

**Growing authoritarianism and strategic redistribution. Evidence from the allocation of Turkey's public transport investment**

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**ABSTRACT**

The literature is unclear on whether, and why, shifts from competitive electoral environments towards electoral authoritarianism may lead to higher – or lower – levels of strategic redistribution. This paper explores this puzzle, investigating the case of Turkey's increasing authoritarianism and exploiting public transport investment data for 2004-2012. The analysis shows how the government's greater political hegemony is unexpectedly correlated with a reduction in the use of public investment for territorial pork-barrelling. Strategic investment decisions seem to have shifted from pork-barrelling to the selection of populist projects. We draw on the literature exploring the strategies that autocrats follow to appease threats to their stability, and explain this shift as the government's active strategy to achieve two simultaneous goals: (1) broadening the incumbent party's appeal to potential political opponents and showing Turkey's 'grand new path'; (2) building and co-opting a politically supportive economic elite who is benefitting from the state's expenditure.

**KEY WORDS:** Public investment; authoritarianism; strategic redistribution; state effectiveness; Turkey.

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# 1. Introduction

The territorial targeting of public resources as a means of political tactics has been reported by a growing number of studies. Yet, in spite of a significant increase in the research on distributive politics (cf. Golden and Min, 2013), the literature is still unclear on whether shifts from highly competitive electoral environments towards one-party electoral hegemony (Diamond, 2002, 2015; Levitsky & Way, 2002; Morse, 2012) may lead to higher – or lower – levels of pork-barrelling. On the one hand, it is often argued that more authoritarian rule is accompanied by lower public good provision and quality (Deacon, 2009; Kroth, Larcinese, and Wehner, 2015; Lake and Baum, 2001). The reason behind such view is that when supporters demand rewards for their votes, the costs of personal or narrowly-targeted benefits required to maintain their loyalty may increase. On the other hand, there is “reason to suspect that distributive politics is quantitative more important in democratic than authoritarian regimes” (Golden and Min 2013: 123). In the former, office-seeking politicians are more responsive to voters, increasing the risk of pork-barrel.

The paper tries to make sense of these contradictory hypotheses drawing from the case of contemporary Turkey. After its electoral victory in 2002, the Justice and Development Party (*Adalet ve Kalkınma Partisi*, AKP) has retained its electoral hegemony and gradually increased its powers over Turkey’s state, politics, and society. However, the attitude of the ruling party and of its leader, former Prime Minister and current President of the Republic R.T. Erdoğan, towards Turkish institutions has not remained stable in time. The AKP’s first years in office were marked by significant and internationally applauded democratisation reforms. Over time, and particularly since 2008, Turkey has progressively become a more authoritarian regime. The drift towards authoritarianism and its societal and political consequences have attracted considerable interest (inter alia: Acemoğlu, 2014; Arbatlı, 2014; Meyersson and Rodrik, 2014; Müftüler-Baç, Keyman, 2012), leading commentators to consider Turkey as a quasi-electoral authoritarian regime (Diamond, 2002, 2015; Levitsky & Way, 2002; Morse, 2012). Much less research has, however, been conducted to assess the transformations occurred in the management of Turkey’s public resources. The paper covers this gap in the literature. It aims to answer the following interrelated questions: (1) is the constant upsurge of power by Erdoğan and his party correlated to a change in the way public investment is allocated to provinces for tactical redistribution? (2) If yes, has the increase in authoritarianism led to greater or lower pork-barrel?

The research presented in this paper features a two-step mixed-methodology. It combines econometric analysis – exploiting a panel data on the allocation of public transportation investment to Turkey’s 81 provinces over 2004-2012 – with elite, semi-structured interviews involving members of the country’s economic bureaucracy. The empirical results suggest that, contrary to the majority of expectations, the increase in authoritarianism of the Turkish government in recent years has been associated with a reduction in the use of public investment in transport infrastructure as a reward for constituencies favourable to the government or, conversely, as a punishment for opposing ones. Such decline in pork-barrelling has nonetheless been driven only partly by a virtuous increase in policy effectiveness, as political pork-barrel seems to have been substituted by the funding of public infrastructure projects selected following populist objectives. This is possibly a result of both the government’s grand desire to show Turkey’s ‘new path’, as well as the increasing influence of special interest groups politically close to the government.

The remainder of the paper is organised as follows: section two provides a review of the theoretical literature, draws from it the research hypotheses, and briefly discusses Turkey’s institutional environment. Section three covers the research design, discussing the empirical econometric model and the data, as well as the selection of interviewees. Section four presents the results. Section five eventually leads the discussion to a conclusion.

## 2. Electoral hegemony and pork-barrelling

Over the last two decades, there has been considerable interest about how public monies are distributed, both paying attention to the economic rationales behind the geographical allocation of funds as well as to political ones. An extensive empirical body of research has emerged on how politicians pass pork-barrelling legislation, that is, how they are inclined to distribute public spending to specific cities and regions to gain electoral advantage (Golden and Min, 2013). Recent developments in this literature have explored why such form of strategic targeting tends to be more intense in some settings than in others. Numerous contributions have linked the variations in distributive patterns and pork-barrelling levels to countries' institutional systems (Persson and Tabellini, 2003; Rogowski and Kayser, 2002). Drawing on the theoretical model proposed by Lizzeri and Persico (2001), Milesi-Ferretti, Perotti, and Rostagno (2002), for example, exploit cross-country differences to uncover that the balance between programmatic versus pork-barrel redistribution is influenced by the electoral rule. Single-member district, majoritarian electoral systems are more prone to pork-barrelling than proportional-representation ones (Milesi-Ferretti, Perotti, and Rostagno, 2002). Hence, different electoral systems provide different incentives to politicians, which may respond by providing different quantities/types of public goods (Carey & Shugart, 1995; Hicken, 2007).<sup>2</sup>

Greater attention on the topic has, however, not resulted in a definitive consensus about how and which mechanisms affect the link between institutional conditions and distributive patterns. In particular, the literature still provides contrasting expectations on whether highly competitive electoral environments may be characterized by higher – or lower – levels of discretionary strategic allocations of public goods compared to institutional settings with one-party hegemonic political power.

On the one hand, the literature on the delivery of public goods under different political regimes suggests that nondemocratic rule is often accompanied by lower public good provision and quality (inter alia: Deacon, 2009; Kroth, Larcinese, and Wehner, 2015; Lake and Baum, 2001). As Deacon (2009, p. 242) suggests “in a dictatorship, a rational government will spend the public budget mainly on transfers targeted to influential groups. Spending on a non-exclusive public good is unwise [...]. By contrast in a democracy, direct transfers are relatively unattractive. Spending in public goods makes sense here.” Bueno De Mesquita, Morrow, Siverson, and Smith (2002, 2003) provide a more finely calibrated taxonomy of regimes based on two key institutional characteristics, namely the sizes of the *selectorate* and the *winning coalition*. Loosely, the former can be thought of as the enfranchised people with the right to cast their vote, while the latter as the number of votes which, according to the electoral rule, leaders need to remain in office. Overall, their predictions are similar to Deacon's (2009), indicating that private goods – “such as corruption, *pork*, patronage, cronyism, [and] nepotism” (Bueno De Mesquita et al., 2002, p. 559, our emphasis) – become less attractive relative to public goods – “such as the protection of property rights, the rule of law, transparency, protection of human rights, [and] national security” (ibid.) – as the size of the winning coalition increases. In their words, all else being equal, “with many supporters demanding rewards, the costs of personal benefits required to keep their loyalty are just too high. Instead, whether leaders are civic-minded or not, those who rely on a broad-based coalition emphasize the production of goods that benefit everyone in their society” (Bueno de Mesquita et al., 2003, p. 37). Besley et al. (2010) similarly predict that competition leads political parties to implement growth-promoting, pro-business policies, rather than their private agenda.

Most of this literature has focused on the overall quantity of public goods provided, rather than on their territorial distribution. Nevertheless, drawing from this body of research, it can be inferred that increases in

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<sup>2</sup> Rickard (2009) further develops such argument, claiming that distributive transfers are influenced not only by domestic institutions, but also by the domestic interest of voters.

authoritarianism may lead to a higher use of public investment for strategic reasons – as suggested by Bueno De Mesquita et al. (2002) in the quote above. Empirical evidence is provided, for example, by Burgess, Miguel, Jedwab, and Morjaria (2014), who, for the case of Kenya, have uncovered how transitions into/out of democracy have constrained/exacerbated pork-barrelling based on ethnic favouritism. Similarly, distributive politics in Mubarak's Egypt, were dominated by the autocratic regime's will to reward supporters of the ruling National Democracy Party to the detriment of opponents (Blaydes, 2010). Díaz-Cayeros, Estévez, and Magaloni (2012) equally argue that Mexico's Institutional Revolutionary Party (PRI) extensively used clientelism and pork-barrelling for decades as strategies to retain its hegemonic power over political opponents. Furthermore, they posit that the loss of majority control by the PRI after the watershed elections of 2000 led to a reduction in the discretionary targeting of public resources to municipalities. Drawing from these studies, we can extract the following main hypothesis:

*Main hypothesis:* Shifts from more democratic to more authoritarian regimes are associated with an increase in pork-barrelling allocations.

