing young and old democracies

Any analysis of the impact of democratization on distributive strategies is contingent on what is meant by *young* and *old* or *consolidated* democracy. In general terms, consolidation is the process in which the new democratic rules become progressively routinized and embraced by the relevant political actors (Kostelka, 2017, p.655), or in Linz and Stepan's (1996) words, when democracy becomes "the only game in town". In retrospect, it alludes to a situation in which the risk of an authoritarian reversal is hardly likely (Gasiorowski and Power, 1998; Svolik, 2015). However, there is no consensus about the elements that make a democracy well established. At the most basic level, it involves the entrenchment of an electoral democracy, which in Robert Dahl's conceptualization of "polyarchy" includes clean elections, freedom of association, universal suffrage, an elected executive, freedom of expression and alternative sources of information. Linz and Stepan

¹ At this point, a clarification is in order. We associate young democracies with the period between the first elections and the entrenchment of the democratic practices (the term transition also refers to this period), whereas we identify consolidated or old democracies with the stage immediately after, i.e. when the rules are well established and accepted by all relevant political actors.

(1996), though, stress that, for a transition to be completed, attitudes and habits have to be cultivated. Accordingly, they propose a definition that combines behavioural, attitudinal and constitutional dimensions.² Others move into maximalists definitions and associate consolidation with improvements in the quality of democracy, but as Schedler (1998, p.104) notes, these attempts open the door to include *any kinds of goals and criteria that one deems to be indispensable for a high-quality and thus "consolidated" democracy.*

While the debate above shows how ambiguous the boundary between new and old democracies is, there has been much less discussion on how to operationalise these terms. Most of the empirical analyses associate consolidation with longevity. For instance, Kostelka (2017) considers twenty years of democratic experience because the probability of democratic breakdown is significantly reduced by the end of the second democratic decade. Within the PBC literature, Klomp and De Haan (2011) also adhere to a twenty year period, whereas Brender and Drazen (2005), Gootjes et al. (2020) and Veiga et al. (2020) set the frontier in four competitive elections. Yet longevity alone could be problematic if there is no change in the ruling party. To avoid this issue, Gasiorowski and Power (1998) consider regime duration along with alternation in the executive power. In a similar vein, Barberia and Avelino (2011) tested the existence of PBCs in Latin American countries under different specifications, and found the effect is contingent on the definition. When they contemplated transition as the stage comprising the first four elections, they found that democratization reduces the magnitude of budget cycles, but if the consolidation is marked by the alternation in power, they found no statistical association.

Even though durability is an attribute of consolidation, durability by itself does not ensure the entrenchment of democracy (Valenzuela, 1990). In this sense, Schneider and Schmitter (2004) elaborate a 12 item list in order to identify when a democracy can be acknowledged as consolidated: no significant political party advocates for major changes in the constitution; regular elections are held and their outcomes are respected; elections have been free and fair; no significant parties or groups reject previous electoral conditions; electoral volatility has diminished significantly; elected officials and representatives are not constrained in their behaviour by non-elected veto groups; a first rotation-in-power or significant shift in alliances of parties in power has occurred; a second rotation-in-power or significant shift in alliances of parties in power has occurred; agreement, formal and informal, has been reached on: the rules governing the association formation and behaviour, the rules governing the executive format, the rules governing the territorial division of competencies and the rules governing ownership and access to mass media. While it should not be interpreted as an exhaustive closed list, it does give an idea of different political accomplishment that characterize consolidated democracies. In operational terms, it provides a richer approach that complements those based on time or alternation in power. The latter is particularly relevant for case analyses because it can be tailored to the landmarks that marked the transition in the country. For the purpose of this investigation, we adopt an approach that combines time with the main events of the Chilean way towards democratic consolidation. We explore this next.

4. Transition and consolidation of Chilean democracy

For long, Chile's transition has been regarded as a model. After seventeen-year dictatorship, Chileans rejected Augusto Pinochet in a plebiscite in 1988, the first elections were held in 1989 and democracy returned in 1990. Since then, centre-left and centre-right coalitions have been governing, the country has experienced political stability and sustained economic growth rates and, until the 2019–2020 riots, few would have hesitated to consider it as one of Latin America's most successful democracies.

However, the Chilean transition was not so exemplary. The military government left the constitutional framework and several "authoritarian enclaves" in place (Garretón, 2004). Three enclaves were of particular relevance (Garretón and Garretón, 2010): the Constitution, the high quorums needed to amend fundamental laws and the 'binomial' electoral rule. Approved, under the military rule in 1980, the Constitution granted senatorial seats to non-elected representatives of the armed forces, including the "senator for life" position for Augusto Pinochet. On the other hand, several fundamental laws required very high quorums for their reform, which privileged the maintenance of constraining factors inherited from the dictatorship. A third element was a 'binomial' electoral rule that restricted competition in national elections to two mayor coalitions.³

In 2005, a constitutional reform erased most of the non-democratic elements. Until then, the armed forces remained a constraining factor for the president's authority because they hold several permanent posts in the National Security Council, 9 senator seats and the "senator for life" position for Augusto Pinochet. The amendment removed these senatorial seats and, later, the Supreme Court dropped Pinochet's immunity for the crimes committed during the military rule (Center for Systemic Peace, 2010). As Siavelis (2009, p. 5) argues, Chile finally found the basic norms of democracy established by Linz and Stepan, given that "the executive, legislative and judicial powers generated by the new democracy" no longer had to "share power with other de jure organs" (emphasis in the original).

Several authors have pointed to the reform as the turning point for the entrenchment of Chilean democracy (Center for Systemic Peace, 2010; Navia, 2010; Siavelis, 2009). We agree on that view: it occurred at a time close to the two decades that most empirical analyses considered the consolidation threshold, and matched the fourth presidential election, which Brender and Drazen (2005), Gootjes et al. (2020) and Veiga et al. (2017) took as the frontier. Indeed, from this point onwards, we find some elements marking the end of a transition. On the one hand, the constitutional amendment meant that representatives were no longer constrained by non-elected veto groups. On the other hand, this year lead to a shift in alliances of parties in power. Although it cannot be considered a rotation-in-power, the 2005 election brought the first socialist president since the military coup, Michelle Bachelet. The centre-left coalition dominated Chilean politics during the first two decades (1989–2009), but previous candidates belonged to the Christian Democratic Party and the Party for Democracy. Bachelet's election was a game changer as the first female and socialist president.

