

An Empirical Investigation of the Legacies of Non-Democratic Regimes: The Case of Soeharto's Mayors in Indonesia*

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Abstract

A large theoretical literature argues that the legacies of non-democratic regimes can affect the quality of governance in new democracies. However, the empirical evidence on the effects of these legacies is scarce. This paper exploits a natural experiment that took place in the Indonesian democratic transition: the mayors of the Soeharto regime were allowed to finish their five year terms before being replaced by new leaders. Since mayors' political cycles were not synchronised, this event generated exogenous variation on how long the agents of the old regime remained in their position and, hence, on the degree of control that they exerted during the democratic transition. The results suggest that districts that had an old-regime mayor for longer exhibit worse governance outcomes and tend to vote more for Soeharto's party. These effects persist several years after the old-regime mayors are no longer in office and are robust to controlling for subsequent political reforms. The results are consistent with the hypothesis that slower transitions towards democracy allow the old-regime elites to find ways to capture democracy in the medium and long run.

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1 Introduction

Since the early 1990s most countries in the world have had political systems that are defined as democratic. However, democracies widely differ on the quality of their political institutions. Oftentimes elites and powerful interest groups retain a disproportionate amount of influence over the policy making process. The empirical evidence suggests that young democracies are particularly prone to elite capture.¹

A potential reason for the greater extent of elite capture in young democracies is the presence of *legacies* of the previous nondemocratic regime: A new democracy can inherit a constitution, a number of laws and regulations, a large army, or an inefficient bureaucracy from the previous regime. These legacies could increase the amount of *de facto* power that old-regime elites have and, consequently, allow them to continue to control the decisions over policies and economic institutions taken during the democratic period.²

The idea that nondemocratic legacies can facilitate elite capture in weakly institutionalized polities has been previously described in the political science literature³ and more recently formalized in a growing theoretical literature in economics.⁴ However, the empirical evidence on the presence of these legacies or on their effects is scarce.

In this paper, we exploit a natural experiment that took place in the Indonesian transition to democracy and that affected the degree to which old-regime elites could capture local power. In 1998 the regime of General Soeharto came to an end. However, the Soeharto-appointed district mayors were not immediately replaced by democratically elected leaders. Instead, they were allowed to finish their five year terms before new elections were called for. Since the timing of appointment of Soeharto mayors was different across districts, this event generated exogenous variation in how long these mayors remained in office during the democratic transition.

The presence of Soeharto mayors during the early stages of the new democracy may have had disproportionate effects on the creation of new institutions and long-run development. In the years following the fall of a nondemocratic regime, new parties are created, new alliances built and new institutions are developed. In this sense, the early stages of a democratic period could represent a critical juncture, along the lines of described by Acemoglu and Robinson (2012). As argued by these authors, small differences in pre-existing conditions during critical junctures can lead to a process of institutional drift that generates

¹See Brender and Drazen (2005) and Keefer (2007).

²Acemoglu and Robinson (2008) provide a theoretical analysis of the incentives of elites to invest in *de facto* power.

³See for instance, Linz and Stepan (1996), O'Donnell and Schmitter (1986), Di Palma (1990), Huntington (1991).

⁴See for instance, Acemoglu and Robinson (2008), Acemoglu, Ticchi and Vindigni (2010, 2011).

important differences in the level of development in the long-run. In the Indonesian context, we argue that small differences in the number of years that Soeharto mayors served during the democratic transition led to different institutional paths that affected the quality of local institutions in the medium- and long-run.

We first document that the appointment timing of the Soeharto mayors is orthogonal to pre-determined district characteristics. We expected this to be the case, since the appointment of district mayors can be traced to the Dutch colonial period. Any accumulation of occasional early terminations throughout history could generate a staggered pattern of appointment across districts.⁵ We provide evidence that the level of public good provision and socio-economic conditions at baseline does not predict the appointment timing of Suharto mayors. Furthermore, we show that variation in support for Soeharto during the nondemocratic regime, does not predict the appointment timing either. We show this by using vote shares that Soeharto’s party obtained in parliamentary elections during the Soeharto regime.⁶

In our main empirical specification, we use dummies for the appointment years of the last Soeharto mayor as the main regressors of interest. We focus on the appointment timing rather than on the year when the last Soeharto mayors step down because the appointment timing precedes the fall of Soeharto and, hence, it is exogenous to political factors determined during the democratic transition. The estimates should be interpreted as capturing the “Intention To Treat” effects.

Our results suggest that districts that had a Soeharto mayor for a longer period of time during the democratic transition have worse governance outcomes. To measure the quality of governance, we use the Economic Governance Survey that was conducted in 2007 and 2011 to a large sample of firms across the country. We focus on questions that specifically asked firm managers to evaluate the performance of the district mayor, or the prevalence of corruption and extortion.

More specifically, our results provide evidence that, in districts where the Soeharto mayor was in office for longer, firm managers are more likely to report that they have to pay illegal fees to the military or police to protect their own security. Furthermore, firm managers in those districts have a worse opinion on the performance of the incumbent mayor at that time: they are more likely to report that the mayor has a poor handling of corruption committed by his or her staff, and they tend to agree with the statement that the mayor is not a respectable figure. All these results persist several years after the Soeharto mayors are

⁵Indonesia has a tradition of staggered appointment of elections and appointments at different levels, such as provinces and villages.

⁶National parliamentary elections were held during the Soeharto regime. Although Soeharto’s party obtained on average 70% of the votes, there was substantial variation in vote shares across districts. For instance, in the year 1987, they ranged from 35% to 99%.

no longer in office and, hence, cannot be accounted for by the direct influence of Soeharto mayors.

These poor governance outcomes coexist with an increase in the support for Soeharto's party: Despite the lack of pre-existing differences in the support for Soeharto's party during the nondemocratic period, districts where the Soeharto mayor was in office for longer during the transition supported Soeharto's party to a greater extent in the 2004 parliamentary election.

This set of results is consistent with the hypothesis that the Soeharto mayors that were in office for longer during the democratic transition invested more in *de facto* power. Consequently, they were able to capture the local democratic institutions to a greater extent. We provide a conceptual framework for this underlying mechanisms which is based on the theoretical model developed by Acemoglu and Robinson (2008). In their model, elites can invest in *de facto* power to compensate for the increase in the amount of *de jure* power that citizens obtain with democratization. We make a number of modifications to their model to accommodate the Indonesian context. These modifications allow us to show that districts where the elite had two periods to invest in *de facto* power end up investing more than districts where the elite had only one period to invest in *de facto* power. Therefore, as long as there are some time or capacity constraints to the investment in *de facto* power, giving the elites more time to invest will lead to higher overall investments in *de facto* power and greater elite capture.

We provide further evidence to support the validity of this specific channel by exploring the effects on the level of political competition in district-level elections. In 2005, direct elections for the district mayor were introduced in Indonesia. We show that districts that had the longest exposure to Soeharto mayors in office during the democratic transition have one fewer contestant to the mayoral elections, and 0.5 fewer independent candidates. These results suggest that political competition in those districts was lower. This can, in turn, explain the worse quality of governance in the medium and long-run in those districts.

Finally, we conduct a number of robustness checks to rule out competing explanations. In particular, we show that timing of subsequent district-level political reforms cannot account for the results.

This paper relates to a number of different literatures. First, it is related to the political science and economics literature on democratization and on the determinants of democratic consolidation. Some examples are Linz and Stepan (1996), O'Donnell and Schmitter (1986), Di Palma (1990), Huntington (1991), Acemoglu and Robinson (2008), Acemoglu, Ticchi and Vindigni (2010, 2011). This literature has argued that nondemocratic elites use a variety of methods to retain their influence in politics after democratization, such as requiring the new

democracy to adopt the constitution of the previous regime or creating a large army that the democratic leaders will have to accommodate. This literature is mainly descriptive or theoretical. To the best of our knowledge, there are only two empirical papers that document the impact of nondemocratic legacies on governance outcomes. The first one is a recent paper by Albertus and Menaldo (2014). Using cross-country panel data, the authors show that income redistribution is lower in democracies that do not emerge after a revolution or that adopt the constitution of the previous regime. The authors argue that, in those situations, nondemocratic elites remain powerful during the democratic transition and can introduce prerogatives that protect their interest during the democratic period. The second paper is by Martinez-Bravo (2014). The paper uses Indonesian data to show that village-level appointees that a new democracy inherits from the previous regime have strong incentives to manipulate voters for strategic reasons. Hence, they represent a legacy from the nondemocratic regime that, under certain conditions, can prevent democratic consolidation.^{7,8}

The paper also relates to the literature on elite capture in democratic politics by means of vote buying, lobbying by interest groups, use of patronage networks and clientelism, use of force or its threat. This literature has had a number of important theoretical and empirical contributions. Some examples are Grossman and Helpman (1996), Bardhan and Mookherjee (2000), Acemoglu, Robinson and Santos-Villagran (2010), Robinson and Torvik (2005), Baland and Robinson (2012), Finan and Schechter (2012), Anderson, et al. (2015). Our paper contributes to this literature by exploiting a natural experiment that generated exogenous variation on the extent of elite capture across districts and by relating the presence of elite capture to the course of events during the democratic transition.

Finally, the paper relates to the literature on Indonesian politics that has analyzed the problems of democratization in Indonesia and that has documented the persistent influence of Soeharto-era elites during the democratic period. This literature has been mainly descriptive.

⁷More specifically, Martinez-Bravo (2014) argues that appointed village heads will have strong incentives to manipulate voters in order to signal their alignment to upper levels of government and ensure their political survival. When the pro-democracy party is not the favorite winner of upper-level elections, appointed village heads will influence voters to support the party associated with the previous nondemocratic regime. The author exploits within-district variation in the type of village head to document the existence of strategic voter-manipulation incentives. Since the present project mainly relies on across-districts variation, and appointed village heads are few in number, it is unlikely that the village-level voter-manipulation incentives interact with the mechanism described in this paper.

⁸This paper also contributes to the debate in political science about whether a gradual democratic transitions are more successful. O'Donnell and Schmitter (1986) argues that democratic consolidation is more likely when the transition is initiated by pacts among elites and, hence, the transition is characterized by gradual changes. In contrast, Di Palma (1990) advocates for settling the main procedural rules at the beginning of the transition and, hence, advocates for faster transitions. The empirical evidence presented in this paper suggests that, at least at the local level, slower or gradual transitions facilitate elite capture since slower transitions allow nondemocratic elites to find ways to capture the local institutions.

Some examples are Malley (2003), Hadiz (2010), Honna (2010), Mietzener (2010).⁹

The rest of the paper proceeds as follows. Section 2 describes the institutional background of Indonesia; Section 3 provides a conceptual framework to guide our interpretation of the empirical results; Section 4 presents the data; Section 5 describes our empirical strategy; Section 6 presents the main results of the paper; Section 7 discusses the mechanism behind the results; Section 8 describes a number of robustness checks; and finally, Section 9 provides the conclusions.

2 Institutional Background

2.1 Political Context

Soeharto ruled Indonesia for more than three decades, from 1965 to 1998. During this time, legislative elections took place every five years at the national and local levels. However, the regime was not democratic: Soeharto's government exerted tight control over the population and opposition parties. Only two moderate opposition parties were allowed to contest elections: PDI (Indonesia Democracy Party) and PPP (Development Unity Party). Soeharto's party, Golkar (Functional Groups) obtained on average, 70% of the votes in the national parliamentary elections that took place during the Soeharto regime.

