

# 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 legacies of non-democratic regimes can affect the quality of governance in new democracies. However, the empirical evidence is scarce. This paper exploits a natural experiment that took place in the Indonesian democratic transition: the Soeharto-regime mayors were allowed to finish their five year terms before being replaced by new leaders. Since mayors' political cycles were not synchronized, this event generated exogenous variation in how long the agents of the old regime remained in their position during the democratic transition. The results suggest that districts which had an old-regime mayor for longer exhibit worse governance outcomes, lower public good provision, and greater electoral support for Soeharto's party. These effects persist several years after the old-regime mayors are no longer in office. The results are consistent with the hypothesis that slower transitions towards democracy allow the old-regime elites to find ways of capturing 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.<sup>1</sup>

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.<sup>2</sup>

The idea that nondemocratic legacies can facilitate elite capture in weakly institutionalized polities has been previously described in the political science literature<sup>3</sup> and more recently formalized in a growing theoretical literature in economics.<sup>4</sup> However, the empirical evidence on the presence of these legacies or on their effects is scarce. Furthermore, we have a limited understanding of how the influence of these legacies depends on the characteristics of the democratic transition.

In this paper, we exploit a natural experiment that took place in the Indonesian transition to democracy 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 appointments 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 are formed and new institutions are developed. In this sense, the early stages of a democratic period represent a critical juncture, along the lines described by Acemoglu and

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<sup>1</sup>See Brender and Drazen (2005) and Keefer (2007).

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

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

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

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 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 level of political competition and, therefore, the quality of governance 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 back to the Dutch colonial period and has historically complied with the five year term length. Any accumulation of occasional early terminations throughout history could generate a staggered pattern of appointment across districts.<sup>5</sup> We provide evidence that the level of public good provision and socio-economic conditions at baseline do not predict the appointment timing of Soeharto 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.

In our main empirical specification, we use indicator variables for the different appointment years of the last Soeharto mayor as the main regressors of interest. The later the appointment date, the higher the exposure of Soeharto mayors during the democratic transition. 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 experience worse governance outcomes and lower provision of public goods. First, we document that there is a greater prevalence of extortion and rent seeking in these districts: firms are more likely to report that they have to pay illegal fees to the military and police to protect their own security.<sup>6</sup> Second, we provide evidence that these districts have lower provision of public goods, in particular in education. All these results persist several years after the Soeharto mayors are 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

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<sup>5</sup>Indonesia has a tradition of staggered timing of elections and appointments at different levels, such as provinces and villages.

<sup>6</sup>The military and the police were key actors in the elite capture strategies of Soeharto mayors. See Section 2 for further details.

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 presence of Soeharto mayors in office during the democratic transition facilitated elite capture. In order to better characterize the mechanism that, we argue, is behind these results, we develop a conceptual framework based on the theoretical model of 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. In particular, we assume that allowing old-regime elites to stay in power for longer during the democratic transition gives them more periods to invest in *de facto* power. With this framework we can show that allowing elites to stay in power for longer leads to higher levels of investment in *de facto* power in equilibrium. These higher investments translate into higher elite capture, lower political competition and, consequently, into worse governance outcomes.

Next, we provide further evidence to support the validity of this specific channel. First, we explore the persistence of Soeharto elites in power in the medium run, 7 to 12 years after the fall of Soeharto. We do this by using novel data collected by the authors of this paper that codes the history of occupations of Indonesian mayors and vice-mayors. We classify mayors as connected to Soeharto if they worked in the bureaucracy or military during the Soeharto regime. These groups were closely linked to the Soeharto administration as we discuss in further detail below. We provide evidence that districts where Soeharto mayors were in office for longer during the transition, have a 30% higher probability of having mayors linked to the Soeharto regime in the medium run. Second, we explore the effects on the extent of political competition. 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 0.6 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. We also provide evidence that the political and economic conditions in which the last Soeharto mayors were appointed were similar. This mitigates the concern that the Soeharto regime changed the nature of appointments over time. Similarly, we also show that differential conditions under which subsequent mayors were elected cannot account for our pattern of 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 interests 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.<sup>7,8</sup>

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 the threat thereof. This literature has had a number of important theoretical and empirical contributions. Some examples are Grossman and Helpman (1996), Bardhan and Mookherjee (2000), Dal Bó and Di Tella (2003), Acemoglu, Robinson and Santos-Villagran (2013), Robinson and Torvik (2005), Baland and Robinson (2008), Finan and Schechter (2012), Alatas et al. (2013), Anderson, et al. (2015). Our paper contributes to this literature

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<sup>7</sup>More 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.

<sup>8</sup>This 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.

by exploiting a natural experiment that generated exogenous variation on opportunities for elite capture across districts. Our paper has also close connections with the literature that has studied the determinants of political dynasties and how institutional reforms affect the continuity in power of these elites (Dal Bó, Dal Bó, Snyder (2009), Querubin (2011)).<sup>9</sup> We add to this literature by studying how the way in which the democratic transition comes about could affect the extent of elite persistence during the democratic period.

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 qualitative. Some examples are Malley (2003), Hadiz (2010), Honna (2010), Mietzener (2010), Poczter and Pepinsky (2015).<sup>10</sup>

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 National-Level 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.<sup>11</sup> However, the regime was far from 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.

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<sup>9</sup>In the context of Indonesia, political dynasties—members of a same family or clan holding political power—have been historically less prevalent than in other parts of South East Asia. Instead, scholars have characterised members of the elite post-Soeharto as those linked to the military and the bureaucracy (Antlöv and Eko 2012).

<sup>10</sup>There 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. (2011), 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.

<sup>11</sup>In particular, legislative elections during the Soeharto regime took place in 1971, 1977, 1982, 1987, 1992, and 1997.

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 East Asian financial crises led to mass public demonstrations against the regime. However, 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.<sup>12</sup>

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, 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.<sup>13</sup>

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 five years.<sup>14</sup>

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

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<sup>12</sup>An 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 Soeharto, however it also described how the same debate had been taking place in Indonesia for a very long time. See Section 8.1 for further discussion.

<sup>13</sup>It 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 led 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.

<sup>14</sup>After 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 post-Soeharto that was not a powerful figure during the Soeharto regime.

characterized the Indonesian transition allowed many of the elites associated with the Soeharto regime to retain much of their influence over the policymaking process (Robinson and Hadiz (2004), Winters (2014)). The elites linked to the Soeharto regime were mainly members of the bureaucracy, the military, and those individuals associated with Golkar, Soeharto’s party.<sup>15</sup> Some examples of the continued influence of Soeharto elites after democratization are the retained political power of the military: 38 seats in the national legislature and 10% of the seats in local legislatures are reserved for the military. Furthermore, 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 into 34 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 colonial period and was typically associated with a considerable amount of power.<sup>16,17</sup> 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 (Hofman and Kaiser (2006)).

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.<sup>18</sup> After democratization, the system was reformed and mayors became

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<sup>15</sup>There is substantial consensus among Indonesian scholars in characterizing elites during the Soeharto regime as those individuals closely connected to the state. For instance, Antlöv and Eko (2012) say “*Political authority in Indonesia is linked to proximity to the state, and not around ruling dynasties, land-holding families or religious institutions as in some other postcolonial countries. The Indonesian state is built up around the bureaucracy.*” (page 6).

<sup>16</sup>In 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 (Niessen (1999), Cribb and Kahin (2004)).

<sup>17</sup>In 1997 there were in Indonesia 296 districts. On average these districts had 500,000 inhabitants. See Section 4 for further description of district characteristics.

<sup>18</sup>More specifically, district parliaments produced a shortlist 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 the tight control of Soeharto’s party, so the list of candidates were always non-controversial candidates with substantial support from the Soeharto government (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 high level of control on the decisions taken in the different regions (Malley (2003)).



indirectly elected by the district legislature. The local legislatures resulting from the 1999 parliamentary election were entitled to elect the mayor according to the rules of proportional representation once the term of the Soeharto-appointed mayor expired. As described above, the fact that Soeharto-appointed mayors were not immediately replaced after the 1999 election, generated variation across districts on the length of time the Soeharto-appointed mayors were in power during the democratic transition.

A few years later, the system of selection of district mayors was further reformed with the introduction of direct elections starting in 2005. The objective of this reform was to further increase the level of accountability of mayors towards citizens (Mietzner (2010)).<sup>19</sup>

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 five years each.

## 2.3 Local Elite Capture in the Post-Soeharto Period

The fall of the Soeharto regime represented a dramatic change in the dynamics of political power at the local level. During the Soeharto regime, all power emanated from the authoritarian and highly centralized Soeharto government. Loyalty and connections to Soeharto were the main determinant of who held power in the different layers of the administration, from the provinces to the villages (Antlöv (2003)). Local power holders were typically members of the bureaucracy or the military. All of these individuals were also members of Golkar, since during the Soeharto regime, bureaucrats had to be registered with the official Golkar party (Antlöv (2003)).

The fall of Soeharto led to an upheaval in the rules of the political game: alignment with the central government or with Golkar, no longer guaranteed retaining power at the local level. Local elites had to design new strategies to ensure their political survival. These strategies typically involved building alliances with new powerful groups at the local level and developing new methods to obtain electoral support at times of elections. Scholars have referred to this phenomenon as the localization of political power in Indonesia (Sidel (2004), Hadiz (2010)).<sup>20</sup>

As described in the previous subsection, local parliaments were entitled to elect new

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<sup>19</sup>The introduction of direct election was also staggered across time since the indirectly elected mayor was allowed to finish their five year term.

<sup>20</sup>Sidel (2004) describes the transformation of power as follows: “*With competitive elections in 1999 came the transfer of state power to those capable of mobilising and capturing votes and thus elected offices. (...) Overall, power was shifted downwards and outwards, from within a centralised bureaucracy firmly rooted in Jakarta to elected members of assemblies in regencies, municipalities, and provinces around the archipelago.*” (page 12).

district mayors as the terms of the Soeharto-appointed mayors expired. During the years leading to these parliamentary elections, local elites mobilized their resources to influence the electoral outcome. The use of bribes and intimidation to buy legislator's votes became an extended practice. For this purpose, elites developed close alliances with the military, police, and criminal organizations, known as *preman* in Indonesia. These organizations were instrumental in the implementation of money politics and intimidation strategies. The instances of intimidation have been, on occasion, quite extreme, including the abduction of members of parliament.<sup>21</sup> Other times, *preman* groups have organized mass mobilizations and riots with the objective of influencing or delaying elections. These same organizations were also the main venues of vote buying and intimidation once direct elections for direct mayors were introduced.

The building of alliances with the military was particularly important in this period. Democratization did not alter the territorial structure of the military. Consequently, members of the military remained at their positions at each level of the administration, from the provinces to the villages. With an authoritarian central government no longer in power, the military could redefine their alliances with new holders of political power at the local level (Honna (2010)). Local elites exerted a great amount of effort in trying to co-opt the local military groups. In addition to holding 10% of the seats in the local legislature, the military could also intimidate opponents and voters. In order to obtain the support of the local military, local elites gave the military implicit consent to conduct their rent-seeking activities, as well as budgetary allocations for projects that benefited the military's interests (Mietzner (2006), Honna (2010)).<sup>22</sup> This *quid-pro-quo* relationship between local elites and the military was sustained through an implicit agreement of mutual trust and cooperation.

Local elites also resorted to other venues to retain their hold on power, including buying out local media (Hadiz (2010)) and hiring a network of supporters (Buehler (2007)).

For most of these activities, those individuals holding power had a comparative advantage in the development of these capture strategies: the district mayor and high-level local bureaucrats had access to important resources that they could assign discretionarily. They could also hire or promote individuals that were loyal to them (Hadiz (2010), Martinez-Bravo (2014)). Furthermore, those individuals holding office might have developed closer connections with members of the military and had access to more resources to co-opt the military.

These strategies of elite capture have resulted in a substantial amount of persistence of

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<sup>21</sup>In the indirect election of the mayor of Medan in North Sumatra, groups with close links to the military abducted PDI-P legislators to force them to vote for the Golkar preferred candidate (Hadiz (2010), p.124).