5. Research design

The empirical approach contemplates investment transfers from the Ministry of Public Works (MOP) to Chilean municipalities between 1989 and 2018 (roads, street pavement, lightning, etc.). It includes both, new investment (about one third) and maintenance (about two thirds, see

² Behaviourally, a democratic regime is consolidated when 'no significant political groups seriously attempt to overthrow the democratic regime or secede from the state'. Attitudinally, when 'the overwhelming majority of the people believe that any further political change must emerge from within the parameters of democratic formulas'. Constitutionally, when all actors in the polity, governmental and non-governmental alike, 'become subjected to, and habituated to, the resolution of conflict within the specific laws, procedures and institutions sanctioned by the new democratic process' (Linz and Stepan, 1996, p.5).

³ Under the binomial rule, only two seats are assigned per constituency, and one list must double the other to obtain the two seats, otherwise the runner-up list takes the second seat. This rule has been criticized on several fronts: it tends to over represent the second political party, it excludes de facto a third party from seats and displaces competition from forces to competition within blocks.

Annex 1). Investment is an adequate category to analyse the existence of tactical redistributions for two reasons. Public infrastructure projects are discretionary and excludable on a territorial basis, i.e., they can be used to please certain constituencies and exclude others (Diaz-Cayeros et al., 2016). Besides, the allocation process leaves room for arbitrariness. Chile's decision-making process for infrastructure projects is not based on a formal set of criteria (OECD, 2017). The MOP determines the needs and the strategies that will be addressed, but there is limited coordination across policy areas and levels of government. Arbitrariness is fuelled by the lack of medium- to long-term planning procedures, as incumbents can match the budgeting timetable with the electoral calendar (Livert and Gainza, 2018). Over the thirty years that make our sample, public works accounted for 38% of government investment, 3% of gross fixed capital formation and 0.8% of GDP (see Annex 1). Although in absolute terms it was evenly distributed across the country, the remote regions of the North and South attracted the highest per capita investment due to their low population rates and difficult accessibility (See Annex 2).

We took electoral data to construct a set of independent variables. First of all, we created three variables to scrutinize potential partisan influence (Table 1): a dummy that takes the value one if the mayor belongs to one of the political parties of the central government coalition (m); a dummy equal to one if the government coalition parties won presidential elections in the municipality (p); and a dummy coded one if the mayor belongs to one of the coalition parties and the coalition won presidential elections in the municipality (mp). The sample includes seven local (1992, 1996, 2000, 2004, 2008, 2012 and 2016) and seven presidential elections (1989, 1993, 1999, 2005, 2009, 2013 and 2017) that resulted in four different coalitions: the centre-left Concertación in 1989-2009 and Nueva Mayoría in 2014-2017, and the centre-right Alianza in 2010-2013 and Chile Vamos in 2018.4 The dummies fluctuated according to national and local dispute, but the three groups of municipalities decreased over time, indicative of increasing competition (Annex 3). We also included the victory margin in municipal elections computed as the percentage difference between the winner and the second, an indicator used to measure competition (see Table 2).

Apart from partisanship, we tested the extent of political budget cycles. In Chile, municipal and presidential dispute are in October and November/December respectively, but these are separated by one-year distance. Dates are fixed and both, incumbents and the electorate, are aware of them in advance, so elections were considered exogenous to allocation decisions. Since these take place in the last term and much of the public investment consists of minor works and maintenance that become visible within less than a year, we deem reasonable to focus on election years to check whether fiscal expansions occur as local and national races approach. Consequently, we followed the "rule of the

Table 1

Type of municipalities depending on electoral results.

		The government coalition won in the presidential election	
The mayor belongs to a political party of the central government coalition	Yes No	Yes $\sqrt{\sqrt{(mp)}}$ $\sqrt{\times (p)}$	No × √ (m) × ×

⁴ Coalitions split along the left-right axis. These include major parties (socialist PS and democrats PDC and PPD in the left; UDI and RN in the right) as well as other smaller parties that support them. Independent mayors were excluded from both coalitions.

Table 2 Descriptive statistics.

Variable	Description	Obs	Mean	Std. Dev.
investment (log)	Investment by the ministry of public works in the municipality (logarithm, Chilean pesos 2018)	6657	12.69085	2.557552
yp0	Dummy equal to 1 for presidential election year, 0 otherwise	10,350	0.2333333	0.422973
ym0	Dummy equal to 1 for municipal election year, 0 otherwise	10,350	0.2333333	0.422973
m	Dummy equal to 1 if mayors belong to the incumbent coalition parties, 0 otherwise	10,350	0.4173913	0.4931524
p	Dummy equal to 1 if the government coalition parties won presidential elections, 0 otherwise	10,350	0.7275362	0.4452487
mp	Dummy equal to 1 if mayors belong to the incumbent coalition parties and the government coalition parties won presidential elections, 0 otherwise	10,350	0.3330435	0.4713247
population h_50	Annual population Percentage of newborns measuring less than 50 cm	10,226 9484	45656.27 46.54328	70267.39 10.37179
weight_3000	Percentage of newborns weighting less than 3000 g	9484	21.08883	6.610066
3_child	Percentage of mothers who had more than 3 children	9484	11.09656	6.659422
regional growth (t- 1)	Regional GDP growth rate in the previous year	10,350	0.01778868	0.07406291
regional growth (t)	Regional GDP growth rate	10,350	0.01773839	0.07406952
regional GDPpc	Regional GDP per capita	10,350	3,927,565	8,554,620
mv_pres	Victory margin in presidential elections	10,235	14.67641	22.28649
mv_mun	Victory margin in municipal elections	9210	15.96595	14.01527

year" (Barberia and Avelino, 2011; Brender and Drazen, 2005; Livert and Gainza, 2018), and created a dichotomous dummy coded one for local ballot years (*ym0*), and another dummy for national ballot years (*yp0*).

