# Decoding Corruption Cycles: Collusive versus Extractive Corruption

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**Abstract**

A large body of empirical literature has shown that politicians' time horizons influence the level of corruption they engage in. However, some studies suggest that corruption follows a U-shaped pattern across a politician's tenure, decreasing in the middle and rising again toward the end, while others find an inverse U-shape. We argue that these conflicting findings can be explained by distinguishing between two types of corruption based on whether the corrupt act is mutually beneficial *(collusion)* or one-sided *(extraction)*. To test this hypothesis, we analyze provincial governors in Vietnam, leveraging 15 years of nationally representative firm-level data and biographical information on local leaders. Our findings reveal a clear relationship between political tenure and corruption: collusion follows a U-shaped trajectory, while extraction follows an inverse U-shape. While timing is a crucial determinant of corruption, its impact varies depending on the nature of the corrupt act.

Key words: corruption, political horizons, authoritarianism, Vietnam

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# 1 Introduction

Understanding the strategies that politicians use to engage in corruption is central to the design and implementation of anti-corruption policies, and ultimately towards achieving good governance and political reform. As with most strategies, timing matters, and a large literature has linked political horizons and the extent of various forms of wrongdoing and manipulation by politicians (Guo, 2009; C. V. Nguyen, 2021; Wallace, 2016; Yu & Li, 2019). Regarding corruption, the reasoning is intuitive. Corruption is illegal yet the private benefits to corruption are large. Politicians strategize over when, and how much, to engage in nepotism, bribery, and embezzlement, to minimize their chances of getting caught, maximize their chances for reelection or promotion, and otherwise extract as much rents as they can, given their expected time-horizons.

However, the empirical literature remains surprisingly unclear on how timing influences the level of corruption. Some studies find that corruption is highest at the end of a politician's term (Cooper et al., 2021; Figueroa, 2021; Mironov & Zhuravskaya, 2016; C. V. Nguyen, 2021; Sidorkin & Vorobyev, 2018). These studies generally follow an Olsonian logic: as a politician's term nears its end, their tenure becomes more uncertain, shortening their time horizon (Olson, 1993). Rational politicians, therefore, seek to extract as much as possible before leaving office. Firms, too, have an incentive to engage in more illicit deals toward the end of a politician's term, as they aim to secure favorable agreements with their political connections before those connections lose power.

Other empirical studies have found the opposite effect: corruption decreases at the end of a politician's term (Buckley-Farlee, 2017; Vadlamannati, 2015). The rationale behind this is equally compelling. Politicians may refrain from engaging in corruption near the end of their term to maximize their chances of reelection or promotion. Being caught in a corruption scandal at this stage could significantly harm their political prospects. Research

has shown that voters have short memories; politicians' achievements closer to election times are disproportionately rewarded, while scandals are heavily punished (Huber et al., 2012; Pereira & Waterbury, 2019). In short, the existing literature agrees that timing matters for corruption, but exactly how remains inconclusive.

This paper argues that a potential resolution for these disparate results lies in the nature of the corrupt activity. The limitation of previous research is that it has either considered corruption as a 'catch-all' term including many different sorts of corrupt activity, or has used the word corruption when referring to something more specific, such as bribery. In particular, we look at politicians in executive positions and make distinct predictions for two different types of corruption: collusion and extraction. Collusion happens when firms bribe or give kickbacks to state agents to get access to special privileges such as government contracts. Extraction—also called extortion—happens when state agents intimidate and harass businesses into bribing them. We posit that the level of collusive corruption across a politician's term follows a U-shaped pattern. Collusive corruption is high at the beginning, goes down towards the middle of the term, and rises again at the end. On the other hand, the relationship between the level of extractive corruption and tenure follows an inverse-U relationship: extraction is low at the beginning, rises in the middle, and falls again at the end of the politician's tenure.