In May 1998 Soeharto lost crucial support and was forced to stepped down. The numerous corruption cases that involved Soeharto's family and the economic consequences of the Asian economic crises lead to mass public demonstrations against the regime. The fall of the regime was quite unexpected. By the year 1997, few predicted the demise of the Soeharto government. The general perception was that the Soeharto regime was as stable as it had been in the previous years.¹⁰

After the fall of Soeharto, a transitional government lead by B.J. Habibie came into power. Habibie had previously been Soeharto's hand-picked vice-president and, initially, most observers were sceptical about Habibie's commitment to democratization. However,

⁹There are also a number of papers in economics that have studied the impact of subsequent reforms of the method of selection of district mayors on local governance in Indonesia. Some examples are Skoufias et. al. (2014), Valsecchi (2013), Moricz and Sjöholm (2014), Mukherjee (2014). However, to the best of our knowledge, no other paper has studied the impact of the staggered replacement of Soeharto-regime mayors on the quality of local governance.

¹⁰An example of this, is the fact that Parliamentary elections were held that year and Golkar obtained 74% of the votes. Furthermore, the newspaper *The Economist* published a Special Report on Indonesia in July 24th of 1997 (*The Economist* (1997)). The report discussed the possible succession of Suharto, however it also described how the same debate had been taking place in Indonesia for a very long time. For instance, it includes the following sentences: "Now 76, he [Suharto] is likely to embark on a seventh term in 1998. Like other long-serving rulers, Suharto seems unable to let go.", or "Speculation about the succession has been a favourite game in Indonesia for at least ten years".

his government undertook several ambitious reforms that effectively transformed the political system into a relatively well functioning democracy. These reforms liberalized political parties and the media, protected freedom of speech, freed political prisoners, and decentralized spending and political power to the district level.¹¹

The first democratic parliamentary election after the fall of Soeharto took place in June 1999. National, provincial, and district legislatures were selected during this election. Although there were instances of vote buying and voter intimidation, in general, it was perceived to be a relatively free and fair election. Golkar (Soeharto's party) obtained 22% of the votes while PDI-P, the main opposition party, obtained the largest vote share with 34% of the votes. Since then, parliamentary elections have taken place every 5 years.¹²

During the years following the 1999 election, additional political reforms were implemented that increased the level of accountability and deepened the democratization process. However, many scholars have argued that the gradual process of institutional reform that characterized the Indonesian transition allowed many of the elites associated with the Soeharto regime to retain much of their influence over the policymaking process. The military kept 38 seats in the national legislature and 10% of the seats in local legislatures, the military and the bureaucracy were not reformed, and, as already mentioned, at the local level, Soeharto-appointed mayors were allowed to finish their term before being replaced by elected leaders (Mietzner (2006, 2010)).

2.2 The Importance of District Mayors in Indonesia

Indonesia is divided in provinces, which are in turn divided into districts, also known as *kabupaten* or *kotamadya*. The district mayor is the head of the executive government and is also known as *bupati* or *walikota*. The district mayor position has existed since the Dutch

¹¹It is beyond the scope of this paper to provide a full account of the motivations of the Habibie government to implement these democratization reforms. Most scholar argue that the situation of political unrest and mass mobilizations were a fundamental factor driving the reforms. However, some authors also point out that Habibie had a personal commitment to democratization. He undertook such reforms even when they lead to confrontations with other members of the previous Soeharto administration and when they undermined Habibie's hold on power. These authors suggest that the fact that Habibie studied in Europe could have played a role in his views of the need to implement democratization reforms. See Anwar (2010) for further discussion.

¹²After a process of coalition formation at the national level, Abdurramah Wahid, the leader of PKB was elected president with the support of Golkar and other nonelected members of Parliament, mostly of the military. However, two years later, Wahid lost a confidence vote and the leader of PDI-P, Megawati Sukarnoputri, obtained the presidency. Direct presidential elections were introduced in 2004. Megawati failed to be reelected and, instead, Susilo Bambang Yudhoyono (SBY) obtained the presidency. He was later reelected in 2009. Finally, in 2014 Joko Widodo, also known as Jokowi, won the presidency. Jokowi, who came from a humble background and started his career at the local level, became the first president of Indonesia that was not a powerful figure during the Soeharto regime.

colonial period and has typically had a considerable amount of power.^{13,14} District mayors have a substantial degree of control over the district budget, can make decisions over local regulations and, since democratization, are responsible for the provision of important public goods, such as health and education.

Over time, the method of selection of district mayors has experienced a number of changes. During the Soeharto regime and the Habibie transitional government, district mayors were appointed by the Ministry of Home Affairs, a fundamental branch of the central government.¹⁵ After democratization, the system was reformed and mayors became indirectly elected by the district legislature. Law No. 22 of 1999 stipulated that the local legislatures resulting from the 1999 parliamentary election could elect the mayor according to the rules of proportional representation once the term of the Soeharto-appointed district mayor expired. With the objective to further increase the level of accountability the selection method was further reformed and in 2005 direct elections to district mayors were introduced (Mietzner (2010)).¹⁶

Despite these changes in the method of selection of district mayors, the term length and the maximum number of consecutive terms have remained the same during the Soeharto regime and the democratic period: district mayors can serve at most two terms of 5 years each.

As described above, an important aspect of the Indonesian democratic transition is the fact that after the fall of Soeharto, district mayors were not immediately replaced by newly elected leaders. Instead, Soeharto appointed mayors were allowed to finish their 5 year term before new elections were called for.

¹³In 1922 the Dutch colonial powers passed an administrative reform that divided the territory in provinces and municipalities. More detailed regulations followed in 1926. These regulations stipulated that the district mayors had to be appointed by the colonial power. After independence, the appointment system persisted until the end of the Soeharto regime (Nielsen (1999), Cribb and Kahin (2004)).

¹⁴In 1997 there were in Indonesia 296 districts. On average these districts had 500,000 inhabitants. See Section 4 for further description of district characteristics.

¹⁵More specifically, district parliaments produced a short list of candidates for the district mayor position and the Ministry of Home Affairs typically selected the individual at the top of the list. In any case, the local parliaments were under tight control of Soeharto's party, so the candidate at the top of the list was always the preferred choice of Soeharto (Mietzner (2010)). During the Soeharto regime district mayors were supposed to serve as both regional political leaders and as representatives of the central government in the different regions. With this practice, the Soeharto central administration exerted a tight control of the decisions taken in the different regions (Malley (2003)).

¹⁶The introduction of direct election was also staggered across time since the indirectly elected mayor was allowed to finish their 5 year term. Law No. 34 of 2004 established this second reform.

2.3 Changes in Local Governance Post-Soeharto

Although most scholars agree that the quality of local governance had experienced a moderate improvement post-Soeharto, many argue that old-regime elites had managed to retain a disproportionate amount of influence over the policy making process.

A large fraction of the district mayors elected in the post-Soeharto period were retired members of the military or members of the bureaucracy. These groups were closely associated with the Soeharto regime (Malley (2003), Mietzner (2010)). Money politics and vote buying practices have remained predominant during the democratic transition, both with indirect and with direct elections for district mayors. The monetary costs of contesting elections for district mayors is typically described as a barrier of entry for independent candidates and representatives of civic society. The military, the police, and paramilitary groups remain an important venue for voter mobilization and voter intimidation (Honna (2010), Hadiz (2010)).

3 Conceptual Framework

In section 10.1 of the Online Appendix we provide a theoretical framework to guide the interpretation of our results. In this section we briefly describe the main insights of this theoretical exercise that illustrate the mechanism that, we argue, is behind the empirical patterns observed in the data. The model is an adaptation of the theory presented in Acemoglu and Robinson (2008). We implement a number of modifications to their setting to adapt it to the Indonesian local context and to simplify some of the aspects of the model that are not central to our mechanism of interest.

The setting of the model is as follows: there are two groups in society, a small elite and citizens. The country is divided in a number of districts. The elite and citizens contest power in each district. The game starts as a non-democratic regime and the elites are in power in all districts. For reasons exogenous to the local power dynamics, the country becomes a democracy. From that point on, citizens can contest local power and have an electoral advantage over the elite because they are the more numerous group. Hence, in the absence of any action by the elite, citizens will take power in all districts. To avoid this scenario, the elite can invest in *de facto* power: for instance, the elite can hire political brokers to buy votes on their behalf, they can make clientelistic offers to citizens, or they can develop a paramilitary group to mobilize and intimidate voters.

To approximate the Indonesian context, we assume that in some districts local elections are scheduled after one period, while in other districts the elections are scheduled after two periods. Hence, in the first set of districts (type 1) the elites have one period to invest in *de facto* power, while in the second set of districts (type 2) the elites have two periods to

undertake such investments. Finally, we assume that the costs of investments in *de facto* power are increasing and convex. After investments are made, elections take place, payoffs are distributed and the game ends.

The main results of this simple theoretical exercise correspond to the equilibrium levels of investment in *de facto* power in each type of districts. We show that, despite the per-period investment in *de facto* power being larger in type 1 districts, the overall investment in *de facto* power (across periods) is higher in type 2 districts. In other words, districts that are given more time to invest in *de facto* power will end up investing more.

This result is driven by the assumption of convex costs of investment in *de facto* power. We interpret this result as suggesting that, as long as there is some time constraint in the process of investment in *de facto* power, districts that have more time to invest will exhibit higher levels of investment. The presence of time constraints in the investment of *de facto* power is a plausible assumption. Finding the right individuals to act as political brokers or co-opting members of the military or police may require a considerable amount of time.¹⁷

As anticipated in the introduction, this paper provides evidence that districts where a Soeharto mayor was in office for longer during the democratic transition exhibit worse governance outcomes. This evidence is consistent with the conceptual framework provided in this section. In particular, our results are consistent with the hypothesis that, in districts where Soeharto's mayors were in office for longer, the elite had more time to invest in *de facto* power and, as a result, found it optimal to undertake higher investments. As a consequence, these districts experienced greater elite capture, lower degree of political competition, and worse governance outcomes in the long-run.

¹⁷A pertinent question is why the elite could not use similar instruments of *de facto* power, possibly developed during the nondemocratic regime. There are at least two reasons for this. First, during the nondemocratic regime, local elites could persist in power by exerting low levels of effort to manipulate voters. The system as a whole was nondemocratic and the possibility of losing power at the local level was negligible. This seems to represent the Indonesian case well. While during the Soeharto regime there were occasional repression of opponents to the regime, massive implementations of vote buying schemes at the time of elections was not necessary, given that the large victory of Soeharto's party was always out of question. Second, democratization could have changed the nature of the optimal investments in *de facto* power. For instance, threats of incarceration or administrative reprisals were no longer credible punishment for voting to opposition parties. In contrast, parties had to retort to vote buying or threats of violence in order to influence voters (Antlöv (2004)).