<sup>22</sup>Post-Soeharto the military has retained a large number of legal businesses and also offers protection to groups engaged in a number of illegal activities, from unofficial logging to human trafficking (Honna (2010)).

the Soeharto elites in local politics. Several scholars have discussed this phenomenon and have provided evidence that a large fraction of district mayors elected in the post-Soeharto period are retired members of the military or members of the bureaucracy, groups closely linked to the Soeharto regime (Malley (2003), Buehler (2007), Mietzner (2010)). While, these elites have occasionally changed party affiliation, Golkar continued to be the main party of Soeharto-era elites, specially during the early stages of the democratic transition (Hadiz (2010)).

However, most Indonesian scholars argue that the degree of elite capture is heterogenous across districts. Anecdotal evidence supports that in some areas corrupt district mayors have been ousted from power in favor of more accountable mayors. In the next section, we discuss how the differential incentives that Soeharto mayors faced to invest in elite capture strategies during the democratic transition could account for the differences in the prevalence of elite capture across districts.

### 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 recruit a network of political brokers that can buy votes on their behalf.

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 fact that the per-period investment in *de facto* power is 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.

## Mapping to the Indonesian Context

The above conceptual framework was designed to match specific features of the Indonesian democratic transition. For instance, the staggered replacement of Soeharto mayors generated variation in the amount of time that mayors had available before they faced elections. As described in the background section, Soeharto mayors used this time to develop different strategies of elite capture. These strategies can also be understood as investments in *de facto* power. For instance, Soeharto elites could make a deal with the local military to obtain their support in exchange of budgetary allocations or implicit permission to engage in rent-seeking activities. Another investment in *de facto* power, could correspond to the hiring of a network of political brokers that would buy votes at time of elections or would intimidate opponents. These tasks were typically conducted by criminal organizations—*preman*—or by loyal individuals hired in the government administration.

The model assumes that these investments in *de facto* power are costly and that the cost function is increasing and convex. As a result the elite prefers to spread the investment over multiple periods. The elite capture strategies described in the previous paragraph are likely to be subject to this type of cost structure since undertaking them required time or were prohibitively costly to implement in a short notice. First, establishing a relational contract with the military probably required a substantial level of trust between the local elites and the military. Although the players were likely to have known each other for a long time, the political scenario that emerged after the fall of Soeharto was completely new. Hence, it is plausible that reestablishing mutual trust required time.<sup>23</sup> Similarly, the construction of a

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<sup>23</sup>After the fall of Soeharto, local officials and other political agents changed their alliances based on their individual calculation (Honna (2010), Martinez-Bravo (2014)). It is likely that both the military and local

network of political brokers needed time to identify suitable candidates and to develop the necessary trusting relationship. Furthermore, it is likely that the more time the Soeharto elites had to invest in *de facto* power, the stronger the alliances with these groups, and the more effective the overall strategy of elite capture.<sup>24</sup>

The model assumes that elites only invest in *de facto* power after democratization. The reason is intuitive: only when the elites face real contestation of power from citizens, they do have incentives to undertake costly investments in *de facto* power. These features seem to match well the Indonesian context: during the Soeharto regime, local elites could persist in power by being loyal to Soeharto. Therefore, local elites had low incentives to undertake costly investments. In contrast, the localization of power that resulted from democratization required local elites to invest in establishing new alliances with local powerful groups and to deter local opponents. Furthermore, democratization also changed the optimal electoral manipulation strategies at times of elections. During the Soeharto regime, there was no possibility that Soeharto's party was going to lose the elections. Given this, few voters had incentives to oppose Soeharto in the polls and, consequently, massive implementations of vote buying schemes were not necessary. With democratization, vote buying had become a more extended practice (Antlöv (2004)). All these suggests that the investments in *de facto* power realized during the early stages of the democratic transition are a fundamental determinant of the extent of elite capture in the following years. Furthermore, it suggests that relatively small differences in the number of years to undertake these investments could substantially affect whether the overall elite capture strategy was successful or not.

To sum up, the conceptual framework presented in this section predicts that districts where the Soeharto mayors had more time to invest in *de facto* power during the democratic transition invested more. Consequently, there was more elite capture in those districts, which led to worse governance outcomes and lower political competition. In the rest of the paper we will evaluate the validity of this prediction using empirical evidence from the Indonesian democratic transition.

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elites wanted to learn the outcome of these changes of alliances before engaging, or fully trusting, a relational contract.

<sup>24</sup>Local elites also enhanced their influence in politics through buying out the media, offering bribes to members of parliament and engaging in vote buying. It is possible that being in office for a longer period of time allowed Soeharto mayors to extract additional resources in order to engage in these money politics activities.

## 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. (2011)). 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. These 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 University’s library. In total, we have complete information on mayors’ political histories since the last Soeharto mayor for 295 districts.<sup>25</sup>

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, also known as PODES (BPS (1993)).

Our outcome data come from different 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, conducted in 2007 and 2011 by the non-governmental organization, KPPOD and the Asia Foundation. In this survey, a large number of firm managers across Indonesia were interviewed to gather information on the difficulties they faced when conducting their businesses. In particular, the survey asked them if they had had to make illegal payments to several organizations to protect their own security, therefore, providing a useful measure of extortion. 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. Third, we combined different waves of the village census to obtain consistently measured indicators of public good provision, such as the number of schools, number of doctors, and access to safe drinking water. We also use several other data sources to explore the underlying mechanisms and to conduct a number of robustness checks. We describe these

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<sup>25</sup>This 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 information on the appointment timing of the second-to-last Soeharto mayor.

datasets later in the text as they become relevant. For a comprehensive description of the data sources see Section 10.2 in the Online Appendix.

## 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.<sup>26</sup> 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.<sup>27</sup>

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. Soeharto stepped down in 1998 and the transitional government took office. It is likely that the nature of the mayoral appointments that took place in 1998 was different from those made during the Soeharto period.<sup>28</sup> The resulting sample contains 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.<sup>29</sup> 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% and 22% of the votes in the 1999 and

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<sup>26</sup>For instance, Burgess et al. (2012) show how district splitting in Indonesia lead to increases in illegal logging and deforestation. Bazzi and Gudgeon (2015) find that district splitting has effects on the prevalence of conflict.

<sup>27</sup>Appendix 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. The coefficients are not statistically significant, with the exception of the coefficient on the 1995 appointment dummy of column 3.

<sup>28</sup>See Section 8.1 for further discussion on the sequence of events related to the fall of the Soeharto regime.

<sup>29</sup>PDI-P's acronym during the Soeharto regime was PDI and was changed to PDI-P after democratization.

2004 elections, respectively. PDI-P was the most voted party in the 1999 election with a vote share of 32%.

Panel B presents some statistics about mayors and the administrative structure of Indonesia. On average, the second-to-last Soeharto mayor was appointed in 1990, the last Soeharto mayor was appointed in 1995 and the first democratic mayor on 2000. 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.<sup>30</sup>

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, 149 villages.

Panel C presents information on district characteristics and public good provision in the year 1993. Each district contained, on average 550,000 inhabitants. Households had access to some basic public goods. For instance, the number of facilities per 1,000 households was 5.3 for primary schools, 1.2 for high schools, and 0.04 for primary health centers. Households also had access to a few health workers: 0.84 doctors and 3.85 midwives per 1,000 households. However, 85% of villages still used traditional birth attendants as health providers. In terms of access to basic services, 20% of villages had access to safe drinking water, and only 3% had toilets in the village. In contrast, most villages had a system of garbage disposal through the use of bins (71%) and had a road wide enough for a four-wheel vehicle to pass throughout the year (95%).<sup>31</sup>

## 5 Empirical Strategy

In this section, we describe our main empirical strategy and 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 term 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

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<sup>30</sup>There 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 in our main empirical strategy.

<sup>31</sup>See Section 10.2 in the Online Appendix for further information on these variables.



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 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.<sup>32</sup>

Figure 1 also records the time when two of our main outcomes of interest were measured: electoral results of the 2004 national-level election and the economic governance survey collected in 2007 and 2011. Our public good provision outcomes are measured for several years between 2003 and 2011.<sup>33</sup> 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.<sup>34</sup>

Our first empirical specification is the following:

$$y_{jdh} = \alpha_0 + \alpha_1 YearApp_d + \delta_h + X'_d\gamma + Z'_j\lambda + \varepsilon_{jdh} \quad (1)$$

where  $y_{jdh}$  is the outcome of interest for subject  $j$ , located in district  $d$  in island  $h$ . In the specification where the outcome is the electoral result or the level of public good provision the unit of observation is the village level, hence, subindex  $j$  corresponds to villages. In our results on local governance, the unit of observation is the firm, hence, subindex  $j$  corresponds to firms.  $YearApp_d$  is the year of appointment of the last Soeharto mayor in district  $d$ .  $\delta_h$  are island fixed effects.<sup>35</sup>  $X'_d$  are district-level controls, in particular, the vote shares of Golkar and PDI in the 1992 election of the Soeharto regime.  $Z'_j$  include subject-level controls. In our village-level specification, these are controls for the size of the village, while in the firm-level

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<sup>32</sup>As 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.

<sup>33</sup>In particular, for the years 2003, 2005, 2008, 2011 (not shown in Figure 1). In some specifications we also use pre-treatment measures of public good provision. In particular, as measured in years 1986, 1990, and 1993.

<sup>34</sup>Soeharto 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.

<sup>35</sup>There are seven main island groups in Indonesia: Java and Bali, Kalimantan, Maluku, Nusa Tenggara, Papua, Sulawesi, and Sumatra. Focusing on within-island variation mitigates the concern that underlying heterogeneity in unobservable characteristics across the vast territory of Indonesia could confound some of our effects.

specifications, these are controls for the size and age of the firm.<sup>36</sup>

$YearApp_d$  is our main regressor of interest. The higher the value of the appointment year, the longer the expected time that the last Soeharto mayor remains in power during the democratic transition. Therefore, we expect to find  $\alpha_1 < 0$  when the dependent variable is a measure of quality of governance or public good provision.

We also estimate a second specification that relaxes the linearity assumption of the treatment effect:

$$y_{jdh} = \beta_0 + \beta_1 App\_1995_d + \beta_2 App\_1996_d + \beta_3 App\_1997_d + \delta_h + X'_d \gamma + Z'_j \lambda + \varepsilon_{jdh} \quad (2)$$

where  $App\_1995_d$  is a dummy that takes value one if the last mayor of the Soeharto regime in district  $d$  was appointed in year 1995.  $App\_1996_d$  and  $App\_1997_d$  are defined analogously. The omitted category corresponds to districts where the last Soeharto mayor was appointed in 1994. The remaining variables are defined as in (1).

This second specification allows for more flexible effects of the different appointment years on outcomes. When the dependent variable is a measure of quality of governance or public good provision, we expect the coefficients  $\beta_1, \beta_2, \beta_3$  to be negative and increasing in magnitude.  $\beta_3$  is the coefficient of greatest interest, since it 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.

The main identifying assumption is that the timing of appointment of the last Soeharto mayors 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 public good provision during the democratic transition and beyond. 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 district mayor position already existed during the Dutch 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

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<sup>36</sup>When the dependent variable is recorded in the Economic Governance Survey, we add a dummy for the wave when the survey was conducted (i.e., 2007 or 2011).

tests that we report in Table 2. The table presents a number of pairwise correlations where the dependent variable corresponds to the year of appointment of the last Soeharto mayor and the regressor of interest is defined by each row. We measure the regressors at baseline, i.e., before the appointment of the last Soeharto mayors. All specifications include island fixed effects as controls. Column 1 reports the point estimate, column 2 the standard error and column 3 the standardized beta coefficient, in order to facilitate the comparison across results. In Panel A we explore whether the support for Soeharto’s party predicts the timing of appointment. The regressors correspond to the vote shares that Golkar obtained in different parliamentary elections that took place during the Soeharto regime.<sup>37</sup> As we can see, none of the correlations is significant suggesting that political factors did not determine the appointment calendar during the Soeharto regime.

In Panel B we explore if the timing of appointment was related to underlying measures of political instability. First, we construct measures of levels of conflict by computing the average number of incidents of conflict, casualties and people injured between 1990 and 1993.<sup>38</sup> The correlations are small in magnitude and statistically insignificant. Second, we investigate if the term length of the second-to-last Soeharto mayor predict the appointment timing. The results indicate that this is not the case, and hence, the appointment timing of the last Soeharto mayor was not preceded by a concentration of early terminations or extensions of the term length of the previous mayors. These results support the assumption that the different years of appointment of the last Soeharto mayor were no different in terms of the political environment.<sup>39</sup>

Panel C investigates whether the baseline levels of public good provision and district characteristics are associated with appointment timing. Regressors in columns 10 to 22 are obtained from the 1993 village census. These correspond to basic public goods in education, health and access to general services. In general, the appointment timing is uncorrelated to the quality of public services across districts. The only exception refers to the likelihood of having traditional birth attendants in the village which is higher for districts with later appointment timings. Rows 23 to 26 of Table 2 examine whether the underlying level of

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<sup>37</sup>Despite 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)). Furthermore, there was substantial variation in vote shares across districts. For instance, in the year 1987, Soeharto’s party vote shares ranged from 35% to 99%.

