Bringing politics (back) into Economic Geography:

National electoral dynamics and local economic growth in Turkey[1]

Davide Luca[2]

Abstract

Despite a large body of work on the role of institutions for local and regional development, economic geographers have frequently overlooked the role of politics. The paper aims to fill this gap, by arguing that studying political dynamics is key to understand the cumulative process of uneven regional development. Using data from Turkey over the period 2004-2013, the paper shows how electoral politics and government actions have had a significant effect on local economic growth patterns. The effect is substantive and increases in election years. Results also suggest that the government has influenced local development trajectories through the selective provision of state goods and regulation.

Keywords: politics of development; electoral politics; distributive politics; local economic growth; Turkey.

JEL classification: C26, D72, H73, O18, O43, R11.

Declarations of interest: none.

---

[2] Bennett Institute for Public Policy, Cambridge University; Middle East Centre, London School of Economics and Political Science. Dl622@cam.ac.uk.

1. Introduction

Despite a large body of work on institutions and local and regional development (Farole, Storper and Rodríguez-Pose, 2010; Gertler, 2010; Rodríguez-Pose, 2013; Tomaney, 2013), economic geographers have frequently overlooked the role of politics in their analysis of how firms, workers, and consumers interact in economic spaces. With few exceptions (e.g. Horan & Jonas, 1998; Markusen, Hall, Campbell, & Deitrick, 1991; Wood, 2008), politics as a process of negotiating political-economic goals, mediating between contrasting interests, and deciding the allocation of public goods has been frequently side-lined in favour of a functionalist and naturalised view of the economy as separated from political bargaining and power (Agnew, 2012). Yet, the development process is never simply a 'technical exercise' (Tomaney, 2013; Abrahams, 2019). The current paper aims at contributing to filling this gap, by bridging the geographical literature on institutions and local economic growth with the political economy research on distributive politics, i.e. on how politicians and governments design public policies for strategic electoral concerns rather than normative considerations of equity or efficiency. It asks: do national-level electoral politics and government actions influence local economic growth patterns?

To anticipate the main argument, the paper contends that the tension between the economic geographies of jobs and firms – as explored by most of the economic geography literature in the last decades (cf. Storper, 2011) – is only *one of* the tensions behind the emergence of uneven regional development (Martin, 2015). By contrast, better exploring the institutional and *political* nature of these dynamics is key to understand the historical cumulative processes of regional development and inequality (Pike *et al.*, 2009; Hadjimichalis and Hudson, 2014). While national states have lost part of their powers and authority with globalization, they yet remain powerful actors in shaping local and regional

economies through the design of regulation and the provision of public goods and services (Agnew, 2013; Rodrik, 2013).

Using data from Turkey's 81 provinces over the period 2004-2013, the paper measures the effect of strategic government actions (as a response to voting outcomes) on local economic growth. The context of the analysis is Turkey, a highly centralised country where the national government has significant leverage on economic policy-making. The country is informative because as early as 1963 it established an ad-hoc institution and a specific policy agenda aimed at curbing the high regional disparities which, however, persist. Earlier work has suggested that the Turkish government did not adopt the right policy tools to tackle regional inequality (Luca and Rodríguez-Pose, 2015). The current analysis contributes to such debate, by suggesting that 'political distortions' may be another key factor in explaining policy failure.

The empirical analysis adopts a two-stage-least-square estimator and a shift-share instrument to identify the genuine source of causality between votes and growth. The paper provides novel results suggesting that provinces with significant AKP support and moderate opposition votes have experienced significantly faster per-capita GVA and employment growth rates. Results are robust against a host of alternative specifications and are economically substantive. As an example, they suggest that a hypothetical province where AKP votes are slightly below the national average experienced more than 3 percentage points (i.e. close to half a standard deviation) of faster annual per-capita GVA growth compared to a hypothetical constituency where the AKP vote share was lowest or highest. Furthermore, in line with the literature on political budget cycles (Rogoff and Sibert, 1988; Alt and Lassen, 2006), the effect is strongest in election years and decreases mid-term. While the methodology does not allow to make strong inference about the overall national aggregate

effects, results uncover a robust negative link between support for the main opposition party and local growth.

The paper also examines potential channels explaining how the central government may affect local economies. The analysis shows that votes for the AKP have a significant and substantive effect on the territorial redistribution of state goods, namely public capital investment and investment subsidies to firms. Furthermore, results provide direct evidence that capital investment acts as a mediator between votes and economic performance. Such result is consistent with recent research on the positive effects that infrastructure improvements have had on Turkey's local economies in recent years (Coşar and Demir, 2016). The analysis also provides indirect evidence consistent with the hypothesis that the government may have contributed to a structural diversification of local economies out of agriculture and into the secondary and tertiary sectors.

The article is structured as follows. Section 2 reviews the literature and develops a simple theoretical framework. Section 3 describes Turkey's institutional background and the data. Section 4 discusses the empirical strategy. Section 5 presents the results, and then provides an exploration of potential explanatory channels. Section 6 draws the conclusions and presents the implications for theory and policy.

2. Conceptual framework

In the last three decades, social scientists have shown growing interest in the link between institutions and economic growth (Rodrik, Subramanian and Trebbi, 2004; Engerman and Sokoloff, 2008; Acemoglu and Robinson, 2012; Clifton, Glasmeier and Sheth, 2016). Among the set of institutions which shape economic outcomes, political channels are

seen to play a key role (Gourevitch, 2008; Farole, Storper and Rodríguez-Pose, 2010; Sen, 2013). Political economists, for example, have suggested how the presence of inclusive institutions preventing specific social groups from monopolizing power and resources is important to sustain long-term economic growth (Acemoglu and Robinson, 2012).

Yet, despite a significant amount of empirical work on the role of institutions for local and regional development (inter alia: Amin, 1999; Bathelt & Glückler, 2014; Beer & Lester, 2015; Dixon, 2012; Gertler, 2003; Macleod, 1997; Pike, Marlow, McCarthy, O'Brien, & Tomaney, 2015; Rodríguez-Pose, 2013; Rodríguez-Pose & Di Cataldo, 2014; Tomaney, 2013), economic geographers have frequently overlooked the specific role of politics in their analysis of how firms, workers, and consumers interact in economic spaces. Politics as a process of negotiating political-economic goals, mediating between contrasting interests, and deciding the allocation of public goods has been frequently side-lined in favour of a more functionalist and naturalised view of the economy as separated from political bargaining and power (Agnew, 2012). In such a landscape, the role of 'institutional thickness' or the 'quality of institutions' are acknowledged as key to sustain effective policies, innovation and development, but the specific role of politics usually remains in the foreground.

There is a tradition of economic geographers specifically interested in the politics of development. Yet, most research has been developed around the role of local governing coalitions, local governance structures, and 'regulationist regimes' for economic development (Horan and Jonas, 1998; Özcan, 2006; Bayirbag, 2011; Storper *et al.*, 2015), or around the role of the state in favouring new geographies of jobs and new capital accumulation regimes (Markusen *et al.*, 1991; MacLeod, 1999; Wood and Valler, 2004; Pike *et al.*, 2009). In other words, the attention of the discipline on the role of *electoral* politics, governments, and societal political cleavages in influencing local and regional economic dynamics has

remained scarce. Besides, most of the existing pieces of work focus on local-level case studies. While they provide analytical depth and qualitative richness, the current paper aims to add to these contributions by providing a broader national-level framework in which those pieces of work on local case studies (e.g. Özcan, 2006) can be contextualized.

Societal political cleavages and government actions can affect local and regional development in different ways. First, local economies and regional disparities are affected by society's beliefs about equality and its aversion to territorial imbalances (Dixit and Londregan, 1996). Second, governments can affect economic policy outputs and outcomes according to non-programmatic, hidden preferences rather than public and binding rules driven by commitments to equity or development imperatives (Stokes *et al.*, 2013).[3] The current paper specifically focuses on the latter.

Over the last two decades, a significant amount of political science literature has explored how incumbent governments and politicians influence territorial public spending patterns, regulation, and development policies for strategic, non-programmatic reasons (cf., for an extensive review: Albertus, 2017; Golden & Min, 2013). Such forms of tactical redistribution (Dixit and Londregan, 1996), where governments have informal leeway to decide who benefits, are linked to public actors' political strategies, and the fact that political survival drives the tendency to funnel resources to those who preserve the incumbent's power (Bueno de Mesquita *et al.*, 2003). This may be particularly true in societies showing deep cleavages and polarization. Existing research from political science and political economy has suggested how higher polarization may lead to stronger electoral cycles in fiscal balance

---

[3] In the real world, the distinction between the two ideal types may be blurred, as discretionary targeting may simultaneously address strategic electoral and normative principles. Besides, at times discretion may be necessary to achieve normative objectives.

(Frye, 2002; Alt and Lassen, 2006). Furthermore, the effects of political cleavages on the economy may be particularly strong in emerging markets, where state support has traditionally played a key role in the economy and, yet, it has been frequently mediated by political connections (Bellin, 2002; World Bank, 2014). Besides, insufficient levels of bureaucratic insulation from politics have frequently reduced the incentives/capacity to prevent the use of public monies for non-programmatic goals (Evans, 1995; Luca, 2017).

If geographers explored the topic as early as in the 1970s (cf. Johnston, 1977), the analysis of how governments strategically target resources for electoral reasons has very recently gained new momentum in the discipline (Lambrinidis, Psycharis and Rovolis, 2005; Luca and Rodríguez-Pose, 2015; Aray, 2016; Luca, 2016; Rodríguez-Pose, Psycharis and Tselios, 2016; Livert and Gainza, 2018). Yet, while there is now growing research of how governments affect the territorial allocation of developmental policy outputs beyond normative considerations of efficiency and equity, there is still limited evidence on whether such discretionary 'political distortions' may be consequential for local economic dynamics.

Given the ample evidence on how political actors may design/implement public policies and regulation at their discretion, there is reason to suspect that politics and partisan government actions may influence not only policy outputs, but also local and regional development outcomes. In political economy, Levitt and Poterba (1999) provide preliminary – although weak – US evidence of how senior Democratic congressmen representation correlates to faster State growth during the second post-war period. More recently, Luca (2016) focuses on Turkey but fails to identify significant effects, while Asher and Novosad (2017), find evidence on the effects of electoral politics and partisanship on local economic growth in India. The current paper adds to these studies by providing the first robust and

systematic results from the case of Turkey, and then sketching out their relevance for the economic geography debate.