We test the implications of our theory by examining provincial chairmen (PCOMs) in Vietnam, an appropriate context for several reasons. First, corruption is widespread in Vietnam. The 2018 Corruption Perception Index (CPI) by Transparency International ranked the country 117th out of 180 surveyed nations. Second, a significant share of business-to-government corruption occurs at the provincial level, where PCOMs play a particularly influential role (Malesky & Phan, 2019). PCOMs wield substantial discretionary power in their provinces and can influence the level of corrupt activity (Kerkvliet & Marr, 2004). Third, PCOMs have strong incentives to manipulate corruption levels to serve their inter-

ests. Vietnam's single-party political structure creates promotion incentives for PCOMs, who aspire to advance to high-ranking positions in the Party, the province, and the central government. Upward promotion is at least partially meritocratic, with PCOM candidates evaluated based on various economic and social performance indicators, including economic growth, poverty reduction, and anti-corruption efforts (Dan, 2018; Jensen & Malesky, 2018a; P. T. Nguyen, 2017).

We test our argument using a nationally representative dataset of over 8,000 firms per year, covering 15 years of the Provincial Competitiveness Index (PCI). This dataset includes information on both collusive and extractive corruption, as well as firm characteristics. We supplement this firm-level data with biographical information on provincial leaders. Since no publicly available dataset exists on Vietnamese politicians, we compiled our own, documenting the tenures and key characteristics of all PCOMs from the late 1990s to 2020, covering 265 PCOM tenures.

The findings provide supportive evidence for our theory. Over the tenure of PCOMs, the level of corruption reported by firms exhibits a U-shaped pattern for bribery in the procurement of government contracts—collusion—and an inverse U-shaped pattern for bribery during regulatory inspections—extraction. These results are robust to a variety of controls and sensitivity tests.

Our results contribute to several strands of literature. Most directly, we provide a framework that reconciles previously divergent findings on the relationship between corruption levels, time horizons, and tenure (Buckley-Farlee, 2017; Campante et al., 2009; Cooper et al., 2021; Figueroa, 2021). Our key insight is that different types of corrupt exchanges follow distinct political cycles. Second, we build on research examining how institutional structures shape the nature of wrongdoing in authoritarian regimes generally, and in Vietnam specifically (Guo, 2009; Jensen & Malesky, 2018a; Wallace, 2016). Finally, our findings have real-world implications: by identifying the mechanisms that incentivize politicians to engage

in corruption (or refrain from it), our work offers insights for the institutional design of government and NGO programs aimed at curbing corruption.

# 2 Theoretical Framework

## 2.1 Collusive Corruption and Extractive Corruption

Research in both political science and economics has reached a broad consensus that political horizons affect the level of corruption. However, beyond this consensus, there is surprisingly little agreement on how timing impacts corruption. Empirical studies across different contexts have produced disparate results. In some cases, corruption peaks at the end of a politician's tenure (Campante et al., 2009; Gamboa-Cavazos et al., 2007; Mironov & Zhuravskaya, 2016; C. V. Nguyen, 2021; Sidorkin & Vorobyev, 2018), while other studies find that corruption declines towards the end (Buckley-Farlee, 2017; Vadlamannati, 2015). These divergent findings across countries with varying political systems, income levels, and geographic contexts suggest that context-specific explanations may not fully account for the observed differences.

We argue that these findings can be reconciled by distinguishing between two types of corruption: collusion and extraction. We define collusive corruption—also known as rent-seeking—as instances where firms bribe government officials to establish relationships that grant access to opportunities such as government contracts. In these cases, firms actively participate in and benefit from corruption, making collusion mutually advantageous for both parties. In contrast, extractive corruption involves the extortion of businesses by state agents. Here, firms neither actively seek nor benefit from corruption; instead, public officials initiate and exclusively profit from the transaction.