<sup>38</sup>The conflict data is obtained from the UNSFIR dataset. These data records instances of large-scale conflict between 1990 and 2003 as reported in provincial newspapers in 14 provinces of Indonesia. These 14 provinces are those with highest underlying conflict. In order to not to alter the estimating sample, we assume there was no large-scale conflict in the provinces not covered by UNSFIR. The results are robust to restricting the sample to those provinces covered by the UNSFIR dataset. Since conflict events are sparse for some districts, we compute the average for the pre-appointment period. See Section 10.2 in the Online Appendix for further details.

<sup>39</sup>See Section 8.1 for further discussion.

economic activity in the district is correlated to the appointment timing. Unfortunately, there are no standard measures of economic activity at the district level before 1993, such as district-level GDP. We proxy the level of economic activity by using measures obtained from the district-government budget in the year 1994.<sup>40</sup> In particular we use the logarithm of the value of different transfers that the districts obtain from the central government, revenue from natural resources, and total revenue of the district government. Only revenue from natural resources is marginally statistically significant at the 10% level.

Overall, the results presented in Table 2 support the assumption that appointment timing is orthogonal to the characteristics of districts before these appointments took place, and to the underlying levels of political or economic stability.

## 6 Results

### 6.1 Effects on Electoral Support for Soeharto’s Party

Our first set of results examine the effects of exposure to a Soeharto mayor during the democratic transition on the support for Golkar—Soeharto’s party—in the 2004 Parliamentary election. While there were some instances of party migration during the early stages of the democratic transition, the old-regime elites continued to use Golkar as their main political vehicle. Hence, we would expect that the strategies of elite capture developed during the early stages of the democratic transition were to also benefit Golkar during national-level parliamentary elections.

Columns 1 to 4 of Table 3 presents the results when the dependent variable is a dummy that takes value 1 if Golkar was the most voted party. This information was recorded in the 2005 Village Census and, hence, the unit of observation is the village level. Columns 1 and 2 report the results of estimating econometric specification (1) 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 orthogonal to underlying political preferences. 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 7.2 percentage points. This represents a 23% 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, as described by econometric specification (2). The point estimates exhibit an increasing pattern, suggesting

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<sup>40</sup>These data are obtained from the INDO-DAPOER dataset. The first year when these variables are available is 1994. See Section 10.2 in the Online Appendix for further details.

that support for Golkar in 2004 was stronger the longer the Soeharto mayor stayed in office. The coefficient on the 1997 appointment suggest that villages in districts with the longest exposure to Soeharto during the transition were 20 percentage points more likely to support Golkar.

Columns 5 to 8 use an alternative measure of support for Golkar, by using the district-level vote shares obtained in the 2004 election. The results in column 6 suggest that every additional year a Soeharto mayor was in office increases the vote share of Golkar by 1.6 percentage points, which represents a 7% increase over the sample mean. The flexible specifications in columns 7 and 8 exhibit a clear increasing pattern of the coefficients, while only the 1997 dummy is statistically significant.

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.<sup>41</sup>

## 6.2 Effects on Quality of Governance: Extortion by Armed Groups

In the next set of results, we examine impact of exposure to Soeharto mayors during the transition on the quality of local governance. In particular, we study the prevalence of rent extraction in the private sector, conducted by armed groups. These measures were included in the Economic Governance Survey conducted in 2007 and 2011.<sup>42</sup> The survey asked firm managers whether they had to pay illegal fees to different organizations to protect their own security.

Table 4 presents the results by armed group: columns 1 and 2 report the results for fees paid to the security forces—military or police—, columns 3 and 4 to local government officials, and columns 5 and 6 to thugs or criminal organizations. The first row of the table indicates that illegal payments are more frequently extracted by security forces: 14% of firms report having to pay illegal fees to the military or police, while the percentage is 4% for payments to local government officials and 5% for thugs and criminal organizations.<sup>43</sup>

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 2.4 percentage points, which represents a 17% increase over the sample mean. Column

<sup>41</sup>These results were presented in Table 2.

<sup>42</sup>Each wave of the survey covered approximately half of the districts of Indonesia. Therefore, the data does not allow a panel data analysis. See Section 10.2 in the online appendix for details on the survey and on the construction of the outcome variables.

<sup>43</sup>Note that the question explicitly asked firms for illegal fees paid to protect the physical integrity of the firm. The fees paid to local government officials may not include other types of rent extraction, such as bribes to speed up administrative processes.

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 appointment dummy suggests that in districts with the longest exposure to Soeharto mayors firms have a 7.6 percentage points higher probability of having to pay illegal fees to the security forces.

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. Columns 5 and 6 present the results on fees paid to thugs and criminal organizations. The results are similar to those on fees to local government officials. Both results suggest that every extra year a Soeharto mayor is in power during the transition increases the likelihood of payments to these groups by 1 percentage point. This effect represents approximately a 20% increase over the sample mean.

Overall these results suggest that firms located in districts with longer exposure to Soeharto mayors during the critical years of the transition face greater rates of extortion by armed groups. These effects are stronger for illegal payments extracted by the military and police. These results are consistent with the anecdotal evidence described in Section 2 that suggests that security forces were instrumental in the elite capture strategies of old-regime elites.

### 6.3 Effects on Public Good Provision

In this subsection, we examine the effects on public good provision. We obtain measures of the availability of public services from the Village Census and we classify them in three categories: education facilities, health facilities, and access to basic services. These correspond to the most important public goods provided in the villages and are also consistently reported across different waves of the village census. The provision of these services crucially depends on the decision of the district government. In particular, after democratization the district became the main administrative level responsible of the provision of these goods.

Table 5 reports the results for the standardized average or z-score of the different groups of public goods (Kling et. al. (2007)). Panel A and B estimate our baseline empirical specifications using the corresponding outcomes as reported in the 2011 village census. The results suggest that the later the appointment timing of the last Soeharto, the lower is the level of public good provision in 2011. In particular, Panel A shows that every additional year a Soeharto mayor is in office during the transition is associated with a decrease in public good provision of 0.05 standard deviations across the different groups of public good provision.

Panel B of Table 5 relaxes the assumption of a linear effect of the appointment timing on outcomes. While the effects vary in terms of statistical significance, the point estimates are consistently negative and generally increasing in magnitude on the level of exposure to the Soeharto mayor during the transition.

An important advantage of the use of the village census is that measures of public good provision are reported for several years. This allows the implementation of a panel-data specification to assess the robustness of our results. We construct a village-level panel of public good provision for a number of years between 1986 and 2011. We exclude the years when the Soeharto mayors were in office in order to compare the pre-appointment period, to the period when public goods are potentially affected by the legacy of their elite capture strategies.<sup>44</sup> More specifically, we estimate the following econometric model:

$$y_{jdt} = \gamma_0 + \gamma_1 YearApp_d \times Post\_2003_t + \delta_d + \rho_t + Z'_{jt}\lambda + \varepsilon_{jdt} \quad (3)$$

where  $y_{jdt}$  is a public good outcome in village  $j$  of district  $d$  in year  $t$ ,  $YearApp_d$  is the year of appointment of the last Soeharto mayor—hence, a measure of exposure to Soeharto the mayor during the democratic transition—,  $Post\_2003_t$  takes value 1 for years after 2003, when the Soeharto mayors are no longer in office,  $\delta_d$  are district fixed effects,  $\rho_t$  are year fixed effects, and  $Z'_{jt}$  are time-varying controls, in particular a quartic in the logged village population. Standard errors are clustered at the district level.

This specification is equivalent to a *Differences-in-Differences* specification, where we compare public good provision before and after Soeharto mayors were in office, and across districts that had different levels of exposure to Soeharto mayors during the transition. Note that this specification includes district fixed effects. While, we argue that the different levels of exposure to Soeharto is orthogonal to district characteristics, specification (3) controls for any remaining potential endogeneity in the cross-section.

In Panel C we report the results. While the effects are slightly smaller in magnitude than those presented in Panel A, they are consistently negative and of a comparable order of magnitude. The effects are stronger for the number of educational facilities and are weaker for health facilities and access to basic services.<sup>45</sup> In Figure 2 we report the estimates of each individual outcome.<sup>46</sup> As we can see, the effects on the public goods outcomes are consistently negative and many of them are statistically significant. Appendix Figure 2 shows the analogous individual results for the specification presented in Panel A.

<sup>44</sup>In particular, we include the following years: 1986, 1990, 1993, 2003, 2005, 2008, and 2011.

<sup>45</sup>Note, that the linear effect on the z-score of health facilities has a p-value of 0.104, so the effect is almost significant at the 10% level.

<sup>46</sup>Each continuous dependent variable is standardized to facilitate the comparison across outcomes. Dummy variables are not standardized.

In Panel D we estimate an analogous specification where we interact the variable  $Post\_2003_t$  with dummies for the different years of appointment of the last Soeharto mayor. The results are also similar to those presented in Panel B: with the exception of column 2, the coefficients exhibit a decreasing pattern and are stronger for the educational outcomes.

Overall these results show that districts with higher exposure to Soeharto mayors during the transition experience a deterioration in public good provision in educational facilities relative to districts with lower exposure. We also provide suggestive evidence of negative effects on health facilities and access to basic services. These effects are observed in the cross-section of districts of 2011, as well as in the panel specification that includes district and year fixed effects.

## 7 Mechanisms

The results presented in the previous section provide evidence that districts with later appointments of the last Soeharto mayors have higher rates of support for Soeharto's party, greater prevalence of extortion by the military and police, and worse public good provision. These results are observed after 2003, i.e., once the term of all the Soeharto mayors had expired. In section 3, we presented a particular mechanism that can provide an explanation for these results: those Soeharto mayors that were appointed later, served for more years during the democratic transition and, hence, had more time to adjust to the new political scenario. As a result, they found it optimal to undertake greater investments in *de facto* power. These investments in *de facto* power, in turn, lead to more elite capture and lower political competition. Consequently, districts with longer exposure to Soeharto mayors during the transition exhibit worse governance outcomes and lower public good provision in the medium-run.

In this section, we provide additional supporting evidence for this mechanism. First, we document that, in general, there was compliance with the five year term length of the last Soeharto mayors. This was presented in Appendix Table 3 where we cross-tabulate the appointment date of the last Soeharto mayor with the starting date of the subsequent mayor. This confirms that districts with later appointments of the last Soeharto mayors also had greater exposure to Soeharto mayors during the democratic transition.

Second, we explore whether old-regime elites are more likely to remain in power in those districts that had longer exposure to Soeharto mayors during the democratic transition. For this purpose we collected a novel dataset on the backgrounds of Indonesian mayors. We conducted an extensive search of the professional background histories of the first mayors elected in the direct elections that were introduced starting in 2005. See Section 10.2 in



the Online Appendix for additional details on these data. As described in Section 2, direct elections were introduced in order to increase the level of accountability of mayors and to open the local political process to citizens. However, most Indonesian observers argue that there is wide heterogeneity in the quality of these elections and on the extent to which non-elite candidates have been able to genuinely contest power (Mietzner (2010)).