The following paragraphs sketches the conceptual framework. If the government is able to influence the local economy, per-capita outputs in year t in region i will include $y_{i,t}^0$, i.e. income in absence of any political economic effect, and $g_{i,t-1}$, i.e. per-capita benefits deriving from government activities in the year t_{-1}.[4] Government actions may include the selective provision of public goods, heterogeneous policy regulations enforcement, access to public credit, international trade support, etc.[5] The one-year lag between y and g is included to account for the time necessary for any government activity to (potentially) impact personal income. In each region (constituency) i, actual per-capita income at time t is hence:

$$y_{i,t} = y_{i,t}^0 + g_{i,t-1} \tag{1}$$

The political science literature on distributive politics underlines how government strategic behaviours are attempts by politicians to protect themselves electorally by targeting specific groups of voters (Golden and Min, 2013). In other words, incumbents attempt to influence future votes by analysing current information on political support and adjusting

---

[4] For simplicity, the bureaucracy in charge of implementing public policies is treated as a direct and fully subordinate agent of the government. This is a simplification of the more complex principal-agent relationship existing in many real world cases (cf. Evans, Huber, & Stephens, 2017).

[5] The framework assumes that at least part of the government inputs are valuable to the economy. If, by contrast, all politically direct inputs were projects exclusively implemented to get additional votes but not economically valuable – i.e. 'white elephants' – we could predict an alternative scenario where the government affects policy outputs but not local economic growth.

their policy actions accordingly.[6] Most distributive politics models assume that politicians tune their actions depending on information at their disposal, proxied by past electoral results. This can be summarised as follows:

$$g_{i,t-1} = f(P_{i,t-2}) \tag{2}$$

where $P_{i,t-2}$ are past election results from time $t - 2$. A one-year lag between g and P is again included, to allow for governments to adjust their actions based on past electoral outcomes.[7]

An ongoing debate in the political science literature focuses on whether politicians target benefits to 'core' districts in order to nurture partisan strongholds (Cox and McCubbins 1986) or 'swing' districts, where the 'marginal productivity' of redistribution is higher (Lindbeck and Weibull, 1987; Dixit and Londregan, 1996) or where future support for the party is in doubt (Stokes, 2005). The current analysis argues that these two behaviours coexist, even in PR electoral systems. Politicians are likely to target preferentially their core supporters, while withholding from their opponents. At the same time, this distortion is reduced in very safe strongholds.

Incumbent actions shape partisan commitments (Calvo and Murillo, 2013; Diaz-Cayeros, Estévez and Magaloni, 2016), particularly in consolidating democracies where

---

[6] Voters could reward or punish politicians based on their past actions (retrospective voting) but also on their promises about the future (prospective voting). While the two may not be mutually exclusive, the majority of research in distributive politics focuses on retrospective voting, since such behaviour seems more rational in environments where politicians may not keep their pledges (Larcinese, Snyder and Testa, 2013; Diaz-Cayeros, Estévez and Magaloni, 2016).

[7] One may also expect politicians to use other sources of information such as opinion polls.

programmatic manifestos lack credibility and material exchanges may be an important determinant of voter behaviour. In such places, as the partisan loyalty of voters is *conditional* on the history of previous spending, politicians have strong incentives to nurture their core constituencies, targeting them to prevent defections to opposing parties (Nichter, 2018). Besides, negative inducements and punishment regimes serve to deter defections among core supporters (Mares and Young, 2016), so we may expect incumbents not to invest in 'hard' opposition strongholds, which they view as a waste of resources beyond spending at the bare minimum levels.

Yet, even within 'core-support' models, utility-maximizing politicians may decide to comparatively reduce their support to core constituencies above very high vote thresholds. Although in PR systems votes in the whole country matter and governments have fewer incentives than in majoritarian settings to focus on specific battleground districts (Golden and Picci, 2008), incumbents may still be tempted to provide less rewards to places where partisan support is very strong and where loyalty is rooted in deep ideological cleavages and hence less conditional on material benefits. In such places the government may be less worried about preventing defections, and hence divert resources to other provinces with 'moderate opposers' (Stokes, 2005) where they aim to boost the party reputation. Anecdotal evidence for the Turkish context is offered by a Parliamentary speech delivered by a legislator from the province of Kütahya in 2012. In such occasion, the Member of Parliament argued that the province had been "forgotten" in the distribution of State resources (Işık, 2012), in spite of its exceptionally high support given to the AK Party – which exceeded 60 percent in both 2007 and 2011 elections.

Besides, research on portfolio diversification shows that governments may simultaneously target core and swing constituencies, by strategically balancing between the

provision of different types of private and public goods. In equilibrium, party machines may comparatively deploy more reversible goods to retain core partisan loyalties while simultaneously investing in irreversible benefits that credibly signal a party's commitment in battleground, swing districts (Albertus, 2013; Diaz-Cayeros, Estévez and Magaloni, 2016). Drawing on such intuitions, *P* is assumed to be the sum of two components which capture the combined effects of the 'core' and 'moderate-opposer' hypotheses:

$$P_{i,t-2} = p_{i,t-2} - p_{i,t-2}^2 \tag{3}$$

Overall, we can test for any potential effects of national electoral politics on per-capita income y at time t in region i by adopting the following local economic growth model:

$$y_{i,t} = \beta_0 y_{i,t-1} + \beta_1 p_{i,t-2} - \beta_2 p^2{}_{i,t-2} + \sum_j^J \beta_j X_{i,t-1} \tag{4}$$

Where:

$y_{i,t-1}$ is the yearly lagged provincial per-capita GVA level, included to test for Solow-style convergence of income. $p_{i,\,t-2}$ and $p^2_{i,\,t-2}$ are the key variables of interest. In particular, the hypothesis is that $\beta_1 > 0$, i.e. that higher votes for the central government drive higher growth rates of provincial personal income, while $\beta_2 < 0$, i.e. that such relationship is bell-shaped. $X_{i,t-1,}$ consists in a vector of socioeconomic factors also affecting economic performance.

Subtracting $y_{i,t-1}$ on both sides, yields:

$$\Delta y_{i,t} = (\beta_0 - 1)y_{i,t-1} + \beta_1 p_{i,t-2} - \beta_2 p^2{}_{i,t-2} + \sum_j^J \beta_j X_{i,t-1} \tag{5}$$

3. Institutional background and data

3.1. The Turkish political system

Turkey is an appropriate case to test the research hypotheses set above. Until 2017 the country was a parliamentary democracy featuring a closed-list, proportional-representation electoral system. The D'Hondt formula and a national threshold of 10 percent are used to translate votes into parliamentary seats. The country features a multiparty system where parties have clear and distinguishable ideological positions (Aytaç, 2014). Parties act as important 'gatekeepers' for access to the resources of the State and thus play a key role in the political distribution of public resources (Kalayıcıoğlu, 2001).

Turkey has one of the most centralised financial systems among OECD members, and the central government has significant power in deciding the allocation of public resources across the country (Luca, 2017). Many contributions show how incumbents have frequently targeted public monies and other preferential treatments to individuals and constituencies with a similar political affiliation, and punished those who do not share the same political orientation (Kemahlioglu, 2008; Aytac, 2014; Çarkoğlu and Aytaç, 2014; Luca and Rodríguez-Pose, 2015). Parties have also been strongly aligned with other types of organizations considered key societal fault-line markers, such as business associations. In their analysis on state-business relations, Buğra and Savaşkan (2014) for example acknowledge how "the impact of these two types of actors on the economic environment is not exercised through separate channels, but appears the outcome of strategies that mutually support each other" (Buğra & Savaşkan, 2014, p. 31).

In the last decades, the Turkish political landscape has been divided along two socio-political cleavages: religiosity versus laicism represents the main one, while a secondary one is that separating Turkish versus ethnic Kurdish nationalisms (Gunes-Ayata and Ayata, 2002; Çarkoğlu and Hinich, 2006). The current paper focuses on the first cleavage, which is

captured by the contraposition between the pro-Islamic ruling party and the main, secular opposition one.[8] The 2002 parliamentary elections are widely seen as a milestone in the history of the Turkish party system. For the first time since 1991, a party – the AKP, founded in 2001 just months before the elections and led by R.T. Erdoğan – garnered more than 34% of the votes, winning an absolute majority of seats in parliament and forming a single-party government. The incumbents have remained in power ever since, winning all subsequent local and national elections. In the next national polls, they increased their vote share first to 46.7% in 2007 and, then, to almost 49.8% in 2011 and, again, 49.5% in 2015.[9]

Buğra and Savaşkan (2014) report the fear of local and regional actors about feeling penalized by the central government for systematically voting for the *Cumhuriet Halk Partisi* (Republican People's Party, CHP), as opposed to the AKP in both local and national elections.[10] The remainder of the paper will test whether such fears find empirical confirmation.

3.2. Data

---

[8] Including a second cleavage in the analysis would pose identification challenges. Future research specifically focused on the Kurdish vote should assess the extent to which this second cleavage has affected local economic growth patterns in the southeast of the country.

[9] The AKP's only decline occurred in the 2015 elections, when its score dropped to 40.9%, to re-bounce back to 49.5% in the November 2015 snap elections.

[10] The other main parties since the early 2000s have been the nationalistic Nationalist Action Party (*Milliyetçi Hareket Partisi*, MHP), and the pro-Kurdish Peace and Democracy Party (*Barış ve Demokrasi Partisi*, BDP), which succeeded to the Democratic Society Party (*Demokrat Toplum Partisi*, DTP) outlawed in 2008.

The analysis employs a dataset covering Turkey's 81 provinces over the period 2004-2013. It takes advantage of new data on provincial Gross Value Added (GVA) released by the Turkish Statistical Institute (TÜİK) in 2016 – prior to that date, detailed information on economic output dynamics for the country's 81 provinces post-2001 was missing. No political economy research has been conducted on such dataset thus far. The Socio-economic and electoral data also comes from TÜİK. The analysis extends electoral results for 2002, 2007, and 2011 elections over each legislature's single year.

The paper focuses on provinces since they constitute one of the most important tiers of political representation and the power base of political parties, as well as the only administrative tier between municipalities/metropolitan municipalities and the central state. Provincial boundaries exactly coincide with both electoral constituencies and the statistical units used to measure local economic performance. It is also important to stress that while provinces represent a key socio-political tier of governance, they mostly lack strong administrative powers autonomous from the central state. As a matter of fact, elections for the provincial assemblies play a minor role in Turkey's politics.[11] Taking these factors into account, the analysis focuses on national ballots. Furthermore, despite a series of decentralization reforms implemented in the early 2000s, the country remains one with a highly centralized public finance system. Many of the decisions affecting sub-national public spending and policies potentially affecting local growth are hence in the hands of Ankara. As an example, between 2010 and 2014 local governments were responsible for less than 30% of the total amount of public fixed-capital investment (Ministry of Development, 2014), with the lion's share still managed by the national government and its local decentered branches.