4 The Data

4.1 Data Sources

The main dataset used in this project contains information on the political histories of district mayors in Indonesia. We construct this dataset by combining two different data sources. The first one corresponds to data collected by a team of researchers at the World Bank (Skoufias et. al., 2014). These data contain information on the names, appointment dates and end dates of the district mayors elected during the democratic period, up to 2007. It also contains information on 56% of the last Soeharto mayors. We complement this data with a novel dataset collected by the authors of this paper (Martinez-Bravo and Mukherjee, 2014). This data contains the names of the district mayors in office between 1988 and 2004 and was collected from the Indonesian Government Official Directories available at Cornell library. In total, we have complete information on mayors' political histories since the last Soeharto mayor for 295 districts.¹⁸

In order to test the endogeneity of the appointment timing, we combine these data with pre-determined district characteristics. For this we use district-level vote shares of the parliamentary elections that took place during the Soeharto regime (King, 2003), as well as measures of public good provision obtained from the 1993 wave of the village census (BPS, 1993).

Our outcome data come mainly from two sources. First, we use the 2005 wave of the village census (BPS, 2005). These data contain information on the electoral outcome of the 2004 national level parliamentary election. We also use district-level vote shares of the 2004 election provided by the electoral commission. Second, we use data from the Economic Governance Survey. This survey was conducted in 2007 and 2011 by the NGO KPOD and the Asia Foundation. In this survey a large number of firm managers across Indonesia were interviewed to gather their views on the quality of the business environment in their districts. Managers were also asked questions about their opinion on the quality of district mayor performance, their perception of corruption, and the prevalence of illegal payment requests from the military or other groups. Each wave of the survey covered approximately, half of the districts in Indonesia. Hence the combination of both waves provides information on almost the universe of districts in Indonesia. See section 10.2 in the Online Appendix for further information about data sources and about the construction of the variables of interest.

¹⁸This corresponds to the entire universe of districts in existence in 1997 with the exception of the capital city of Jakarta. Note that we also have some information on the second to last Soeharto mayor.

4.2 Descriptive Statistics

As described above, we are able to obtain information on the appointment dates of the last Soeharto mayors for 295 districts. To construct our estimating sample we impose a number of restrictions. First, we restrict the sample to districts that did not split during the time of our study. Since the end of the Soeharto regime, Indonesia has experienced an intense process of district splitting (Fitriani et al. (2005)). After a district split, the newly created districts elect new mayors and, consequently, the initial timing of appointment is no longer a meaningful predictor of the amount of time the Soeharto mayor is in power during the democratic transition. Furthermore, the process of district division can generate particular political dynamics that can confound the mechanisms described in this paper.¹⁹ In order to mitigate these concerns, we focus our analysis on districts that never split. Appendix Table 1 presents the number of districts by year of appointment of the last Soeharto mayor. Column 1 reports the full sample, while column 2 focuses on districts that never split. As we can see 67% of districts in Indonesia did not experience jurisdictional divisions.^{20,21}

Next, we drop 7 districts because of missing information on electoral results during the Soeharto regime. We use the electoral results in the Soeharto period as controls in some of our specifications and, hence, districts with missing information are not part of our estimating sample. Finally, we drop districts where the last Soeharto mayor was appointed in the year 1998. In 1998 Soeharto stepped down and the transitional government was in office. It is likely that the nature of these appointments was different from those made during the Soeharto period. The resulting sample contains to 129 districts.

Table 1 shows some descriptive statistics. Panel A provides measures of electoral support for Golkar (Soeharto’s party) and PDI-P, the main opposition party.²² During the Soeharto regime, Golkar obtained on average 69.3% of the votes, while PDI only obtained 15%. These data confirm the supremacy of Golkar during the Soeharto regime. During the democratic period, this situation changed: Golkar obtained 25% of the votes in the 1999 and 2004 elections. PDI-P was the most voted party in the 1999 election with a vote share of 32%.

¹⁹For instance, Burgess et al. (2012) show how district splitting in Indonesia lead to increases in illegal logging and deforestation.

²⁰Appendix Table 2 shows that the timing of appointment of the last Soeharto mayor does not predict the likelihood of a district splitting. In particular a dummy for whether the district experienced a split is regressed on the year of appointment of the last Soeharto mayor or on dummies for the different appointment years. None of the coefficients is statistically significant, with and without controls.

²¹It is clear from the table that the frequency of appointments is different across years. According to Malley (2003) this pattern originated during the Soeharto regime. The reason is that two years after election years new provincial governors were appointed, and in the following 3 years district mayors were appointed. This could explain why the mode of district appointments happened in 1995, three years after the 1992 election. Elections during the Soeharto regime took place every 5 years since 1977.

²²PDI-P’s acronym during the Soeharto regime was PDI and was changed to PDI-P after democratization.

Panel B presents some statistics about mayors and the administrative structure. On average, the last Soeharto mayor was appointed in 1995 and the first democratic mayor on 2000. The second-to-last Soeharto mayor was appointed in 1990. This suggests that, on average, there was compliance of the rule of letting the last Soeharto mayor finish their five year term before replacing them with new mayors. To further investigate this, Appendix Table 3 provides the cross tabulation of appointment dates of the last Soeharto mayor and the first democratic mayor. As we can see, most Soeharto mayors fulfil their five year term before being replaced by new mayors.²³

The last row of Panel B in Table 1 provides information on the number of jurisdictions. Our baseline estimating sample contains 129 districts, each containing, on average, 147 villages.

Panel C presents information on the demographic characteristics of districts in the year 1993. Each district contains, on average 541,000 inhabitants, 62% of whom are employed in agriculture. The number of number of primary schools per 1,000 households was 5.4, the number of health care centers was 0.03 per 1,000 households, and only 20% of villages had access to safe drinking water.

5 Empirical Strategy

In this section we describe our main empirical strategy and we provide support for the identification assumptions. Figure 1 provides a graphical representation of the timing of events that help us to illustrate the empirical strategy. Until 1999, district mayors were appointed by the Soeharto regime or the transitional government. These mayors were allowed to finish their five year terms before being replaced by indirectly elected leaders. Therefore, these mayors could be in office during the period corresponding to the shaded area (i.e., until 2003). In our main empirical regression we will use the timing of appointment of the last Soeharto mayor as an exogenous determinant of the length of time the Soeharto mayor stayed in office during the democratic transition. The possible appointment dates of the last Soeharto mayor ranged from 1994 to 1998. Districts where the last Soeharto mayor was appointed in 1994 have a predicted replacement of the mayor by 1999. Hence, this set of districts had the lowest exposure to a Soeharto mayor during the democratic transition. In contrast, in districts where the last Soeharto mayor was appointed in 1997, the expected

²³There are some instances of early terminations and some events of possible extensions of the five year term. This could reflect measurement error on the appointment dates of mayors. Another possibility is that the timing of election of the democratic mayors was, to some extent, influenced by political factors determined during the democratic transition. Because of the possible endogeneity of the timing of replacement of the Soeharto mayors, we rely on the *appointment* timing for our main empirical strategy.

turnover of district mayors is expected for the year 2002. This set of districts had a Soeharto mayor in office for the first three years of the democratic transition, hence, having the longest exposure to Soeharto mayors during this critical period.²⁴

Figure 1 also records the time when our two main outcomes of interest were measured: electoral results of the 2004 national-level election and the economic governance survey collected in 2007 and 2011. Note that, at the time of measurement of these outcomes, the term of all Soeharto mayors had already expired. Hence, the effects we estimate cannot be accounted for by the direct presence of the Soeharto mayors in office.^{25,26}

Our main empirical specification is the following:

$$y_{jdp} = \beta_0 + \beta_1 App_{1995_{dp}} + \beta_2 App_{1996_{dp}} + \beta_3 App_{1997_{dp}} + \delta_p + X'_{dp}\gamma + Z'_{jdp}\lambda + \varepsilon_{jdp} \quad (1)$$

where y_{jdp} is the outcome of interest for subject j , which is located in district d of province p . In the specification where the outcome is the electoral result the unit of observation is the village level, hence, the j subindex corresponds to villages. In our results on local governance, the unit of observation is the firm, hence, the j subindex corresponds to firms. $App_{1995_{dp}}$ is a dummy that takes value one if the last mayor of the Soeharto regime in district d of province p was appointed in the year 1995. $App_{1996_{dp}}$ and $App_{1997_{dp}}$ are defined similarly. The omitted category corresponds to districts where the last Soeharto mayor was appointed in 1994. δ_p are province fixed effects and X'_{dp} are district-level controls, in particular, the vote shares of Golkar and PDI-P in the 1992 election of the Soeharto regime. Z'_{jdp} include subject-level controls. In our village-level specification, these are controls for the size of the village, while in the firm-level specifications, these are controls for the size and age of the firm.^{27,28}

The main coefficient of interest is β_3 . This coefficient captures the difference in the dependent variable between districts that had the highest and the lowest exposure to a Soeharto mayor during the democratic transition, conditional on controls.

We also estimate the following related specification:

²⁴As described in the previous section, districts where the Soeharto mayor was appointed in 1998 are excluded from the sample because the nature of these appointments is likely to be different.

²⁵Soeharto mayors were allowed to run for office during the democratic period, but the reelection rates were very low. About 12% of them were reelected. See section 8 for further discussion.

²⁶Note that, the longer the presence of the Soeharto mayor during the transition, the shorter the length of tenure of the subsequent mayor at any point in time. This points out at an alternative mechanism to our results. In section 8 we provide evidence that these alternative mechanism can not explain the results. We use the fact that the appointment timing of the last Soeharto mayor is not fully collinear with the election timing of subsequent leaders, to control for the latter factor.

²⁷Note that, despite the regressions are estimated at the village or firm level the coefficients β_1, β_2 , and β_3 are estimated out of district-level variation.

²⁸When the dependent variable is recorded in the Economic Governance Survey, we add dummy for the wave when the survey was conducted.

$$y_{jdp} = \alpha_0 + \alpha_1 YearApp_{dp} + \delta_p + X'_{dp}\gamma + Z'_{jdp}\lambda + \varepsilon_{jdp} \quad (2)$$

where $YearApp_{dp}$ corresponds to the year of appointment of the last Soeharto mayor and the controls are defined as before. While equation (1) represents a more flexible, specification (2) provides a more direct interpretation of the magnitude of the effect: coefficient α_1 captures the effect on the dependent variable of each additional year that a Soeharto mayor was in power during the democratic transition.

The main identifying assumption behind these empirical strategies is that the timing of the appointment of the Soeharto mayor is as good as randomly assigned, conditional on controls. In particular, we require that the timing of appointment is exogenous to underlying political factors that could have affected the quality of local governance or political preferences during the democratic transition. We find that this assumption is plausible for several reasons. First, the timing of appointment of the last Soeharto mayor precedes the fall of the Soeharto regime and the end of the Soeharto regime was quite unexpected. Hence, it is unlikely that the Soeharto administration anticipated the political factors relevant during the transition and that this affected the timing of appointments. Second, the timing of appointments was not decided by the central government. Appointments were regularly scheduled for the years when the term of the previous mayor expired. The figure of the district mayor existed during the colonial period. Hence, any accumulation of early terminations, for health or other reasons, could have generated variation in the timing of appointments in the long-run.

To verify the exogeneity of the appointment timing, we conduct a number of empirical tests. Table 2 presents the results. Panel A explores whether the support for Soeharto predicts the timing of appointment. The dependent variable in column 1 is the year of appointment of the last Soeharto mayor. In columns 2 to 4 the dependent variable is a dummy variable that takes value one for the corresponding year and value zero for year 1994, the omitted category in our main empirical specification (1). The main regressors correspond to the vote shares that Golkar obtained in different parliamentary elections that took place during the Soeharto regime.²⁹ Only one out of 20 coefficients is statistically significant. Furthermore, the tests of joint significance displayed at the bottom of each panel indicate that support for Golkar is not a significant predictor of the timing of appointment.