Following the work of Indonesian scholars, we define membership to the old-regime elite by previous occupation. During the Soeharto regime, the bureaucracy and the military were the two groups most closely associated with the Soeharto administration (Malley (2003), Hadiz (2010)). We also define as connected to Soeharto those mayors that were politicians during the Soeharto regime. Importantly, we implement this classification based on the occupation that the mayors had *during* the Soeharto regime, i.e., before 1999. We use information from curriculum vitae located in district government website, online news-portals and personal websites which were retrieved through online searches. To increase the representativeness of this exercise, we collect information on the mayor and vice-mayor.<sup>47</sup>

Column 1 in Table 6 presents the results. The dependent variable takes value 1 if either the mayor or the vice-mayor were connected to the Soeharto regime, and 0 otherwise. The mean of this variable is 0.71 suggesting that a large fractions of districts in Indonesia elected mayors linked to the old-regime. Panel A reports the results of our baseline, linear specification. The results indicate that every extra year that a Soeharto mayor is in power during the democratic transition increases the likelihood of elite persistence in direct elections by 11 percentage points, which represents a 16% increase over the sample mean. Panel B reports the flexible specification using dummies for the different appointment years. The point estimates exhibit an increasing pattern, with the strongest effects corresponding to years of appointment 1996 and 1997. Hence, consistent with the mechanism suggested in Section 3, there is a higher prevalence of elite persistence in districts where the Soeharto mayors were in office for longer during the early stages of the democratic transition.<sup>48,49</sup>

Our third piece of evidence to support the mechanism through investments in *de facto*

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<sup>47</sup>Both individuals contest elections running as a candidate pair. While the district mayor has most of the decision power, the vice-mayor is also an important political figure in the districts. We were able to obtain information on the background of the mayor or vice-mayor for 119 districts.

<sup>48</sup>We also studied whether the Soeharto mayors themselves were more likely to get reelected if they were appointed later. While it is indeed the case that reelection rates were higher for districts where the Soeharto mayors were appointed later, these results are based on very few observations. The reason is that only 12% of Soeharto mayors were reelected. The descriptive statistics are presented in Appendix Table 4. One of the reasons why they might not had been reelected is that they could have faced term limits. Hence, these results suggest that the strategies of elite capture were targeted to increase the persistence in power of members of the elite as a group, but were not capitalized by a single individual.

<sup>49</sup>Since direct elections were introduced in a staggered fashion, we control for the timing of election by adding a dummy variable as a control that takes value 1 if direct elections took place in 2005 or 2006, and 0 otherwise.

power consists of exploring the effects on the level of political competition. We obtain different measures of electoral competition from the electoral results of the first direct election for district mayor that took place in each district.<sup>50,51</sup> Columns 2 to 6 report different outcomes that are increasing in the level of political competition. Column 2 shows the results when the dependent variable corresponds to the number of candidates contesting the elections. Panel A suggests that every additional year of exposure of Soeharto mayors decreases the number of candidates by 0.28. Panel B shows that this effect is mainly driven by those districts that had longest exposure to Soeharto mayors: districts where the Soeharto mayor was appointed in 1997 have 1.4 fewer candidate contesting the elections. Columns 3 and 4 explore the effects on number of independent candidates and share of independent candidates, respectively. These are candidates not affiliated to a specific party. Independent candidates typically contest elections with local platforms and are perceived as being independent of party elites. The results suggest that exposure to Soeharto mayors leads to fewer independent candidates contesting these elections. Panel B indicates that these effects are monotonically decreasing on the degree of exposure to Soeharto mayors during the transition. Column 5 explores the effect on the Herfindahl Index of political competition.<sup>52</sup> While the effects are small and statistically insignificant the point estimate of the districts with the longest exposure is negative. Column 6 explores the extent to which incumbent mayors lose reelection.<sup>53</sup> We observe that districts with longer exposure to Soeharto mayors during the transition exhibit a greater incumbent advantage. This result is particularly notable, given the evidence of worse governance outcomes and the deterioration in public good provision that we document for those districts. Finally, in column 7 we report the z-score for the different measures of political competition. Panel A suggests that every additional year of exposure to Soeharto mayors decreases the index of political competition by 0.2 standard deviations.

Consistent with the implications of the conceptual framework presented in Section 3, districts with higher exposure to Soeharto mayors during the democratic transition exhibit higher rates of elite persistence and lower political competition. This evidence supports the hypothesis that the negative effects on local governance and public good provision are the

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<sup>50</sup>See Section 10.2 for additional details on this dataset.

<sup>51</sup>To account for the different timing of direct elections, we add as control a dummy variable that takes value 1 if direct elections took place in 2005 or 2006, and 0 otherwise.

<sup>52</sup>This index is defined as 1 minus the sum of squares of the vote shares of each candidate. If candidate  $i$  obtains vote share  $s_i$ , the Herfindahl Index will be computed as  $1 - \sum_i s_i^2$ . If only one candidate runs for elections and obtains a 100% vote share, the index would take value 0. The more candidates contest the elections and the smaller the vote shares of each candidate, the higher the value of the index. Therefore, the index is increasing in the degree of political competition among candidates.

<sup>53</sup>In particular, the dependent variable takes value 1 for districts where neither the newly elected mayor nor the vice-mayor served as mayors or vice-mayors in the previous term.

result of investments in *de facto* power undertaken during the early stages of the democratic transition.

## 8 Robustness Checks

While the evidence presented so far supports the hypothesis of investments in *de facto* power as the main driver of the results, in this section we explore the validity of competing explanations for our empirical results.

### 8.1 Cohort Effects

Our empirical analysis exploits the variation across districts on the timing of appointment of the last Soeharto mayors. Under the plausible assumption that the timing of the fall of Soeharto was orthogonal to district-level political cycles, the fall of the regime was equivalent to randomly assigning districts to different levels of exposure to Soeharto mayors during the democratic transition. These events mitigate the first order endogeneity concern that districts assigned to different levels of exposure differ on underlying characteristics. However, a remaining concern is that the assignment to different levels of exposure is correlated with other factors that could have an independent effect on our outcomes of interest. The different levels of exposure are generated by the fact that the last Soeharto mayors are appointed in different years and, therefore, correspond to a different cohort of mayors. For instance, if the Soeharto government changed its appointment strategy over time, the differences across districts could be driven by having had in office Soeharto mayors with different characteristics. Also, if the event of a district-mayor appointment leads to conflict or political mobilization, it could generate different political dynamics across districts. While it is unclear why these alternative channels could have long-lasting effects on the quality of governance, they are, nevertheless, a potential confounder for our interpretation of the results.

We undertake a number of strategies to evaluate the validity of these alternative explanations. First, we argue that the characteristics of the Indonesian democratic transition greatly mitigate these concerns. Mainly, the fall of the Soeharto regime was largely unanticipated and the political and economic conditions were quite stable during the period 1994-1997. By the year 1997, the regime was perceived as fairly stable and few predicted the subsequent fall of Soeharto. This is particularly illustrated by the publication of a special report on Indonesia in the newspaper *The Economist* on July 24th of 1997 (The Economist (1997)). While this report discussed the possible succession of Soeharto, it also described how the same debate had been ongoing for a very long time in Indonesia. For instance, it includes the following sentences: “Now 76, he [Soeharto] is likely to embark on a seventh term in

1998. *Like other long-serving rulers, Soeharto seems unable to let go.*”; *“Speculation about the succession has been a favourite game in Indonesia for at least ten years.”*; *“Some believe Soeharto will stand down in the middle of his next term. Others say that, like a Javanese king, he will want to die on his throne.”*<sup>54</sup> The report also predicted a low likelihood of an immediate regime change. In particular the report says *“Indonesia is showing few signs of being an authoritarian domino on the verge of tumbling. Protests have been on a smaller scale, and generally moderate in its demands.”* This last statement is remarkable, given that the report was published only 10 months prior to the fall of the Soeharto regime.

Part of the reason why the fall of the Soeharto regime was so unexpected is because the main triggering event of Soeharto’s loss of critical support was linked to the onset of the East Asian financial crises in the second half of 1997. While Indonesia was severely affected by the crisis, its negative consequences started taking place in 1998. An example of this is the evolution of the exchange rate of the rupiah to the US dollar. On August 1997, Indonesia abandoned the rupiah trading band and allowed the currency to freely float. However, as can be seen in Appendix Figure 1, this did not lead to an immediate large drop in the value of the rupiah. Instead, the largest devaluation of the currency took place in the first months of 1998.<sup>55</sup> Economic turmoil and social unrest started taking place in the late 1997 and intensified in 1998. Indeed the large-scale riots that lead to the decision of Soeharto to step down only took place on May 1998.

The second strategy we undertake to mitigate these concerns consists of restricting the sample to districts that appointed the last Soeharto mayor in the period of highest political and economic stability. As we describe in Section 5, our baseline specification does not include districts that appointed Soeharto mayors in 1998. Given that the levels of social unrest were high in 1998, it is likely that these appointments were different in nature relative to the appointments that took place in 1994-1997. To further mitigate the concerns of differential appointments over time, we also show the results when we drop from the sample districts that conducted appointments in 1997. While social unrest in 1997 only started towards the end of the year and was small relative to the scale of riots in 1998, this specification is useful in mitigating the aforementioned concerns.

Table 7 presents this robustness check for our main outcomes of interests, when we

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<sup>54</sup>The episodes of Soeharto illness in the last years of the regime were exploited in the seminal paper Fisman (2001) to estimate the value of political connections to Soeharto. However, it is important to note that news about Soeharto’s health had been taking place for most of the 1990s decade. In particular, the events that Fisman (2001) studies took place in January 1995, April 1995, April 1996, July 1996, April 1997. Soeharto also underwent extensive medical tests in 1994 when he was diagnosed with kidney stones (Jakarta Post (1999)). Overall, this suggests that the perception of the health status of Soeharto was probably not systematically different in the period 1994-1997. Soeharto ended up passing away in 2008.

<sup>55</sup>The figure was obtained from <http://www.tradingeconomics.com/indonesia/currency>. Last accessed December, 8th 2015.

implement the linear specification. Column 1 presents our baseline results to facilitate the comparison. Column 2 evaluates the sensitivity of the results to dropping from the sample those districts that appointed their last Soeharto mayor in 1997. As we can see, the results are robust to this specification. Appendix Table 5 in the Online Appendix implements the same robustness check to our main measures of political competition. While the result on the presence of mayors connected to Soeharto is unaffected, the effects on the z-score of political competition is no longer statistically significant. However, the point estimate remains negative and large in magnitude.<sup>56,57</sup>

Our third strategy consists of directly controlling in our main specifications for measures of the underlying level of social unrest and economic conditions at the time of appointment. For measures of social unrest we use the UNSFIR dataset (Varshney et al. (2008)). These data collected information on large-scale violence as described in local newspapers of 14 provinces. The provinces covered were those with the highest incidence of conflict. In order to not modify the estimating sample, we assume there were no large-scale conflicts in the non-covered provinces, which is a plausible assumption.<sup>58</sup> Using these data we compute for each district the number of conflict incidents, number of casualties, and number of people injured in the year of the appointment of the last Soeharto mayor. Column 3 of Table 7 and Appendix Table 5 reports the results. The results are very robust to adding these additional controls: neither the point estimates, nor the statistical significance are affected.<sup>59</sup>

In a similar exercise, we control for the level of economic activity at the time of the appointment. District-level data on economic variables are scarce for the 1990s. For this

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<sup>56</sup>In Appendix Tables 6, 7, and 8 we report the equivalent robustness checks when appointment timing is allowed to have non-linear effects in outcomes. The results are similar to those presented in Table 7 and Appendix Table 5.

<sup>57</sup>In Appendix Table 9 we report our main results when including districts that appointed the last Soeharto mayor in 1998. As we can see, the estimates of the dummies for appointment timing 1995 to 1997 are similar to our baseline results. The coefficient on the 1998 appointment dummy has the same sign as the other appointment dummies but is typically smaller in magnitude. Note that we do not have a prior about how the results should be for districts with appointment timings in 1998. On the one hand, the mayors appointed in 1998 had a long time to undertake investments in *de facto* power. On the other hand, the selection of those mayors was different. Since they were appointed by the transitional government, they might have been more moderate. However, for completeness, Appendix Table 9 shows that our main results are not affected by including in the sample the districts with appointments in 1998. Note that we do not report the results on subsequent mayors connected to Soeharto. The reason is that we do not have this information. Given the intensity of this data collection exercise, we focused our efforts in collecting this information for the districts included in our main estimating sample.

<sup>58</sup>The results are similar but less precisely estimated when we restrict the sample to the 14 provinces that were covered by the UNSFIR dataset. The results are available from the authors upon request. See the Data Appendix in Section 10.2 for further details on the UNSFIR dataset.