---

[11] An exception are metropolitan municipalities which, during the AKP incumbency, have gained increasing importance and, since 2004, correspond to provincial boundaries.

Appendices A.1, 2, and 3 respectively provide a detailed description of variables, their key summary statistics, and their pairwise correlation coefficients.

4. Empirical strategy

The research follows two steps. It first assesses whether there is a reduced-form link between partisan politics and local economic growth. It then provides an exploration of some key potential channels which may drive the reduced-form results.

4.1. Empirical estimation

In line with Equation 5, the empirical model adopted for estimation is:

$$\Delta y_{i,t} = (\beta_0 - 1)y_{i,t-1} + \beta_1 p_{i,t-2} - \beta_2 p^2_{i,t-2} + \sum_j^J \beta_j X_{i,t-1} + \alpha_i + \gamma_j + d_t + \varepsilon_{i,t} \quad (6)$$

Where:

$\Delta y_{i,t}$ is the rate of per-capita economic growth, expressed in logarithmic terms, of province i at time t, and $y_{i,t-1}$ is the yearly lagged provincial per-capita GVA level (expressed again in Ln), included to test for Solow-style convergence of income, with $\beta_0 < 0$ indicating convergence.

$p_{i,t-2}$ and $p^2_{i,t-2}$ are the key variables of interest as discussed in Section 2. It is important to remind that we want to test whether $\beta_1 > 0$, i.e. if higher votes for the central

government drive higher growth rates of provincial personal income, and if $\beta_2 < 0$, i.e. whether such relationship is bell-shaped.[12]

$X_{i,t-1,}$ consists in a vector of controls. Baseline estimates include total provincial population and voter turnout to elections. Many of the socioeconomic drivers commonly included in empirical regressions among the determinants of local economic growth – such as public capital – might constitute channels through which politics may affect economic dynamics. Such variables are hence excluded from the reduced-form model as they would be 'bad controls' (Angrist & Pischke, 2009). By contrast, data on private capital and entrepreneurship is not available for the whole panel. It will therefore be excluded from the baseline regression, and then added in the robustness checks.

$\alpha_i,$ and d_t respectively consist in province and year fixed-effects (FE). I do not include province-specific time trends (the interaction between province and year FE) because of the insufficient degrees of freedom to do so. Equation 6 also includes a dummy γ_j for metropolitan municipalities whose mayor is from the AK Party. $\varepsilon_{i,t}$ is the error term.

4.2. Identification

---

[12] The quadratic term has a high correlation with more 'traditional' measures of electoral competitiveness (cf. Besley et al., 2010) – such as the absolute vote difference between the first and the second party in each province. The pairwise correlation coefficient between the two variables is above 0.72 and significant at the 0.01 confidence level. By including $p_{i,t-2}^2$ the analysis hence controls for electoral competitiveness. Besides, if widely adopted in majoritarian electoral systems, the more 'traditional' measure of close race has a limited relevance in PR ones. Similarly, the analysis does not include a more generic measure of party competition such as the Herfindahl index because of its highly collinearity with AKP. The pairwise correlation coefficient between the two is 0.76, significant at the 0.01 confince level.

The estimation of Equation 6 may suffer from two main identification concerns. First, while the inclusion of fixed-effects should attenuate the risk of omitted variable bias, there might still be spurious factors simultaneously affecting voting patterns and economic dynamics. Second, ballot results may suffer from reverse causality.[13]

To identify the genuine causality between votes and economic performance, the analysis adopts a Two-stage Least Square (2SLS) estimator. It proposes a shift-share instrument (Bartik, 1991). The intuition behind the instrument is that national vote pattern changes that are party-specific but external to an individual province i reflect a 'synthetic' exogenous political 'shock' for that sub-national unit. For each province i in year t, the instrument $p_{IV_{i,t}}$ is constructed by weighting $p_{i,b}$, which represents the initial electoral result for the incumbent party in province i in the base year b, for the national variation Δn between time t and the base year b:

$$p_{IV_{i,t}} = p_{i,b} * \left(1 + \frac{n_t - n_b}{n_b}\right) \tag{7}$$

The rationale behind the instrument is that combining local composition shares with aggregate level shifts can help predicting exogenous variation in an endogenous variable of interest. In other words, the instrument assumes that changes in national voting pattern that are party-specific but external to an individual province reflect 'synthetic' exogenous political shocks to the province.

Since I include the quadratic term of the endogenous variable, I instrument it by the quadratic term of the linear instrument (cf. Woodridge, 2010). This second instrument is constructed as:

---

[13] A further concern is linked to the so called 'Nickel bias' in FE dynamic models (Nickell, 1981). Robustness checks will show that this does not affect the results.

$$p_{IV_{i,t}}^2 = (p_{IV_{i,t}})^2 \qquad\qquad (8)$$

A key assumption for shift-share instruments to comply with the exclusion restriction is that the initial shares are exogenous (cf. Goldsmith-Pinkham, Sorkin, & Swift, 2018). 2002 is selected as the base year assuming that results for that election are close to an exogenous shock. Appendix figure B.1 shows, for each election, the turnover rate of MPs, constructed dividing the number of newly elected MPs by reconfirmed ones. The 2002 rate has been the highest in Turkey's democratic history, even higher than after the two military coups of 1960 and 1980 (marked by vertical lines). 2002 votes might yet be correlated to previous elections held before the 1999-2002 legislature and, hence, to past policy outputs and outcomes. This could be for example the case if parliamentarians from 'old parties' in power in the mid-1990s skipped the 1999-2002 legislature but decided to join the newly created AK Party in 2002. A second set of instruments using the 1995 elections as baseline is hence added. Robustness tests will also exclude the 2002-2006 legislature and restrict the analysis to the panel 2007-2014, for which the main set of instruments should allow the identification of a genuinely exogenous source of variation.

5. Results

5.1. Baseline estimates

Table 1 presents the main results. Column one features an Ordinary Least Square (OLS) estimator. Column two adds year and province FE, as well as a dummy for metropolitan municipalities whose mayor is from the AKP (the variable, not reported, is insignificant). Such strategy should allow controlling for local idiosyncrasies and for cross-

sectional common time shocks. Model three, which is the most complete, further adds provincial population and voter turnout among the regressors.

[Table 1 about here]

Results confirm the conceptual framework and uncover a positive link between votes for the national incumbent party and faster per-capital provincial GVA growth rates. As expected, the linear term for AKP votes is positive and significant across all specifications, while its quadratic term is negative (and again significant), suggesting that the relationship between dependent and explanatory variables is bell-shaped as expected.

To test against potential endogeneity, coefficients for model four are estimated by means of 2SLS, whose first-stage regressions are displayed in Appendix A.4.[14] As expected, the 2SLS coefficients are smaller than the OLS and FE ones, suggesting that the latter were biased upward due to endogeneity. Appendix figure B.2 shows the fitted lines for the regression coefficients of Table 1's columns three and four. The graphs provide clear visual evidence of how, after controlling for endogeneity, the link between votes and local economic growth is significantly smaller, in line with what just discussed. Nevertheless, the effect remains substantial. Estimates are most precise for the central part of the AKP vote share distribution. They suggest that a hypothetical province where AKP votes are just below the national average experienced more than 3 percentage points (that is, close to half a standard deviation) of faster per-capita GVA growth compared to hypothetical constituencies where AKP vote shares are lowest/highest. Such finding is consistent with the conceptual framework, which combines 'core' (Cox and McCubbins, 1986) and 'moderate opponent' (Stokes, 2005) hypotheses. In other words, the government may have tried to strategically

---

[14] Results from Appendix A 4 confirms the relevance of only the set of instrumentals calculated using 2002 as base year.

favour core constituencies but, at the same time, this effect may have been stronger in areas where the party aims to 'buy' support from moderate oppositions. By contrast, the main losers may be the 'hard' opposition strongholds (i.e. where support for the AKP is minimum), as well as places where the incumbents have already a very strong electoral backing and may be less worried about partisan defections.

Table 2 presents the results obtained replacing per-capita GVA with total employment growth. Models one to four follow the same specifications as in Table 1. The last two columns are the preferred ones, as they are the most complete. Results show a very similar picture as before. Again, the linear term for AKP votes is positive and significant across all specifications, while its quadratic term is negative and significant.

[Table 2 about here]

Appendix figure B.3 presents the fitted lines for models three and four of Table 2. 2SLS results determine a reduction in the effect of votes on employment growth. At the same time, even after controlling for endogeneity the effect is significant.

Finally, Appendix A.5 tests whether the positive effect of votes for the AKP on local growth is mirrored by a negative link between vote shares for opposition parties and economic performance. The analysis focuses on the CHP, the main party opposing Erdoğan and the AKP. Conditioning on covariates and fixed-effects, the table shows a robust link between CHP vote shares and negative economic performance. The shift-share instruments are unfortunately weak (the K-P first stage test is low, cf. column 4). Caution is hence needed in making strong inference. With this caveat in mind, the table shows at least preliminary evidence of how the government may have picked not only 'winners', but also 'losers'. Faster growth in pro-government areas may have hence come at the cost of reduced output in 'hard' opposition constituencies.

5.2. Robustness checks

The following section tests the robustness of the baseline results from Table 1. First, given the limited relevance of the extra set of instruments constructed using the 1995 elections as base year, there may still be concerns about the endogeneity of the 2002-2006 electoral results. I hence re-estimate Equation 6 restricting the panel to the period 2007-2014, for which the instruments built on the base year 2002 should be exogenous. The outputs are presented in Appendix A.6. The exclusion of the 2002-2006 legislature does not undermine the results which, if anything, increase now in magnitude.

Second, it is well known that in dynamic models, i.e. where the lagged dependent variable is included among the regressors, panel estimates are biased in the order of 1/T (Nickell, 1981). Appendix A.7 presents the main results estimated excluding the dynamic component from Equation 6. Not controlling for ß convergence increases the magnitude of the AKP coefficients as expected. Nevertheless, results are overall qualitatively similar.

Third, results might be sensitive to the inclusion of Ankara, Istanbul, and Izmir, Turkey's main economic hubs. Combined, these three cities in 2014 accounted for 45.84% of the country's GDP, slightly down from 46.15% in 2004. Appendix A.8 reports the results excluding such cities from the analysis. Again, the new outputs are very similar to the baseline ones.

Fourth, the baseline specification does not control for a host of variables commonly included in growth regressions, such as public capital, on the ground that they might constitute channels through which party politics affect growth. While the inclusion of province and year FE should attenuate potential risks of omitted-variable biases, Appendix

A.9 re-runs the regressions controlling for private capital investment and entrepreneurship. Data on these two variables is not available for the whole panel (this explains why they are not included in the baseline results). Coefficients are hardly influenced by the change in specification.