In Panel B, we investigate if the term length of the second-to-last Soeharto mayor predict the appointment timing. The results suggest that this is not the case. This result supports

²⁹Despite the elections during the Soeharto regime were heavily controlled, scholars argue that the variation in vote shares across districts is still informative about the relative strength of support for Soeharto in the different regions (King, 2003; Haris, 2004). All regressions include province fixed effects as controls.

the hypothesis that the different years of appointment of the last Soeharto mayor were no different in terms of the political environment.³⁰

Panel C investigates whether the levels of public good provision and other district characteristics in 1993 are associated with appointment timing. These measures are contained in the village census, which is the unit of observation of the regressions. Most of the regressors are not statistically significant, suggesting that district characteristics are not correlated with appointment timing. Furthermore the tests of joint significance also support the lack of correlation.

Overall, the evidence supports the assumption that the timing of appointment of the last Soeharto mayor is orthogonal to district characteristics and to underlying political support for different parties.³¹

6 Results

Our first set of results examine the effects of exposure to a Soeharto mayor during the democratic transition on the support for Soeharto party in the 2004 Parliamentary election. Columns 1 to 4 of Table 3 presents the results when the dependent variable is a village-level dummy that takes value 1 for villages where Golkar was the most voted party. This information was recorded in the 2005 Village Census. Columns 1 and 2 report the results of estimating specification (2) without and with controls for support for Golkar at baseline, respectively. The inclusion of these controls does not affect the estimated coefficient, which is consistent with the assumption that the appointment timing is as good as randomly assigned. The results suggest that each additional year that the Soeharto mayors spent in office during the democratic transition increased the likelihood of Golkar victory in the villages by 4.8 percentage points. This represents a 14% increase over the sample mean of the dependent variable, which is a substantial effect.

Columns 3 and 4 relax the assumption of a linear treatment effect by regressing the outcome of interests on dummies for the different years of appointment. The point estimates exhibit an increasing pattern, suggesting that support for Golkar in 2004 was stronger the

³⁰Note that there are no available data on the demographic characteristics of the last Soeharto mayor that could also be used for this type of analysis.

³¹Appendix Table 4 presents an alternative specification for the endogeneity test. We conduct a number of pairwise correlations where the dependent variable is defined by each column and the regressor of interest is defined by each row. All specifications include province fixed effects. Out of 56 pairwise correlations performed, only 5 of them are statistically significant, which represent 9% of the regressions estimated. Hence, the significant coefficients could be generated by chance. If anything it seems that districts with an appointment in 1995 have stronger support for Golkar relative to districts with appointments in 1994. To mitigate the possible concern of support for Golkar affecting appointment timing, we will add controls for support for Golkar at baseline in our main specifications.

longer the Suharto mayor stayed in office. Only the coefficient on the 1997 appointment is statistically significant. The results suggest that villages in districts where the Soeharto mayor was appointed in 1997 are 18 percentage points more likely to support Golkar.

Columns 5 and 6 use an alternative measure of support for Golkar, by using the district-level vote shares obtained in the 2004 election. Districts with the longest exposure to a Suharto mayor during the transition exhibit an increase of 5 percentage points in the vote share of Golkar. This effect represents a 24% increase over the sample mean.

These results suggest that districts where the Soeharto mayor was in office for longer during the democratic transition exhibit stronger support for Soeharto's party. This result is specially remarkable given that, at baseline—i.e., before any of the appointments were made—there were no differences across districts on support for Soeharto's party.³²

The next set of results examines measures of the quality of local governance included in the Economic Governance Survey. In this survey, firm managers were asked some questions about the quality of the business environment and the ease of conducting business. We focus on a set of questions that specifically asked firm managers to evaluate the performance of the mayor or the frequency of extortion by political groups.³³

Table 4 presents the first set of results where we study the prevalence of illegal payments across districts. In particular, the survey asked firm managers whether they had to pay fees to the military, police, local government officials or criminal organizations to protect their own security. The first row of the table indicates that illegal payments are more frequently collected by security forces: 14% of firms report having to pay illegal fees to the military or police. This percentage is lower for fees collected by local governments, 4%,³⁴ or by thugs and criminal organizations, 5%.

Column 1 shows that each additional year of the democratic transition where a Soeharto mayor was in power increases the likelihood of illegal payments to the military or the police by 2 percentage points, which represents a 14% increase over the sample mean. Column 2 explores the results by year of appointment of the Soeharto mayor. The magnitude of the coefficients is similar for districts with appointments in 1995 and 1996 and it is higher for districts with appointments in 1997. The coefficient on the 1997 is statically significant at the 5% level and suggests that in districts with the longest exposure to Soeharto mayors during the transition firms have a 7.5 percentage points higher probability of having to pay illegal fees to the security forces.

³²These results were presented in Table 2.

³³See section 10.2 in the online appendix for further details on the survey and on the construction of the outcome variables.

³⁴Note that the question explicitly asked firms for illegal fees to protect the physical integrity of the firm. These fees may not include other types of rent extraction by local officials, such as bribes to speed up administrative processes.

Columns 3 and 4 explore the prevalence of illegal payments to local government officials. While the results are weaker in terms of statistical significance, we observe an increasing pattern of the coefficients for districts with longer exposure to Soeharto mayors during the democratic transition. Districts with the longest exposure experience a 2.7 percentage points higher likelihood of having to pay illegal fees to government officials. The results on fees extracted by thugs or criminal organizations, presented in columns 5 and 6, also exhibit an increasing pattern of the coefficients. However, they are imprecisely estimated and not statistically significant.

In Table 5 we examine the effects of exposure to Soeharto mayors during the transition on perceptions of corruption and quality of performance of the incumbent district mayor.³⁵ We focus on the estimation of econometric specification (1). The questions are coded as 1 if the respondent agrees with a negative statement about the performance of the mayor. The questions that lead to significant results are those in columns 1, 3, and 5. The results suggest that in districts that appointed the last Soeharto mayor in 1997, firm managers are more likely to think that the incumbent mayor does not have a good understanding of business needs, has a poor handling of corruption committed by his or her staff, and is not a respected figure. The coefficients are small and insignificant for districts with appointments in 1995 and 1996. In column 6 we evaluate the joint significance of the five outcomes by constructing a standardized average of the dependent variables (see Kling et. al. (2007)). The results suggest that districts with the longest exposure to Soeharto mayors have 0.2 standard deviations higher likelihood of having a bad opinion about the incumbent mayor.³⁶

Overall, these results suggest that in districts where a Soeharto mayor was in office for longer during the democratic transition, firm owners have a worse opinion on the quality of management of the district mayor and are more likely to face illegal payment requests by the military or police. These results are observed more than five years after the term of all Soeharto mayors expired. The results are consistent with the hypothesis that allowing Soeharto mayors to stay in office for longer during the critical period of the democratic transition facilitated elite capture, which lead to worse governance outcomes in the medium-run.

³⁵This survey was conducted in 2007 and 2011, when the Soeharto mayors were no longer in office.

³⁶Note that the results in Table 5 restrict the sample to firm owners that responded to the five questions. This allows an easier comparison across outcomes and with the standardized index in column 6. The results are similar when not restricting to a common sample.

7 Mechanisms

In this section we provide additional supporting evidence for the mechanism described in our conceptual framework, section 3. In that section, we argue that mayors appointed in 1997 were able to serve more years in office during the democratic transition than mayors appointed in 1994. As a result, mayors appointed in 1997 made higher investments in *de facto* power, which lead to higher elite capture in those districts. Higher elite capture translated into lower political competition and worse governance outcomes in the medium and long run.

Appendix Table 3 provides evidence of the first part of the statement, by showing that, in general, there was compliance with the 5 year term length. This means that mayors appointed in 1997 were in office for longer during the democratic transition relative to mayors appointed in 1994.

Next, we explore the reelection rates of Soeharto mayors during the democratic period. Appendix Table 5 shows that the reelection rates of Soeharto mayors were low for all years of appointment: on average 12% of the Soeharto mayors were reelected. This suggests that the mechanisms of elite capture did not operate through the political survival of the mayor himself/herself. However, it is still possible that the investments in *de facto* power facilitated the election of other individuals of the same elite.

Finally, we explore the effects on political competition. We collect information on the electoral results of the first direct election for district mayor that took place in each district. The introduction of direct elections, which began in 2005, was perceived as a democratic deepening reform that had the objective of opening the political arena to candidates outside the main parties and dominant elites. Table 6 provides the results on different measures. We estimate our baseline empirical specification (1). Since the direct elections take place in different points in time, we include as controls dummies for the different years when these elections took place. In columns 1 to 3 we examine the effects on the type of candidates. Column 1 suggests that districts where the Soeharto mayor was appointed in 1997 have one fewer candidate contesting the elections. However, the results are imprecisely estimated. Column 2 focuses on the number of independent candidates. In this case, we observe a statistically significant pattern of declining coefficients, suggesting that districts with longer exposure to Soeharto mayors during the transition have fewer independent candidates contesting the elections. Column 3 shows similar effects when the dependent variable is the share of independent candidates. Columns 4 to 6, explore the effects on other measures of political competition. The results are imprecisely estimated and not significant. However, the point estimates are suggestive that, if anything, districts with longest exposure to Soeharto had lower turnout, lower level of political competition, and higher incumbency advantage.

8 Robustness Checks

We have so far interpreted our results as supportive of the hypothesis that districts where Soeharto mayors were in office for longer during the democratic transition experienced higher investments in *de facto* power by the Soeharto elites, and this led to lower quality of local governance in the medium run. In this section we explore the validity of competing explanations for our empirical results.

A potential alternative explanation is that our results are driven by the timing of subsequent district level political reforms. In particular, starting in 2005 direct elections for district mayors were introduced. Direct elections took place when the five-year term of the previous mayor expired. However, in 2004 there was a moratorium on district elections and around 40% of districts held elections in the year 2005.³⁷

To explore the validity of this concern we control for whether the district introduced elections early (i.e., in 2005). The timing of introduction of direct elections is not perfectly collinear with the appointment timing of the last Soeharto mayor because the introduction of direct elections was delayed in some districts.

Appendix Table 6 explores the robustness of our results on the electoral support for Golkar in the 2004 election. We estimate the same specification shown in Table 3 (with full controls) and include as an additional control a dummy variable that takes value one for districts that held direct elections in 2005. Note that the dependent variable is determined before the introduction of direct elections. Hence, our specifications test whether the anticipation of an early direct election could have affected the voting behavior in the 2004 general election. The results are robust to this specification and the dummy for early direct elections is statistically insignificant.

Appendix Table 7 and 8 evaluate the robustness on our results on the Economic Governance firm-level survey. Both sets of results show that the results are robust to including a dummy for early direct elections and the direct election dummy is, in general, statistically insignificant.

Overall, these results seem to indicate that our empirical results can not be accounted by the timing of subsequent electoral reforms.

³⁷Once the term of the Soeharto mayors expired, local parliaments constituted after the 1999 election indirectly elected new mayors. Once the term of the indirect mayors expired, direct elections for mayors took place. See Mukherjee (2014) for further details.