<sup>59</sup>The results in Panel C correspond to the panel-data specification of our measure of public good provision. For this panel, we interact the conflict measures at time of appointment with a full set of year fixed effects to allow the intensity of conflict to have potential time-varying effect on our outcomes. We implement the same approach for the rest of robustness checks that require controlling by time-invariant districts characteristics.

exercise, we proxy the level of economic activity by measures of district-government revenues from different sources. These data belong to the INDO-DAPOER dataset collected by the World Bank.<sup>60</sup> We use as controls the logarithm values of total district revenue, transfers from the central government, and revenue from natural resources at the time of appointment of the last Soeharto mayor. The results are presented in column 4 of Table 7 and Appendix Table 5. As we can see the results are robust to incorporating these controls. Only the z-score on political competition decreases in magnitude and loses its significance. However, the point estimate is still negative and large in magnitude.

Finally, note that, as presented in Table 2, the lack of correlation between appointment timing and the term length of the second-to-last Soeharto mayors is consistent with the appointments taking place as scheduled, and therefore, supportive of the idea that the nature of the appointments was not altered during the period 1994-1997.<sup>61</sup>

## 8.2 Political and Economic Conditions at the Time Elections of the First Democratic Mayor

A related concern is that the levels of exposure to the Soeharto mayors during the transition correlate to the conditions in which the first democratic mayors were elected. If the conditions under which this election took place have long-lasting effects on the quality of governance, the differential election timing could be a confounder for our results. Appendix Table 3, suggests that the appointment and election timings are strongly correlated: districts that appointed their last Soeharto mayor later—hence, having a longer exposure to this mayor during the transition—also tend to have later election of their first democratic mayor.

The characteristics of the Indonesian transition mitigate, once again, this concern. Note that the first mayors elected in the democratic period were elected through indirect elections: the district parliaments constituted after the 1999 election were entitled to elect the mayor according to the rules of proportional representation once the term of the last Soeharto mayor expired. Hence, the fact that all the local parliaments were constituted at the same point in time mitigates the concern that districts systematically differ on their party composition because of having been constituted at different points in time. However, it is still possible that the parliamentary process through which the mayor was selected was influenced by the fact of taking place at different points in time.

To address this concern we control for the level of social unrest and the economic condi-

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<sup>60</sup>See the Data Appendix in Section 10.2 for further details.

<sup>61</sup>Unfortunately, we were unable to find information on demographic characteristics of the last Soeharto mayors after extensive online searches. There seems to be very little information available on mayors that were in office in the 1990s. For this reason, we decided to collect information on the term lengths of the second-to-last mayors from the official directories.

tions at the time of the indirect election at each district. Following a similar approach to the one discussed in the previous subsection, we incorporate controls on the incidence of conflict and measures of district government revenue measured at the time of the parliamentary election of the first democratic mayor. The results are presented in columns 5 and 6 of Table 7 and Appendix Table 5. The additional controls on incidence of conflict do not change the magnitude or significance of the results. The coefficients on electoral results—Panel A of Table 7—and subsequent mayors connected to Soeharto—Panel A of Appendix Table 5—decrease a bit in magnitude once we control for economic variables. However, these results are qualitatively similar, and the rest of results remain unaffected when incorporating these controls.

Finally, we implement a similar robustness check to control for the economic and political conditions at the time of the first direct elections. Most of our outcomes of interest are measured when the first directly elected mayors were in office. Differential levels of conflict or economic stability could affect the election process and, consequently, the characteristics of the elected mayor. Columns 6 and 7 of Table 7 and Appendix Table 5 present the results when adding economic controls and measures of conflict.<sup>62</sup> The results are also robust to this additional set of controls.

### 8.3 Effects Driven by Subsequent Political Reforms

A potential alternative explanation is that our results are driven by the timing of subsequent district-level political reforms. Starting in 2005, direct elections for district mayors were introduced in a staggered fashion: elections took place when the five-year term of the previous mayor expired. Therefore, there is a natural positive correlation between the appointment timing of the last Soeharto mayor and the timing of introduction of direct elections.

However, the two timings are not perfectly collinear. In 2004 a moratorium was introduced on district elections and around 40% of districts held elections in the year 2005. To evaluate the validity of this concern we subject our baseline specification to additional controls on the timing of direct elections. In particular we add dummies for the different direct election years.<sup>63</sup>

Column 9 of Table 7 and Appendix Table 5 reports the results. The results are very robust to these additional set of controls. Therefore, it is unlikely that our empirical results

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<sup>62</sup>Since the UNSFIR data on conflict is reported until 2003, while direct elections were introduced in 2005, we use a different source of information to proxy for political stability. We obtain measures of the number of villages that experienced conflict from the 2005 and 2008 village census. We proxy the prevalence of conflict in districts with direct election in 2005 and 2006 using the incidence of conflict reported in the 2005 village census. We use the 2008 village census to measure conflict for districts that implemented direct elections in 2007 or later.

<sup>63</sup>We add dummies for elections in years 2005, 2006, and 2007 or later.

are confounded by the timing of the introduction of direct elections.

A related concern, is that differences in the appointment timing of the last Soeharto mayor could be correlated with the experience of mayors at the time our outcomes of interest are measured. The number of years of experience of mayors relates to the timing of elections and also to whether they were reelected or not. To assess the robustness of our results to differences in the levels of experience of mayors, column 10 of Table 7 and Appendix Table 5 incorporates as controls dummies for the different number of years of experience of the district mayors in office at the time our outcomes of interest are measured. The results are highly robust to adding these controls.

## 9 Discussion

In this paper we provide evidence that districts that had a longer exposure to Soeharto mayors during the democratic transition exhibit worse governance outcomes more than a decade after their appointment. In particular, districts where the Soeharto mayor was in office for longer have a greater prevalence of extortion to private sector firms and lower provision of public goods. Furthermore, these results coexists with stronger electoral support for Soeharto's party in those districts.

We provide a conceptual framework that provides an explanation for these results: the Soeharto mayors that, for exogenous reasons, stayed for longer in office during the democratic transition had more time to adjust to the new political scenario that emerged after the fall of Soeharto. As a result, they invested more in *de facto* power, which led to higher levels of elite capture.

This particular channel is consistent with the qualitative literature that has described the persistence of Soeharto elites in local governments during the democratic period. Furthermore, we present additional evidence that is consistent with our interpretation of the results: districts with longer exposure to Soeharto mayors during the transition exhibit greater persistence of the Soeharto elites in the local government and have lower levels of political competition.

This paper makes two main contributions. First, it exploits a particular feature of the Indonesia democratic transition that generated exogenous variation on the incentives to engage in elite capture strategies across the different regions. We document that there is a higher presence of elite capture, lower quality of governance outcomes, and lower levels of public good provision in those regions where, we argue, the incentives to engage in elite capture were higher. Therefore, it provides empirical evidence that the incentives of elites to invest in *de facto* power are a fundamental determinant of the presence of elite capture



and poor governance outcomes in weekly institutionalized polities.

Second, 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 long run. In particular, the presence of agents of the old regime during the democratic transition, can facilitate elite capture and lead to worse quality of local democracy. While, an important literature in political science has argued that slow transitions towards democracy are more likely to be successful—i.e., not suffer from authoritarian reversals—, this paper presents evidence that, slow democratic transitions can have important costs, as old-regime elites find it easier to capture the new democracy. Expediting the process of leader turnover at the local level by accountable leaders, or imposing temporary additional checks and balances at the local level, might be beneficial measures for new democracies.

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Figure 1: Timeline of Events and Outcome Measurement

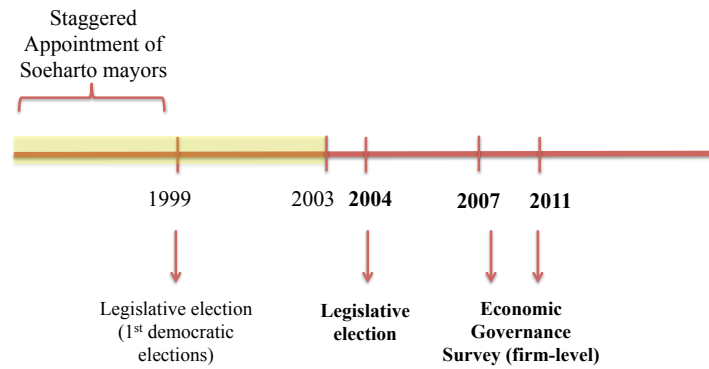
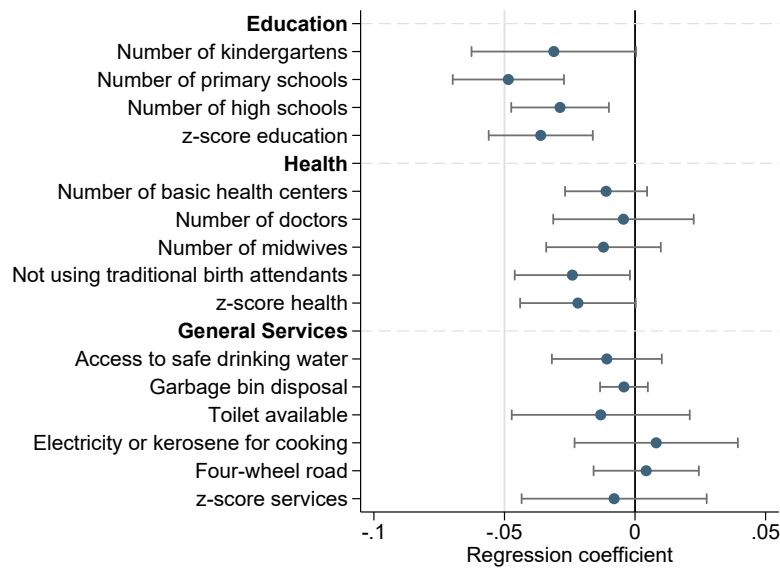


Figure 2. Effects of Exposure to Soeharto Mayors on Public Good Provision (Panel Specification)



Notes: Point estimates and 90% confidence interval on standardized public good outcomes.

Table 1. Summary Statistics

	Observations / Num of Districts	Mean	Std. Dev.
Panel A. Measures of Political Attitudes			
Vote Share of Golkar during Soeharto 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 Soeharto Mayor	127	1990.14	1.10
Year of Appointment of the Last Soeharto Mayor	129	1995.16	0.88
Year of Appointment of First Democratic Mayor	129	2000.16	0.97
Number of villages per district	129	149.24	124.84
Panel C. District Characteristics & Public Good Provision			
Population in the District	129	550,303	453,506
Number of Primary Schools*	126	5.26	1.99
Number of High Schools*	126	1.16	0.69
Number of Kindergarten*	126	1.40	0.90
Number of Health Care Centers*	126	0.04	0.06
Number of Doctors*	126	0.84	1.05
Number of Midwives*	126	3.85	3.01
Presence of Tradional Birth Attendant	126	0.85	0.17
Access Safe Drinking Water	126	0.20	0.26
Garbage Bin Disposal System	126	0.71	0.28
Toilet in the Village	126	0.03	0.07
Electricity or Kerosene for Cooking	126	0.26	0.33
Wide Road	126	0.95	0.09

Notes: \* per 1,000 households. Variables described in Panel C are reported in the 1993 village census.

Table 2. Endogeneity Test

Dependent Variable: Year of Appointment Last Soeharto Mayor			
Independent Variables:	Coefficient	Standard Error	Beta Coefficient
	(1)	(2)	(3)
Panel A. Measures of Political Support			
(1) Golkar Vote Share 1971	-0.001	(0.004)	-0.021
(2) Golkar Vote Share 1977	-0.004	(0.005)	-0.070
(3) Golkar Vote Share 1982	0.004	(0.005)	0.075
(4) Golkar Vote Share 1987	0.001	(0.006)	0.019
(5) Golkar Vote Share 1992	0.001	(0.005)	0.014
Panel B. Measures of Political Stability			
(6) Conflict: Number of Incidents	0.082	(0.182)	0.029
(7) Conflict: Number of Casualties	-0.358	(0.508)	-0.060
(8) Conflict: Number of People Injured	-0.052	(0.133)	-0.022
(9) Term Length Previous Mayor	-0.066	(0.130)	-0.048
Panel C. Public Good Provision and Economic Variables			
(10) Log Population	0.048	(0.059)	0.045
(11) Number of Primary Schools	-0.000	(0.009)	-0.001
(12) Number of High Schools	-0.010	(0.008)	-0.021
(13) Number of Kindergarten	-0.036	(0.024)	-0.076
(14) Number of Health Care Centers	0.067	(0.048)	0.020
(15) Number of Doctors	-0.015	(0.013)	-0.027
(16) Number of Midwives	-0.003	(0.003)	-0.018
(17) Presence of Traditional Birth Attendants	0.134**	(0.058)	0.053
(18) Access Safe Drinking Water	-0.042	(0.081)	-0.015
(19) Garbage Bin Disposal System	0.003	(0.061)	0.002
(20) Toilet in the Village	0.004	(0.103)	0.001
(21) Electricity or Kerosene for Cooking	-0.056	(0.110)	-0.023
(22) Wide Road	-0.086	(0.137)	-0.023
(23) Log DAU Transfer	-0.085	(0.127)	-0.068
(24) Log DAK Transfer	0.099	(0.139)	0.062
(25) Log Revenue from Natural Resources	0.042*	(0.023)	0.106
(26) Log Total Revenue	-0.053	(0.151)	-0.030

Notes: Panel A and B show robust standard errors in parenthesis. Panel C shows clustered standard errors at the district level in parenthesis for facilities (rows 10-22) and robust standard errors in parenthesis for the economic variables (rows 23-26). All regressions include island fixed effects as controls. The number of districts could vary by specification because of missing information on the corresponding regressor. Conflict measures in Panel B are calculated as an average of conflict observed between 1990 and 1993 in the UNSFIR data set. Public good provision measures are calculated from the village census recorded in 1993. Economic variables are obtained from the DAPOER data set recorded in 1994. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.