Finally, Appendix A.10 shows the results of a battery of 'placebo' regressions where the time lag between left- and right-hand side variable is excluded. If the conceptual framework is correct, votes should only affect future economic performance, since time is needed to translate strategic political decisions into policy actions which may then influence local growth. Results confirm the intuition: regressing current economic performance on current electoral outcomes yields no results, with coefficients turning completely insignificant.

5.3. Political business cycle

The baseline analysis assumed that the effect of votes on local economic performance is constant across the electoral cycle. Yet, a significant amount of research suggests that politicians tend to tailor strategic targeting decisions depending on the electoral cycle (Rogoff and Sibert, 1988; Alt and Lassen, 2006). This section hence tests for the existence of political business cycles in local economic performance, by expanding Equation 6 to the following:

$$\Delta y_{i,t} = (\beta_0 - 1)y_{i,t-1} + \left(\beta_1 p_{i,t-2} + \beta_2 {p^2}_{i,t-2}\right) * C_k + \sum_j^J \beta_j X_{i,t-1} + \alpha_i + \gamma_j + d_t + \varepsilon_{i,t} \ (7)$$

Where C_k is a categorical variable equal to 0 in election years and then taking value 1 in post-election years, 2 in mid-term years, and 3 in the last year of an election cycle (that is, a pre-election year). Studies suggest that governments increase spending prior to ballots, so

that the economy is strongest when people cast their votes. The expectation is hence that the impact of votes on local economic performance is strongest around the election period. It is important to stress that, while incumbents may try to entice voters by increased expenditure, we still expect the direction of causality running from lagged voting outcomes to higher spending, to economic growth.[15]

Appendix A.11 reports the FE and 2SLS regression results. Appendix figure B.4 then plots the predicted values of provincial per-capita GVA growth considering the combined interaction effects between AKP and AKP^2 with the electoral cycle dummies (while holding other variables constant at their mean). The graph provides evidence of how, conditioning on covariates, local economic performance in provinces with a high 'political clout' accelerates in the election year, slows down post-election and mid-term, and then speed-up again in the year before the next ballot. The results are robust against excluding from the analysis the year 2009, a mid-term year during which Turkey was hit by the downturn.[16]

5.4. Potential mechanisms

The previous sections provide evidence of a robust link between vote patterns and local economic growth dynamics. The next paragraphs aim to shed preliminary light on the channels potentially driving the results. One of the hypotheses put forward in the conceptual

---

[15] Causality may also likely run the other way, with higher expenditure and growth positively affecting votes. The 2SLS strategy deals with such potential reverse effect.

[16] While results could potentially still suffer from omitted variable bias - for example if the effects of the economic recession were geographically heterogeneous, unfortunately there are not enough degrees of freedom to control for province-specific time trends.

framework concerns the preferential allocation of key government inputs. To this aim, the analysis estimates the following equation:

$$G_{i,t}^{j} = \beta_1 p_{i,t-1} - \beta_2 p^2_{i,t-1} + \beta_3 X_{i,t-1} + \alpha_i + d_t + \varepsilon_{i,t} \tag{8}$$

where (*i* and *t* again denote provinces and years respectively): $G_{i,t}^{j}$ is a vector indicating different government goods j allocated by the central state to each province i in year t. In particular, I analyse the following variables, for which provincial-level data is available: per-capita public fixed-capital investment, investment subsidies to private firms, per-capita public current expenditure; $p_{i,t-1}$, $p^2_{i,t-1}$, and $X_{i,t-1}$ represent the same variables accounted for in Equation 6. The vector $X_{i,t-1}$ includes provincial population, per-capita GDP, and voter turnout; α_i and d_t are province and year fixed-effects; $\varepsilon_{i,t}$ is the error term. In line with the conceptual framework, the time-lag between regressors and dependent variables is now one year, rather than two.

[Table 4 about here]

Table 4 shows the results. Odd and even columns respectively report FE and 2SLS outputs. Confirming previous research on distributive politics in Turkey, the table shows that voting for the central incumbent party has had a statistically significant and substantial influence over the territorial allocation of public investment and investment subsidies to firms (columns one to four). Furthermore, results are in line with recent models of strategic targeting with alternative distributive goods (Albertus, 2013; Cammett, 2014). Diaz-Cayeros et al. (2016), for example, posit that parties machines may target low-spillover (i.e. highly excludable and reversible) goods to retain core partisan supporters, while simultaneously investing in high-spillover goods (i.e. characterised by low excludability and reversibility) in battleground areas with the aim of attracting the support of voters outside of their core. The

results from columns one to four are consistent with this hypothesis: while in the case of firm subsidies (low-spillover good) the function seems to be quasi-linear (the quadratic term is insignificant, cf. models three and four), in the case of capital investment (high-spillover good) the function is significantly quadratic. Finally, columns five and six do not find a statistically significant evidence of a link between AKP vote shares and total government expenditure.[17]

Throughout its incumbency, the AKP government has significantly fostered trade relationships between Turkey and Muslim-majority countries. Lo Turco and Maggioni (2018) show how firms located in provinces characterised by stronger religiosity have been more likely to enter export destinations with a higher share of Muslims. It may hence be plausible that AKP-supporting provinces may have preferentially benefitted from government-led expansion of trade links. To this aim, I test whether there is any link between AKP vote shares and export growth. Similarly, the analysis tests whether there is any effect of votes on the location of inward FDI, since the central government may have favoured specific provinces vis-à-vis international investors through the national Investment Support and Promotion Agency of Turkey. Results, presented in Appendix A.12, do not however find any statistically significant relationship between AKP vote shares, export growth, and inward FDI.

Appendix A.13 then explores whether the developmental state goods allocated by the government for strategic reasons may be a mediator between votes and local economic growth. The table reports the most stringent specification from the reduced-form analysis (i.e. the one controlling for private capital and entrepreneurship) to minimise potential risks of

---

[17] Cammett, Luca, & Sergenti (2019) indeed show how the strategic distribution of public expenditure follows complex patterns.

omitted-variable bias. The first two columns report the baseline FE and 2SLS results. Columns three and four then add capital investment and firm subsidies. If such goods act as mediators between votes and GDP growth, their inclusion would lead to a reduction in significance and magnitude of the coefficients for AKP vote shares, as their effect would be absorbed by the formers. Indeed, this seems to be, at least in part, the case. The AKP linear and quadratic terms become smaller (especially with the 2SLS estimator) and lose statistical significance while, among the strategically-targeted goods, public investment seems to have a positive (although only marginally significant) effect on economic growth (with the 2SLS estimator).

At the same time, however, the distribution of capital investment may not be the only channel driving the reduced-form results. While the coefficients of both political variables reduce in magnitude and significance, their joint effect is still significantly different from zero. I draw on recent literature to speculate about two other potential channels, namely credit and regulation. First, the literature has shown how access to public finance often depends on political factors and, at the same time, can have significant effects on the real economy (Carvalho, 2014). Second, a growing amount of research on state-business relations has stressed the relevance of informal links between firms and the incumbent party (Buğra & Savaşkan, 2014; Gurarak, 2016; Gurarak & Meyersson, 2016; Özcan & Gündüz, 2015a, 2015b). Recent research by Özcan and Gündüz (2015) has for example shown how firms politically connected to the government have experienced abnormal performances and growth in recent years. Consistently, Buğra and Savaşkan (2014) claim that frequent changes to the laws regulating public tenders have been used to favour business groups close to the ruling party. If the government preferentially favour politically-connected firms, and if the latter are located heterogeneously across the country, we may expect this to be an additional channel.

Relatedly, the government may have used regulation to influence the structural transformation of local economies. The degree to which the institutional environment is conducive to fast structural change is a key determinant of economic performance. While it is not possible to establish a direct link, analysing the effect of votes on economic sub-sectors can yet provide exploratory evidence on local structural change associated to political dynamics. Tables 5 and 6 respectively show the estimates subdividing total GVA and employment growth into primary, secondary, and tertiary sectors. For reasons of space the tables only report 2SLS results (FE outputs, available on request, are overall similar).

[Table 5 about here]

[Table 6 about here]

In table 5, while the overall direction of coefficients is similar, the positive linear effect of vote shares on GVA growth is insignificant for the primary sector (meanwhile, the quadratic term is significant and shows a higher magnitude). In the case of employment, Table 6 shows a strong and significantly negative link between votes and employment growth in the agricultural sector while, at the same time, a markedly positive link for the secondary sector. Some of the coefficients need to be interpreted with care as their Hansen J test' P-values are below the threshold of 0.1. While further research with a stronger identification is needed, it is plausible to speculate that the government may have affected local economies' structural transformation. Particularly during the first years of the AKP incumbency, Turkey experienced a significant growth in labor productivity due to labor movement out of agriculture into more productive areas of the economy (Rodrik, 2010). Relatedly, Meyersson (2017) shows how the AK Party has significantly boosted the economy by fostering the construction sector. Although weakly identified, coefficients from Tables 6 and 7 are consistent with the hypothesis that the government, in electorally strategic provinces, may

have actively contributed to a diversification of the economy towards the secondary and tertiary sectors (Table 6), as well as to a shift of agricultural employment into the secondary sector (Table 7).

6. Conclusion

The paper draws on the case of Turkey to argue that party politics can have substantial effects on local economic dynamics. While nation states have lost part of their powers and authority with globalization, they yet remain powerful actors in shaping local and regional economies (Agnew, 2013).

Empirically, the analysis shows how votes for the incumbent AK Party in national elections have a substantial effect on the economic performance of Turkey's provinces, measured as per-capita GVA and employment growth. 2SLS estimates featuring a shift-share instrumental variable strategy suggest that a hypothetical province where AKP votes are just below the national average experienced more than 3 percentage points (i.e. around half a standard deviations) of faster annual per-capita GVA growth compared to a constituency where the vote share is lowest. Furthermore, the positive effect fades away above a threshold coinciding with the national average share of votes. Findings are in line with a distributive politics framework which combines, in a proportional-representation electoral system, 'core' (Cox and McCubbins, 1986) and 'moderate opposition' (Stokes, 2005) targeting hypotheses. According to such framework, the government may favour their partisan supporters but, at the same time, try to particularly pick 'winners' among provinces where chances to win new support is highest, while overlooking 'hard' opposition strongholds as well as places where it has already secured a very solid and ideological backing less prone to defections.

Consistently with the literature on political business cycles, the analysis also provides preliminary evidence that the effect of votes on local economic performance is strongest in election years, decreases mid-term, and then increases again in the year prior to the following ballots.