9 Discussion

This paper provides evidence that districts that had a Soeharto mayor in office for longer during the democratic transition exhibit worse governance outcomes more than a decade after their appointment. In particular, we show that firm owners tend to have a worse opinion of the district mayor in office, and are more likely to be forced to pay illegal fees to the military and police. Districts with the longest exposure to a Soeharto's mayor during the democratic transition are also more likely to support Soeharto's party in parliamentary elections.

These results are consistent with the hypothesis that districts where the Soeharto mayors stayed in office for longer during the democratic transition invested more in *de facto* power. We also provide a conceptual framework that illustrates this mechanism. This framework is built on the idea that national-level democratization empowered citizens to contest power at the local level. In order to counteract this, Soeharto mayors tried to retain local political control by investing in *de facto* power, for instance, by hiring political brokers that would obtain votes for their party or by co-opting the military. The main prediction of the model is that districts that have more periods to undertake these investments, end up investing more.

Our empirical analysis exploits a particular feature of the Indonesian transition that generated exogenous variation on how long a district mayor appointed by the Soeharto regime remained in office during the democratic transition. Consistent with the predictions of the model, we observe that districts with the longest exposure to a Soeharto mayor exhibit worse governance outcomes.

Our interpretation of these results is that in those districts, the higher investments in *de facto* power lead to higher elite capture and lower political competition. We provide additional supportive evidence for this mechanism, by showing that districts with the longest exposure to Soeharto mayors during the democratic transition exhibit lower political competition in district-level elections.

Overall, this paper provides evidence that the way in which a democratic transition comes about may have important effects on the quality of local governance in the medium run. In particular, the presence of agents of the old regime during the democratic transition, can facilitate elite capture and lead to worse quality local democracy. Expediting the process of leader turnover at the local level, or imposing temporary additional checks and balances at the local level, might be beneficial measures for new democracies.

REFERENCES

- Acemoglu, Daron, and James A. Robinson.** 2008. “Persistence of Power, Elites, and Institutions.” *American Economic Review* 98 (1): 267–293.
- Acemoglu, Daron, and James A. Robinson.** 2012. *Why Nations Fail. The Origins of Power, Prosperity, and Poverty*. New York: Crown Publishers.
- Acemoglu, Daron, James A. Robinson, and Rafael J. Santos-Villagran.** 2010. “The monopoly of violence: Evidence from Colombia.” *Journal of the European Economic Association, Forthcoming*.
- Acemoglu, Daron, Davide Ticchi, and Andrea Vindigni.** 2010. “A theory of military dictatorships.” *American Economic Journal: Macroeconomics* 2 (1): 1–42.
- Acemoglu, Daron, Davide Ticchi, and Andrea Vindigni.** 2011. “Emergence and persistence of inefficient states.” *Journal of European Economic Association* 9 (2): 177–208.
- Albertus, Michael and Victor Menaldo.** 2014. “Gaming Democracy: Elite Dominance During Transition and the Prospects for Redistribution.” *British Journal of Political Science* 44 (3): 575 – 603.
- Anderson, Siwan, Patrick Francois, and Ashok Kotwal.** 2015. “Clientelism in Indian Villages.” *American Economic Review* 105 (6): 1780–1816.
- Antlöv, Hans.** 2004. “National elections, local issues: The 1997 and 1999 national elections in a village on Java.” In *Elections in Indonesia: The New Order and beyond*, edited by Hans Antlöv and Sven Cederroth. London: RoutledgeCurzon.
- Anwar, Dewi Fortuna.** 2010. “The Habibie Presidency: Catapulting Towards Reform.” In *Soeharto’s New Order and its Legacy*, edited by Edward Aspinall and Greg Fealy. Canberra: ANU E Press.
- Baland, Jean-Marie, and James A. Robinson.** 2008. “Land and power: Theory and evidence from Chile.” *American Economic Review* 98 (5): 1737–65.
- Bardhan, Pranab K. and Dilip Mookherjee.** 2000. “Capture and Governance at Local and National Levels,” *American Economic Review*, 90(2): 135–139.
- BPS, Badan Pusat Statistik (Central Bureau of Statistics, Indonesia)** 1993, 2005. “Village Potential Statistics (PODES)” Badan Pusat Statistik. Direktorat Diseminasi Statistik (Directorate of dissemination of statistics) (accessed November 27th, 2009).
- Brender, Adi, and Allan Drazen.** 2005. Political Budget Cycles in New versus Established Democracies. *Journal of Monetary Economics* 52 (7): 127195.
- Burgess, Robin, Matthew Hansen, Benjamin Olken, Peter Potapov, and Stefanie Sieber.** 2012. “The Political Economy of Deforestation in the Tropics.” *Quarterly Journal of Economics*, 127 (4), pp 1707-1754.

Cribb, Robert and Audrey Kahin. 2004. “Historical Dictionary of Indonesia.” Lanham, Maryland: Scarecrow Press, Inc.

Di Palma, Giuseppe. 1990. *To Craft Democracies*; Berkeley: University of California Press.

Finan, Frederico, and Laura Schechter. 2012. “Vote-buying and reciprocity.” *Econometrica*, 80 (2): 863–82.

Fitriani, Fitria, Bert Hofman and Kai Kaiser. 2005. “Unity in Diversity? The Creation of New Local Governments in a Decentralising Indonesia.” *Bulletin of Indonesian Economic Studies*, 41 (1): 57–79.

Grossman, Gene and Elhanan Helpman. 1996. “Electoral Competition and Special Interests Politics,” *Review of Economic Studies*, 63: 265–286.

Hadiz, Verdi R. 2010. “Localising Power in Post-Authoritarian Indonesia: A Southeast Asia Perspective.” Stanford, California: Stanford University Press.

Haris, Syamsuddin. 2004. “General elections under the New Order.” In *Elections in Indonesia: The New Order and beyond*, edited by Hans Antlöv and Sven Cederroth. London: RoutledgeCurzon.

Hofman, Bert, and Kai Kaiser. 2006. “Decentralization, democratic transition, and local governance in Indonesia.” In *Decentralization and local governance in developing countries*, edited by Pranab Bardhan and Dilip Mookherjee. Cambridge, MA: MIT Press.

Honna, Jun. 2010. “The Legacy of the New Order Military in Local Politics: West, Central and East Java.” In *Soeharto’s New Order and its Legacy*, edited by Edward Aspinall and Greg Fealy. Canberra: ANU E Press.

Huntington, Samuel. 1991. *The Third Wave: Democratization in the Late Twentieth Century*; Norman, OK: University of Oklahoma Press.

Keefer, Philip. 2007. Clientelism, Credibility, and the Policy Choices of Young Democracies. *American Journal of Political Science* 51: 804-21.

King, Dwight Y. 2003. *Half-hearted reform: Electoral institutions and the struggle for democracy in Indonesia: Dataset* Westport, CN: Praeger (accessed February 7th, 2009).

Kling, Jeffrey R., Jeffrey B. Liebman, and Lawrence F. Katz. 2007. “Experimental Analysis of Neighborhood Effects.” *Econometrica*, 75 (1): 83–119.

Komisi Pemilihan Umum (KPU) (Indonesian National Election Commission) 1999 “District Level Electoral Results in the General elections of 1999” Komisi Pemilihan Umum (Indonesian National Election Commission) (accessed July 1st, 2009).

Law No.5 of year 1979 on Village Government. [Undang-Undang No.5 Tahun 1979].

Law No.22 of year 1999 on Regional Governance. [Undang-Undang No.22 Tahun

1999].

Law No.34 of year 2004 on Regional Governance. [Undang-Undang No.34 Tahun 2004].

Linz, Juan J. and Alfred Stepan. 1996. *Problems of Democratic Transitions and Consolidation: Southern Europe, South America, and Post Communist Europe*; Baltimore: Johns Hopkins University Press.

Malley, Michael S. 2003. "New Rules, Old Structures, and the Limits of Democratic Decentralisation," In *Local Power and Politics in Indonesia*, edited by Edward Aspinall and Greg Fealy. Singapore: Institute of Southeast Asian Studies, pp. 102–116.

Martinez-Bravo, Monica. 2014. "The Role of Local Officials in New Democracies: Evidence from Indonesia." *American Economic Review* 104 (4): 1244–87.

Martinez-Bravo, Monica and Priya Mukherjee. 2014. "Political Histories of Mayors in Indonesia: Dataset" Data from Indonesia Officials Directories, Cornell University.

Mietzner, Marcus. 2006. *The Politics of Military Reform in Post-Soeharto Indonesia; Elite Conflict, Nationalism and Institutional Resistance*. Washington D.C.: East-West Center Washington.

Mietzner, Marcus. 2010. "Indonesia's Direct Elections: Empowering the Electorate or Entrenching the New Order Oligarchy." In *Soeharto's New Order and its Legacy*, edited by Edward Aspinall and Greg Fealy. Canberra: ANU E Press.

Moricz, Sara and Fredrik Sjöholm. 2014. "The Effect of Elections on Economic Growth: Results from a Natural Experiment in Indonesia." *Lund University Working Paper No. 2014:15*.

Mukherjee, Priya. 2014. "Policy Choices under Appointments and Elections: Evidence from a Natural Experiment in Indonesia," *Cornell University Mimeo*.

Niessen, Nicole. 1999. *Municipal government in Indonesia: Policy, law, and practice of decentralization and urban spatial planning*. Leiden, NL: Research School CNWS, School of Asian, African, and Amerindian Studies, Universiteit Leiden.

O'Donnell, Guillermo, and Philippe C. Schmitter.1986. *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies*; Baltimore: Johns Hopkins University Press.

Robinson, James A. and Ragnar Torvik. 2005. "White Elephants," *Journal of Public Economics* 89: 197-210.

Schiller, Jim. 2009. "Electing district heads in Indonesia: Democratic deepening or elite entrenchment?" In *Deepening democracy in Indonesia? Direct elections for local leaders*, edited by Maribeth Erb and Priyambudi Sulistiyanto. Singapore: Institute of Southeast Asian Studies.

Skoufias, Emmanuel, Ambar Narayan, Basab Dasgupta, and Kai Kaiser. 2011. “Electoral accountability, fiscal decentralization, and service delivery in Indonesia: Dataset” Policy Research Working Paper No. 5614 (accessed January 9th, 2012).

The Economist. 1997. “Special Report on Indonesia,” *The Economist*, July 24th.

Valsecchi, Michele. 2013. “Local Elections and Corruption during Democratization: Evidence from Indonesia,” *University of Gothenburg Mimeo*.