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

	Dependent Variables:							
	Golkar Most Voted Party in the Village				District-Level Vote Share			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Dep. Var. Mean</i>	0,32	0,32	0,32	0,32	21.62	21.62	21.62	21.62
Year of Appointment	0.071*** (0.022)	0.072*** (0.018)			1.640** (0.753)	1.595** (0.665)		
Appointment 1995			0.081** (0.036)	0.072** (0.036)			0.149 (1.701)	-0.396 (1.702)
Appointment 1996			0.136** (0.060)	0.157*** (0.051)			1.511 (2.015)	2.421 (1.863)
Appointment 1997			0.226*** (0.071)	0.204*** (0.057)			5.685** (2.568)	4.581** (2.228)
Controls for electoral results in 1992		✓		✓		✓		✓
Observations	21,826	21,826	21,826	21,826	129	129	129	129
R-squared	0.163	0.196	0.163	0.197	0.446	0.509	0.453	0.516
Number of Districts	129	129	129	129	129	129	129	129

Notes: Columns 1 to 4 show standard errors clustered at the district level in parenthesis. Columns 5 to 8 show robust standard errors in parenthesis. In columns 1 to 4 the unit of observation is the village level, while in columns 5 to 8 the unit of observation is the district level. All specification include island fixed effects as regressors. Even columns also include district-level vote shares obtained by Golkar and PDI in the 1992 election. Columns 2 and 4 also add a quartic in log population of the village as controls. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Table 4. Effects of Soeharto's Mayors on Illegal Payments to Armed Groups

	Dependent Variables:					
	Dummy for Illegal Payments Made to:					
	the army or police		local government officials		thugs and criminal	
	(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	0.024*** (0.009)		0.009* (0.005)		0.011* (0.007)	
Appointment 1995		0.042*** (0.015)		0.007 (0.009)		0.003 (0.011)
Appointment 1996		0.049** (0.023)		0.018 (0.012)		0.019 (0.016)
Appointment 1997		0.076*** (0.029)		0.026 (0.017)		0.034 (0.023)
Observations	8,147	8,147	8,147	8,147	8,147	8,147
R-squared	0.039	0.039	0.006	0.006	0.022	0.022
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 specifications include as controls a set of island fixed effects, district-level vote shares obtained by Golkar and PDI in the 1992 election, 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. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Table 5. Effects of Soeharto's Mayors on Public Good Provision

	Dependent Variables:		
	Z-Score School Facilities	Z-Score Health Facilities	Z-Score Basic Services
	(1)	(2)	(3)
Panel A. Linear Cross-Section Specification. Outcomes from 2011 village census			
Year of Appointment	-0.055*** (0.021)	-0.056** (0.027)	-0.054 (0.033)
Observations	11,992	11,742	11,917
R-squared	0.615	0.220	0.160
Panel B. Flexible Cross-Sectional Specification. Outcomes from 2011 village census			
Appointment: 1995	-0.072 (0.058)	0.001 (0.072)	-0.070 (0.090)
Appointment: 1996	-0.132* (0.069)	-0.158* (0.081)	-0.122 (0.097)
Appointment: 1997	-0.156*** (0.051)	-0.061 (0.087)	-0.159 (0.114)
Observations	11,992	11,742	11,917
R-squared	0.615	0.225	0.160
Panel C. Linear Panel Specification			
Year of Appointment×Post2003	-0.036*** (0.012)	-0.022 (0.013)	-0.008 (0.021)
Observations	83,944	81,880	79,924
R-squared	0.658	0.318	0.398
Panel D. Flexible Panel Specification			
Appointment:1995×Post2003	-0.058 (0.037)	0.007 (0.034)	-0.017 (0.055)
Appointment:1996×Post2003	-0.091*** (0.034)	-0.065* (0.035)	-0.014 (0.056)
Appointment:1997×Post2003	-0.106*** (0.039)	-0.013 (0.042)	-0.036 (0.074)
Observations	83,944	81,880	79,924
R-squared	0.658	0.318	0.398

*Notes:* Standard errors clustered at the district level in parenthesis. 108 districts/clusters included in the sample. In Panels A and B the unit of observation is the village. All specifications in Panels A and B include a set of island fixed effects, district-level vote shares obtained by Golkar and PDI in the 1992 election, and a quartic in log population of the village as controls. Panels C and D correspond to panel specifications where the unit of observation is the village-year. The years included in the sample are 1986, 1990, 1993, 2003, 2005, 2008, and 2011. These regressions include district and year fixed effects, and a quartic in log population of the village as controls. All outcome variables have mean of the dependent variable of value 0, since they correspond to standardized averages. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

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

	Dependent Variables:						
	Measure of Elite Capture	Measures of Political Competition in Mayoral Elections					
	Connections to Soeharto Regime	Number of Candidates	Number of Independent Candidates	Share of Independent Candidates (col 1/col 2)	Herfindahl Index of Political Competition	Incumbent Mayor Does Not Win Election	Z-score of pol. competition cols 2 - 7
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Mean Dep. Var.</i>	0,71	3,85	0,13	0,02	0,62	0,40	0,00
Panel A. Linear Treatment Effect							
Year of Appointment	0.109** (0.044)	-0.282* (0.143)	-0.153** (0.068)	-0.029*** (0.011)	-0.000 (0.013)	-0.096* (0.053)	-0.200** (0.081)
Observations	119	129	129	129	126	129	126
R-squared	0.218	0.193	0.247	0.238	0.207	0.124	0.272
Panel B. Flexible Treatment Effect							
Appointment 1995	-0.048 (0.106)	-0.166 (0.271)	-0.188 (0.129)	-0.033 (0.022)	-0.011 (0.028)	-0.035 (0.122)	-0.210 (0.157)
Appointment 1996	0.215* (0.126)	0.041 (0.358)	-0.130 (0.151)	-0.040* (0.022)	0.034 (0.035)	-0.129 (0.142)	-0.142 (0.183)
Appointment 1997	0.287** (0.139)	-1.388*** (0.528)	-0.639*** (0.240)	-0.104*** (0.039)	-0.041 (0.046)	-0.329* (0.181)	-0.877*** (0.286)
Observations	119	129	129	129	126	129	126
R-squared	0.242	0.238	0.275	0.248	0.225	0.128	0.303

*Notes:* Robust standard errors in parenthesis. The unit of observation is the district. All specifications include as controls a set of island fixed effects, the district-level vote shares obtained by Golkar and PDI in the 1992 election, and a dummy variable to control for early direct elections. The direct election dummy equals 1 if the election took place in 2005 or 2006, 0 otherwise. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Table 7. Robustness Checks

	Baseline	Dropping 1997	Conflict, at time of appointment	Economic controls, at time of appointment	Conflict, at time of 1st election	Economic controls, at time of 1st election	Conflict, at time of direct election	Economic controls, at time of direct election	Timing of Direct Election	Years of Experience of the Mayor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Dependent Variable: Golkar Most Voted Party										
Yr. of App.	0.072*** (0.018)	0.080*** (0.026)	0.083*** (0.020)	0.079*** (0.019)	0.075*** (0.018)	0.050** (0.019)	0.072*** (0.018)	0.067*** (0.019)	0.070*** (0.018)	0.073*** (0.017)
Observations	21,826	19,605	21,826	21,159	21,826	21,159	21,826	21,159	21,826	21,826
R-squared	0.196	0.201	0.203	0.217	0.214	0.209	0.197	0.218	0.196	0.200
Panel B. Dependent Variable: Illegal Payments to Army or Police										
Yr. of App.	0.024*** (0.009)	0.024** (0.011)	0.024*** (0.009)	0.030*** (0.009)	0.022** (0.009)	0.029*** (0.010)	0.025*** (0.009)	0.024*** (0.009)	0.029*** (0.009)	0.028*** (0.011)
Observations	8,147	7,383	8,147	7,784	8,147	7,784	8,147	7,784	8,147	8,147
R-squared	0.039	0.038	0.039	0.044	0.043	0.039	0.039	0.041	0.041	0.042
Panel C. Dependent Variable: Public Goods. Z-score Education Facilities										
App.Yr.×Post	-0.036*** (0.012)	-0.044*** (0.016)	-0.035** (0.013)	-0.036** (0.016)	-0.040*** (0.013)	-0.030* (0.015)	-0.033*** (0.011)	-0.037*** (0.014)	-0.039*** (0.014)	-0.040*** (0.012)
Observations	83,944	77,329	83,944	83,944	83,944	83,944	83,944	83,944	83,944	83,944
R-squared	0.658	0.661	0.659	0.659	0.659	0.659	0.659	0.659	0.658	0.658

*Notes:* Panels A, B and C show standard errors clustered at the district level in parenthesis. The unit of observation is the village in Panels A, the firm in Panel B, and the village-year in Panel C. Each estimate includes the baseline controls defined in the notes of Tables 3-5. Each column subjects the baseline results to a different robustness check specified in the heading of the respective column. Column 2 drops districts that appointed the last Soeharto mayor in 1997. Columns 3, 5, and 7 add as controls measures of incidence of conflict at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. Columns 4, 6, and 8 add as controls measures of the level of economic activity at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. In column 9 we control for the timing of direct elections by adding dummies for elections in 2005, 2006, and 2007 or later. Column 10 adds as controls dummies for the number of years of experience of the district mayor in office at the time our outcomes of interest are measured. In Panel C these controls have time-variation since the identity of the mayor changed over time. In Panel C columns 2-9, the time invariant controls are interacted with a full set of year fixed effects. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

## 10 Appendix [For Online Publication Only]

### 10.1 A Model of Local Elite Capture

In this subsection, 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 in period  $t$ , 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 payoffs.

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.<sup>64</sup>

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  $\omega_t$  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.  $\theta_{it}$  denotes the level of investment that elite member  $i$  undertakes in

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<sup>64</sup>Our 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  $\theta^{E1}$  in one-period type of districts. Likewise, in two-period districts an individual elite member takes as given investment levels of other elite members, denoted by  $\theta_1^{E2}$  and  $\theta_2^{E2}$  for 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:

$$p^{E1}(\theta_{it}, \theta^{E1}) = F[(M-1)\theta^{E1} + \theta_{it} - \underline{p}] \quad (4)$$

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

$$p^{E2}(\theta_{it}, \theta_{it-1}, \theta_1^{E2}, \theta_2^{E2}) = F[(M-1)\theta_1^{E2} + (M-1)\theta_2^{E2} + \theta_{it} + \theta_{it-1} - \underline{p}] \quad (5)$$

The elite member in one-period district will choose  $\theta_{it}$  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 (4) to substitute for the probability of the elite remaining

in power.

Hence, the optimal elite investment  $\theta_{it}^*$  is given by

$$f[(M-1)\theta^{E1} + \theta_{it}^* - \underline{p}]\Delta R = C'(\theta_{it}^*) \quad (6)$$

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 (6) simplifies to

$$f[M\theta^{*E1} - \underline{p}]\Delta R = C'(\theta^{*E1}) \quad (7)$$

Expression (7) uniquely defines the equilibrium level of effort  $\theta^{*E1}$  in the range of values that satisfies the second order conditions.<sup>65</sup> In this range of values the right hand side of expression (7) is increasing in  $\theta$ , while the left hand side is decreasing in  $\theta$ .