On the other hand, there are arguments indicating that authoritarianism might not be necessarily associated with an increase in pork-barrel.<sup>3</sup> Distributive politics and pork-barrelling may be quantitatively more important in democratic than authoritarian regimes (Golden and Min, 2013) and in settings where a large number of competing parties have to cater to the interest of voters than in ones with low electoral competition (Lizzeri and Persico, 2005). As Lizzeri and Persico (2005, p. 1319) argue, the theoretical rationale is that “when there are many competing parties, the electoral base of each party tends to be smaller. To cater to their narrow support base, politicians will find it expedient to promise pork-barrel policies with narrow appeal rather than policies which benefit the supporters of the winning politician, but will not maximize aggregate welfare”. In other words, as the support base of each political party becomes a smaller fraction of the total electorate, the potential gain from targeting only a subset of the electorate increases, and hence the incentives for politicians to engage in pork-barrelling increase (ibid.). Drawing from such intuition, the alternative hypothesis can be formulated as follows:

*Alternative hypothesis:* Shifts from more democratic to more authoritarian regime may lead to a reduction in the strategic use of public investment for pork-barrelling.

To conclude, the literature still provides contrasting expectations on whether the increase in incumbent parties' hegemonic powers vis-à-vis electoral opponents may be characterized by an increase – or a decrease – in the use of public good allocations to strategically reward supporting constituencies (and, conversely, punish those supporting the opposition). The remainder of the paper will explore the extent to which these different hypotheses help explain changes in public investment allocations in Turkey, as the country has increasingly trod a path towards authoritarianism.

### **3. The recent transformation of Turkey's institutional environment**

Turkey is a multi-party democracy which has held free elections since the mid-1980s. It also boasts a number of attributes of established democratic regimes, such as separation of powers and fairly independent judicial system. However, these democratic attributes do not prevent the country from traditionally being considered

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<sup>3</sup> Interestingly, Truex (2014) contends that the association between democracy and a better provision of public goods is empirically extremely fragile. From his perspective, the idea of a 'democratic advantage' is simply too weak to be believed.

a polity where incumbent governments privilege individuals and constituencies with the ‘right’ political affiliation and punish those who do not share the same political orientation (Acemoğlu and Robinson, 2013; Aytac, 2014; Heper and Keyman, 1998; Heper, 1985, 1992; Kemahlioğlu, 2008).<sup>4</sup> Moreover, in recent years that institutional strength of Turkey is regarded to have been undermined by a growing wave of authoritarianism which may have affected the territorial allocation of public funding. Since the ascent to power of the AKP in 2002, the country’s clientelistic networks have increasingly pivoted around the governing party (Buğra and Savaşkan, 2014). Çarkoğlu and Aytac (2014), for example, show that in the 2011 parliamentary elections over one-third of voters were targeted for vote-buying, and that the strong partisans of the ruling AK Party were significantly more likely to be directed. In addition, Luca and Rodríguez-Pose (2015) have demonstrated that ‘electorally-driven, strategic rationales’ play, alongside socioeconomic factors, a crucial role in the allocation of public investment across Turkish provinces. While the presence of pork-barrel in Turkey is well-documented in all these studies, they do not explore the extent to which pork-barrel has increased or declined as a consequence of the growing authoritarianism.

During the first years in power, the AKP’s performance in power was assessed favourably by many commentators. Those were the years in which the country was considered to be undergoing a virtuous cycle of landmark economic and political reforms (Öniş, 2004), to which the start of the EU Accession Negotiations in 2005 contributed (Özdemir Tsarouhas, 2013; Uğur & Yankaya, 2008). Yet, following its consolidation in office, the AKP, its leader, Recep Tayyip Erdoğan, and his government started to adopt a more authoritarian stance.<sup>5</sup> How authoritarian the country has become is still a matter of controversy. Some commentators defend that Turkey’s democracy is still on track (e.g. Acemoğlu, 2014). Others, by contrast, hold a more pessimistic view. From this perspective, Turkey is undergoing a widespread *de facto* institutional deterioration (Meyersson and Rodrik, 2014). Particularly since 2008, signs of authoritarianism have gradually crept in.

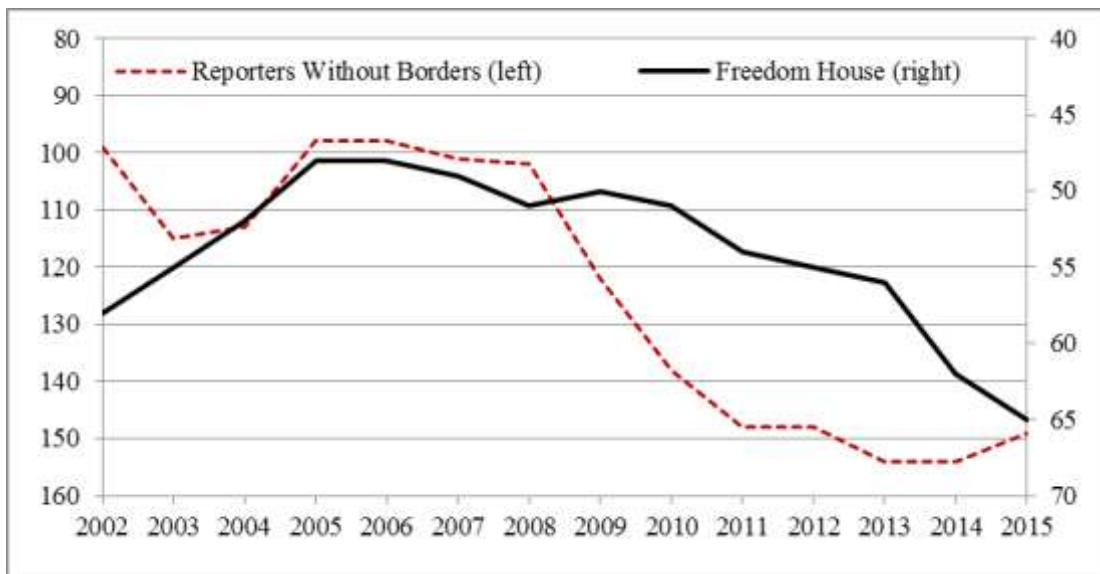
First, a series of landmark political trials have frontally targeted military officers, the former Kemalist elite, Kurdish politicians, and other social activists. In parallel, there has been a dramatic backlash in the freedom of expression. Figure 1 depicts the evolution of Reporters Without Borders’ Turkish international ranking, as well as the Freedom House’s Freedom of the Press Index, since the AKP’s arrival into power. As the graph shows, 2008 and 2009 represent the main watershed years. According to the former ranking, the country has fallen from 99<sup>th</sup> in 2002 to 149<sup>th</sup> in 2015 in the world while, in 2013, Turkey had more journalists imprisoned than any other country, ahead of ones such as Iran and China (Reporters Without Borders, 2013). The government crackdown of the Gezi Park protest in June of the same year similarly exemplifies a notorious example of diminished tolerance towards activism and protests.

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<sup>4</sup> In its current form, Turkey is a closed-list, proportional-representation electoral democracy. The D’Hondt formula and a national threshold of 10 percent are used to translate votes into parliamentary seats. With the exception of the 1990s, during which fragmentation and volatility weakened the role and coherence of the party system (Sayari and Esmer, 2002), Turkish political parties have traditionally displayed a high degree of saliency in Turkey’s political arena (De Leon, Desai, and Tuğal, 2009). Parties act as important ‘gatekeepers’ for access to the resources of the State and thus play a key role in the country’s distributive politics (Kalaycıoğlu, 2001).