Figure 1: Timeline of Events and Outcome Measurement

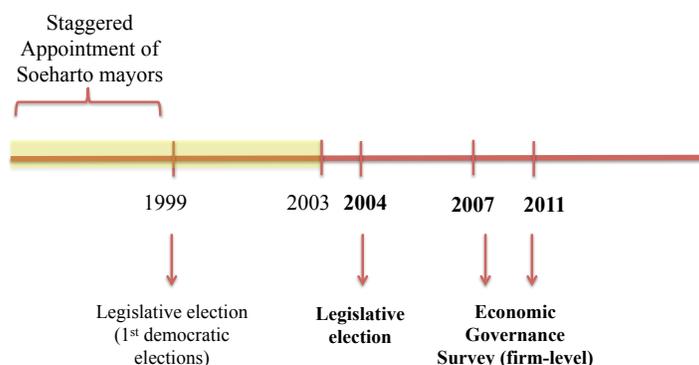


Table 1. Summary Statistics

	Observations/ Num of Districts	Mean	Std. Dev.
Panel A. Measures of Political Attitudes			
Vote Share of Golkar during Suharto regime	129	69.30	14.37
Vote Share of Golkar 1999 Election	129	25.15	18.24
Vote Share of Golkar 2004 Election	129	21.62	10.55
Vote Share of PDI during Suharto regime	129	15.25	9.42
Vote Share of PDI-P 1999 Election	129	32.43	18.84
Vote Share of PDI-P 2004 Election	129	18.86	13.62
Panel B. Mayors and Administrative Structure			
Year of Appointment of the 2nd to Last Suharto Mayor	127	1990.14	1.10
Year of Appointment of the Last Suharto Mayor	129	1995.16	0.88
Year of Appointment of First Democratic Mayor	129	2000.16	0.97
Number of villages per district	129	147.99	122.81
Panel C. Demographic Characteristics			
Population in the District	129	541,237	449,284
Percentage of Rural Households	126	62.21	27.57
Number of Primary Schools*	126	5.27	2.17
Number of Health Care Centers [§]	126	0.03	0.06
Access Safe Drinking Water	126	0.19	0.25

Notes: * per 1,000 households

Table 2. Endogeneity Test

	Dependent Variables:			
	Year of Appointment	Dummy appointment year		
		1995	1996	1997
	(1)	(2)	(3)	(4)
<i>Dep. Var. Mean</i>	<i>1995.16</i>	<i>0.70</i>	<i>0.44</i>	<i>0.32</i>
Panel A. Measures of Political Support				
Golkar Vote Share 1971	0.000 (0.008)	-0.005 (0.006)	0.005 (0.009)	-0.003 (0.009)
Golkar Vote Share 1977	-0.009 (0.017)	-0.000 (0.013)	-0.027* (0.015)	-0.012 (0.024)
Golkar Vote Share 1982	0.016 (0.019)	0.008 (0.013)	0.035 (0.023)	0.020 (0.027)
Golkar Vote Share 1987	0.008 (0.022)	0.011 (0.017)	-0.002 (0.027)	0.013 (0.020)
Golkar Vote Share 1992	-0.006 (0.011)	-0.003 (0.008)	-0.011 (0.018)	-0.006 (0.017)
Observations	128	93	50	41
R-squared	0.275	0.231	0.514	0.486
F-stat	0.606	1.443	1.606	0.730
p-value	0.695	0.220	0.189	0.609
Panel B. Term Length 2nd to Last Suharto Mayor				
Term Length Previous Mayor	-0.075 (0.136)	0.063 (0.091)	-0.099 (0.162)	-0.045 (0.126)
Observations	127	91	51	41
R-squared	0.264	0.172	0.444	0.414
Panel C. Geographic Characteristics & Public Good Provision				
Percentage rural HH	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)
Log Population	0.060 (0.058)	-0.049 (0.037)	-0.005 (0.060)	0.108** (0.050)
Distance to the Subdistrict	0.001 (0.001)	0.000 (0.001)	0.002 (0.002)	0.001 (0.002)
Number of Primary Schools [§]	0.002 (0.003)	-0.001 (0.001)	-0.005 (0.008)	0.012 (0.007)
Number of Health Care Centers [§]	-0.005 (0.039)	-0.040 (0.026)	0.008 (0.032)	-0.019 (0.031)
Access Safe Drinking Water	0.010 (0.079)	0.009 (0.044)	0.037 (0.085)	-0.054 (0.055)
Toilet in the Village	-0.066 (0.083)	-0.003 (0.057)	-0.082 (0.079)	-0.063 (0.086)
Public Transportation	-0.015 (0.064)	0.055 (0.038)	-0.007 (0.047)	-0.059 (0.061)
Observations	19,062	13,879	6,833	4,594
R-squared	0.174	0.264	0.399	0.351
F-stat	0.374	1.053	0.485	0.957
p-value	0.933	0.403	0.861	0.482
Number of Clusters	126	92	49	41

Notes: Panel A and B show robust standard errors in parenthesis. Panel C shows clustered standard errors at the district level in parenthesis. All regressions include province fixed effects as controls. § Number of facilities per 1,000 households.

Table 3. Effects of Soeharto's Mayors on Village-Level Electoral Outcomes

	Dependent Variables:					
	Dummy Golkar Most Voted Party in the Village				District-Level Vote Share of Golkar	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dep. Var. Mean</i>	0.330	0.330	0.330	0.330	21.62	21.62
Year of Appointment	0.048*** (0.016)	0.048*** (0.015)				
Appointment 1995			0.036 (0.026)	0.024 (0.023)	-0.136 (1.712)	-0.712 (1.690)
Appointment 1996			0.053 (0.044)	0.054 (0.042)	1.139 (2.181)	1.245 (2.093)
Appointment 1997			0.185*** (0.044)	0.176*** (0.037)	5.404** (2.243)	4.730** (1.833)
Controls of electoral results in 1992		✓		✓		✓
Observations	21,826	21,826	21,826	21,826	129	129
R-squared	0.266	0.271	0.267	0.272	0.694	0.718
Number of Districts	129	129	129	129	129	129

Notes: Columns 1 to 4 show standard errors clustered at the district level in parenthesis. Columns 5 and 6 show robust standard errors in parenthesis. In columns 1 to 4 the unit of observation is the village level, while in columns 5 and 6 the unit of observation is the district level. All specification include province fixed effects as regressors. Even columns also include the district-level vote shares that Golkar and PDI obtained in the 1992 elections. Columns 2 and 4 also add a quartic in log population of the village as controls.

Table 4. Effects of Soeharto's Mayors on Illegal Payments to the Police and Military

	Dependent Variables:					
	Dummy for Illegal Payments Made to:					
	the army or police		local government officials		thugs and criminal organizations	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mean Dep. Var.</i>	0.14	0.14	0.04	0.04	0.05	0.05
Year of Appointment of the Last Soeharto Mayor	0.021** (0.009)		0.008* (0.005)		0.009 (0.007)	
Appointment 1995		0.039** (0.016)		0.005 (0.009)		0.011 (0.012)
Appointment 1996		0.036 (0.024)		0.012 (0.014)		0.025 (0.018)
Appointment 1997		0.075** (0.034)		0.027* (0.015)		0.022 (0.027)
Observations	8,147	8,147	8,147	8,147	8,147	8,147
R-squared	0.047	0.048	0.022	0.022	0.031	0.031
Number of Clusters	127	127	127	127	127	127

Notes: Standard errors clustered at the district level in parenthesis. The unit of observation is the firm. All specification include a set of province fixed effects, the district-level vote shares that Golkar and PDI obtained in the 1992 elections, dummies for the number of years of experience of the firm, and dummies for intervals of number of employees, and a dummy for the wave of the EGI survey.

Table 5. Effects of Soeharto's Mayors on Quality of Governance

	Dependent Variables: Agreement with "The mayor..."					z-score
	... does not have a good understanding of business needs	... does not place government officials based on merit	... does not have a firm handling of corruption committed by his/her staff	... engages on corruption for personal benefit	... is not a respected and exemplary figure	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mean Dep. Var.</i>	0.29	0.31	0.32	0.34	0.19	0.00
Appointment 1995	0.014 (0.029)	0.008 (0.037)	-0.007 (0.037)	-0.039 (0.041)	0.047 (0.031)	0.014 (0.061)
Appointment 1996	0.012 (0.049)	-0.022 (0.049)	0.014 (0.049)	0.005 (0.049)	0.019 (0.045)	0.014 (0.082)
Appointment 1997	0.087* (0.047)	0.021 (0.045)	0.170** (0.066)	0.070 (0.084)	0.134* (0.077)	0.217* (0.125)
Observations	4,848	4,848	4,848	4,848	4,848	4,848
R-squared	0.057	0.051	0.059	0.047	0.042	0.069
Number of Clusters	127	127	127	127	127	127

Notes: Standard errors clustered at the district level in parenthesis. The unit of observation is the firm. All specification include a set of province fixed effects, the district-level vote shares that Golkar and PDI obtained in the 1992 elections, dummies for the number of years of experience of the firm, dummies for intervals of number of employees, and a dummy for the wave of the EGI survey.

Table 6. Effects of Soeharto's Mayors on Political Competition

	Dependent Variables:					
	Number of Candidates	Number of Independent Candidates	Share of Independent Candidates (col 1/col2)	Turnout	Herfindahl Index of Political Competition	Incumbent Mayor Wins Election
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mean Dep. Var.</i>	3.82	0.10	0.02	0.84	0.61	0.51
Appointment 1995	-0.159 (0.298)	-0.235* (0.127)	-0.038* (0.019)	-0.065* (0.039)	-0.011 (0.036)	-0.089 (0.146)
Appointment 1996	0.580 (0.378)	-0.355* (0.181)	-0.060** (0.029)	-0.006 (0.064)	0.061 (0.064)	-0.147 (0.193)
Appointment 1997	-0.933 (0.693)	-0.522** (0.263)	-0.091** (0.044)	-0.050 (0.066)	-0.020 (0.065)	0.278 (0.238)
Year of Direct Election Fixed	✓	✓	✓	✓	✓	✓
Observations	122	122	122	117	114	122
R-squared	0.463	0.600	0.622	0.356	0.324	0.199

Notes: Robust Standard errors in parenthesis. The unit of observation is the district. All specification include a set of province fixed effects, the district-level vote shares that Golkar and PDI obtained in the 1992 elections, and dummies for the year when the direct election for the mayor took place.

10 Appendix [For Online Publication Only]

10.1 A Model of Local Elite Capture

Next, we present a theoretical model that formalizes the mechanism that, we argue, is behind our empirical results. This model is an adaptation of the one presented in Acemoglu and Robinson (2008). We implement a number of modifications to their setting to adapt it to the Indonesian context. Furthermore, we impose a number of assumptions that make the exposition easier and help us focus on the main result of interest. We refer the interested reader to Acemoglu and Robinson (2008) for a thorough description of the interactions between the agents of the model and for additional insights and results.

Consider a society made up of an elite and citizens. The country is divided in equally-sized districts, each with a population of M elites. The elite and citizens regularly contest power in each district. The group that wins power makes decisions over economic institutions. We denote by $s_t \in \{E, C\}$ the group that is in power, with E denoting that the elite is in power and C denoting that citizens are in power. When the elite is in power, they choose their most beneficial set of economic institutions obtaining payoff R_e . When the citizens are in power the set of economic institutions that citizens choose leads to a payoff of R_c for the elite. We define $\Delta R = R_e - R_c > 0$ as the difference between these two payments.

The game starts as a dictatorship and the elite is in power in all districts. However, for reasons exogenous to the local power dynamics, the country becomes democratic. Local level elections are scheduled in all districts. We assume that the group that wins the local election remains in power forever, and as a result, the subsequent regime becomes an absorbing state.³⁸

The electoral equilibrium is determined by the relative level of political power of both groups. Political power is defined by the interaction of *de jure* political power and *de facto* political power. Since citizens are the most numerous group, democratization grants citizens with a baseline amount of *de jure* political power equal to $\underline{p} > 0$. The overall level of political power that citizens have at the time of the local election is:

$$P_t^C = \underline{p} + \omega_t$$

where ω_t is a random variable distributed according to $F[\cdot]$.