In addition to electoral data, we introduced control variables: population (log); regional GDP per capita; regional GDP growth rate in t and t_{-1} ; the percentage of new-borns measuring less than 50 cm; the percentage of new-borns weighting less than 3000 gr; and the percentage of mothers with more than three children. In the absence of poverty indicators for the whole sample series, the latter accounted for proxies since they are correlated with municipalities' socioeconomic conditions (Mardones and Acuña, 2020). Population data is from the National Statistics Institute, GDP data from the Central Bank and poverty proxies from Mardones and Acuña (2020).

We estimated three econometric models using fixed-effects (FE), heteroskedasticity and autocorrelation robust estimations with municipal and time effects. While municipal fixed-effects controlled for place-specific factors that are fixed over time, the year fixed-effects controlled for factors that vary over time but are common across all municipalities.

⁵ We conducted a two-sample *t*-test with unequal variances to check whether the differences from one election to another were statistically significant. The test certified mean differences for m and p at p < 0.01.

Robust standard errors were clustered at the municipal scale to control for serial and spatial correlation. Z_{its} stands for a vector gathering control variables in every model.

$$\log(investment_{it}) = \alpha + \beta 1 \ m_{it} + \beta 2 \ p_{it} + \beta 3 \ mp_{it} + \gamma Z_{it} + \sigma_i + \tau_t + u_{it}$$
 (1)

$$\log(investment_{it}) = \alpha + \beta 1 \ m_{it} + \beta 2 \ p_{it} + \beta 3 \ mp_{it} + \beta 4 \ ym0_t + \beta 5 \ (m_{it} \ x \ ym0_t) + \beta 6 \ (p_{it} \ x \ ym0_t) + \beta 7 \ (mp_{it} \ x \ ym0_t) + \gamma Z_{it} + \sigma_i + \tau_t + u_{it}$$
(2)

$$log(investment_{it}) = \alpha + \beta 1 \ m_{it} + \beta 2 \ p_{it} + \beta 3 \ mp_{it} + \beta 4 \ yp0_t + \beta 5 \ (m_{it} \ x \ yp0_t) + \beta 6 \ (p_{it} \ x \ yp0_t) + \beta 7 \ (mp_{it} \ x \ yp0_t) + \gamma Z_{it} + \sigma_i + \tau_t + u_{it}$$
(3)

Model 1 tested potential leanings in favour of the three groups of municipalities (*m*, *p*, *mp*). Models 2 and 3 dealt with the political budget cycle, but while Model 2 examined the impact of municipal contests, Model 3 considered presidential elections. Both worked with interaction terms for election years and municipality to weight the budget cycle in aligned and rival municipalities, a usual procedure in the literature (Corvalan et al., 2018; Luca and Rodríguez-Pose, 2019). Additionally, we regressed these three models including the interaction between the partisan effect and the vote margin. Although our main goal was not to address the incidence of electoral competition, we appraised the impact of partisan politics by interacting with the margin variable.

We divided the sample in two periods to assess whether fiscal opportunism decreased as democracy evolved: the transition stage (1989–2005) and the democratic consolidation stage (2006–2018). As discussed in the previous section, we took the 2005 constitutional reforms as the turning point for consolidation. Nonetheless, we checked also the robustness of our models for other transition thresholds.

6. Results

6.1. Distributive politics in Chile (1989-2018)

The first set of analyses examines the pattern of distributive politics within the whole sample years (Table 3). The most basic Model 1 inspects whether there is a partisan skew in the distribution of investment. The positive sign of the coefficient for the interaction between municipal and presidential electoral results (mp) reveals that in Chile, the municipalities where the government coalition parties won in presidential elections and the mayor belongs to one of these parties, have been systematically benefited. This finding advances the existence of certain favouritism for the most loyal constituencies and indicates that allocations credited both, presidential and mayoral dispute. Targeting areas where the central government incumbent party rules the town council allows for a coordinated action between the two tiers to cement their position in the locality. Mayors are an important ingredient of the strategy because they can mobilize the local electorate and consolidate the partisan advantage. In exchange, incumbent parties allocate an out of proportion share of investment looking for the electoral returns in the national dispute.

Based on the results of Model 1, Equation (4) captures this "mayoral effect" i.e., among the municipalities that voted by majority for the incumbent coalition in the presidential elections, how much investment has been diverted to the municipalities that hold also a fellow mayor.⁶ According to our estimations, these obtained 18.2% extra investment, compared to those that voted for the incumbent coalition in the presidential elections but the opposition rules the local administration.

Table 3 Distributive politics in Chile 1989–2018.

VARIABLES	Model 1	Model 2a	Model 2 extended	Model 3a	Model 3 extended
m	-0.239* (0.142)	-0.239* (0.142)	-0.436*** (0.162)	-0.239* (0.142)	-0.217 (0.157)
p	-0.0417	-0.0419	-0.0491	-0.0417	-0.0144
	(0.114) 0.421**	(0.114)	(0.121) 0.616***	(0.114) 0.421**	(0.128)
mp	(0.164)	0.421** (0.164)	(0.190)	(0.164)	0.389** (0.185)
ym0	(0.101)	2.815***	2.690*** (0.584)	(0.101)	(0.100)
ym0_m		()	0.648*** (0.247)		
ym0_p			0.0166 (0.164)		
ym0_mp			-0.624** (0.296)		
yp0				1.883***	1.981***
yp0_m				(0.564)	(0.588) -0.0921 (0.288)
yp0_p					-0.109 (0.199)
yp0_mp					0.135 (0.311)
Constant	10.84*** (2.163)	11.31*** (0.458)	10.81*** (2.161)	10.84*** (2.163)	10.81***
Observations	6198	6198	6198	6198	6198
R-squared	0.108	0.108	0.109	0.108	0.108
Number of id	343	343	343	343	343
Municipal FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES