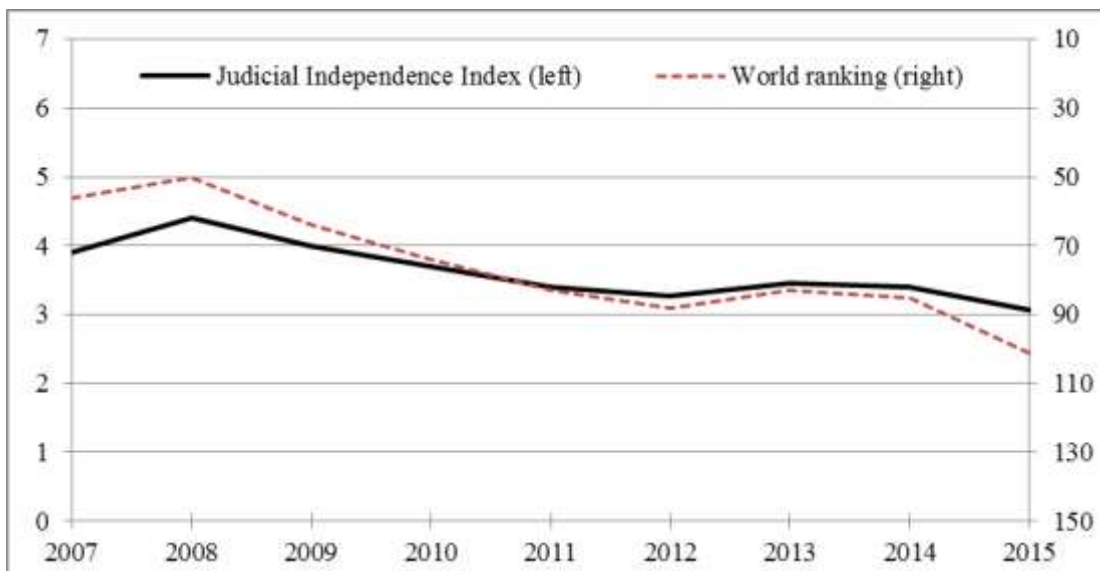
<sup>5</sup> While mixed signals emanating from the EU are frequently invoked to explain the AKP’s change, Uğur and Yankaya (2008) argue that such shift was caused by two main political calculations by the party leadership: first, the decision to cater more for the demands of its conservative core support base; second, concerns that support for EU membership would alienate the more nationalist base. Besides, the policy innovation in the field of democratisation reforms and EU membership had secured the AK Party with significant legitimacy to rule against threat from potential veto players (Dağı, 2006).

**Figure 1.** Press freedom in Turkey, 2002-2015 (Reporters Without Borders's Turkish ranking in the world, Freedom House's Freedom of the Press Index).



Source: own elaboration on data from Reporters Without Borders, Freedom House.

**Figure 2.** Judicial independence in Turkey, 2007-2015 (Judicial Independence Index, Turkey's ranking in the world).



Source: own elaboration on data from World Economic Forum.

Second, in spite of a relatively stable number of terrorist attacks between 2002 and 2011, the number of people imprisoned under terrorist charges has increased dramatically throughout the period (Meyersson, 2014). Life has also become significantly more difficult for opposition parties. The latest elections, held on 1 November 2015, were for example characterised as mostly free, but deeply unfair, with the south-eastern

part of the country under an atmosphere of near civil war and the media severely controlled by the AKP government (Walt, 2015).

Third, judicial independence has also been under attack. Figure 2 presents Turkey's index of judicial independence prepared by the World Economic Forum, as well as the country's world ranking, for the available period 2007-2015. Judicial independence is a key component of constraints on government powers. Again, the graph points to 2008 as the year after which the Turkish institutional environment started deteriorating. Last but not least, in the wake of the corruption scandal which emerged in 2013, the Government drafted a series of laws aiming to bring structural changes to the appointment of judges and prosecutors, and give far-reaching powers to the National Intelligence Agency (*Milli İstihbarat Teşkilatı*, MIT) (Kiziltan and Yildirim, 2014). All these factors put together amount to what Arbatlı (2014) has called the 'rise of electoral authoritarianism'.

Yet, for all the debate about the reduction of liberties in Turkey in recent years, there has been no research which has addressed the extent to which this increasing transition of the Turkish state towards electoral authoritarianism has affected the territorial distribution of public monies. Is a more authoritarian Turkish government using public funds to strategically target provinces?

## 4. Research design

### 4.1. Econometric analysis: model and variables

Taking into account the previous hypotheses, we propose the following empirical model to test whether the rise in authoritarianism of the AKP government has been accompanied by an increase in the strategic distribution of public infrastructure investment to rewards partisan supporters and punish opponents:

$$G_{i,t} = \beta_1 P_{j,i,t-1} + \beta_2 D_{t-1} + \beta_3 D * P_{j,i,t-1} + \beta_4 X_{i,t-1} + \alpha_i + n_t + \varepsilon_{i,t}, \quad (1)$$

where ( $j$ ,  $i$  and  $t$  respectively denote parties, provinces, and years):  $G_{i,t}$  is the total amount of per capita fixed-capital investment in transportation infrastructure projects allocated to each province by the state;<sup>6</sup>  $P_{j,i,t-1}$  represents a vector of electoral variables;  $D_{t-1}$  is a dummy equal to one for each year after 2008, that is, the period after which the government of the former Prime Minister and current President of the Republic Erdoğan turned increasingly authoritarian;  $D * P_{j,i,t-1}$  is an interaction between such dummy and the electoral variables;  $X_{i,t-1}$  is a vector of socioeconomic controls which, under any circumstances, should determine the allocation of public investment;  $\alpha_i$  and  $n_t$  are respectively province and year fixed-effects, and  $\varepsilon_{i,t}$  is the error term.<sup>7</sup> A one-year lag between left- and right-hand side variables is included to account for the investment project cycle and the time necessary for tactical concerns to potentially influence redistributive outcomes. This set-up is akin to a Difference-in-Difference equation, with the interaction term  $D * P$  being the 'treatment variable', the years until 2008 the 'pre-treatment' period, and the years from 2009 onward the 'post-treatment period'. Ceteris paribus, a positive estimate of  $\beta_3$  for the incumbent party would mean that

<sup>6</sup> While local administrations have some very limited degree of expenditure autonomy, almost 90% of all public investment is still controlled by the national administration.

<sup>7</sup> Investments projects often stretch over many years, meaning that allocations can be correlated over time. While this fact may support the inclusion of the dependent variable's lagged value  $Y_{i,t-1}$  as a regressor, this inclusion may bias FE estimators of dynamic models in the order of  $1/T$ , which is a level too high for our short time span. Tests available on request show that the inclusion of lagged investments into the analysis confirms how current allocations are correlated to those of previous years, but do not alter the political variables' results.

provinces with a higher vote share for the AKP have been more privileged by the allocation of public funds after the authoritarian turn in 2008 than before it. By contrast, a positive  $\beta_3$  coefficient for an opposition party would suggest that there is no evidence of ‘punishment’ against opposition strongholds by the AKP government after the authoritarian turn. The dependent and the explanatory variables, summarised in Appendix 1, are described in the following paragraphs.

*Public investment.* The variable consists in the amount of per-capita public investment in transportation and communication infrastructure projects. Values are expressed in 1000 Turkish Lira (TL) at 2012 prices and in logarithmic terms, in order to control for non-linear relations.<sup>8</sup> Amid the different types of public investment carried out by the Turkish central state, the focus on transport infrastructure is justified because of the prominent role played by the sector in AKP’s distributive politics. This contrasts, for example, with the 1990s, during which bringing electricity and village roads was frequently a common strategy to target voters. The analysis hence adopts a ‘selection of the extreme case’ method (Gerring, 2007; Seawright and Gerring, 2008) in order to better identify pork-barrel.

*Party vote shares.* Following the theoretical predictions for a close-list, proportional multi-member electoral system (McGillivray, 2004), we focus on a core-voter model, according to which strategic targeting is carried out to cement the support of core voters and punish opponents. We account for the share of votes of the four main parties – the AK Party, the Republican People’s Party (*Cumhuriyet Halk Partisi*, CHP), the National Action Party (*Milli Hareket Partisi*, MHP), and the Kurdish Party –, which accounted for almost 80% of total votes in every election during the period of analysis. Under the allegation of supporting the Kurdistan Workers’ Party (PKK), successive Kurdish parties have been repeatedly banned from elections. We therefore consider, at each election, the party in place at that moment. Running as independent candidates and then agglomerating into a single group after elections has also been a strategy to circumvent the seat allocation minimum national thresholds. We therefore jointly consider Kurdish and independent votes.

*Electoral competition.* We also include a variable to control for the alternative expectation that utility-maximising politicians will target districts with the highest electoral productivity gains, that is, those where the vote difference between the incumbent government’s party and its challenger is lower. The variable is constructed as the negative of the absolute value of the vote difference between the incumbent party and its main challenger in each province. The challenger is the second party where the AKP has garnered the greatest number of votes, or the leading party when this is not the case. As we take the negative of the absolute value, we will expect the variable to show a positive sign, meaning that provinces where the vote difference is lower receive comparatively more funds.

*Provincial Development Index.* Due to changes in early 2000s in data collection by Turkstat, provincial data on GDP for the whole period of analysis do not exist. We try to control for the contextual socioeconomic disadvantage by including the Provincial Development Index (PDI). The PDI is a composite indicator developed by the Ministry of Development by means of principal component analysis. It takes into account economic (statistics on manufacturing, construction, agriculture, value added, investments and finance) and, to a lesser extent, social factors (demographic structure, employment, education, health, and various

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<sup>8</sup> A significant proportion of investments is registered as part of multi-provincial projects, so it cannot be matched to any specific province. Typical multi-provincial projects involve the construction of roads linking more than one province, or the national wholesale purchase of equipment and machineries. Our analysis only concentrates on the investments which can be attributed to a single province. As data limitation is – alas – one of the biggest problems in empirical research, we follow the same approach as earlier researchers who have worked on public investments in Turkey (Deliktaş et al. 2008; Karadağ et al., 2004; Celebioğlu and Dall’erba, 2010).



developmental parameters). While we are aware that the index may not fully be a proxy for provincial wealth, there is no viable alternative.