The elite does not have *de jure* political power, but can invest in *de facto* political power. For instance, they can hire political brokers to buy votes, or they can organize a local paramilitary group. θ_{it} denotes the level of investment that elite member i undertakes in

³⁸Our static framework is in sharp contrast to the Acemoglu and Robinson (2008) which is fully dynamic. The result we focus on is also present in a dynamic version of the model.

period t . However, such investments come at a cost $C(\theta_{it})$ where $C(\cdot)$ is an increasing and convex function that satisfies $C'(0) = 0$.

There are two types of districts. In the first set of districts the elites have one period to invest in *de facto* power, while in the second set of districts the elites have two periods to invest in *de facto* power. While in the first type of districts *de facto* power investments can only be undertaken in period t , in the second type of districts the investments are possible in periods t and $t-1$.

The level of political power of the elite at the time of the election in the one-period type of districts is given by:

$$P_t^{E1} = \sum_{i \in \mathcal{M}} \theta_{it}$$

while the level of political power in the two-period type of districts is:

$$P_t^{E2} = \sum_{i \in \mathcal{M}} \theta_{it-1} + \sum_{i \in \mathcal{M}} \theta_{it}$$

Next, we analyze the optimal investment decision of a particular elite member. This individual takes as given the investments in *de facto* power of every other elite member that we denote by θ^{E1} in one-period type of districts. Likewise, in two-period districts the elite member takes as given investment levels of θ_1^{E2} and θ_2^{E2} in the first and second period, respectively. The elite in one-period districts retains political power if $P_t^{E1} \geq P_t^C$. The probability of this event is given by the following expression:

$$p^{E1}(\theta_{it}, \theta^{E1}) = F[(M-1)\theta^{E1} + \theta_{it} - \underline{p}] \quad (3)$$

Similarly, in two-period districts the probability that the elite remains in power is given by:

$$p^{E2}(\theta_{it}, \theta_{it-1}, \theta_1^{E2}, \theta_2^{E2}) = F[(M-1)\theta_1^{E2} + (M-1)\theta_2^{E2} + \theta_{it} + \theta_{it-1} - \underline{p}] \quad (4)$$

The elite member in one-period district will choose θ_{it} to maximize the following expression

$$\begin{aligned} \max_{\theta_{it}} \{ & p^{E1}(\theta_{it}, \theta^{E1})R_e + (1 - p^{E1}(\theta_{it}, \theta^{E1}))R_c - C(\theta_{it}) \} \\ \max_{\theta_{it}} \{ & F[(M-1)\theta^{E1} + \theta_{it} - \underline{p}]\Delta R + R_c - C(\theta_{it}) \} \end{aligned}$$

where the last expression uses (3) to substitute for the probability of the elite remaining in power.

Hence, the optimal elite investment θ_{it}^* is given by

$$f[(M-1)\theta^{E1} + \theta_{it}^* - \underline{p}]\Delta R = C'(\theta_{it}^*) \quad (5)$$

Since all elite members are identical, in equilibrium they will choose the same level of *de facto* power, i.e., $\theta_{it}^* = \theta^{E1}$. Given this, expression (5) simplifies to

$$f[M\theta^{*E1} - \underline{p}]\Delta R = C'(\theta^{*E1}) \quad (6)$$

Expression (6) uniquely defines the equilibrium level of effort θ^{*E1} in the range of values that satisfies the second order conditions.³⁹ In this range of values the right hand side of expression (6) is increasing in θ , while the left hand side is decreasing in θ .

We now examine the optimal investments decisions of an elite member in a two-period district. The elite member solves the following problem

$$\max_{\theta_{it}, \theta_{it-1}} \{F[(M-1)\theta_1^{E2} + (M-1)\theta_2^{E2} + \theta_{it} + \theta_{it-1} - \underline{p}]\Delta R + R_c - C(\theta_{it}) - C(\theta_{it-1})\}$$

The first order conditions of this maximization problem are:

$$\begin{aligned} f[(M-1)\theta_1^{E2} + (M-1)\theta_2^{E2} + \theta_{it} + \theta_{it-1} - \underline{p}]\Delta R &= C'(\theta_{it}^*) \\ f[(M-1)\theta_1^{E2} + (M-1)\theta_2^{E2} + \theta_{it} + \theta_{it-1} - \underline{p}]\Delta R &= C'(\theta_{it-1}^*) \end{aligned}$$

Once we impose the symmetric equilibrium conditions $\theta_{it-1}^* = \theta_1^{E2}$ and $\theta_{it}^* = \theta_2^{E2}$, it is clear that the elite members will choose the same investment in each of the periods. We denote the per-period optimal level of investment as θ^{*E2}

$$f[2M\theta^{*E2} - \underline{p}]\Delta R = C'(\theta^{*E2}) \quad (7)$$

The comparison of equations (6) and (7), is informative about what type of district will lead to higher investments in *de facto* power.

First, it is easy to show that $\theta^{*E1} > \theta^{*E2}$. One-period districts will invest more *per period* than two-period districts. This result is intuitive since one-period districts find it optimal to compensate their shorter investment window by investing more. To see this note that the $f[M\theta - \underline{p}] > f[2M\theta - \underline{p}]$ for all θ that satisfies the second order conditions (i.e., $\theta > \underline{p}/M$). This is a result of function $f(\cdot)$ being decreasing in this set of values. Hence, necessarily the

³⁹Note that the θ_{it}^* will be a maximum as long as the second order condition is satisfied. This will be the case as long as $\theta_{it}^* > \underline{p} - (M-1)\theta^{E1}$. In equilibrium, this expression becomes $\theta^{*E1} > \underline{p}/M$. We assume this restriction holds.

intersection of the left hand side and the right hand side will take place at a smaller value of θ for equations (7) than for equation (6).

Given this finding, we can also show that the overall investment in *de facto* power across all periods is higher in two-period district than in one-period districts, i.e., $2\theta^{*E2} > \theta^{*E1}$. Given our previous result and the fact that the cost function is convex we have $C'(\theta^{*E1}) > C'(\theta^{*E2})$. Given expressions (6) and (7), this implies that $f[M\theta^{*E1} - p] > f[2M\theta^{*E2} - p]$. Since function $f(\cdot)$ is decreasing in this set of values, we have $2\theta^{*E2} > \theta^{*E1}$, which concludes the proof.

Note that this result is driven by the convexity of the cost function. If we assume a linear cost function, the per-period investment in two-period districts will be exactly half of the per-period investment of one-period districts. This result suggests that, in order for our conceptual framework to predict higher investment in *de facto* power in districts with longer exposures to Soeharto mayors, there needs to exist some time or capacity constraint in the ability to invest in *de facto* power. Nevertheless, we find this assumption entirely plausible. It is very likely that developing a paramilitary group or a network of political brokers requires a considerable amount of time. The nature of these illegal activities makes building a trusting relationship a key aspect for its success, which requires a considerable amount of time.

10.2 Data Appendix

Data on Political Histories of Mayors

The data on mayors was obtained by combining two different data sources. The first dataset corresponds to data collected by the World Bank on the histories of district mayors during the early years of the democratic transition in Indonesia (Skoufias et. al. 2011). This data contain information on 171 mayors whose appointment date was between 1994 and 1998 and on 432 whose appointment date was between 1999 and 2004. We label the first set of mayors as Soeharto-appointees, while we label the latter set of mayors as (indirectly) elected in democracy. In addition to their appointment and expected end-date, the Skoufias dataset also provides information on the names of mayors. For the democratically elected mayors additional information was recorded on their gender, level of education and the number of the legislation where their appointment was passed into law.

Since the Skoufias data only contains information for 56% of the Soeharto-appointed mayors, we complement this data with a novel dataset collected by the authors (Martinez-Bravo and Mukherjee, 2014). In particular, we access Indonesian Official Directories of

Regional representatives located at Cornell University. We digitize information on the names of all district mayors in office for the years 1988 to 2004, with the only exception of year 1999 that we were not able to locate. Using these data we infer the appointment date of the Soeharto mayors missing on Skoufias data, by using the year before a particular mayor starts appearing in the Cornell directories.⁴⁰ Using our own data we complement the Skoufias data with an additional set of 134 Soeharto-appointed mayors. We also obtain information on the second-to-last Soeharto mayors from the Cornell directories

In total we have information on 296 Soeharto-appointed mayors. These corresponds to the universe of district mayors in Indonesia during the Soeharto period with the only exception of the city of Jakarta. Column 2 of Appendix Table 1 shows the number of districts for which we have data, by year of appointment of the last Soeharto mayor.

Construction of the Baseline Dataset

In the 1990s and the 2000s Indonesia experienced an intense process of jurisdictional proliferation, as many districts split into different districts. In 1993 there were 285 districts in Indonesia. By 2007 the number was 459. Since the process of district splitting could generate particular political dynamics that could interact with our estimates, we restrict attention to the 198 districts that did not experienced district splitting throughout this period.

We impose a number of additional restrictions to this data to conduct our analysis. First, we drop from the sample the districts where the last Soeharto mayor was appointed in the year 1998. In 1998 the transitional government of Habibie was conducting the appointments since Soeharto had already stepped down. The nature of these appointments could be substantially different from other years. As a result we omit 62 districts from the analysis.

Next, we drop 7 districts for which we do not have information on electoral results during the Soeharto regime.⁴¹ The proxies for electoral support during the Soeharto period are included as controls in most specifications.

The final sample contains 129. Column 3 of Appendix Table 1 shows the distribution of districts in this baseline sample by year of appointment of the last Soeharto mayor. This baseline data are merged with other datasets that contain different outcome variables. Occasionally the sample size is further reduced because of missing information in the additional datasets used. When this happens we note it in the table notes. Next, we describe in more

⁴⁰We confirm that this procedure is accurate by comparing the two data sources (World Bank and Cornell directories data) for districts where the information is available in both sources. This comparison suggests that mayors start appearing in the directories the year after their appointment, i.e. the year they serve as mayor for the entire year.

⁴¹The districts dropped are Kota Batam, Kota Bitung, Kota Denpasar, Kota Jayapura, Kota Kupang, Kota Mataram, Kota Palu, Lampung Barat.

detail the additional datasets that are merged to our baseline data.

District-Level Electoral Data

Since 1971, district-level parliamentary elections regularly take place in Indonesia. These elections happen simultaneously with national and province-level parliamentary elections. The data on electoral results during the Soeharto period was generously provided by Professor Dwight King, from Northern Illinois University (King (2003)). These data contain the district-level electoral results for the years 1971, 1977, 1982, 1987, and 1992. The district-level electoral results for the years 1999 and 2004 was obtained from the Indonesian National Election Commission (KPU (1999)).

Potensi Desa (Village Census)

We complement our analysis with data from the Potensi Desa (PODES) village census. These data contain a wide variety of measures of village-level public good provision. In addition to this, the 2005 wave of PODES contains information on the ranking of the three most voted parties in the 2004 election. We construct the dependent variable in a similar way. We miss one district of the Baseline sample, Nias in South Sumatra because of being missing from the 2005 wave of PODES.

To verify the endogeneity of the Soeharto mayors' appointment timing we merge our baseline dataset with the 1993 wave of PODES. All the districts provide a match to 1993 PODES except for 7 that do not have information in PODES 1993.⁴²

Economic Governance Survey

We also merge our baseline data with data from the Economic Governance Survey. These data were collected by KPPOD (Regional Autonomy Watch) and the Asia Foundation with the objective of measuring how local governance affected the economic activity of businesses. The survey was conducted in two waves, 2007 and 2011, to a different set of districts.