The results have implications for theory and policy. First, while in economic geography there is a tradition of research interested in the politics of development (Markusen *et al.*, 1991; Horan and Jonas, 1998; MacLeod, 1999; Pike *et al.*, 2009), the discipline has so far largely overlooked the role of *electoral* politics in influencing local and regional economic dynamics. Even radical political economy approaches in geography, which have focused on issues such as regulation and governance, have frequently reduced the workings of the state as if "abstracted from serious consideration of the actual politics going on within it and totally innocent of the political processes that operate within the wider economy beyond the purview of the state per se" (Agnew, 2012, p. 571). To address this gap, the paper draws on the political science research on political institutions and distributive politics. The potential for cross-breeding economic geography and political science is significant. Many political institutions remain primarily territorial in scope and – although adopting different conceptual lenses – subfields of politics such as comparative political economy are frequently interested to very similar topics as institutionalist economic geographers (Agnew, 2012). The current paper contributes to cross-cutting the disciplines by arguing that (national) electoral politics can have significant effects on local and regional economic growth. Hence, if the objective is to fully understand local and regional economic growth, economic geographers should engage more with the political economy of policy-making and its economic outcomes.

Second, throughout the 2000s Turkey was internationally seen as an economic and institutional 'success story' due to its records of fast growth and structural economic and

institutional change. Yet, in recent years critics have significantly challenged the extent of the reforms the country underwent (inter alia: Meyersson & Rodrik, 2014; Somer, 2016), and questions have emerged over the lessons to be drawn from the Turkish case. The current analysis contributes to such critical assessment, by showing how Turkey's economic growth model has been marked by strong and significant partisan dynamics.

The analysis also points to areas for future research. First, future work should explore in more depth the 'micro-mechanisms' through which politics shape developmental policy decisions. Second, while the methodology is not fit to make strong inference about the overall aggregate effects at the national level, results uncover a robust negative link between support for the main opposition party and local growth. Faster growth in pro-government areas may have hence come at the cost of reduced output in opposition constituencies. There is reason to speculate that the selection of 'winners' and 'losers' over purely political reasons may be not only unfair, but may also have negative economic consequences (cf. Farole et al., 2010; Gourevitch, 2008). Better understanding what the specific welfare distortions of the politically-expedient policy design and implementation are is a key area for future research.

References

Abrahams, A. (2019) *Hard traveling: unemployment and road infrastructure in the shadow of political turmoil*. Toronto.

Acemoglu, D. and Robinson, J. A. (2012) *Why nations fail*. Great Brit. London: Profile Books Ltd.

Agnew, J. (2012) 'Putting politics into economic geography', in Barnes, T. J., Peck, J., and Sheppard, E. (eds) *The Wiley-Blackwell Companion to Economic Geography*. Chichester: Wiley-Blackwell, pp. 567–580.

Agnew, J. (2013) 'Commentary on Who needs the nation-state?', *Economic Geography*, 89(1), pp. 21–26. doi: 10.1111/j.1944-8287.2012.01176.x.

Albertus, M. (2013) 'Vote Buying With Multiple Distributive Goods', *Comparative Political Studies*, 46(9), pp. 1082–1111. doi: 10.1177/0010414012463897.

Albertus, M. (2017) 'Theory and Methods in the Study of Distributive Politics', *Political Science Research and Methods*, 60637, pp. 1–11. doi: 10.1017/psrm.2017.25.

Alt, J. E. and Lassen, D. D. (2006) 'Transparency, political polarization, and political budget cycles in OECD countries', *American Journal of Political Science*. Blackwell Publishing Inc, 50(3), pp. 530–550. doi: 10.1111/j.1540-5907.2006.00200.x.

Amin, A. (1999) 'An institutionalist perspective on regional economic development', *International Journal of Urban and Regional Research*. John Wiley & Sons, Ltd (10.1111), 23(2), pp. 365–378. doi: 10.1111/1468-2427.00201.

Angrist, J. D. and Pischke, J.-S. (2009) *Mostly harmless econometrics: An empiricist's companion*. Princeton, NJ: Princeton University Press.

Aray, H. (2016) 'Partisan Alignment Effects on Total Factor Productivity', *Regional Studies*, 50(1), pp. 154–167. doi: 10.1080/00343404.2014.910594.

Asher, S. and Novosad, P. (2017) 'Politics and local economic growth: Evidence from India', *American Economic Journal: Applied Economics*, 9(1), pp. 229–273. doi: 10.1257/app.20150512.

Aytac, S. E. (2014) 'Distributive politics in a multiparty system: The conditional cash transfer program in Turkey', *Comparative Political Studies*, 47(9), pp. 1211–1237. doi: 10.1177/0010414013495357.

Bartik, T. J. (1991) *Who benefits from state and local economic development policies?* Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.

Bathelt, H. and Glückler, J. (2014) 'Institutional change in economic geography', *Progress in Human Geography*. SAGE PublicationsSage UK: London, England, 38(3), pp. 340–363. doi: 10.1177/0309132513507823.

Bayirbag, M. K. (2011) 'Pro-Business Local Governance and (Local) Business Associations: The Case of Gaziantep', *Business and Politics*, 13(4).

Beer, A. and Lester, L. (2015) 'Institutional thickness and institutional effectiveness: developing regional indices for policy and practice in Australia', *Regional Studies, Regional Science*. Routledge, 2(1), pp. 205–228. doi: 10.1080/21681376.2015.1013150.

Bellin, E. (2002) *Stalled democracy : capital, labor, and the paradox of state-sponsored development*. Ithaca: Cornell University Press.

Besley, T., Persson, T. and Sturm, D. M. (2010) 'Political Competition , Policy and Growth : Theory and Evidence from the US', *Review of Economic Studies*, 77, pp. 1329–1352. doi: 10.1111/j.1467-937X.2010.00606.x.

Bueno de Mesquita, B. *et al.* (2003) *The logic of political survival*. Cambridge, MA: MIT Press.

Bugra, A. and Savaskan, O. (2014) *New capitalism in Turkey. The relationship between politics, religion and business*. Celtenham, UK: Edward Elgar.

Calvo, E. and Murillo, M. V. (2013) 'When parties meet voters', *Comparative Political Studies*. SAGE PublicationsSage CA: Los Angeles, CA, 46(7), pp. 851–882. doi: 10.1177/0010414012463882.

Cammett, M. (2014) *Compassionate communalism. Welfare and sectarianism in Lebanon*. Ithaca and London: Cornell University Press.

Cammett, M., Luca, D. and Sergenti, E. (2019) *Programmatic redistribution as an electoral strategy: The politics of Turkish central government spending under AKP rule*. Cambridge, MA.

Çarkoğlu, A. and Aytaç, S. E. (2014) 'Who gets targeted for vote-buying? Evidence from an

augmented list experiment in Turkey', *European Political Science Review*, 7(4), pp. 547–566. doi: 10.1017/S1755773914000320.

Çarkoğlu, A. and Hinich, M. J. (2006) 'A spatial analysis of Turkish party preferences', *Electoral Studies*, 25(2), pp. 369–392.

Carvalho, D. (2014) 'The real effects of government-owned banks: evidence from an emerging market', *The Journal of Finance*. Wiley/Blackwell (10.1111), 69(2), pp. 577–609. doi: 10.1111/jofi.12130.

Clifton, J., Glasmeier, A. and Sheth, A. (2016) 'Revisiting development theory: Alice H. Amsden's impact on the field', *Cambridge Journal of Regions, Economy and Society*. Narnia, 10(1), p. rsw034. doi: 10.1093/cjres/rsw034.

Coşar, A. K. and Demir, B. (2016) 'Domestic road infrastructure and international trade: Evidence from Turkey', *Journal of Development Economics*, 118, pp. 232–244. doi: 10.1016/j.jdeveco.2015.10.001.

Cox, G. W. and McCubbins, M. D. (1986) 'Electoral politics as a redistributive game', *Journal of Politics*, 48(2), pp. 370–89.

Diaz-Cayeros, A., Estévez, F. and Magaloni, B. (2016) *The political logic of poverty relief. Electoral strategies and social policy in Mexico*. Cambridge: Cambridge University Press.

Dixit, A. and Londregan, J. (1996) 'The determinants of success of special interests in redistributive politics', *Journal of Politics*, 58(4), pp. 1132–55.

Dixon, A. D. (2012) 'Function before form: macro-institutional comparison and the geography of finance', *Journal of Economic Geography*. Narnia, 12(3), pp. 579–600. doi: 10.1093/jeg/lbr043.

Engerman, S. L. and Sokoloff, K. L. (2008) 'Debating the Role of Institutions in Political and Economic Development: Theory, History, and Findings', *Annual Review of Political Science*, 11(1), pp. 119–135. doi: 10.1146/annurev.polisci.11.120406.135217.

Evans, P. B. (1995) *Embedded autonomy: States and industrial transformation*. Princeton, NJ: Princeton University Press.

Evans, P. B., Huber, E. and Stephens, J. (2017) 'The Political Foundations of State Effectiveness', in Centeno, M., Kohli, A., and Yashar, D. (eds) *States in the developing world*. Cambridge: Cambridge University Press, pp. 380–408.

Farole, T., Storper, M. and Rodríguez-Pose, A. (2010) 'Human geography and the institutions that underlie economic growth', *Progress in Human Geography*, 35(1), pp. 58–80.

Frye, T. (2002) 'The Perils of polarization: Economic performance in the postcommunist world', *World Politics*. Cambridge University Press, 54(03), pp. 308–337. doi: 10.1353/wp.2002.0008.

Gertler, M. S. (2003) 'Tacit knowledge and the economic geography of context, or The undefinable tacitness of being (there)', *Journal of Economic Geography*, 3(1), pp. 75–99. doi: 10.1093/jeg/3.1.75.

Gertler, M. S. (2010) 'Rules of the Game: The Place of Institutions in Regional Economic Change', *Regional Studies*, 44(1), pp. 1–15. doi: 10.1080/00343400903389979.

Golden, M. and Min, B. (2013) 'Distributive Politics Around the World', *Annual Review of Political Science*, 16(12), pp. 1–27.

Golden, M. and Picci, L. (2008) 'Pork-Barrel Politics in Postwar Italy, 1953–94', *American Journal of Political Science*, 52(2), pp. 268–289.

Goldsmith-Pinkham, P., Sorkin, I. and Swift, H. (2018) *Bartik Instruments: What, when, why, and how*. Unpublished working paper.

Gourevitch, P. (2008) 'The Role of Politics in Economic Development', *Annual Review of Political Science*, 11(1), pp. 137–159. doi: 10.1146/annurev.polisci.11.053006.185507.