*Manufacturing employment.* We concentrate on the percentage of employment in manufacturing on total employment because of the central role that industrialisation has played in the structural transformation of Turkey's economy in recent years.

*Educational attainment.* We control for the students in higher education (vocational training and university) as a percentage of the total population. This indicator becomes a proxy for the level of education in each province.

*Rural population.* In a country like Turkey, characterised by late development and a rapid, recent urbanisation, regional development inequalities are likely to be correlated with the urban/rural divide, which we proxy by the per cent of population living in rural areas.

*Population.* Population is still included in the equation as a measure of agglomeration, as it is customarily considered an important driver of investment allocations. In contrast to all other variables, population is not normalized.

#### 4.2. Data

The analysis employs a panel data set covering 81 Turkish provinces over the period 2004-2012. Because of the one-year lag between left- and right-hand side variables, the length of the panel decreases from 9 to 8 years. Basic data on national public investments per province was extracted from the Ministry of Development (former State Planning Organisation). Electoral data for the 2002, 2007, and 2011 elections was gathered from the European Election Database, as well as from Turkey's Electoral High Committee. We annualised political variables by extending electoral results over each legislature. Electoral wards within metropolitan provinces are not taken into account and therefore national elections' data are collected for provinces, which constitute the power bases of political parties and one of the most important units of political representation (Güvenç and Kırmancıoğlu, 2009). Population information was obtained by merging 2005-2009 OECD figures with Turkstat regional database's 2007-2011 figures. Other socioeconomic data stem from Turkstat's regional database.

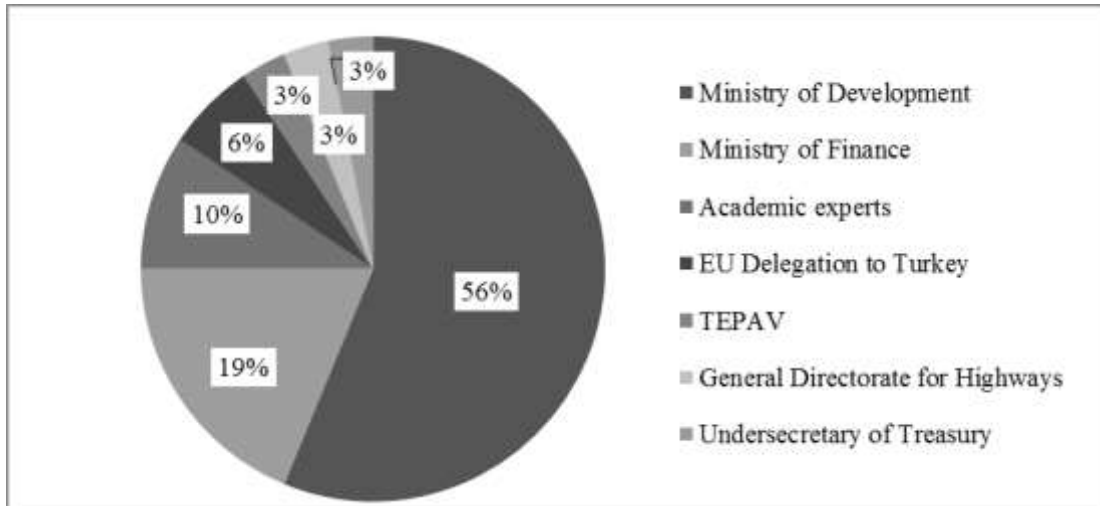
A review of data sources, summary statistics for each variable and pairwise correlation coefficients are provided in Appendices 1, 2, and 3. Appendix 4 presents the distribution of the average amount of fixed-capital investment until and after 2008.

#### 4.3. Qualitative analysis: selection of interviewees

The final part of the analysis draws on qualitative research methods. We follow Lieberman's (2005, p. 440) guidelines for the use of in-depth analysis "to answer those questions left open by the LNA [large-N analysis, that is, quantitative analysis, A./N.] – either because there were insufficient data to assess statistical relationships or because the nature of causal order could not be confidently inferred." Concretely, the analysis is based on elite, semi-structured interviews carried out between October and December 2014 in

Turkey's central economic bureaucracy.<sup>9</sup> The interviewees were selected integrating purposive and chain sampling techniques. First, officials occupying positions of relevance for the project cycle were contacted. Each of them was then asked to provide further contacts. A snowball selection of potential interviewees was nested into the initial purposive sampling. The final sample includes 32 interviewees, including 18 civil servants from the Ministry of Development and 14 individuals from other organisations.<sup>10</sup>

**Figure 3.** The composition of the interviewees' sample (percentages, clockwise).



In the selection of interviewees, the Ministry of Development was targeted because the organisation holds the principal responsibilities for the allocation and coordination of public investment and is the place where public investment policies are mainly developed. Interviews with individuals external to the ministry were conducted in order to cross-validate the information extracted from the other interviewees. Figure 3 and Appendix 5 respectively provide the institutional breakdown and a detailed list of those interviewed.

In order to increase the respondents' willingness and eagerness to talk and discuss personal and institutional conflicts more freely, interviewees were accessed only after having secured the support of trusted individuals who could 'warrant' the interviewer's trustworthiness. Interviews lasted on average between 60 and 90 minutes. Previous work experience in the country and the use of Turkish in communication further helped 'breaking into the bureaucratic black box'. Considering the sensitivity of the questions being asked, interviews were not recorded. Interviewees were also guaranteed anonymity in order to encourage 'free speech'. Finally, interviewees were asked to provide information on their most-followed media outlets. Such information was then used to 'control' for respondents' heterogeneous political views – which may influence perceptions about the use of public monies by the government.<sup>11</sup>

## 5. Empirical analysis

<sup>9</sup> Four of the interviews were conducted during a pilot research phase between October 2012 and September 2013.

<sup>10</sup> Six civil servants from the Ministry of Finance; three key public policy scholars from Bilgi University, Boğazici University, and Koç University; two experts from the Delegation of the EU to Turkey; one retired manager from the Undersecretary of Treasury; one public finance expert from Turkey's Economic Policy Research Foundation (Türkiye Ekonomi Politikaları Araştırma Vakfı, TEPAV) with previous experience at the Undersecretary of Treasury and the World Bank; and one expert from the Ministry of Transport's General Directorate for Highways (Karayolları Genel Müdürlüğü, KGM).

<sup>11</sup> Similarly to many other countries around the world, different Turkish media outlets are associated with different political views.

### 5.1. Econometric estimation and results

The econometric analysis is conducted by means of fixed-effect (FE) heteroscedasticity- and autocorrelation-robust estimators with province and year fixed effects. Such method of estimation has the advantage of controlling for all the possible omitted variables that are idiosyncratic to provinces as well as for cross-sectional common shocks. Considering that plans for time  $t$  are prepared in advance and approved by the winter of time  $t-1$ , we include a one-year lag between dependent and explanatory variables, which will also contribute to minimize the potential endogeneity between right- and left-side variables. To control for potential serial and spatial correlation, we estimate robust standard errors adjusted for clustering at the provincial level (81 clusters). As a robustness check, we follow Angrist and Pischke (2009)'s suggestion and add province-specific time trends to the list of controls. The inclusion of province-specific time trends, that is, coefficients obtained by multiplying the province fixed-effects by year-specific intercepts, allows 'treatment' and 'control' provinces to follow different trends over time. It hence helps minimize the potential risk of omitted variable bias. For example, we do not have data on the previous public investment stock, meaning that we are unable to rule out the hypothesis that higher/lower investment flows during the 'post-treatment' period may be influenced by the amount of investments already channelled before 2004.

Table 1 presents the results. Columns (1) and (2) show the baseline estimates for the electoral variables respectively, excluding and including socioeconomic controls. Columns (3) to (7) report the results obtained adding the dummy for the post-2008 period, as well as its interaction with each individual electoral variable. Column (8) presents the interactions together. Finally, column (9) adds the province-specific time trend to the regression (8), allowing to further control for potential omitted variables.

As expected, column (1) shows how the central allocation of transport investment to the provinces of Turkey across the period 2004-2012 is indeed correlated to the electoral results. In line with theoretical predictions for a close-list, proportional multi-member electoral system (McGillivray, 2004), coefficients in particular support the core-voter hypothesis. This hypothesis postulates that strategic allocations are conducted in order to cement support among core partisan voters. The findings are robust to the inclusion of socioeconomic controls in column (2). Holding other variables constant, and transforming the dependent variable's coefficient in linear terms, column (2) shows that a one percent increase in the votes for the AK Party is correlated to an average increase of nearly 3.4 percent in the amount of per-capita investment. Conversely, a one percent increase in the votes for the main opposition party, the CHP, is correlated to an average reduction of investment of more than 4.2 percent.