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 two periods. We denote the per-period optimal level of investment as  $\theta^{*E2}$

$$f[2M\theta^{*E2} - \underline{p}]\Delta R = C'(\theta^{*E2}) \quad (8)$$

The comparison of equations (7) and (8), 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  $\theta$  that satisfies the second order conditions (i.e.,  $\theta > \underline{p}/M$ ).

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<sup>65</sup>Note that the  $\theta_{it}^*$  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.

This is a result of function  $f(\cdot)$  being decreasing in this set of values. Hence, necessarily the intersection of the left hand side and the right hand side will take place at a smaller value of  $\theta$  for equations (8) than for equation (7).

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 (7) and (8), this implies that  $f[M\theta^{*E1} - \underline{p}] > f[2M\theta^{*E2} - \underline{p}]$ . 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 making a deal with the local military requires 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). These 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 these data with a novel dataset collected by the authors. 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.<sup>66</sup> 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 295 last-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.<sup>67</sup> The proxies for electoral support during the Soeharto period are included as controls in most specifications.

The final sample contains 129 districts. Column 3 of Appendix Table 1 shows the distribution of districts in this baseline sample by year of appointment of the last Soeharto mayor. These 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

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<sup>66</sup>We 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.

<sup>67</sup>The districts dropped are Kota Batam, Kota Bitung, Kota Denpasar, Kota Jayapura, Kota Kupang, Kota Mataram, Kota Palu, Lampung Barat.

describe in more 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 year 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 number 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 miss one district of the Baseline sample, Nias in South Sumatra because of lack of coverage in the 2005 wave of PODES.

To deal with concerns of potential endogeneity of the Soeharto mayors' appointment timing, and to provide descriptive statistics, we merge our baseline dataset with the 1993 wave of PODES. The resulting sample contains 129 districts and 19,497 village-level observations. Occasionally some of the regressions contain fewer observations because of missing information in some villages on a particular covariate.

Finally, to investigate the last Soeharto mayors' effect on public goods provision, we merge our baseline dataset with a village-level panel constructed from 9 consecutive waves of the of the Potensi Desa (PODES) village census. In particular, we use the waves fielded in 1986, 1990, 1993, 1996, 2000, 2003, 2005, 2008 and 2011 to construct the panel. For the earlier waves (1986-2003) we match villages across waves by enforcing exact matches of village names. The official crosswalk of village identifiers provided by BPS allows us to merge villages across waves in the period 2003 to 2011. This procedure produces a balanced panel of 11,992 villages in 108 districts when restricting to our core estimation sample.

We focus on a variety of outcome variables which measure basic public goods and are consistently reported across waves of the village census. Each outcome variable is assigned to one of three categories: Educational facilities, health facilities or basic services. In our main analysis, we show z-scores for each of these categories to evaluate the joint significance or the effects. Next, we list and describe in more detail each of the individual outcome variables.

### Measures of Education Facilities:

- **Number of primary schools:** This variable corresponds to the number of primary schools available in the village.
- **Number of high schools:** This variable corresponds to the number of high schools available in the village. It aggregates both junior and senior high schools available in the village.
- **Number of kindergartens:** This variable corresponds to the number of kindergartens available in the village.

### Measures of Health Facilities:

- **Number of health care centers:** This variable corresponds to the number of primary health care centers, also known as *puskesmas*. *Puskesmas* are primary health care centers in charge of basic medical services and preventive care.
- **Number of doctors in the village:** This variable corresponds to the number of formally trained doctors living and working in the village.
- **Number of midwives in the village:** This variable corresponds to the number of formally trained midwives living and working in the village.
- **Lack of Presence of Traditional Birth Attendants:** This variable takes value one if no traditional birth attendants operate in the village. The lack of presence of these unofficial workers is typically associated with access to good quality formally-trained health workers.

### Measures of Access to Basic Services:

- **Access to safe drinking water:** This variable takes value one if most households in the village obtain their drinking water from a pump or from a water company. It takes value zero if households drink water from a natural well, from rain, river or another source.
- **Garbage Disposal:** This outcome variable takes value one if the village has a system of garbage disposal through the use of bins or by burying the waste into a hole. It takes value zero if households throw their waste to the river or dispose of their garbage through some other method.

- **Toilet in the village:** This variable takes value one if a public toilet is available in the village. It takes value zero otherwise.
- **Electricity or Kerosene for Cooking:** This outcome variable takes value one if most households in the village use either gas, kerosene or electricity as cooking fuel. It takes value zero if households predominately use firewood, charcoal or other combustibles for cooking.
- **Wide Road:** This variable takes value 1 if a four-wheel vehicle can pass the village's main road throughout the year. It takes on value zero if this is not the case.

### 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 survey consisted of 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.

We focus our attention on questions that elicited corruption and illegal payments. Section 7 of the survey has the title of Transaction Costs. 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 types of organizations prompted were the police, the military, local government officials, criminal organization (*preman*), or other. The dependent variable of interest takes value one if the firm reports experiences the necessity to pay an illegal fee to either of the listed organizations, zero otherwise.

### Background of Mayors

We also conduct an original data collection exercise on the professional background of the first directly elected mayors. We focus on the 129 districts of our baseline estimating sample. For these districts, we collect information on the mayors and vice mayors. We obtain information on 251 mayors and vice mayors. In the analysis of this data, we restrict our attention to the 122 districts for which we have complete information on the name of both mayor and vice-mayor. The two main variables of interest for our analysis are the professional background during the Soeharto-regime as well the incumbency status at the time of the direct election. We observe the professional background of 107 mayors and 96 vice

mayors. We have information on the professional background of at least one of them for 119 districts. This information is used to construct the measure of elite capture “Connections to Soeharto Regime”. To be more precise, an individual is coded as connected to the Soeharto regime if he was a member of the district administration, politician or member of the military prior to 1999, otherwise he is coded as not connected. A district is coded as being connected to the Soeharto regime if the mayor or vice-mayor were connected to Soeharto.

The source for this data are CVs of the mayors and vice-mayor sometimes collected in books, but predominately found online on Indonesian news-portals, personal and official district websites featuring biographic information about the mayors and vice-mayor of interest. These sources were located by two research assistants. Both research assistants were Indonesian-native speakers and hired through the online platform “Upwork”. They both worked independently on the same task and were monitored closely throughout the process. The classifications produced by the two research assistants were then compared to each other. In case of disagreement, we consulted the original source to resolve the conflict.

### **Pilkada Data**

The Pilkada dataset records information about the outcomes of the first direct elections of district mayors held in Indonesia between 2005 and 2008. In particular, the following variables of interest are recorded: the number of candidates in each district, the number of independent candidates, information on the background of the winner as well as vote shares obtained by each candidate. We use the latter to calculate the Herfindahl-index using the standard formula by Laakso and Taagepera (1979).<sup>68</sup> We report results on a linearly transformed version of the Herfindahl-index, where we subtract the Herfindahl-index from 1 such that a higher value of the outcome variable can be interpreted as a higher level of political competition. Furthermore, we use the information on the background of the winning candidate to augment our own data collection on the background of the set of mayors elected under direct democracy. To be precise, we impute the background information from the Pilkada dataset in cases where the data collection exercise described above failed to deliver information on the incumbency status of the mayor and vice-mayor.

The basic Pilkada dataset was obtained from the website <http://www.pemilu.asia>. It provides information on the electoral outcomes described for 398 districts. However, full information about the electoral results is only available for 360 districts. After reviewing and cleaning this dataset, and in an effort to keep the sample of districts as close to the core estimation sample as possible across different specifications, we engaged in another data collection (using the same research assistants and overall procedure as described in

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<sup>68</sup>Laakso, Markku and Rein Taagepera, 1979. ““Effective” Number of Parties. A Measure with Application to West Europe,” *Comparative Political Studies*, Vol. 12 No. 1, 3-27.

the subsection on “Background of Mayors”) to complement and correct missing or erroneous information on vote shares, number of candidates and the number of independent candidates. This led to imputations in 20 cases of our core estimation sample.

### **UNSFIR dataset on Conflict 1990-2003**

The UNSFIR (United Nations Support Facility for Indonesian Recovery) dataset collects events of large-scale violence in the period 1990-2003. Enumerators coded the events described in provincial newspapers of 14 provinces. For the large majority of the conflict events, the districts where the events took place are reported. For each district and year we construct measures for the number of incidents that took place, number of casualties, and number of people injured. To the best of our knowledge, this is the dataset with the widest geographical coverage of provinces that contains measures of conflict for the last years of the Soeharto regime. For additional information on the dataset, see Varshney et al. (2008).

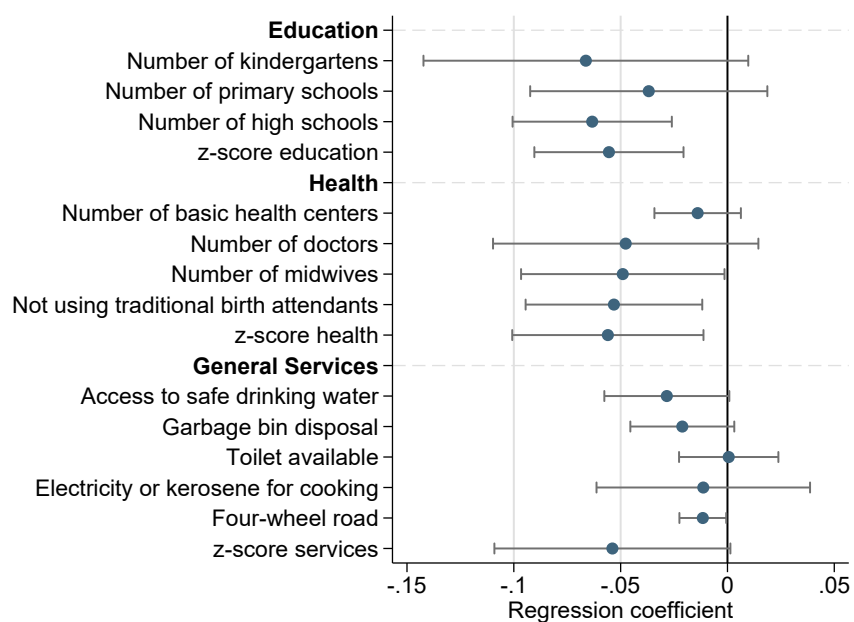
### **INDO-DAPOER on Economic Indicators**

The INDO-DAPOER dataset contains district-level economic variables for the period 1976-2013. However very few variables are systematically collected before the year 2000. The variables that are systematically reported in the period 1994-1998 correspond to transfers from the central government to the districts (total general allocation grant (DAU) and the special allocation grant (DAK)) as well as total district revenues. General allocation grants (DAK) constitute block grants from the Central Budget and are allocated to equalize fiscal capacity among the regions. The objective of these funds is to finance needs associated with the implementation of decentralization. Special allocation grants (*Dana Alokasi Khusus*, DAK) are allocated to certain regions with the aim of funding investment expenditures which are identified as national priorities. Examples of such national priorities could, for example, be education, health or different infrastructure sectors such as roads or sanitation. This data is collected and distributed by the World Bank group.

Appendix Figure 1. Historical Evolution of the Exchange rate Rupiah to USD



Appendix Figure 2. Effects of Exposure to Soeharto Mayors on Public Good Provision (2011 Village Census)



Notes: Point estimates and 90% confidence interval on standardized public good outcomes.

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 Variable for District Split			
	(1)	(2)	(3)	(4)
<i>Dep. Var. Mean</i>	<i>0,34</i>	<i>0,34</i>	<i>0,34</i>	<i>0,34</i>
Year of Appointment	0.035 (0.039)	0.039 (0.035)		
Appointment 1995			-0.148* (0.089)	-0.100 (0.077)
Appointment 1996			0.056 (0.107)	0.095 (0.084)
Appointment 1997			0.026 (0.128)	0.029 (0.124)
Controls: Electoral results 1992 and Island Fixed Effects		✓		✓
Observations	198	198	198	198
R-squared	0.004	0.301	0.034	0.321

*Notes:* Robust standard errors in parenthesis. The unit of observation is the number of districts in existence in 1993. The dependent variable takes value one if the district subsequently splitted. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.