Gunes-Ayata, A. and Ayata, S. (2002) 'Ethnic and religious bases of voting', in Sayari, S. and Esmer, Y. (eds) *Politics, parties, and elections in Turkey*. Boulder, London: Lynne Rienner Publisher, pp. 137–156.

Gurakar, E. C. and Meyersson, E. (2016) 'State discretion, political connections and public procurement: Evidence from Turkey', *Working Paper*.

Hadjimichalis, C. and Hudson, R. (2014) 'Contemporary crisis across Europe and the crisis of regional development theories', *Regional Studies*. Routledge, 48(1), pp. 208–218. doi: 10.1080/00343404.2013.834044.

Horan, C. and Jonas, A. E. G. (1998) 'Governing Massachusetts: Uneven Development and Politics in

Metropolitan Boston', *Economic Geography*, 74, pp. 83–95. doi: 10.1111/j.1944-8287.1998.tb00032.x.

Işık, A. (2012) 'Kütahya Milletvekili Alim Işık'ın, Kütahya İline Yapılan Kamu Yatırımlarına İlişkin Gündem Dışı', *Parliamentary Reports of the Republic of Turkey*, Yasama Yil.

Johnston, R. J. (1977) 'Environment, elections and expenditure: Analyses of where governments spend', *Regional Studies*. Taylor & Francis Group , 11(6), pp. 383–394. doi: 10.1080/09595237700185411.

Kemahlioglu, O. (2008) 'Particularistic distribution of investment subsidies under coalition governments: The case of Turkey', *Comparative Politics*, 40(2), pp. 189–207.

Lambrinidis, M., Psycharis, Y. and Rovolis, A. (2005) 'Regional allocation of public infrastructure investment: The case of Greece', *Regional Studies*. Taylor & Francis Group , 39(9), pp. 1231–1244. doi: 10.1080/00343400500390057.

Larcinese, V., Snyder, J. M. and Testa, C. (2013) 'Testing Models of Distributive Politics using Exit Polls to Measure Voters' Preferences and Partisanship', *British Journal of Political Science*, 43(4), pp. 845–875.

Levitt, S. D. and Poterba, J. M. (1999) 'Congressional distributive politics and state economic performance', *Public Choice*, 99, pp. 185–216.

Lindbeck, A. and Weibull, J. W. (1987) 'Balanced-budget redistribution as the outcome of political competition', *Public Choice*. Springer, pp. 273–297. doi: 10.2307/30024725.

Livert, F. and Gainza, X. (2018) 'Distributive politics and spatial equity: the allocation of public investment in Chile', *Regional Studies*, 52(3), pp. 403–415. doi: 10.1080/00343404.2017.1309013.

Luca, D. (2016) 'Votes and Regional Economic Growth: Evidence from Turkey', *World Development*, 78, pp. 477–495. doi: http://dx.doi.org/10.1016/j.worlddev.2015.10.033.

Luca, D. (2017) 'Boon or bane for development? Turkey's central state bureaucracy and the management of public investment', *Environment and Planning C: Politics and Space*. SAGE PublicationsSage UK: London, England, 35(6), pp. 939–957. doi: 10.1177/0263774X16670666.

Luca, D. and Rodríguez-Pose, A. (2015) 'Distributive Politics and Regional Development: Assessing the Territorial Distribution of Turkey's Public Investment', *The Journal of Development Studies*. Routledge, 51(11), pp. 1518–1540. doi: 10.1080/00220388.2015.1028536.

Macleod, G. (1997) *'Institutional thickness' and industrial governance in Lowland Scotland*.

MacLeod, G. (1999) 'Place, Politics and "Scale Dependence": Exploring the Structuration of Euro-Regionalism', *European Urban and Regional Studies*, 6(3), pp. 231–253. doi: 10.1177/096977649900600304.

Mares, I. and Young, L. (2016) 'Buying, expropriating, and stealing votes', *Annual Review of Political Science*. Annual Reviews, 19(1), pp. 267–288. doi: 10.1146/annurev-polisci-060514-120923.

Markusen, A. R. *et al.* (1991) *The rise of the gunbelt : the military remapping of industrial America*. Oxford: Oxford University Press.

Martin, R. (2015) 'Rebalancing the spatial economy: The challenge for regional theory', *Territory, Politics, Governance*. Routledge, 3(3), pp. 235–272. doi: 10.1080/21622671.2015.1064825.

Meyersson, E. (2017) *Constructing growth in New Turkey*.

Meyersson, E. and Rodrik, D. (2014) 'Erdogan's Coup. The true state of Turkish democracy', *Foreign affairs*, May 26, pp. 8–11.

Ministry of Development (2014) *Tenth Development Plan 2014-2018*. Ankara: Publishing of the Ministry of Development.

Nichter, S. (2019) *Votes for survival : relational clientelism in Latin America*. Cambridge: Cambridge University Press.

Nickell, S. (1981) 'Biases in dynamic models with fixed effects', *Econometrica*, 49(6), pp. 1417–1426.

Özcan, G. B. (2006) 'A critical analysis of decentralisation and local economic development: the Turkish case', *Environment and Planning C: Government and Policy*, 24(1), pp. 117–138.

Özcan, G. B. and Gündüz, U. (2015) 'Political connectedness and business performance: evidence from Turkish industry rankings', *Business and Politics*, p. 41. doi: 10.1515/bap-2013-0037.

Pike, A. *et al.* (2009) 'A Geographical Political Economy of Evolution in Economic Geography', *Economic Geography*, 85(2), pp. 175–182. doi: 10.1111/j.1944-8287.2009.01021.x.

Pike, A. *et al.* (2015) 'Local institutions and local economic development: The Local Enterprise Partnerships in England, 2010-', *Cambridge Journal of Regions, Economy and Society*. Narnia, 8(2), pp. 185–204. doi: 10.1093/cjres/rsu030.

Rodríguez-Pose, A. (2013) 'Do Institutions Matter for Regional Development?', *Regional Studies*. Routledge, 47(7), pp. 1034–1047. doi: 10.1080/00343404.2012.748978.

Rodríguez-Pose, A. and Di Cataldo, M. (2014) 'Quality of government and innovative performance in the regions of Europe', *Journal of Economic Geography* . doi: 10.1093/jeg/lbu023.

Rodríguez-Pose, A., Psycharis, Y. and Tselios, V. (2016) 'Politics and Investment: Examining the Territorial Allocation of Public Investment in Greece', *Regional Studies*, 50(7), pp. 1097–1112. doi: 10.1080/00343404.2015.1009027.

Rodrik, D. (2010) *Structural Transformation and Economic Development*. Ankara.

Rodrik, D. (2013) 'Roepke Lecture in Economic Geography - who needs the nation-state?', *Economic Geography*, 89(1), pp. 1–19. doi: 10.1111/j.1944-8287.2012.01177.x.

Rodrik, D., Subramanian, A. and Trebbi, F. (2004) 'Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development', *Journal of Economic Growth*, 9(2), pp. 131–165. doi: 10.1023/B:JOEG.0000031425.72248.85.

Rogoff, K. and Sibert, A. (1988) 'Elections and macroeconomic policy cycles', *The Review of Economic Studies*. Oxford University Press, 55(1), p. 1. doi: 10.2307/2297526.

Sen, K. (2013) 'The Political Dynamics of Economic Growth', *World Development*, 47, pp. 71–86. doi: 10.1016/j.worlddev.2013.02.015.

Somer, M. (2016) 'Understanding Turkey's Democratic Breakdown: Old versus New and Indigenous versus Global Authoritarianism', *Southeast European and Black Sea Studies*. Routledge, 16(4), pp. 1–23. doi: 10.1080/14683857.2016.1246548.

Stokes, S. C. (2005) 'Perverse accountability: A Formal model of machine politics with evidence from Argentina', *American Political Science Review*. Cambridge University Press, 99(03), pp. 315–325. doi: 10.1017/S0003055405051683.

Stokes, S. C. *et al.* (2013) *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics*, *Cambridge Studies in Comparative Politics*. Cambridge: Cambridge University Press. doi: DOI: 10.1017/CBO9781107324909.

Storper, M. (2011) 'Why do regions develop and change? The challenge for geography and economics', *Journal of Economic Geography*. Narnia, 11(2), pp. 333–346. doi: 10.1093/jeg/lbq033.

Storper, M. *et al.* (2015) *The rise and fall of urban economies: Lessons from San Francisco e Los Angeles*. Stanford, CA: Stanford University Press.

Tomaney, J. (2013) 'Region and place I: Institutions', *Progress in Human Geography*, 38(1), pp. 131–140. doi: 10.1177/0309132513493385.

Lo Turco, A. and Maggioni, D. (2018) 'Effects of Islamic religiosity on bilateral trust in trade: The case of Turkish exports', *Journal of Comparative Economics*. Academic Press. doi: 10.1016/J.JCE.2018.02.001.

Wood, A. (2008) 'The politics of local and regional development', in Cox, K. R., Low, M., and Robinson, J. (eds) *The SAGE Handbook of Political Geography*. London, Thousand Oaks, New Delhi, Singapore: Sage Publications.

Wood, A. and Valler, D. (2004) *Governing Local and Regional Economies*. Aldershot: Ashgate.

Woodridge, J. M. (2010) *Econometric analysis of cross section and panel data*. 2nd editio. Cambridge, MA: MIT Press.

World Bank (2014) *Jobs or privideges: Unleashing the employment potential of the Middle East and North Africa*. Washington, DC: World Bank.

Tables

Table 1. Votes for the incumbent party and provincial per-capita GVA growth: robust OLS, FE and 2SLS estimates (2004-2013).

	(1) OLS	(2) FE	(3) FE	(4) 2SLS
Lagged AKP	0.215***	0.210**	0.263**	0.241**
	(0.048)	(0.100)	(0.101)	(0.097)
Lagged AKP^2	-0.002***	-0.002*	-0.002**	-0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Observations	729	729	729	729
R-squared	0.074	0.591	0.600	0.565
First-stage K-P F				10.528
Hansen J (P-val)				0.214
Lagged GVA	yes	yes	yes	yes
Year FE		yes	yes	yes
Prov FE		yes	yes	yes
MM dummy		yes	yes	yes
Controls			yes	yes

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Constant, lagged GVA, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Table 2. Votes for the incumbent party and provincial employment growth rate: robust

FE and 2SLS estimates (2004-2012).