Moving from the first two columns to the rest of the table, results show significant differences in the distributive politics patterns for the pre- and post-2008 sub-periods. Columns (8) and (9) are our preferred specifications, as they allow controlling for each political variable's interaction with the post-2008 dummy. While the linear political terms maintain the same signs as in the initial models, their significance and magnitude change significantly. The coefficient for votes for the AKP remains positive, but turns insignificant. The coefficient for the interacted term is similarly positive, yet highly insignificant. Moving to the main opposition party, the CHP, the results show that the lower allocation of investment to opposition strongholds was markedly higher during the AK Party's first years in office than during the period 2009-2012. Results show a similar picture for the case of provinces with strong support for the pro-Kurdish party. While the coefficient for the latter's linear term is insignificant in all models, its interaction with the post-2008 dummy is positive and strongly significant. This finding is particularly interesting considering how, during the 1980s and 1990s, mostly Kurdish-inhabited areas were persistently disadvantaged in the allocation of public investment (Danielson and Keles, 1985).

According to the results, the empirical evidence seems to lean towards the alternative hypothesis rather than the main hypothesis: an increase in the social and political powers of the government is associated with a

reduction – rather than an increase – in the use of public investment for strategic targeting. Results tend to support Golden and Min's (2013) as well as Lizzeri and Persico's (2005) intuitions of how pork-barrelling may be particularly responsive to democratic electoral competition. In other words, the quantitative empirical findings seem to suggest how a more authoritarian AK Party has felt less of a need to reward its core constituencies, and freer to transfer funds to other areas of the country.

**Table 1.** Multivariate regressions of the provincial per-capita public investment in transport and communication infrastructures: robust Fixed Effects estimates (2004-2012).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
AKP votes	0.0495** (0.0194)	0.0334* (0.0176)	0.0327* (0.0181)	0.0334* (0.0176)	0.0340* (0.0179)	0.0195 (0.0195)	0.0336* (0.0176)	0.0153 (0.0201)	0.0156 (0.0199)
CHP votes	-0.0362** (0.0158)	-0.0417*** (0.0150)	-0.0439*** (0.0163)	-0.0374 (0.0234)	-0.0480*** (0.0150)	-0.0422*** (0.0147)	-0.0414** (0.0162)	-0.0763*** (0.0261)	-0.0749*** (0.0263)
MHP votes	0.0276 (0.0315)	0.0361 (0.0286)	0.0345 (0.0296)	0.0366 (0.0289)	0.0940** (0.0429)	0.0508* (0.0294)	0.0365 (0.0302)	0.0858** (0.0425)	0.0860** (0.0425)
Kurdish votes	0.0120 (0.0199)	0.00266 (0.0188)	0.00116 (0.0198)	0.00311 (0.0189)	0.00116 (0.0196)	-0.0164 (0.0215)	0.00271 (0.0186)	-0.0247 (0.0244)	-0.0237 (0.0239)
El. Comp.	0.00814 (0.00853)	0.00304 (0.00848)	0.00189 (0.00839)	0.00314 (0.00847)	0.00147 (0.00873)	-0.00382 (0.00836)	0.00344 (0.0108)	-0.00450 (0.0114)	-0.00431 (0.0113)
Post-2008			1.283 (0.846)	1.087** (0.515)	1.474*** (0.513)	0.768 (0.474)	0.998* (0.566)	0 (0)	0 (0)
Post#AKP			-0.00464 (0.00979)					0.0236 (0.0178)	0.0222 (0.0173)
Post#CHP				-0.00442 (0.0135)				0.0440* (0.0227)	0.0416* (0.0217)
Post#MHP					-0.0536*** (0.0202)			-0.0221 (0.0249)	-0.0225 (0.0246)
Post#Kurd						0.0244** (0.00976)		0.0381** (0.0157)	0.0370** (0.0150)
Post#El. Comp.							-0.000691 (0.00863)	0.00196 (0.0134)	0.00156 (0.0132)
Constant	1.261 (0.903)	-5.261** (2.457)	-5.090** (2.475)	-5.294** (2.487)	-4.935* (2.535)	-3.176 (2.514)	-5.275** (2.490)	-2.368 (2.806)	-2.406 (2.781)
Observations	648	648	648	648	648	648	648	648	648
R-squared	0.083	0.113	0.114	0.113	0.134	0.134	0.113	0.149	0.149
Number of id	81	81	81	81	81	81	81	81	81
Prov FE	yes	yes	yes	yes	Yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	Yes	yes	yes	yes	yes
Controls		yes	yes	yes	Yes	yes	yes	yes	yes
Prov*year FE									yes

Robust standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Controls include: provincial development index, manufacturing employment, education attainments, rural population, and population.

Istanbul, Ankara, and Izmir – Turkey's three main cities and economic hubs – have been significant recipients of overall transport infrastructure investment flows in recent years. Considering the different political orientation of these cities – with Izmir traditionally being a CHP stronghold, and Istanbul and Ankara more frequently showing a higher support for the AKP – Appendix 6 checks the robustness of the estimates against their exclusion. The results show that coefficients are virtually identical to the ones of the full specification, indicating that potential differences in the allocation of funds to the big Turkish cities do not make a difference for the link between politics and the distribution of funds.

Our empirical results, however, may be affected by endogeneity caused by reverse causality, since higher/lower investments by the central government at election  $t$  may increase/decrease the votes given to the governing party at subsequent polls (Larcinese, Snyder, and Testa, 2012). Hence, in order to identify the factors behind these relationships, we complement the econometric results with in-depth qualitative evidence.

## 5.2. *Potential explanatory mechanisms: qualitative findings*

Overall, the quantitative evidence suggests that the AKP government has not been immune to the temptation of rewarding its core constituencies with more investment. Furthermore, the degree of rewards – as well as the extent to which opposition constituencies have been punished – has decreased as the AKP rule has become more authoritarian. How can this result be explained?

A first hypothesis which needs attention is that the econometric results may be influenced, and biased, by potential ‘Keynesian attempts’ to boost macroeconomic demand following the 2008/9 economic recession. Throughout the implementation of the Ninth Multiannual Development Plan, the government decided to give more weight to investment in transport infrastructures than initially foreseen. This was acknowledged in the Ministry of Development's (2014) Tenth National Development Plan. Yet, past research has shown how the allocation of extraordinary ‘Keynesian’ programmes, such as the US ‘New Deal’, has often been also a way of rewarding political allies and supporters (e.g. Wright, 1974). In other words, while it may be true that the reallocation of funds towards transport projects may have partly been a reaction to the downturn, the crisis alone is not enough to explain the distributive politics patterns which emerge from the econometric results. Besides, the inclusion of province-specific time trends helps controlling for such potential source of bias.

Findings from the interviews point instead to a different direction. While the majority of the interviewees expressed concerns about the excessive powers that the government has recently adopted, most of them nonetheless acknowledged how a stronger government has been capable of streamlining policy decisions. The two following excerpts, respectively by a retired manager from the Undersecretary of Treasury and a manager from the Ministry of Development, provide an example:

“Before Erdoğan, with coalition governments [that is, before 2002, A./N.], each party would try to influence the ministry they controlled, so coordination was more problematic. Now Erdoğan has much more power in investment decisions. So at the decision level problems are lower.” (Interview number 1).

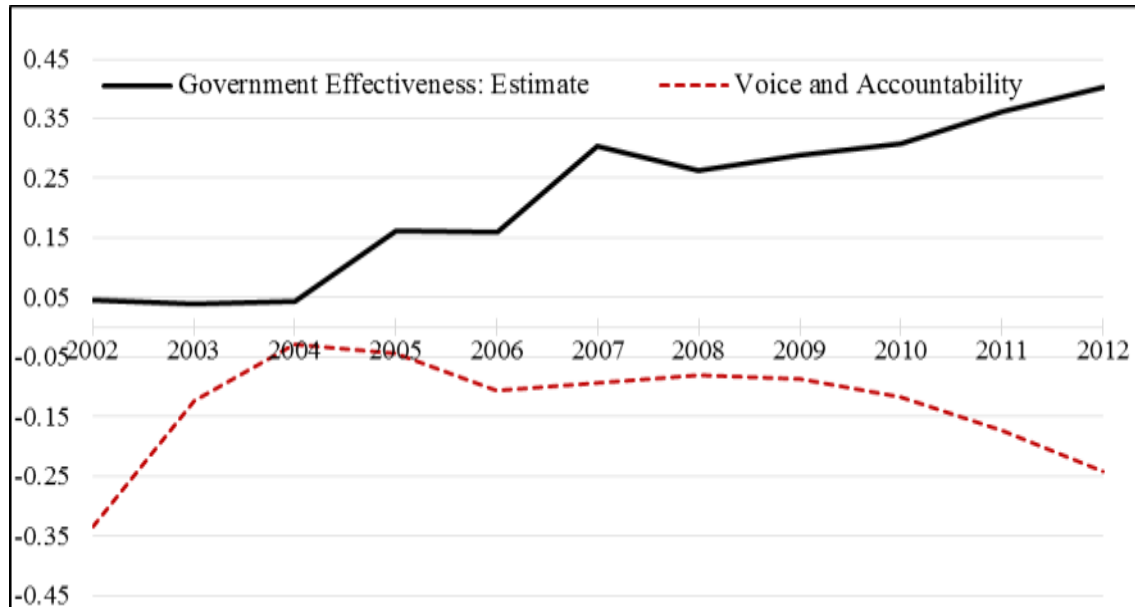
“In coalition times, there was an unsigned agreement among coalition members not to ask things. Now, with a single-party government, pressure is higher. [In the past] we would go to our general director and say that a project is not necessary. And the issue would stop there. But now the matter comes directly to our Minister. In some sense this pressure works as a facilitator. We have for example reduced the difference between the best and worst regions.” (Interview number 26).