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	<b>16</b>	15	0	0	0	31
	1995	10	<b>51</b>	4	0	1	67
	1996	4	5	<b>14</b>	0	0	23
	1997	0	3	0	<b>7</b>	5	15
	1998	5	1	1	5	<b>47</b>	62
	Total	35	75	19	12	53	198

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

Appendix Table 4. 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 5. Robustness Checks. (Additional Outcomes)

	Baseline	Dropping 1997	Conflict, at time of appointment	Economic controls, at time of appointment	Conflict, at time of 1st election	Economic controls, at time of 1st election	Conflict, at time of direct election	Economic controls, at time of direct election	Timing of Direct Election	Years of Experience of the Mayor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Dependent Variable: Elected Mayors with Connections to Soeharto										
Yr. of App.	0.109** (0.044)	0.111* (0.0650)	0.121** (0.0474)	0.125** (0.0503)	0.101** (0.0433)	0.0636 (0.0598)	0.0968** (0.0445)	0.0728 (0.0463)	0.0839* (0.0476)	0.102** (0.0471)
Observations	119	106	119	115	119	115	119	115	119	119
R-squared	0.218	0.227	0.226	0.256	0.243	0.248	0.210	0.268	0.231	0.284
Panel B. Dependent Variable: Z-score Measures of Political Competition										
Yr. of App.	-0.200** (0.081)	-0.0701 (0.0902)	-0.186** (0.0882)	-0.137 (0.0896)	-0.186** (0.0788)	-0.200** (0.0975)	-0.149* (0.0759)	-0.217*** (0.0823)	-0.241** (0.0950)	-0.178** (0.0772)
Observations	126	115	126	123	126	123	126	123	126	126
R-squared	0.272	0.308	0.275	0.324	0.291	0.303	0.160	0.305	0.285	0.365

*Notes:* Panels A and B show robust standard errors in parenthesis. The unit of observation is the district. Each estimate includes the baseline controls defined in the notes of Tables 6. Each column subjects the baseline results to a different robustness check specified in the heading of the respective column. Column 2 drops districts that appointed the last Soeharto mayor in 1997. Columns 3, 5, and 7 add as controls measures of incidence of conflict at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. Columns 4, 6, and 8 add as controls measures of the level of economic activity at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. In column 9 we control for the timing of direct elections by adding dummies for elections in 2005, 2006, and 2007 or later. Column 10 adds as controls dummies for the number of years of experience of the district mayor in office at the time our outcomes of interest are measured. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Appendix Table 6. Robustness Checks. (Flexible Specification)

	Baseline	Dropping 1997	Conflict, at time of app.	Economic controls, at time of app.	Conflict, at time of 1st election	Economic controls, at time of 1st election	Conflict, at time of direct election	Economic controls, at time of direct election	Timing of Direct Election	Years of Experience of the Mayor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Dependent Variable: Golkar Most Voted Party										
App. 1995	0.072** (0.036)	0.076** (0.036)	0.070** (0.035)	0.069** (0.034)	0.045 (0.036)	0.070* (0.037)	0.071* (0.037)	0.089** (0.038)	0.073** (0.036)	0.094* (0.048)
App. 1996	0.157*** (0.051)	0.160*** (0.052)	0.150*** (0.051)	0.149*** (0.049)	0.138*** (0.049)	0.103** (0.049)	0.154*** (0.053)	0.131*** (0.047)	0.158*** (0.050)	0.151*** (0.056)
App. 1997	0.204*** (0.057)		0.264*** (0.069)	0.243*** (0.066)	0.218*** (0.061)	0.147** (0.068)	0.204*** (0.057)	0.212*** (0.061)	0.200*** (0.059)	0.218*** (0.053)
Observations	21,826	19,605	21,826	21,159	21,826	21,159	21,826	21,159	21,826	21,826
R-squared	0.197	0.201	0.203	0.217	0.215	0.209	0.197	0.218	0.197	0.200
Panel B. Dependent Variable: Illegal Payments to Army or Police										
App. 1995	0.042*** (0.015)	0.041*** (0.015)	0.042*** (0.016)	0.049*** (0.015)	0.035** (0.015)	0.045*** (0.016)	0.043*** (0.015)	0.048*** (0.015)	0.047*** (0.015)	0.048*** (0.017)
App. 1996	0.049** (0.023)	0.044* (0.023)	0.044* (0.024)	0.039* (0.022)	0.035 (0.022)	0.045 (0.028)	0.053** (0.023)	0.034 (0.022)	0.091*** (0.030)	0.065* (0.033)
App. 1997	0.076*** (0.029)		0.082*** (0.030)	0.113*** (0.033)	0.080*** (0.030)	0.088*** (0.033)	0.078*** (0.029)	0.090*** (0.032)	0.064** (0.029)	0.070* (0.039)
Observations	8,147	7,383	8,147	7,784	8,147	7,784	8,147	7,784	8,147	8,147
R-squared	0.039	0.038	0.040	0.046	0.044	0.040	0.040	0.042	0.043	0.043

*Notes:* Standard errors clustered at the district level in parenthesis. The unit of observation is the village. Each estimate includes the baseline controls defined in the notes of Tables 3-4. Each column subjects the baseline results to a different robustness check specified in the heading of the respective column. Column 2 drops districts that appointed the last Soeharto mayor in 1997. Columns 3, 5, and 7 add as controls measures of incidence of conflict at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. Columns 4, 6, and 8 add as controls measures of the level of economic activity at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. In column 9 we control for the timing of direct elections by adding dummies for elections in 2005, 2006, and 2007 or later. Column 10 adds as controls dummies for the number of years of experience of the district mayor in office at the time our outcomes of interest are measured. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Appendix Table 7. Robustness Checks. (Flexible Specification)

	Baseline	Dropping 1997	Conflict, at time of app.	Economic controls, at time of app.	Conflict, at time of 1st election	Economic controls, at time of 1st election	Conflict, at time of direct election	Economic controls, at time of direct election	Timing of Direct Election	Years of Experience of the Mayor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent Variable: Public Goods. Z-score Education Facilities										
App. 1995×Post	-0.058 (0.037)	-0.057 (0.036)	-0.054 (0.037)	-0.055 (0.039)	-0.054 (0.039)	-0.043 (0.039)	-0.047 (0.035)	-0.046 (0.040)	-0.058 (0.037)	-0.067* (0.035)
App. 1996×Post	-0.091*** (0.034)	-0.090*** (0.033)	-0.089** (0.035)	-0.081** (0.039)	-0.095** (0.037)	-0.061 (0.043)	-0.066* (0.034)	-0.085** (0.040)	-0.083** (0.041)	-0.108*** (0.033)
App. 1997×Post	-0.106*** (0.039)		-0.095** (0.047)	-0.113** (0.054)	-0.115*** (0.041)	-0.091* (0.047)	-0.114*** (0.037)	-0.105** (0.041)	-0.121** (0.046)	-0.111*** (0.037)
Observations	83,944	77,329	83,944	83,944	83,944	83,944	83,944	83,944	83,944	83,944
R-squared	0.658	0.661	0.659	0.659	0.659	0.659	0.659	0.659	0.658	0.659

*Notes:* Standard errors clustered at the district level in parenthesis. The unit of observation is the village-year. Each estimate includes the baseline controls defined in the notes of Tables 5 for Panels D. Each column subjects the baseline results to a different robustness check specified in the heading of the respective column. Column 2 drops districts that appointed the last Soeharto mayor in 1997. Columns 3, 5, and 7 add as controls measures of incidence of conflict at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively, each interacted with year fixed effects. Columns 4, 6, and 8 add as controls measures of the level of economic activity at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively, each interacted with year fixed effects. In column 9 we control for the timing of direct elections by adding dummies for elections in 2005, 2006, and 2007 or later, each interacted with year fixed effects. Column 10 adds as controls dummies for the number of years of experience of the district mayor in office at the time our outcomes of interest are measured. These controls have time-variation since the identity of the mayor changed over time. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Appendix Table 8. Robustness Checks. (Flexible Specification)

	Baseline	Dropping 1997	Conflict, at time of app.	Economic controls, at time of app.	Conflict, at time of 1st election	Economic controls, at time of 1st election	Conflict, at time of direct election	Economic controls, at time of direct election	Timing of Direct Election	Years of Experience of the Mayor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Dependent Variable: Elected Mayors with Connections to Soeharto										
App. 1995	-0.048 (0.106)	-0.0392 (0.107)	-0.0483 (0.107)	-0.0201 (0.107)	-0.0654 (0.104)	-0.0341 (0.112)	-0.0212 (0.104)	-0.0465 (0.107)	-0.0464 (0.106)	-0.0302 (0.122)
App. 1996	0.215* (0.126)	0.246* (0.128)	0.220* (0.128)	0.299** (0.140)	0.216* (0.125)	0.197 (0.165)	0.239* (0.133)	0.182 (0.143)	0.147 (0.149)	0.243* (0.144)
App. 1997	0.287** (0.139)		0.351** (0.164)	0.289* (0.153)	0.240* (0.139)	0.180 (0.176)	0.214 (0.145)	0.172 (0.146)	0.271* (0.144)	0.262* (0.154)
Observations	119	106	119	115	119	115	119	115	119	119
R-squared	0.242	0.254	0.253	0.283	0.272	0.262	0.230	0.285	0.246	0.303
Panel B. Dependent Variable: Z-score Measures of Political Competition										
App. 1995	-0.210 (0.157)	-0.198 (0.154)	-0.210 (0.159)	-0.197 (0.165)	-0.187 (0.154)	-0.266* (0.158)	-0.325 (0.201)	-0.236 (0.154)	-0.213 (0.156)	-0.269 (0.176)
App. 1996	-0.142 (0.183)	-0.117 (0.176)	-0.130 (0.180)	-0.0513 (0.194)	-0.100 (0.178)	-0.164 (0.205)	-0.273 (0.235)	-0.163 (0.183)	-0.197 (0.273)	-0.145 (0.196)
App. 1997	-0.877*** (0.286)		-0.928*** (0.336)	-0.688** (0.311)	-0.845*** (0.284)	-0.736** (0.317)	-0.537** (0.216)	-0.799*** (0.280)	-0.894*** (0.292)	-0.741*** (0.257)
Observations	126	115	126	123	126	123	126	123	126	126
R-squared	0.303	0.316	0.304	0.352	0.323	0.324	0.175	0.302	0.304	0.390

*Notes:* Robust standard errors in parenthesis. The unit of observation is the village. Each estimate includes the baseline controls defined in the notes of Table 6. Each column subjects the baseline results to a different robustness check specified in the heading of the respective column. Column 2 drops districts that appointed the last Soeharto mayor in 1997. Columns 3, 5, and 7 add as controls measures of incidence of conflict at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. Columns 4, 6, and 8 add as controls measures of the level of economic activity at the time of appointment of the last Soeharto mayor, at the time of election of the first democratic mayor, and at the time of election of the first directly elected mayor, respectively. In column 9 we control for the timing of direct elections by adding dummies for elections in 2005, 2006, and 2007 or later. Column 10 adds as controls dummies for the number of years of experience of the district mayor in office at the time our outcomes of interest are measured. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.

Appendix Table 9. Main Results Including Districts with Appointments in 1998

	Dependent Variables:			
	Golkar Most Voted Party in the Village	Illegal Payments to Army or Police	Public Goods. Z-Score Education Facilities	Political Competition. Z-Score
	(1)	(2)	(3)	(4)
<i>Mean Dep. Var.</i>	0,31	0,15	0,00	0,00
Appointment 1995	0.069* (0.037)	0.037** (0.016)	-0.059 (0.037)	-0.245 (0.159)
Appointment 1996	0.146*** (0.052)	0.043* (0.022)	-0.093*** (0.034)	-0.202 (0.197)
Appointment 1997	0.196*** (0.055)	0.068** (0.029)	-0.108*** (0.039)	-0.601** (0.257)
Appointment 1998	0.060* (0.034)	0.055*** (0.017)	-0.034 (0.037)	-0.289 (0.302)
Observations	32,767	11,924	125,363	163
R-squared	0.198	0.038	0.649	0.180

*Notes:* Standard errors clustered at the district level in parenthesis for column 1-3. Robust standard errors in parenthesis for column 4. The unit of observation is the village in column 1, the firm in column 2, the village-year in the panel specification displayed in column 3, and the district in column 4. Additional controls included in the baseline results are described in Tables 3, 4, 5 and 6. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1.