	(1) OLS	(2) FE	(3) FE	(4) 2SLS
Lagged AKP	0.690***	0.366**	0.346**	0.304**
	(0.202)	(0.151)	(0.155)	(0.155)
Lagged AKP^2	-0.005*	-0.004**	-0.004**	-0.005***
	(0.003)	(0.002)	(0.002)	(0.001)
Observations	648	648	648	648
R-squared	0.313	0.432	0.433	0.322
First-stage K-P F				7.704
Hansen J (P-val)				0.229
Lagged empl.	yes	yes	yes	yes
Year FE		yes	yes	yes
Prov FE		yes	yes	yes
MM dummy		yes	yes	yes
Controls			yes	yes

Robust standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, lagged employment, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Table 4. Votes for the incumbent party and the territorial allocation of central state goods: robust FE and 2SLS estimates (2004-2012).

	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS	(5) FE	(6) 2SLS
	Capital investment		Firm subsidies		Current expenditure	
Lagged AKP	0.034**	0.051**	0.036**	0.030**	0.003	0.001
	(0.016)	(0.020)	(0.014)	(0.014)	(0.003)	(0.003)
Lagged AKP^2	-0.000**	-0.001***	-0.000	-0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	729	729	729	729	729	729
R-squared	0.488	0.264	0.608	0.369	0.974	0.924
First-stage K-P F		14.762		14.762		14.762
Hansen J (P-val)		0.251		0.302		0.501
Prov FE	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 8.

Table 5. Votes for the incumbent party and provincial per-capita GVA growth divided by economic sector: robust 2SLS estimates (2004-2013).

	(1) 2SLS Total	(2) 2SLS Primary	(3) 2SLS Secondary	(4) 2SLS Tertiary
Lagged AKP	0.241**	0.315	0.324**	0.248***
	(0.097)	(0.437)	(0.149)	(0.085)
L. AKP^2	-0.003***	-0.009**	-0.002	-0.003***
	(0.001)	(0.004)	(0.001)	(0.001)
Observations	729	729	729	729
R-squared	0.5647	0.4371	0.6854	0.6153
First-stage K-P F	10.528	10.138	9.262	11.685
Hansen J (P-val)	0.214	0.408	0.021	0.798
Lagged (sectoral) GVA	yes	yes	yes	yes
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, lagged GVA, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Table 6. Votes for the incumbent party and provincial employment growth divided by economic sector: robust 2SLS estimates (2004-2013).

	(1) 2SLS Total	(2) 2SLS Primary	(3) 2SLS Secondary	(4) 2SLS Tertiary
Lagged AKP	0.003**	-0.007***	0.013***	0.000
	(0.002)	(0.003)	(0.003)	(0.001)
L. AKP^2	-0.000***	0.000***	-0.000***	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	648	729	729	729
R-squared	0.322	0.342	0.332	0.378
First-stage K-P F	7.704	10.278	12.294	10.238
Hansen J (P-val)	0.229	0.0512	0.0823	0.237
Lagged (sectoral) empl.	yes	yes	yes	yes
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, lagged employment, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A: tables

Appendix A.1. Variables' description and data sources.

Variable	Description	Unit	Source
Δ Gross Value Added growth	Annual growth rate of Ln per-capita gross value added (GVA) at 2012 prices.	Percent points	TURKSTAT Regional Database
Δ Employment	Annual growth rate of total employment	Percent points	TURKSTAT Regional Database
AKP	Percentage of votes to the central governing party (AKP) in national elections (2002, 2007, 2011)	Percent points	TURKSTAT Regional Database
Turnout	Turnout to national elections	Percent points	TURKSTAT Regional Database
Population	Total provincial population	1000 people	TURKSTAT Regional Database, OECD
Private investment	Per-capita gross investment in tangible goods by private economic actors	Ln, 1000 TL at 2012 prices	Own calculations on data from TURKSTAT Regional Database
Entrepreneurship	Net annual variation in regional economic units per 1000 inhabitants	Ln count	Own calculation on data from TURKSTAT Regional Database
Public investment	Per-capita fixed capital investments allocated to each province by the central state	Ln, TL at 2012 prices	Own calculation on data from the Ministry of Development
Firm subsidies	Number of investment subsidy certificates annually awarded to private firms per 10.000 inhabitants	Ln count	Own calculation on data from the Ministry of Economy
Public expenditure	Per-capita total public current expenditure allocated to each province by the central state	Ln, TL at 2012 prices	Own calculation on data from the Ministry of Finance

Appendix A.2. Summary statistics.

VARIABLES	Mean	Standard Deviation	Min	Max
Δ GVA	5.534	6.505	-13.381	30.324
Δ employment	2.745	6.962	-14.152	40.897
AKP	41.800	15.401	6.494	84.825
Turnout	83.037	5.613	61.800	92.800
Population	896.269	1,518.209	65.126	13,992.795
Private Investment	0.928	1.103	-2.367	3.946
Entrepreneurship	0.045	0.090	-0.224	0.250
Public investment	5.180	0.752	1.728	9.542
Investment subsidies	-0.944	0.768	-11.513	0.601
Public expenditure	9.157	0.390	8.241	10.701

Appendix A.3. Pairwise correlation coefficients (* $p < 0.05$).

	Δ GVA	Δ Empl.	AKP	Turnout	Pop	Priv. Inv.	Entrepr.	Publ. inv.	Firm subs.	Publ. Exp.
Δ GVA	1.000									
Δ Empl.	0.015	1.000								
AKP	0.041	0.080*	1.000							
Turnout	-0.206*	0.129*	0.175*	1.000						
Pop	-0.076*	0.023	0.021	-0.014*	1.000					
Priv. Inv.	-0.109*	0.106*	0.105*	0.522*	-0.112*	1.000				
Entrepr.	0.098*	-0.279*	-0.232*	-0.226*	-0.014	-0.065	1.000			
Public. Inv.	-0.005	0.095*	0.346*	0.223*	0.080*	0.298*	-0.145*	1.000		
Firm subs.	0.001	0.066	0.329*	0.409*	0.081*	0.313*	-0.111*	0.202*	1.000	
Publ. Exp.	-0.092*	0.111*	0.175*	0.180*	-0.139*	0.207*	-0.176*	0.435*	0.001	1.000

Appendix A.4. First-stage regressions of the endogenous electoral variables from Table 1's model 4. Estimates are presented for both the AKP's linear (column 1) and quadratic term (column 2).

	(1) AKP	(2) AKP^2
AKP_IV	1.280**	323.248***
	(0.533)	(61.031)
AKP_IVb	-0.195	-33.127
	(0.551)	(51.455)
AKP_IV^2	-0.013***	-2.098***
	(0.003)	(0.378)
AKP_IVb^2	0.001	0.137
	(0.002)	(0.171)
Observations	729	729
Adjusted R-squared	0.797	0.739
Prov FE	yes	yes
Year FE	yes	yes
MM dummy	yes	yes
Control	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, controls, and fixed-effects not reported.

Appendix A.5. Votes for the main opposition party and provincial per-capita GVA growth: robust OLS, FE and 2SLS estimates (2004-2013).

	(1) OLS	(2) FE	(3) FE	(4) 2SLS
Lagged CHP	-0.031	-0.552***	-0.560***	-1.032***
	(0.072)	(0.166)	(0.145)	(0.360)
Lagged CHP^2	0.002	0.008***	0.008***	0.014**
	(0.002)	(0.003)	(0.002)	(0.006)
Observations	729	729	729	729
R-squared	0.063	0.597	0.604	0.563
First-stage K-P F				3.656
Hansen J				0.193
Lagged GVA	yes	yes	yes	yes
Year FE		yes	yes	yes
Prov FE		yes	yes	yes
MM dummy		yes	yes	yes
Controls			yes	yes

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Constant, lagged GVA, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.6. Votes for the incumbent party and provincial per-capita GVA growth: robust FE and 2SLS estimates restricting the panel (2007-2013).

	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS
			2007-2013 panel	
Lagged AKP	0.263**	0.241**	0.359**	0.344**
	(0.101)	(0.097)	(0.145)	(0.140)
Lagged AKP^2	-0.002**	-0.003***	-0.004**	-0.005***
	(0.001)	(0.001)	(0.001)	(0.001)
Observations	729	729	567	567
R-squared	0.600	0.565	0.730	0.704
First-stage K-P F		10.528		9.727
Hansen J (P-val)		0.214		0.306
Lagged GVA	yes	yes	yes	yes
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Lagged GVA, constant, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.7. Votes for the incumbent party and provincial per-capita GVA growth: robust FE and 2SLS estimates excluding the dynamic component (2004-2013).

	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS
			Excluding lagged GVA	
Lagged AKP	0.263**	0.241**	0.351***	0.442***
	(0.101)	(0.097)	(0.105)	(0.120)
Lagged AKP^2	-0.002**	-0.003***	-0.004***	-0.005***
	(0.001)	(0.001)	(0.001)	(0.001)
Observations	729	729	729	729
R-squared	0.600	0.565	0.482	0.440
First-stage K-P F		10.528		10.218
Hansen J (P-val)		0.214		0.141
Lagged GVA	yes	yes		
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Models one and two report the results from the last two columns of Table 1. Constant, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.8. Votes for the incumbent party and provincial per-capita GVA growth: robust FE and 2SLS estimates excluding Ankara, Istanbul, and Izmir (2004-2013).

	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS
			Excluding main economic hubs	
Lagged AKP	0.263**	0.241**	0.278**	0.255**
	(0.101)	(0.097)	(0.106)	(0.101)
Lagged AKP^2	-0.002**	-0.003***	-0.002**	-0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Observations	729	729	702	702
R-squared	0.600	0.565	0.599	0.566
First-stage K-P F		10.528		10.921
Hansen J (P-val)		0.214		0.227
Lagged GVA	yes	yes	yes	yes
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Lagged GVA, constant, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.9. Votes for the incumbent party and provincial per-capita GVA growth: robust FE and 2SLS estimates adding, among the controls, private capital investment and entrepreneurship (2004-2013).

	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS	(5) FE	(6) 2SLS
			Censored		Extra controls	
Lagged AKP	0.263**	0.241**	0.308***	0.252**	0.339***	0.267***
	(0.101)	(0.097)	(0.110)	(0.099)	(0.108)	(0.101)
Lagged AKP^2	-0.002**	-0.003***	-0.002**	-0.003***	-0.003**	-0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	729	729	648	648	648	648
R-squared	0.600	0.565	0.624	0.583	0.632	0.591
First-stage K-P F		10.528		8.276		8.465
Hansen J (P-val)		0.214		0.215		0.266
Lagged GVA	yes	yes	yes	yes	yes	yes
Prov FE	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes
Extra controls					yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Models one and two report the results from the last two columns of Table 1. For comparability, columns three and four re-estimate the same models on the restricted panel, while models five and six add the two extra regressors. Lagged GVA, constant, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.10. Votes for the incumbent party and provincial per-capita GVA growth: robust FE and 2SLS placebo estimates excluding the time-lag between political regressors and dependent variable (2004-2013).