Indeed, data by the World Bank on the evolution of governance indicators, presented in Figure 4, shows how, while political voice decreased in recent years, the level of government effectiveness has followed an opposite, upward trend. In other words, the strong government may have increased coordination among different institutions and put under control inter-party pork-barrelling.<sup>12</sup>

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<sup>12</sup> Such hypothesis is, somehow, similar to the idea of a ‘benevolent dictator’, that is, an authoritarian leader exercising absolute power but doing so for the benefit of the population.

**Figure 4.** Government effectiveness and political voice in Turkey, 2002-2012 (World Bank governance indicators).



Source: own elaboration on data from World Bank.

Preliminary confirmation was offered by another manager from the Ministry of Development. Although overall critical about the current government, the official's quote is informative:

"Today no MP has the power to implement small pork-barrel. The Parliament and the party are strongly disciplined." (Interview number 12).

Such finding confirms, at least partially, the basic premise put forward by Lizzeri and Persico (2005) on the potential drawbacks of electoral competition. The aim of their research, as well as this analysis, is not to argue that electoral competition is necessarily bad. Much literature shows how a many-party system is essential to allow different ethnic and ideological cleavages to find expression in the political system. Nonetheless, Lizzeri and Persico (2005) also highlight the possibility that electoral competition can have unexpected and counterintuitive effects, such as on the strategic use of public goods for electoral rewarding.

As Filiztekin and Bakış (2015) point out, the continuous electoral victories of the AK Party since its somewhat surprisingly landslide in 2002 deserves careful investigation. While earlier research has mostly linked political success to the country's positive economic performance experienced in the 2000s, or to Turkey's rooted ideological cleavages (cf. Akarca and Tansel, 2006; Çarkoğlu, 2008), the current analysis points to the ability of the government to, somehow, 'deliver' public goods as another explanation (cf. Müftüler-Baç and Keyman, 2012, for a partly similar argument).<sup>13</sup>

Hence, while the interviews stress that the strong powers of the government have streamlined government decision-making, such result should not be read as an indication that authoritarianism pays off in the territorial allocation of public funding. Although the government is now certainly more able to direct policy and allocate investments freely without worrying about electoral vagaries, such change is not without

<sup>13</sup> As Filiztekin and Bakış (2015) point out, structural explanations are further influenced by location, in the sense that the same variables seem to have different impacts on voting behaviours depending on the context where voters live.

drawbacks. A manager from the Ministry of Development, for example, underlined how the economic bureaucracy has experienced a reduction in its autonomy and, hence, in its technical ability to manage the investment project cycle:

“Before the arrival of AKP into power, in coalition times, Ministries were under the control of separate parties. Now institutions are all closer so coordination is faster, even though this may determine that agreements occur at high, political level instead of the technical level.” (Interview number 18).

Relatedly, some of the interviewees also highlight the risk of how investments are increasingly driven by populist choices. As the following quote by another manager from the Ministry of Development suggests, the growing power of the government over policy-making and the reduced autonomy of the economic bureaucracy may have simply determined a shift from pork-barrelling to populist spending:

“In the 1990s governments had very short life. So people [politicians, A./N.] would try to do as much as possible to get things done for themselves and their supporters and constituencies. They would try to do pork-barrelling. Now we have a single political pressure. For example, roads are very costly for Turkey. So the biggest priority would be to enlarge the train network. But the government prefers the High Speed Train, and other big projects such as the Third Airport, the Third Bridge, Marmaray, etc. [...]. This is political pressure. And it's costly for Turkey. [...] We moved from pork-barrelling to big projects.” (Interview number 12).

Complaining about how his department has struggled to shield itself from political pressure in the selection of projects, a senior manager indeed provided a pessimistic opinion of how public investment in transport infrastructure has been used and managed in recent years:

“[Today] investments are not selected by need or by cost criteria. They are selected by General Directors. The Prime Minister, or the Ministry of Transport, is just looking for the total number of km of highways you did, how many airports, or how much high speed rail you built. Whether the terminal is efficient, whether it is effective does not matter. There are public-private partnerships, such as the Gebze-Izmir Highway or the Third Bridge projects. They are technically very careful, because they invest their own money. Transport investment is beyond management.” (Interview number 17).

While the figures provided are overestimated, the following excerpt by a planning expert offers another concrete example of such dynamic:

“If you read page 236 of the 2014 programme, you understand that we should not invest at all in motorways but invest in other means of transport. But in the last years there have been 70 trillion TL investments in motorways. We allocate 4 trillion at the beginning of the year, and at the end they have become 9. We send reports saying that projects are good/bad, giving technical opinions. [...] Yet, so far, I cannot remember even one case when they rejected a project after our evaluation. At the end, unless you get politicians away from populist approaches, all the ideas about effective planning rest on paper.” (Interview number 25).

To conclude, the qualitative analysis provides evidence in two main directions. First, the authoritarian turn by the government has streamlined policy decisions. Second, while such trend may have had some positive effects on policy effectiveness, there is growing evidence pointing to a partial shift from pork-barrelling to the selection of populist projects. Drawing from the interview findings, as well as from the case of Istanbul discussed by Christie-miller (2014), we can speculate on two main reasons which may have led the government to embark into populist investment spending: first, the government's desire to build mass support (Magaloni and Kricheli, 2010). As many interviewees pointed out, the increase in the allocations to Kurdish-inhabited provinces has followed the attempt carried out by AKP government to solve the longstanding problem of Kurdish separatism. Under this light, the result can also be read as a confirmation of Magaloni and Kricheli's (2010) view that authoritarian leaders have to spread out resources in a calculated

way so as to maximize their survival prospects, for example by broadening their appeal to potential opponents. Besides, populist investment has to a large extent become intertwined with Erdoğan's and his party's desire to showcase their grand 'New Turkey' – a term rhetorically used to describe the allegedly 'new era' the country is experiencing under the AKP ruling.

A second, complementary explanation is that the AKP may have simply reduced its focus on pork-barrelling and, instead, become increasingly sensitive and connected to special interest groups. Explaining why the institutional structure of the project cycle management was transformed in 2008, the following quote by a senior manager provides preliminary support in favour of this second hypothesis:

"Today [...] billion of Turkish Liras are spent just for the highway sector. This is pumping money into Turkey. Construction firms were getting irritated. The Ministry of Transport wants to show people that things are done. And the best way is to build highways. So they changed the institutional structure. This reduced the power of the State Planning Organisation [currently Ministry of Development, A. /N.], and increased the power of firms. We were asking for performance indicators. So [the reason why operational powers were transformed] was mainly political." (Interview number 17).

Indeed, recent research by Özcan and Gündüz (2015) puts forward empirical evidence showing how firms politically connected to government – many of which are active in the construction and energy sector – have experienced abnormal performances and growth in recent years. Buğra and Savaşkan (2014) have further examined how frequent changes to the laws regulating public tenders have been used to systematically favour business groups close to the ruling party.

Not only does such anecdotal evidence reinforce the idea of collusion between economic and political interests, but it also supports the hypothesis that the increasingly authoritarian government may have used spending on public infrastructure as a way to develop and co-opt an emerging economic elite politically and ideologically close to the AK Party (Magaloni & Kricheli, 2010). Buğra and Savaşkan (2014) provide an argument in line with such hypothesis, and suggest how the incumbency of the AKP has been characterised by "a form of interaction that involves a mutual dependency between the government and business. Business actors, both individual entrepreneurs and associations, have relied on government support in the pursuit of economic interest or associational power. At the same time, entrepreneurs used economic resources, and associations mobilized their influence on the membership to support the ruling political party" (p. 12).