Note: Fixed-effects estimations with standard errors, clustered by municipality. P-values reported in parenthesis ***p < 0.01, **p < 0.05, *p < 0.1.

$$\begin{split} \log(investment_{it}) &= \alpha - 0.239(m)_{it} - 0.0417 \ (p)_{it} + 0.421 \ (m^*p)_{it} + \gamma Z_{it} + \sigma_i + \tau_t \\ &+ u_{it} \end{split}$$

(4)

Moving now into budget cycles, we first appraised the incidence of municipal elections. Investment increased significantly during local ballot years (ym0), indicative of a municipal budget cycle (Model 2). It is worth analysing the effect, though, in conjunction with the results of the ruling coalition in the municipality to grasp whether aligned constituencies are particularly favoured ahead elections or not (Model 2 Extended). This exercise uncovers a partisan cycle complementing the municipal budget cycle, as core municipalities (mp) were the most benefited in election years. If we replicate the exercise above and examine the mayoral effect, we observe that investment raised by 20.4% in the municipalities that voted for the coalition parties in presidential and municipal elections, compared to the areas that supported the incumbent coalition in the presidential elections but the opposition is in charge of the local administration. Model 3 and Model 3 Extended accounted for the presidential cycle. Results show that investment rose during presidential ballot years (yp0) indicative of a presidential cycle, but in this case, there is no systematic differentiation between allied and non-allied areas.

We performed two tests to check the consistency of our results. First, we included the victory margin in municipal elections as an additional control and interacted this variable with $\it mp$. The results can be compared in Annex 4. The $\it mp$ variable remains statistically significant although its coefficient is somewhat reduced and the mayoral effect drops to 12.3%. All other results remain: core municipalities gain extra investment during municipal election years, and the significance of $\it yp0$

⁶ The "mayoral effect" is expressed as: $\frac{\partial \log(investment)}{\partial m} = -0.239 + 0.421* p$. If p dummy takes the value 1, then. $\frac{\partial \log(investment)}{\partial m} = 0.182$

⁷ We compute the mayoral effect as follows. $\frac{\log(\text{investment})}{\delta m} = m + (m*ym0) + (m*p) + (m*p*ym0) = -0.436 + 0.648 + 0.616 - 0.624 = 0.204$

confirms the existence of a presidential budget cycle.

Second, we checked the accuracy of our estimations using Generalized Method of Moments (GMM). Although a FE strategy provides a sound methodological basis, results could be biased if investment is endogenous to past decisions as several infrastructure projects extend over one period. Consequently, we relied on difference-GMM (Arellano and Bond, 1991) treating variables as endogenous to past performance. The results suggest that endogeneity is not a serious issue. The Arellano–Bond tests for AR1 and AR2 report no second-order serial autocorrelation, whereas the Hansen test indicates that instrumental variables are valid. The GMM estimator confirms the partisan effect for *mp* and the existence of a municipal and presidential political budget cycle (See Annex 5). In consequence, and taking into consideration the higher reliability of the FE estimator, ⁸ hereafter we lean on FE specifications.

This first exercise disclosed how, in Chile, infrastructure investment has been used with electoral aims since the onset of democracy. In the following, we examine if the manoeuvre for fiscal manipulation has changed as democratic practices settled.

6.2. Distributive politics during the democratic transition (1989–2005) and the consolidation stage (2006–2018)

Tables 4–6 compare the pattern of distributive politics during the democratic transition (1989–2005) and the consolidation stage (2006–2018). Table 4 reflects no partisan leanings when we split the sample since m, p and mp are not statistically significant. However, when taking a closer look to the budget cycle, it does show a marked preference for core municipalities (mp) as elections approach.

If we turn first to municipal budget cycle (Table 5), during the transition, the variable ym0 is not statistically significant, which suggests there was no widespread increase as local elections approached. Yet, an opportunistic cycle in favour of core municipalities can be noticed. The coefficients for the interaction between ym0 and mp are statistically significant, indicative of a targeting strategy for the sake of aligned municipalities. The mayoral effect means that public works spending rose by 18.3% in those constituencies that voted for the presidential coalition and hold an akin mayor.

Surprisingly, the municipal political budget cycle changed in nature as democracy ripened. During the consolidation stage, investment rose in every municipality, regardless of mayoral allegiance or presidential election results (ym0 is statistically significant, but there is no

Table 4Partisan bias during transition and democratic consolidation.

VARIABLES	1989–2005	2006–2018		
m	-0.157	-0.208		
	(0.222)	(0.215)		
p	-0.0265	-0.0400		
	(0.222)	(0.132)		
mp	0.380	0.357		
	(0.253)	(0.241)		
Constant	6.731*	14.08***		
	(3.597)	(4.268)		
Observations	3.073	3.125		
R-squared	0.025	0.115		
Number of id	320	341		
Municipal FE	YES	YES		
Year FE	YES	YES		
Controls	YES	YES		

Note: Fixed-effects estimations with standard errors, clustered by municipality. P-values reported in parenthesis ***p < 0.01, **p < 0.05, *p < 0.1.

Table 5Municipal PBC during transition and democratic consolidation.

Variables	1989–2005	1989–2005	2006-2018	2006-2018
ym0	0.0731	0.000596	3.125***	2.972***
	(0.574)	(0.624)	(0.327)	(0.373)
ym0_m		0.855***		0.229
		(0.324)		(0.335)
ym0_p/		-0.0449		0.0726
		(0.277)		(0.192)
ym0_mp		-0.937**		-0.0232
		(0.398)		(0.387)
m	-0.157	-0.447*	-0.208	-0.265
	(0.222)	(0.248)	(0.215)	(0.237)
p	-0.0265	-0.0146	-0.0400	-0.0583
	(0.222)	(0.237)	(0.132)	(0.137)
mp	0.380	0.712**	0.357	0.360
	(0.253)	(0.288)	(0.241)	(0.271)
Constant	6.731*	6.558*	14.08***	14.05***
	(3.597)	(3.592)	(4.268)	(4.285)
Observations	3073	3073	3125	3125
R-squared	0.025	0.029	0.115	0.115
Number of id	320	320	341	341
Municipal FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES

Note: Fixed-effects estimations with standard errors, clustered by municipality. P-values reported in parenthesis ***p < 0.01, **p < 0.05, *p < 0.1.