The firm survey consisted on several questions to firm owners or managers on topics such as ease of obtaining business permits, security of land tenure, local taxes, quality of local infrastructure, degree of security and conflict resolution. First, we focus on questions that elicited the opinion of firm owners about the quality of local governance. More specifically in section 6 (Kapasitas dan Integritas Bupati/Walikota; Capacity and Integrity of Mayors). In these sections questions were in the form of a statement to which respondents had to answer one of the following options: strongly disagree, disagree, agree, strongly agree, refuse

⁴²The districts with missing information in Podes are Halmahera Tengah, Majene, Mamuju, Mamuju Utara, Salatiga, Semarang and Ujung Pandang.

to answer. The dependent variables in Table 5 are obtained from answers to the following statements:

- The mayor has a good understanding of the problems faced by firms.
- The mayor places government officials in the government bureaucracy related to businesses based on work experience and merit.
- The mayor acts firmly against any acts of corruption committed by the staff.
- The mayor engages in corruption for personal benefit.
- The mayor is a respected and exemplary figure.

In particular, the dependent variable is a dummy that takes value 1 if the answer is “disagree” or “strongly disagree”.

Second, we focus our attention to questions that elicited corruption and illegal payments. Section 7 of the survey has the title of Transaction Costs. One of the questions asked firm owners to report illegal payments made to different organization for security purposes. In particular, the questions wording is “Did your company had to pay an extra fee for security in 2007 to organization X?”, where the different options were the police, the military, local government officials, criminal organization (*preman*), or other. The dependent variable of interest takes value 1 if the firm reports having had to pay an illegal fee to either of the listed organizations.

Appendix Table 1. Distribution of Districts
by Appointment Years of the Last Soeharto Mayors

Year of Appointment of the Last Suharto Mayor	Total Number of Districts,	Number of Districts that did not split	Number of Districts, (Baseline Sample)
(1)	(2)	(3)	(4)
1994	49	31	28
1995	90	67	65
1996	46	23	23
1997	25	15	13
1998	85	62	-
Total	295	198	129

Appendix Table 2. Appointment Timing and District Splitting

	Dependent Variable: Dummy for District Split			
	(1)	(2)	(3)	(4)
<i>Dep. Var. Mean</i>	0.36	0.36	0.36	0.36
Year of Appointment	0.047 (0.038)	0.007 (0.034)		
Appointment 1995			-0.130 (0.087)	-0.093 (0.075)
Appointment 1996			0.109 (0.104)	0.028 (0.088)
Appointment 1997			0.043 (0.127)	-0.037 (0.111)
Controls: Electoral results 1992 and Province Fixed Effects		✓		✓
Observations	203	203	203	203
R-squared	0.008	0.493	0.041	0.502

Notes: Robust standard errors in parenthesis. The unit of observation is the number of districts in existence in 1997. The dependent variable takes value one if the district subsequently splitted.

Appendix Table 3. Cross Tabulation of District by Appointment Year of Last Soeharto Mayor and First Democratic Mayor

		Number of Districts by Year of Election of the First Democratic Mayor						
		1999	2000	2001	2002	2003	2004	Total
Number of Districts by Year of Appointment of the Last Soeharto Mayor	1994	16	15	0	0	0	0	31
	1995	10	51	4	0	1	1	67
	1996	4	5	14	0	0	0	23
	1997	0	3	0	7	5	0	15
	1998	5	1	1	5	47	3	62
	Total	35	75	19	12	53	4	198

Notes: Sample restricted to districts according to their 1997 that subsequently did not split.

Appendix Table 4. Endogeneity Check. Pairwise Correlations.

	Dependent Variables:			
	Year of Appointment	Dummy appointment year		
		1995	1996	1997
(1)	(2)	(3)	(4)	
<i>Dep. Var. Mean</i>	1995.16	0.70	0.44	0.32
Panel A. Measures of Political Support				
Golkar Vote Share 1971	0.005 (0.005)	0.003 (0.003)	0.006 (0.006)	0.003 (0.006)
Golkar Vote Share 1977	0.007 (0.006)	0.007* (0.004)	0.002 (0.008)	0.008 (0.009)
Golkar Vote Share 1982	0.011* (0.006)	0.009** (0.004)	0.011 (0.009)	0.014 (0.010)
Golkar Vote Share 1987	0.011 (0.008)	0.011** (0.006)	0.009 (0.012)	0.016 (0.011)
Golkar Vote Share 1992	0.006 (0.006)	0.007 (0.004)	0.002 (0.013)	0.011 (0.013)
Observations	128	93	50	41
Panel B. Term Length 2nd to Last Suharto Mayor				
Term Length Previous Mayor	-0.075 (0.136)	0.063 (0.091)	-0.099 (0.162)	-0.045 (0.126)
Observations	127	91	51	41
Panel C. Geographic Characteristics & Public Good Provision				
Percentage rural HH	0.016 (0.132)	0.098 (0.108)	0.065 (0.158)	0.055 -0.117
Log Population	0.044 (0.052)	-0.050 (0.038)	-0.011 (0.068)	0.066 (0.044)
Distance to the Subdistrict	0.001 (0.001)	0.001 (0.001)	0.003 (0.002)	0.002 (0.002)
Number of Primary Schools [§]	0.001 (0.003)	0.000 (0.002)	-0.004 (0.009)	0.007 (0.006)
Number of Health Care Centers [§]	0.009 (0.045)	-0.059* (0.033)	-0.003 (0.037)	0.000 (0.038)
Access Safe Drinking Water	0.009 (0.086)	-0.032 (0.047)	0.003 (0.107)	-0.060 (0.059)
Toilet in the Village	-0.074 (0.086)	0.015 (0.061)	-0.075 (0.081)	-0.062 (0.094)
Public Transportation	-0.004 (0.063)	0.044 (0.039)	-0.009 (0.049)	-0.042 (0.059)
Observations	19,335	14,064	6,965	4,682
Number of Clusters	129	93	51	41

Notes: Panel A and B show robust standard errors in parenthesis. Panel C shows clustered standard errors at the district level in parenthesis. Each coefficient corresponds to a bivariate regression where the dependent variable is defined by the column heading and the regressor is defined by each row. All regressions include province fixed effects as controls. The number of districts and observations can vary by specification because missing information on the corresponding regressor. § Number of facilities per 1,000 households.

Appendix Table 5. Reelection Rates of Soeharto's Mayors.

Year of Appointment of the Last Suharto Mayor	Number of Mayors by Appointment Date, (Baseline Sample)	Number of which reelected	Fraction of Mayors reelected (col 3/col2)
(1)	(2)	(3)	(4)
1994	28	2	0.07
1995	65	8	0.12
1996	23	2	0.09
1997	13	2	0.15
1998	58	8	0.14
Total	187	22	0.12

Appendix Table 6. Effects of Soeharto's Mayors on 2004 Electoral Results. Robustness to Timing of Subsequent Political Reforms.

	Dependent Variables:		
	Dummy Golkar Most Voted Party in the Village		District-Level Vote Share of Golkar
	(1)	(2)	(3)
<i>Dep. Var. Mean</i>	<i>0.319</i>	<i>0.319</i>	<i>21.62</i>
Year of Appointment	0.045*** (0.014)		
Appointment 1995		0.024 (0.023)	-0.735 (1.684)
Appointment 1996		0.048 (0.039)	1.305 (2.184)
Appointment 1997		0.167*** (0.041)	4.863** (2.059)
Early Direct Mayor Election	-0.016 (0.033)	-0.014 (0.031)	0.226 (1.320)
Observations	21,826	21,826	129
R-squared	0.271	0.273	0.718
Number of Districts	129	129	129

Notes: Columns 1 and 2 show standard errors clustered at the district level in parenthesis. Column 3 shows robust standard errors in parenthesis. In Columns 1 and 2 the unit of observation is the village level, while in Column 3 the unit of observation is the district level. All specifications include province fixed effects as regressors. All columns also include the district-level vote shares that Golkar and PDI obtained in the 1992 elections. Columns 1 and 2 also add a quartic in log population of the village as controls

Appendix Table 7. Effects of Soeharto's Mayors on Illegal Payments. Robustness to Timing of Subsequent Political Reforms

	Dependent Variables:					
	Dummy for Illegal Payments Made to:					
	the army or police		local government officials		thugs and criminal organizations	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mean Dep. Var.</i>	0.14	0.14	0.04	0.04	0.05	0.05
Year of Appointment of the Last Soeharto Mayor	0.020** (0.010)		0.007 (0.005)		0.012 (0.008)	
Appointment 1995		0.040** (0.015)		0.006 (0.009)		0.010 (0.012)
Appointment 1996		0.034 (0.025)		0.011 (0.015)		0.028 (0.019)
Appointment 1997		0.069* (0.036)		0.026 (0.017)		0.030 (0.028)
Early Direct Mayor Election	-0.006 (0.016)	-0.010 (0.017)	-0.002 (0.014)	-0.002 (0.015)	0.014 (0.014)	0.014 (0.013)
Observations	8,147	8,147	8,147	8,147	8,147	8,147
R-squared	0.047	0.048	0.022	0.022	0.031	0.031
Number of Clusters	127	127	127	127	127	127

Notes: Standard errors clustered at the district level. The unit of observation is the firm. All specification include a set of province fixed effects, the district-level vote shares that Golkar and PDI obtained in the 1992 elections, dummies for the number of years of experience of the firm, dummies for intervals of number of employees, and a dummy for the wave of the EGI survey.

Appendix Table 8. Effects of Soeharto's Mayors on Quality of Governance. Robustness to Timing of Subsequent Political Reforms

	Dependent Variables: Agreement with "The mayor..."					z-score
	... does not have a good understanding of business needs	... does not place government officials based on merit	... does not have a firm handling of corruption committed by his/her staff	... engages on corruption for personal benefit	... is not a respected and exemplary figure	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mean Dep. Var.</i>	0.29	0.31	0.32	0.34	0.19	0.00
Appointment 1995	0.017 (0.030)	0.005 (0.037)	-0.010 (0.038)	-0.042 (0.043)	0.040 (0.031)	0.008 (0.063)
Appointment 1996	0.002 (0.047)	-0.013 (0.047)	0.025 (0.052)	0.014 (0.051)	0.040 (0.044)	0.033 (0.081)
Appointment 1997	0.069 (0.056)	0.037 (0.047)	0.190*** (0.072)	0.085 (0.091)	0.172** (0.085)	0.251* (0.139)
Early Direct Mayor Election	-0.030 (0.036)	0.026 (0.034)	0.035 (0.036)	0.026 (0.044)	0.065* (0.037)	0.057 (0.067)
Observations	4,848	4,848	4,848	4,848	4,848	4,848
R-squared	0.057	0.051	0.060	0.048	0.045	0.069
Number of Clusters	127	127	127	127	127	127

Notes: Standard errors clustered at the district level. The unit of observation is the firm. All specification include a set of province fixed effects, the district-level vote shares that Golkar and PDI obtained in the 1992 elections, dummies for the number of years of experience of the firm, dummies for intervals of number of employees, and a dummy for the wave of the EGI survey.