## 6. Conclusion

The empirical research conducted in this paper provides evidence of how the increase in the authoritarianism by the AKP government since 2008 is correlated to a reduction, rather than an increase, in the use of Turkey's public investment in transport and communications as a tool to strategically reward supporting constituencies and punish foes. However, such reduction in pork-barrelling has been only to a limited extent determined by true desire to improve the delivery of public policy, as political influence over investment decisions has apparently shifted from inter-party pork-barrelling to the selection of projects following populist rationales, whose logics run *above* partisan politics. Two potential reasons are behind such shift: 1) a move by the government towards populist investment aiming to broad the AK Party's appeal to potential opponents and display the 'New Turkey' emerging from the AKP rule and 2) a greater collusion between politics and economic special interest groups close to the executive. In other words, the reduction in pork-barrelling may respond to other, even more pernicious, policy developments. As has been noted Rodríguez-Pose and Garcilazo (2015), weak institutional conditions may end up tilting public investment in



infrastructure towards ‘prestige’ projects of dubious socioeconomic returns to the detriment of less ostentatious but more necessary projects. Our interviews suggest that, with the shift towards greater authoritarianism, this may indeed be the case in Turkey. It may be possible that in a more authoritarian Turkey prestige infrastructure projects are increasingly gaining ground not only with respect to more ‘ordinary’ infrastructure projects – e.g. high-speed rail vs. ordinary passenger and freight railway lines – but also with respect to other areas of public expenditure. Further research into this is, however, needed.

Two caveats must be taken into account. The first one relates to the potential biases caused by endogeneity. Earlier research conducted on similar data and for the same period (Luca and Rodríguez-Pose, 2015) suggests that reverse causality is not a serious concern. Nevertheless, we cannot entirely rule out such potential risk. Second, the results suggest that the strategic use of public investment in transport infrastructure to target provinces has decreased through AKP’s incumbency. Yet, it must be borne in mind that public investment projects are a public good which, by their own nature, is not excludable. In other words, transport infrastructures provide local spillovers to anyone, independently of their partisanship (Min, 2015). Diaz-Cayeros et al. (2012) for example discuss the hypothesis of portfolio diversification, that is, the possibility that political machines may use high-spillover and low-spillover public goods (Besley, Pande, Rahman, & Rao, 2004) for different targets. Additional research on the allocation of public yet excludable goods such as welfare care and education will be needed to assess whether they follow the same dynamics as transport investment.

The analysis’ implications for theory and policy are threefold. First, the results contribute to the literature on distributive politics by addressing a previously unexplored gap. The empirical evidence seems to overall support the analysis’ alternative hypothesis, according to which shifts from democracy towards more authoritarian regimes can lead to a reduction in the allocation of public goods following electoral interests – and not an increase, as most of the literature on democracy and public goods (Bueno De Mesquita et al., 2002) would lead to surmise. We explain such findings drawing on Lizzeri and Persico’s (2005) theoretical view that projects with narrow benefits may be more appealing to office-motivated politicians than to leaders with very large electoral bases and less concerns about winning elections.

Second, the results contribute to the current debate on the reasons and societal implications of the AKP’s electoral hegemony over Turkey’s politics. While earlier research has frequently linked such political success to the country’s positive economic performance experienced in the 2000s, and to Turkey’s deep-rooted ideological cleavages (cf. Akarca and Tansel, 2006, Çarkoğlu, 2008), the findings of the current analysis underscore the ability of the government to, somehow, ‘deliver’ public goods as a further reason (cf. Müftüler-Baç, Keyman, 2012 for a partly similar argument). At the same time, the qualitative preliminary evidence on the shift from pork-barrelling to populist spending raises concerns about the sustainability of current investment practices. Future research should be devoted to explore such issue.

Last but not least, the results contribute to the debate on why, and how, one-party authoritarian regimes – which have become the most common form of authoritarian polities (Diamond, 2015; Magaloni & Kricheli, 2010) – manages to appease threats to their stability. Recent literature argues that one-party and hegemonic-party regimes are more stable than other forms of autocracies thanks to their ability to simultaneously mobilising mass support *and* co-opting the elite (Blaydes, 2010; Magaloni & Kricheli, 2010; Magaloni, 2008). The findings from the empirical analysis seem to provide a concrete example. The reduction in pork-barrelling, along with the government’s sensitivity to politically-aligned special interest groups, may signal the government’s achievement of two goals simultaneously: on the one hand, delivering to citizens and broadening their appeal by making policy concessions in directions favoured by potential political opponents – such as the Kurds; and, on the other hand, building and co-opting a new economic elite significantly close to the ruling party by preferentially favouring politically close firms in the award of infrastructure projects’

tenders (Buğra & Savaşkan, 2014). Indeed, the reduction in pork-barrelling may herald the emergence of other types of problems connected to public investment that, in a context where the institutional conditions still require considerable improvements, can lead to the emergence of other, perhaps more dangerous problems linked to special interests and corruption.

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## Appendices

### Appendix 1. Description of variables and sources of data.

Variable	Variable description	Source
Public investment	Ln of the amount of per-capita fixed capital investment annually allocated to each province in transport and communication infrastructure projects	Ministry of Development (former State Planning Organisation)
AKP votes	% of votes for the AKP	Turkey's electoral High Committee, European Election Database
CHP votes	% of votes for the CHP	Turkey's electoral High Committee, European Election Database
MHP votes	% of votes for the MHP	Turkey's electoral High Committee, European Election Database
Kurdish party votes	% of votes for the Kurdish party and for independent candidates	Turkey's electoral High Committee, European Election Database
Electoral competition	Negative absolute value of the vote difference between the incumbent party and its main challenger in each province	Own calculation on data from the Turkey's electoral High Committee, European Election Database
Development index	Provincial Development Index	Own calculation from: State Planning Organisation (1996, 2003a), Baday-Yıldız, Sivri and Berber (2010)
Manufacturing employment	% employment in manufacturing	Turkstat Regional Database
Education attainments	% high education (vocational training and university) students on the total population	Turkstat Regional Database
Rural population	% of rural population	Turkstat Regional Database
Population	Total number of inhabitants per province	OECD, Turkstat Regional Database

## Appendix 2. Summary statistics.

<i>Variable</i>	Mean	St. Dev.	Minimum	Maximum
Public investments	3.025	1.423	0	9.215
AKP votes	45.037	14.811	6.5	84.82
CHP votes	18.541	9.506	2.01	52.5
MHP votes	12.759	7.129	0	44.9
Kurdish party votes	9.345	16.417	0	70.8
Electoral competition	-26.18	15.363	-70.4	-0.1
Development index	-0.001	0.987	-1.659	4.138
Manufacturing employment	20.963	9.444	4.7	46.3
Education attainments	4.557	19.931	0.039	254.955
Rural population	37.849	13.5677	1.01	70.084
Population	898500.2	1538670	65126	1.40e+07

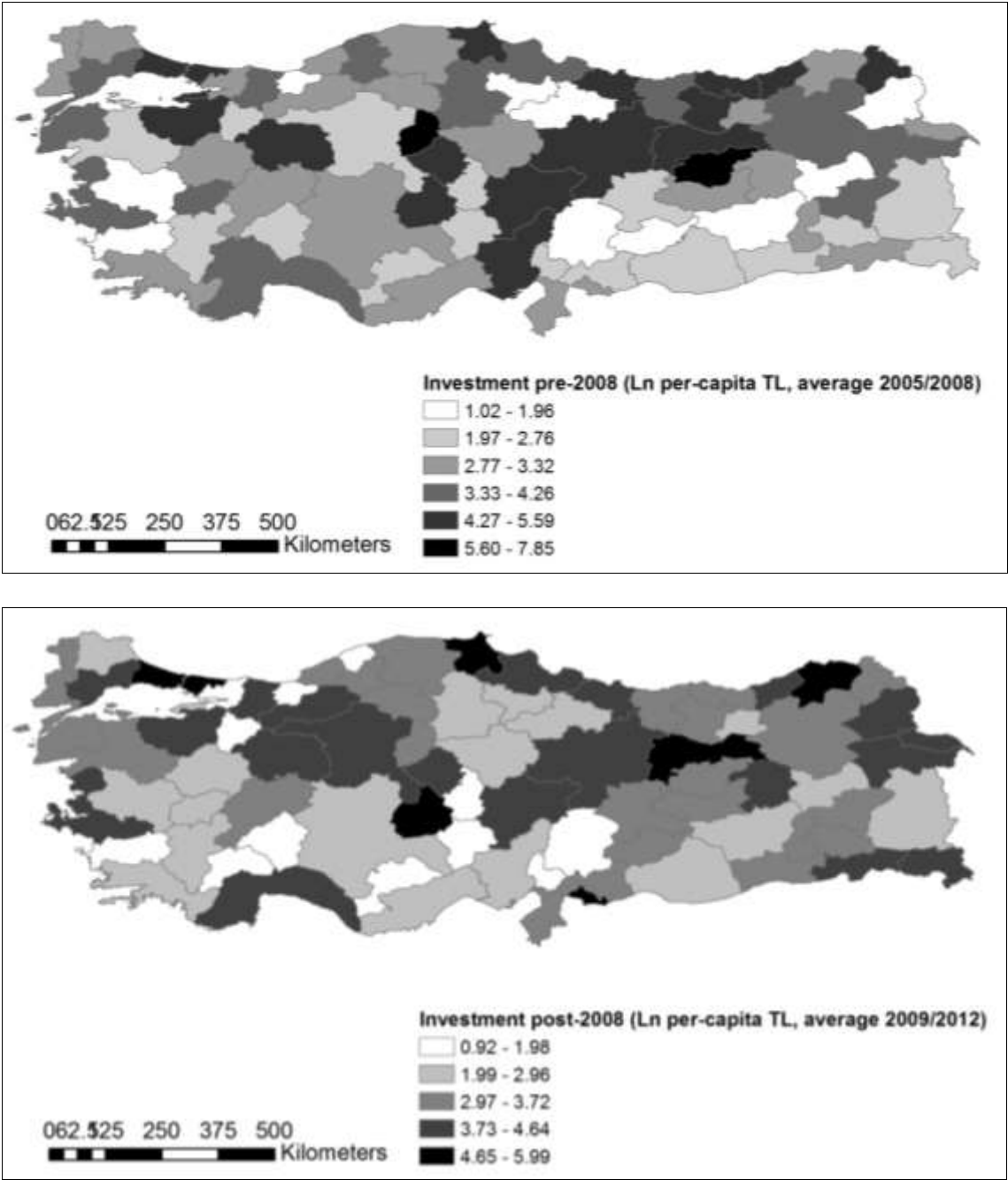
Source: own elaboration.