Table 6
Presidential PBC during transition and democratic consolidation.

Variables	1989–2005	1989–2005	2006-2018	2006-2018
yp0	-1.213	-1.485	2.779***	3.224***
	(0.869)	(0.921)	(0.429)	(0.467)
yp0_m		0.494		-0.750*
		(0.481)		(0.434)
yp0_p		0.323		-0.478**
		(0.406)		(0.229)
yp0_mp		-0.376		0.777*
		(0.534)		(0.468)
m	-0.151	-0.249	-0.234	-0.0233
	(0.221)	(0.248)	(0.216)	(0.251)
p	0.00480	-0.0466	-0.0599	0.0886
	(0.219)	(0.230)	(0.134)	(0.161)
mp	0.356	0.414	0.393	0.169
	(0.251)	(0.278)	(0.243)	(0.278)
Constant	-21.68	-20.79	44.32**	44.13**
	(15.67)	(15.60)	(17.48)	(17.46)
Observations	3073	3073	3125	3125
R-squared	0.027	0.027	0.115	0.117
Number of id	320	320	341	341
Municipal FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES

Note: Fixed-effects estimations with standard errors, clustered by municipality. P-values reported in parenthesis ***p < 0.01, **p < 0.05, *p < 0.1.

meaningful association for the interaction with mp). Hence, as democratic culture blossomed, incumbents modified their strategy from targeting core areas, to widespread transfer increases prior to elections. The magnitude of the municipal PBC is striking, since investment transfers rose up to 312% in election years, compared to non-ballot years.

Table 6 gathers the incidence of presidential PBC. In the first years after Pinochet's dictatorship, we find no traces of election cycle, but after the democratic reforms, investment rose systematically prior to presidential polls (yp0 is statistically significant). Thus, a presidential cycle overlapped the municipal cycle. The magnitude once again is remarkable, as public works spending increased by as much as 277% in the presidential election year.

Fig. 1 presents the predicted investment in *mp* (green) and *non-mp* municipalities (red) to provide some graphical evidence of the nature and magnitude of the PBC. As can be seen, *mp* municipalities attracted

 $^{^{8}}$ Although GMM is attractive to handle regressors' potential endogeneity, it also introduces discretion when treating instruments and lags.

also introduces discretion when rectains an administration of the mayoral effect is calculated as: $\frac{\partial \log(investment)}{\partial m} = m + (m*pm0) + (m*p) + (m*p*ym0) = -0.447 + 0,855 + 0,712 - 0,937 = 0.183.$

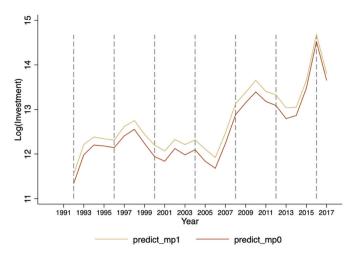


Fig. 1. Investment in core municipalities during the municipal PBC. Note: The dashed line corresponds to municipal election years.

significantly more investment, especially during local ballot years (the dashed line), but from year 2005 onwards this gap narrows as investment reaches both groups.

We conducted three additional tests to weight the robustness of our analysis. As we did for the whole sample, we first included the victory margin and the interaction with *mp*. The results are displayed in Annex 6. Although the coefficients are somewhat reduced, the inclusion of the victory margin does not modify the main findings: initially, public works spending increased before local polls in core constituencies, whereas democratic consolidation led to a municipal and a presidential cycle across the board.

In a second exercise, we ran our models considering various victory margin thresholds in municipal and presidential elections, i.e. if the difference between the first and the second was below 50, 40, 30, 20 and 10 percent. We wanted to check if the incidence of the cycle varied depending on how challenging elections were. Table 7 summarizes the coefficients and the significance level for the mayoral effect during the

Table 7The mayoral effect and the incidence of election years during transition and consolidation depending on the victory margin.

	Victory	Obs.	Transition	Consolidation	
	Margin		Mayoral effect ^a	Ym0	Yp0
Presidential Elections	Vict_marg<50 Vict_marg <40	5974 5354	15.9%** 43.1%**	3.176*** 3.247***	2.699*** 2.736***
	Vict_marg <30	4465	27.2%**	3.126***	2.678***
	Vict_marg <20	3496	30.2%**	2.498***	2.554***
	Vict_marg <10	2540	-12%**	2.502***	3.280***
Municipal Elections	Vict_marg <50	5907	14.1%**	3.064***	2.764***
	Vict_marg <40	5662	12.9%**	3.138***	2.700***
	Vict_marg <30	5221	6.1%*	3.244***	2.826***
	Vict_marg <20	4267	13%	3.719***	3.063***
	Vict_marg <10	2579	1%	3.682***	3.416***

Note: Fixed-effects estimations with standard errors. clustered by municipality. p-values reported in parenthesis ***p < 0.01. **p < 0.05. *p < 0.1.

transition stage, and the coefficients and the significance level for ym0 and yp0 during the consolidation stage. These results provide further evidence of the consistency of our baseline models. During the transition stage, the mayoral effect is significant for different victory margin thresholds, whereas in the consolidation stage, ym0 and yp0 remain statistically significant no matter how contested municipal and presidential elections were.

Thirdly, we examined whether results were dependent on the definition of democratic transition or not. Although the 2005 reforms were a landmark in the evolution towards democracy, the nature and magnitude of the PBC may be sensitive to the year considered to mark the boundary between transition and consolidation. Annex 7–10 display the results for the municipal and presidential PBC considering different thresholds, i.e., if the democratic transition lasted from ten to twenty years and, consequently, the consolidation began from the eleventh to the twenty-first year. Overall, results are robust to alternative definitions. During the first years, investment benefited core constituencies where the ruling coalition enjoyed support in the presidential and municipal dispute (*mp*) ahead municipal elections. As democracy took root, the partisan bias disappeared but a significant PBC emerged just before both, local and presidential elections.