	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS
			Placebo	
Lagged AKP	0.263**	0.240**		
	(0.101)	(0.097)		
Lagged AKP^2	-0.002**	-0.003***		
	(0.001)	(0.001)		
AKP			-0.054	-0.179
			(0.109)	(0.134)
AKP^2			0.001	0.001
			(0.001)	(0.001)
Observations	729	729	729	729
R-squared	0.600	0.565	0.595	0.558
First-stage K-P F		10.448		14.730
Hansen J (p-value)		0.214		0.343
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Lagged GDP	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Models one and two report the results from the last two columns of Table 1. Constant, controls and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.11. Votes for the incumbent party and provincial per-capital GVA growth across the electoral cycle: robust FE and 2SLS estimates (2004-2013). The lower part of the table reports the interactions between the AKP and AKP^2 coefficients with the electoral cycle dummies (baseline category: election years).

	(1) FE	(2) 2SLS
Lagged AKP	0.592***	0.640***
	(0.164)	(0.151)
Lagged AKP^2	-0.006***	-0.007***
	(0.002)	(0.002)
Post-election*L.AKP	-0.144	-0.253**
	(0.119)	(0.110)
Post-election*L.AKP^2	0.0000	0.003**
	(0.0000)	(0.001)
Mid-term*L.AKP	-0.672***	-0.772***
	(0.225)	(0.222)
Mid-term*L.AKP^2	0.0001***	0.009***
	(0.0000)	(0.002)
Pre-election*L.AKP	-0.459***	-0.563***
	(0.117)	(0.132)
Pre-election*L.AKP^2	0.0000***	0.007***
	(0.0000)	(0.002)
Observations	729	729
R-squared	0.6226	0.588
First-stage K-P F		8.850
Hansen J (p-value)		0.164
Prov FE	yes	yes
Year FE	yes	yes
MM dummy	yes	yes
Lagged GDP	yes	yes
Controls	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, controls and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix A.12. Votes for the incumbent party, provincial exports, and the location of inward foreign direct investment (FDI): robust FE and 2SLS estimates (2004-2012).

	(1) Tobit	(2) Tobit 2SLS	(3) FE	(4) 2SLS
		FDI		Export
Lagged AKP	-0.1259	-0.0155	0.0446	0.0183
	(0.1782)	(0.2369)	(0.0564)	(0.0672)
Lagged AKP^2	0.0019	0.0074*	-0.0004	-0.0000
	(0.0021)	(0.0038)	(0.0005)	(0.0006)
Observations	729	729	729	729
R-squared	0.288		0.1147	0.1127
First-stage K-P F		63.020		14.871
Hansen J (P-val)		0.171		0.519
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Controls	yes	yes	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Constant, controls, and fixed-effects not reported. All explanatory variables are lagged as described in Equation 8. Columns 1 and 2 are estimated by means of a Tobit estimator. Columns 1 reports the Pseudo R-squared. Column 2 reports a global first-stage F and the P-value of a Wald test of exogeneity.
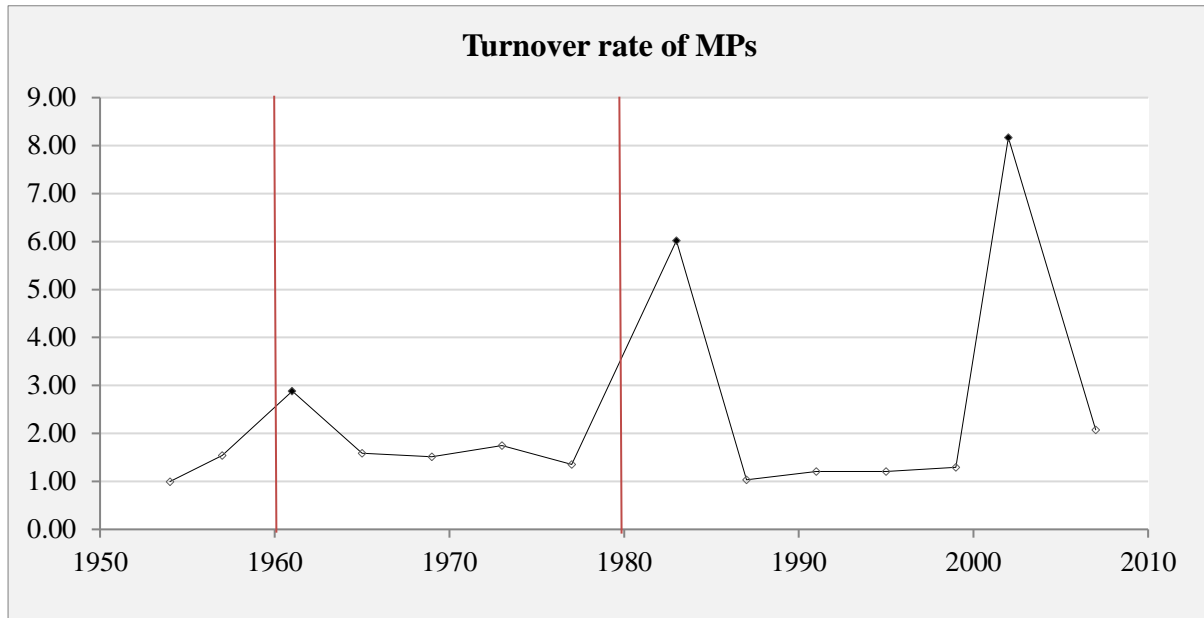
Appendix A.13. Votes for the incumbent party, the territorial allocation of public goods, and provincial per-capita GVA growth: robust FE and 2SLS estimates (2004-2012).

|	(1) FE	(2) 2SLS	(3) FE	(4) 2SLS
Lagged AKP	0.339***	0.267***	0.318***	0.231**
	(0.108)	(0.101)	(0.109)	(0.100)
Lagged AKP^2	-0.003**	-0.003***	-0.003**	-0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Lagged capital investment			0.380	0.434*
			(0.260)	(0.254)
Lagged firm subsidies			0.183	0.416
			(0.516)	(0.482)
Observations	648	648	648	648
R-squared	0.632	0.591	0.634	0.592
First-stage K-P F		10.528		10.305
Hansen		0.214		0.304
Prov FE	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
MM dummy	yes	yes	yes	yes
Lagged GVA	yes	yes	yes	yes
Controls (including extras)	yes	yes	yes	yes

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Lagged GVA, constant, controls (including extra controls), and fixed-effects not reported. All explanatory variables are lagged as described in Equation 6.

Appendix B: figures

Appendix B.1. Turnover rate of MPs (newly elected/reconfirmed parliamentarians) at each national election. The vertical lines indicate the military coups of 1960 and 1980.

Appendix B.2. Votes for the incumbent party and provincial per-capita GVA growth: fitted lines (based on the FE and IV results of Table 1, columns 3 and 4). The vertical lines indicate the national vote share average +/- one standard deviation.
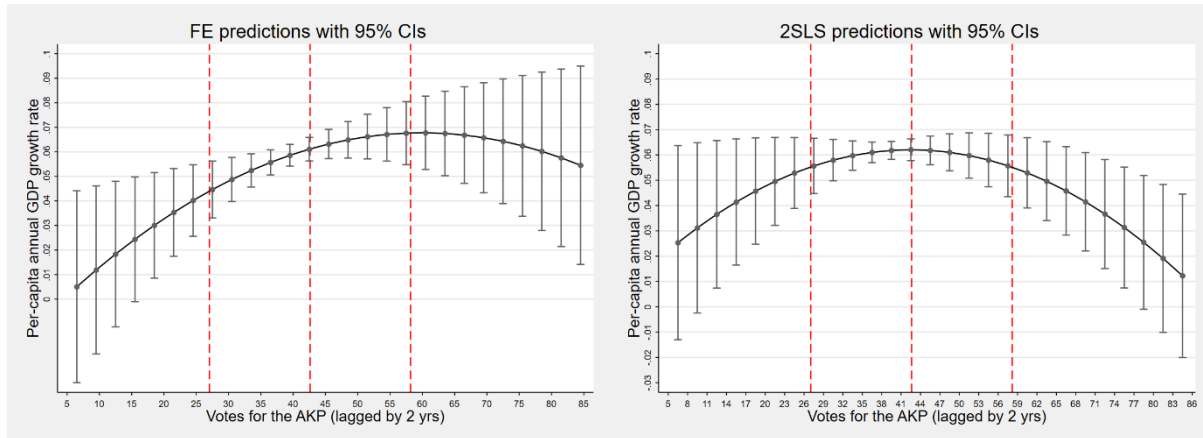
Appendix B.3. Votes for the incumbent party and provincial employment growth: fitted lines (based on the FE and IV results of Table 3, columns 3 and 4). The vertical lines indicate the national vote share average +/- one standard deviation.
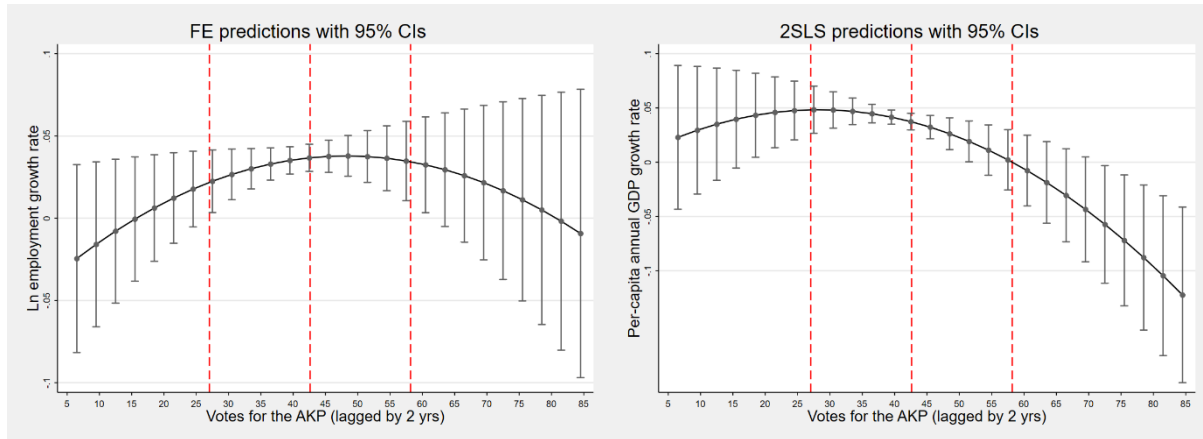
Appendix B.4. Political business cycle: average effect of votes for the incumbent party on provincial per-capita GVA growth across the electoral cycle.