## Appendix 3. Pairwise correlations among variables.

	Invest.	AKP votes	CHP votes	MHP votes	Kurd. votes	El. comp.	Dev. Index	Manuf. Empl.	Educ. Attain.	Rural pop.	Pop.
Investments	1										
AKP votes	0.116*	1									
CHP votes	0.078*	-0.304*	1								
MHP votes	-0.120*	0.072	0.189*	1							
Kurdish v.	-0.034	-0.396*	-0.311*	-0.538*	1						
El. Comp.	-0.103*	-0.641*	0.430*	0.117*	0.065	1					
Dev. Index	0.091*	-0.073	0.484*	0.272*	-0.523*	0.221*	1				
Man. Emp.	-0.041	-0.005	0.301*	0.072	-0.305*	0.050	0.596*	1			
Educ. Att.	0.084*	0.001	0.122*	0.051	-0.095*	0.068	0.159*	0.265*	1		
Rural pop.	-0.120*	-0.087*	-0.168*	-0.114*	0.166*	0.020	-0.668*	-0.557	-0.216*	1	
Population	0.158*	-0.020	0.206*	-0.059	-0.063	0.127*	0.655*	0.320*	-0.014	-0.526*	1

Source: own elaboration. \* p<0.05.

**Appendix 4.** Geographical distribution of average fixed-capital public investment in transport and communication infrastructures until (above) and after 2008 (below).



Source: own elaboration on data from Ministry of Development database.

**Appendix 5.** List of interviewees.

- (1) Retired manager, Undersecretary of Treasury, Ankara, 24/10/2014.
- (2) Senior manager, Ministry of Development, Ankara, 2/10/2014.
- (3) Senior planning expert, Ministry of Development, Ankara, 3/10/2014.
- (4) Director, Turkey's Economic Policy Research Foundation (Türkiye Ekonomi Politikaları Araştırma Vakfı, TEPAV), Ankara, 27/10/2014.
- (5) Senior planning expert, Ministry of Development, Ankara, 27/10/2014.
- (6) Manager, Ministry of Development, Ankara, 28/10/2014.
- (7) Senior planning expert, Ministry of Development, Ankara, 30/10/2014.
- (8) Finance expert, Ministry of Finance, Ankara, 19/11/2014.
- (9) Finance expert, Ministry of Finance, Ankara, 19/11/2014.
- (10) Manager, Ministry of Finance, Ankara, 21/11/2014.
- (11) Finance expert, Ministry of Finance, Ankara, 2/12/2014.
- (12) Manager, Ministry of Development, Ankara, 1/12/2014.
- (13) Manager, Ministry of Development, Ankara, 2/12/2014.
- (14) Finance expert, Ministry of Finance, Ankara, 3/12/2014.
- (15) Finance expert, Ministry of Finance, Ankara, 3/12/2014.
- (16) Manager, Ministry of Development, Ankara, 3/12/2014.
- (17) Senior manager, Ministry of Development, Ankara, 4/12/2014.
- (18) Manager, Ministry of Development, Ankara, 5/12/2014.
- (19) Planning expert, Ministry of Development, Ankara, 5/12/2014.
- (20) Manager, Ministry of Development, Ankara, 8/12/2014.
- (21) Manager, Ministry of Development, Ankara, 10/12/2014.
- (22) Planning expert, Ministry of Development, Ankara, 11/12/2014.
- (23) Manager, Ministry of Development, Ankara, 11/12/2014.
- (24) Planning expert, Ministry of Development, Ankara, 15/12/2014.
- (25) Planning expert, Ministry of Development, Ankara, 15/12/2014.
- (26) Manager, Ministry of Development, Ankara, 16/12/2014.
- (27) Manager, Ministry of Transport's General Directorate for Highways (Karayolları Genel Müdürlüğü, KGM, Ankara, 22/12/2014.
- (28) Senior scholar, Bilgi University, Istanbul, 2/10/2012.
- (29) Senior scholar, Koç University, Istanbul, 19/04/2013.
- (30) Senior scholar, Boğazici University, Istanbul, 13/10/2014.
- (31) Manager, Delegation of the EU to Turkey, Ankara, 23/09/2013.
- (32) Senior manager, Delegation of the EU to Turkey, Ankara, 23/09/2013.



**Appendix 6.** Multivariate regressions of the provincial per-capita public investment in transport and communication infrastructures: robust Fixed Effects estimates excluding Istanbul, Ankara, and Izmir (2004-2012).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
AKP votes	0.0516** (0.0196)	0.0334* (0.0176)	0.0331* (0.0180)	0.0333* (0.0175)	0.0343* (0.0179)	0.0199 (0.0196)	0.0343* (0.0176)	0.0150 (0.0205)	0.0152 (0.0203)
CHP votes	-0.0334** (0.0159)	-0.0425*** (0.0152)	-0.0436*** (0.0165)	-0.0354 (0.0237)	-0.0483*** (0.0153)	-0.0425*** (0.0150)	-0.0415** (0.0164)	-0.0768*** (0.0275)	-0.0759*** (0.0275)
MHP votes	0.0285 (0.0317)	0.0362 (0.0284)	0.0354 (0.0294)	0.0370 (0.0286)	0.0939** (0.0430)	0.0510* (0.0293)	0.0378 (0.0302)	0.0854** (0.0428)	0.0855** (0.0429)
Kurdish votes	0.0136 (0.0199)	0.00274 (0.0186)	0.00200 (0.0196)	0.00349 (0.0188)	0.00149 (0.0194)	-0.0159 (0.0215)	0.00289 (0.0184)	-0.0249 (0.0246)	-0.0244 (0.0241)
El. Comp.	0.00840 (0.00866)	0.00253 (0.00850)	0.00195 (0.00844)	0.00265 (0.00849)	0.00107 (0.00877)	-0.00420 (0.00845)	0.00412 (0.0109)	-0.00424 (0.0115)	-0.00414 (0.0115)
Post-2008			1.157 (0.842)	1.131** (0.505)	1.450*** (0.497)	0.739 (0.460)	0.920 (0.562)	0 (0)	0 (0)
Post#AKP			-0.00249 (0.00982)					0.0264 (0.0186)	0.0255 (0.0181)
Post#CHP				-0.00771 (0.0141)				0.0463* (0.0243)	0.0447* (0.0231)
Post#MHP					-0.0532** (0.0205)			-0.0196 (0.0257)	-0.0198 (0.0256)
Post#Kurd						0.0242** (0.00978)		0.0396** (0.0164)	0.0389** (0.0157)
Post#El. Comp.							-0.00282 (0.00869)	0.00124 (0.0134)	0.00101 (0.0132)
Constant	1.052 (0.910)	-6.306** (2.728)	-6.175** (2.776)	-6.367** (2.758)	-5.857** (2.798)	-3.961 (2.734)	-6.398** (2.770)	-3.284 (3.006)	-3.295 (2.993)
Observations	624	624	624	624	624	624	624	624	624
R-squared	0.085	0.117	0.117	0.117	0.137	0.138	0.117	0.152	0.152
Number of id	78	78	78	78	78	78	78	78	78
Prov FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls		yes	yes	yes	yes	yes	yes	yes	yes
Prov*year FE									yes

Robust standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Controls include: provincial development index, manufacturing employment, education attainments, rural population, total population.