7. Institutional constraints and electoral incentives in the consolidation of Chilean democracy

Why did distributive politics vary as Chilean democracy entrenched? Previous research has argued that the scope for manipulation diminishes as democratic practices settle, but our analysis points in another direction. In the early years, incumbents targeted stronghold areas, but as democracy blossomed, they modified their strategy from focusing in core constituencies to widespread PBC. In fact, the magnitude of PBC is significantly larger in the consolidation period than in the transition stage. Why?

For us, the answer to this question lies in the tension between institutional constraints and electoral incentives outlined above. During the past thirty years, Chile has undergone several institutional reforms to modernize the state and improve accountability. As an example, in 2001 an expenditure control rule was established to limit incumbents' ability to increase expenses at discretion. This rule adjusted fiscal balances by considering the effects of the business cycle, which, in principle, should have limited incumbents' ability to relate fiscal variables to the electoral calendar. Indeed, it has been acknowledged as a fundamental pillar of the country's macroeconomic stability and an example to be followed by other countries (Marcel, 2013). In a similar vein, information systems and planning processes have improved. In 2005, the legal framework for national investment was modified for the first time since 1975 to ensure investments included a favourable report based on a technical evaluation from the planning authority (https://observatorio planificacion.cepal.org/en/regulatory-frameworks/country/1/secto rial-topic/129).

Chile has also improved in terms of transparency. Transparency International ranked Chile 21st out of 41 countries in 1996 and 27th out of 180 in 2018. Nonetheless, several gaps remain, notably in the budgeting process. The Open Budget Initiative places Chile far from the OECD average and other Latin American countries, such as Brazil, Peru and Argentina (International Budget Partnership, 2019a). In particular, it stresses the lack of mechanisms to engage the civil society in budget formulation and implementation, as well as inadequate oversight procedures by the Legislative during implementation (International Budget Partnership, 2019b).

More important for us, though, is that the democratization process has led to an increasingly competitive environment, thereby altering incumbents' incentives. Since the first municipal elections, the number of candidates and the gap between the main contenders has been decreasing, especially from 2004 onwards (Fig. 2). The enhanced competition in local politics is largely explained by a change in the

^a The mayoral effect is calculated as. $\frac{\partial \log(investment)}{\partial m} = m + (m*ym0) + (m*p) + (m*p*ym0)$

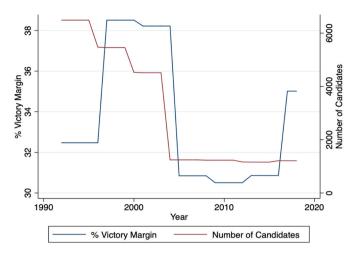


Fig. 2. Candidates and victory margin in municipal elections.

electoral rule. Until then, mayors were directly elected but they had to fulfil a set of conditions¹⁰. As a result, a winning candidate might not be awarded office if she didn't' belong to the most voted coalition and vice versa, coalition agreements could lead to the most voted candidate not being elected (Bunker, 2008). In 2004, the local electoral law was reformed so that mayors were elected through relative majority and town councillors through the D'Hont rule. The amendment reduced coalitions' power vis-à-vis candidates and altered aspirants' incentives since they could only contend as mayors or councillors.

National politics has also become more contested. Electoral support for the two coalitions that have dominated Chilean politics has been declining and new contenders have increased rivalry for the presidential dispute. 11 For us, the new competitive environment operated a change in the distributive tactic. Initially, the low rivalry and the absence of oversight rules and procedures meant that the most appropriate strategy was to target the municipalities where the ruling party was domineering. In this way, the conditions for winning elections were nurtured. Furthermore, targeting the constituencies where the ruling coalition enjoyed political support and fellow majors dominated local politics allowed for a coordinated action between the two government tiers to cement the party's position in the locality. However, such a targeting strategy is no longer adequate when competition increases because concentrating in the most loyal electorate is not enough to keep winning elections and maintain the status quo. On the contrary, incumbents have to appeal to a broader set of voters, thus increasing investment across the board as the electoral clash comes closer.

8. Concluding remarks

In this research, we have documented the existence of electoral motivations in the allocation of investment to Chilean municipalities since the onset of democracy. During the early years, the areas where the central government enjoyed political support and co-partisans ruled local councils were systematically benefited before local polls. This targeting strategy speaks of a joint action between local and national policymaking to maintain the electoral position of the ruling party in the municipality. When the same party commands the municipal and

national government, voters are not bound to differentiate between tiers to elucidate whom should they reward for the new infrastructure. By contrast, in the event of a rival party controlling local or national politics in the municipality, voters would be required to discriminate who is responsible. Such information asymmetries may explain why just the most loyal areas were privileged, in spite of the central government being in charge of investment decisions.

As democracy settled, we find no traces of a partisan bias, but contrary to PBC literature, we find stronger budget cycles. Initially, investment rose in ballot years just in the municipalities where the ruling party dominated local and national politics, consistent with a targeting strategy to assist the most loyal constituencies. As competition increased, the fiscal excesses prior to local polls extended to every municipality. In addition, a budget cycle matching presidential elections emerged. Not only this result discloses political budget cycles as the most persistent resource to attract votes, but it also uncovers how fiscal manipulations adapt to the rules of the game.

We believe institutional constraints and incentives can shed light on why the PBC changed in nature and increased in magnitude as democracy matured. In Chile, the progressive modernization of the state improved accountability and restrained partisanship in the distribution of collective goods, but growing electoral competition moulded politicians' incentives to influence fiscal outcomes. Competition forced a change in the electoral tactic, from targeting just bulwarks to increasing transfers across the board before local polls. As the electoral base eroded, incumbents' incentives shifted because it is much more restrictive to focus just on the core electorate, than to favour everyone prior to elections.

In short, we should not take for granted a linear, inverse, relationship between the degree of democracy and the scope for fiscal opportunism. The distributive game is an essential part of democracy because politicians are motivated by their desire to reach and maintain office. Rules, competition and a well-informed citizenry will certainly increase control and reduce the margin to use public goods at will, but only by understanding how institutional constraints interact with electoral incentives, it will be possible to grasp context-conditional solutions.

Declaration of competing interest

We have no conflicts of interest to disclose.

Acknowledgment

ANID Fast Track Competition, Project COVID-0419 (National Research and Development Agency, Chile).

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.electstud.2021.102377.

Author statement

We confirm that the work entitled *Electoral incentives and distributive* politics in young democracies: evidence from Chile is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

References

Akhmedov, A., Zhuravskaya, E., 2004. Opportunistic political cycles: test in a young democracy setting. Q. J. Econ. 119 (4), 1301–1338.

Alesina, A., 1989. Politics and business cycles in industrial democracies. Econ. Pol. 4 (8), 55–98.

Alt, J.E., Rose, S., 2006. Context conditional political budget cycles. Handbook of Comparative Politics. Oxford University Press, Oxford, pp. 845–867.

¹⁰ Until the reform, the most voted councilor was elected as mayor if her electoral list had at least 30% of the votes or, alternatively, if it was the winning list, even if it did not exceed that threshold. If none of these two conditions were fulfilled, the candidate from the first leading list would be elected as mayor. In the event of a tie in the latter condition, the Electoral Court would draw for the position (Bunker, 2008).

¹¹ In the 2009 presidential elections a new political party obtained 20% of the vote share, and two opposition parties reached 10% of the vote share in 2013.

- Arellano, M., Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Rev. Econ. Stud. 58, 277–297. https://doi.org/10.2307/2297968.
- Barberia, L.G., Avelino, G., 2011. Do political budget cycles differ in Latin American democracies? Economia 11 (2), 101–134.
- Bonvecchi, A., Lodola, G., 2010. The dual logic of intergovernmental transfers: presidents, governors, and the politics of coalition-building in Argentina. Publius 41 (2), 179–206.
- Brender, A., Drazen, A., 2005. Political budget cycles in new versus established democracies. J. Monetary Econ. 52 (7), 1271–1295. https://doi.org/10.1016/j. jmoneco.2005.04.004.
- Brollo, F., Nannicini, T., 2012. Tying your enemy's hands in close races: the politics of federal transfers in Brazil. Am. Polit. Sci. Rev. 106, 742–761, 04.
- Bunker, K., 2008. Modificaciones y reformas al sistema electoral municipal en Chile, 1992-2008. Observatorio Electoral UDP 1 (3). https://www.icso.cl/images/do cumentos/documentostrabajo/.
- Center for Systemic Peace, 2010. Polity IV Country Report 2010: Chile. Center for Systemic Peace, North Vienna, VA.
- Corvalan, A., Cox, P., Osorio, R., 2018. Indirect political budget cycles: evidence from Chilean municipalities. J. Dev. Econ. 133, 1–14. https://doi.org/10.1016/j. jdeveco.2018.01.001.
- Curto-Grau, M., Solé-Ollé, A., Sorribas-Navarro, P., 2018. Does electoral competition curb party favoritism? Am. Econ. J. Appl. Econ. 10 (4), 378–407.
- De Haan, J., 2014. Democracy, elections and government budget deficits. Ger. Econ. Rev. 15 (1), 131–142.
- De Haan, J., Klomp, J., 2013. Conditional political budget cycles: a review of recent evidence. Publ. Choice 157 (3–4), 387–410.
- Diamond, A., 2021. Pork belly politics: the moral and instrumental reasons clients donate to patrons in a rural Colombian mayoral election. Qual. Sociol. 44 (1), 151–173. https://doi.org/10.1007/s11133-020-09472-x.
- Diaz-Cayeros, A., Estévez, F., Magaloni, B., 2016. The Political Logic of Poverty Relief: Electoral Strategies and Social Policy in Mexico. Cambridge University Press, New York
- Eibl, F., Lynge-Mangueira, H., 2017. Constraints, competition, and competitiveness: explaining the non-linear effect of democratization on political budget cycles. Eur. Pol. Sci. Rev. 9 (4), 629–656. https://doi.org/10.1017/S1755773916000205.
- Garretón, M.A., 2004. Incomplete Democracy: Political Democratization in Chile and Latin America. Chapel Hill: University of North Carolina Press.
- Garretón, M.A., Garretón, R., 2010. La democracia incompleta en Chile: La realidad tras los rankings internacionales. Rev. Ciencia Politic. 30 (1), 115–148.
- Gasiorowski, M.J., Power, T.J., 1998. The structural determinants of democratic consolidation: evidence from the Third World. Comp. Polit. Stud. 31 (6), 740–771. https://doi.org/10.1177/0010414098031006003.
- Golden, M., Min, B., 2013. Distributive politics around the world. Annu. Rev. Polit. Sci. 16 (1), 73–99. https://doi.org/10.1146/annurev-polisci-052209-121553.
- Gonzalez, M.d. I.A., 2002. Do changes in democracy affect the political budget cycle? Evidence from Mexico. Rev. Dev. Econ. 6 (2), 204–224. https://doi.org/10.1111/ 1467-9361.00150
- Gootjes, B., de Haan, J., Jong-A-Pin, R., 2020. Do fiscal rules constrain political budget cycles? Publ. Choice 1–30.
- International Budget Partnership, 2019a. Open Budget Survey. International Budget Partnership, Washington, DC.
- International Budget Partnership, 2019b. Open Budget Survey: Chile. International Budget Partnership, Washington, DC.
- Jordan, R., Livert, F., 2016. An old challenge and a new problem: infrastructure planning in Latin America. In: Balbim, R. (Ed.), The Geopolitics of Cities: Old Challenges, New Issues. Ipea, Brasilia, pp. 97–119.
- Kang, W.C., 2015. Electoral cycles in pork barrel politics: evidence from South Korea 1989–2008 38, 46–58. https://doi.org/10.1016/j.electstud.2015.02.013.
- Kauder, B., Potrafke, N., Reischmann, M., 2016. Do politicians reward core supporters? Evidence from a discretionary grant program. Eur. J. Polit. Econ. 45, 39–56. https://doi.org/10.1016/j.ejpoleco.2016.09.003.
- Keefer, P., 2007. Clientelism, credibility, and the policy choices of young democracies.
 Am. J. Polit. Sci. 51 (4), 804–821.
- Klomp, J., De Haan, J., 2011. Do political budget cycles really exist? Appl. Econ. 45 (3), 329–341. https://doi.org/10.1080/00036846.2011.599787.
- Kostelka, F., 2017. Does democratic consolidation lead to a decline in voter turnout? Global evidence since 1939. Am. Polit. Sci. Rev. 111 (4), 653–667. https://doi.org/ 10.1017/S0003055417000259.

Lara, E.B., Toro, M.S., 2019. Tactical Distribution in Local Funding: the Value of an Aligned Mayor, vol. 56, pp. 74–89. https://doi.org/10.1016/j.ejpoleco.2018.07.006.

- Linz, J.J., Stepan, A., 1996. Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe. Johns Hopkins University Press, Baltimore.
- Livert, F., Gainza, X., 2018. Distributive politics and spatial equity: the allocation of public investment in Chile. Reg. Stud. 52 (3), 403–415. https://doi.org/10.1080/ 00343404.2017.1309013.
- Luca, D., Rodríguez-Pose, A., 2019. Building consensus: shifting strategies in the territorial targeting of Turkey's public transport investment. Reg. Stud. 53 (11), 1591–1602. https://doi.org/10.1080/00343404.2019.1594750.
- Luca, D., Rodríguez-Pose, A., 2015. Distributive politics and regional development: assessing the territorial distribution of Turkey's public investment. J. Dev. Stud. 51 (11), 1518–1540. https://doi.org/10.1080/00220388.2015.1028536.
- Magaloni, B., 2006. Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico. Cambridge University Press, Cambridge.
- Mandon, P., Cazals, A., 2019. Political budget cycles: manipulation by leaders versus manipulation by researchers? Evidence from a meta-regression analysis. J. Econ. Surv. 33 (1), 274–308. https://doi.org/10.1111/joes.12263.
- Marcel, M., 2013. The structural balance rule in Chile: ten years, ten lessons, 289. IDB Discussion Paper, IDB-DP-, pp. 1–51.
- Mardones, F., Acuña, J., 2020. Evolution of perinatal outcomes and sociodemographic variables in Chile (1996–2017). J. Develop. Orig. Health Disease 1–10. https://doi. org/10.1017/S2040174420001117.
- Migueis, M., 2013. The effect of political alignment on transfers to Portuguese municipalities. Econ. Polit. 25 (1), 110–133. https://doi.org/10.1111/ecpo.12005.
- Navia, P., 2010. Living in actually existing democracies: democracy to the extent possible in Chile. Lat. Am. Res. Rev. 45, 298–328. http://www.jstor.org/stable/27919223.
- OECD, 2017. Gaps and Governance Standards of Public Infrastructure in Chile. OECD, Paris. https://doi.org/10.1787/9789264278875-en.
- Prichard, W., 2018. Electoral competitiveness, tax bargaining and political incentives in developing countries: evidence from political budget cycles affecting taxation. Br. J. Polit. Sci. 48 (2), 427–457. https://doi.org/10.1017/S0007123415000757.
- Remmer, K.L., 2007. The political economy of patronage: expenditure patterns in the Argentine provinces, 1983–2003. J. Polit. 69 (2), 363–377.
- Rodríguez-Pose, A., Psycharis, Y., Tselios, V., 2016. Politics and investment: examining the territorial allocation of public investment in Greece. Reg. Stud. 50 (7), 1097–1112. https://doi.org/10.1080/00343404.2015.1009027.
- Sakurai, S.N., Menezes-Filho, N., 2011. Opportunistic and partisan election cycles in Brazil: new evidence at the municipal level. Publ. Choice 148 (1–2), 233–247.
- Schady, N.R., 2000. The political economy of expenditures by the peruvian social fund (FONCODES), 1991–95. Am. Polit. Sci. Rev. 94 (2), 289–304.
- Schedler, A., 1998. What is democratic consolidation? J. Democr. 9 (2), 91–107.
- Schneider, C.Q., Schmitter, P.C., 2004. Liberalization, transition and consolidation: measuring the components of democratization, 11 (5), 59–90. https://doi.org/ 10.1080/13510340412000287271.
- Shelton, C.A., 2014. Legislative budget cycles. Publ. Choice 159 (1), 251–275. https://doi.org/10.1007/s11127-012-0043-9.
- Shi, M., Svensson, J., 2006. Political budget cycles: do they differ across countries and why? J. Publ. Econ. 90 (8–9), 1367–1389. https://doi.org/10.1016/j. inubeco.2005.09.009.
- Shmuel, A., 2020. The political budget cycle across varying degrees of democracy. Elect. Stud. 68, 102218. https://doi.org/10.1016/j.electstud.2020.102218.
- Siavelis, P.M., 2009. Enclaves de la transición y democracia Chilena. Rev. Ciencia Politic. 29 (1), 3–21.
- Streb, J.M., Lema, D., Torrens, G., 2009. Checks and balances on political budget cycles: cross-country evidence. Kyklos 62 (3), 426–447.
- Svolik, M.W., 2015. Which democracies will last? coups, incumbent takeovers, and the dynamic of democratic consolidation. Br. J. Polit. Sci. 45 (4), 715–738. http://www. jstor.org/stable/43821439.
- Tavits, M., 2009. Geographically targeted spending: exploring the electoral strategies of incumbent governments. Eur. Pol. Sci. Rev. 1 (1), 103–123.
- Valenzuela, J.S., 1990. Democratic consolidation in post-transitional settings: notion, process, and facilitating conditions. Helen Kellogg Institute for International Studies Working Paper 150. University of Notre Dame.
- Veiga, F.J., Veiga, L.G., Morozumi, A., 2017. Political budget cycles and media freedom. Elect. Stud. 45, 88–99. https://doi.org/10.1016/j.electstud.2016.11.008.