In collusive corruption, corrupt officials and businesses act as partners in illicit dealings. Mutual trust is essential in such arrangements, as corrupt agreements cannot be enforced through public institutions, significantly increasing transaction costs (Vannucci & Della Porta, 2013). Both parties must trust each other to uphold the agreement, complete payments, avoid disclosing details to external parties, and refrain from using the information for future blackmail. As a result, a period of socialization, trust-building, and cautious engagement is necessary before such relationships fully develop.

In the early stages of collusion, businesses first engage in network-building bribes to gain access to politicians' inner circles. This process often begins with introductions through mutual acquaintances who provide favorable recommendations, followed by efforts to ingratiate themselves with officials through gifts and invitations to high-profile social events. More subtle approaches include offering special treatment to officials' family members or funding their leisure activities, such as gambling and golf (Li, 2011). In other words, firms initially incur a *fixed cost*—both in terms of money and time—to establish relationships with government officials (Coviello & Gagliarducci, 2017).

Once these businesses have gained officials' confidence, they are positioned to receive favorable treatment in securing government contracts. Officials can facilitate this by providing early or exclusive information, manipulating bid criteria or timelines to exclude competitors, or directly rigging the evaluation process (Blundo et al., 2008). At this stage, firms often provide "thank-you gifts" or kickbacks—a *variable cost*—following the awarding of contracts. In contrast, for businesses that have not invested in building close relationships with officials, attempts to offer bribes in a purely transactional manner at the time of bidding are likely to be outright rejected or even reported by the officials (Li, 2011).

This arrangement benefits both parties: politicians receive payment, while firms gain access to contracts and licenses that would otherwise be inaccessible. Moreover, repeated interactions can reduce the transaction costs associated with these illicit agreements, leading

politicians to consistently favor a select group of businesses.

Extractive corruption, in contrast, is zero-sum, meaning firms incur losses from the transaction. A common example occurs when officials coerce firms into paying informal fees to obtain essential business documents, such as business registrations, export/import clearances, or vehicle inspection reports (Dong, 2018; H. Duyen, 2024a). Even when firms are legally entitled to these documents and have submitted the required paperwork and fees, officials can still exploit their authority by stalling the process, demanding additional unofficial paperwork, or creating other bureaucratic obstacles (Blundo et al., 2008). In many cases, such as at Vietnamese customs agencies or vehicle inspection centers, these informal payments become routine business expenses, with prevailing rates widely known (Dong, 2018; H. Duyen, 2024a).

Extraction can also occur during site visits by state agents. For instance, in corrupt areas, restaurants and street-side businesses are expected to make regular informal payments to local police during routine visits. Businesses that refuse to comply risk becoming targets for selective law enforcement. These payments function similarly to "protection money" paid to non-state mafias and gangs. Another form of extraction occurs during regulatory inspections, where government agents responsible for fire safety, food sanitation, environmental protection, and other oversight areas may intimidate businesses into paying bribes to avoid fines or closures.

Extractive corruption results in firm losses while benefiting corrupt state agents. Although the individuals directly extorting firms are typically low-level bureaucrats, politicians and high-ranking officials often facilitate and profit from these practices through a complex system of benefits. Sustained corruption at lower levels generally requires at least implicit approval from higher-ups. For example, at Vietnamese vehicle inspection centers, lower-ranking officials are required to remit a fixed percentage of their bribe revenues to the Head of the Department of Vehicle Inspection (H. Duyen, 2024b). Beyond directly siphoning off

bribes, politicians may also profit indirectly by selling lucrative government positions that offer opportunities for illicit earnings (Wade, 1982).

This classification of corruption into two types builds on existing typologies in the literature while adapting them to support our theoretical framework. For instance, what we term extractive corruption closely corresponds to petty bribery, while collusive corruption aligns with forms of grand corruption (Klitgaard, 1988; Rose-Ackerman & Palifka, 2016). By distinguishing corruption based on the balance of interests within the transaction rather than its scale, we are able to analyze how corruption levels evolve in relation to political time horizons. Additionally, our typology broadly aligns with Yuen Yuen Ang's four categories of corruption (Ang, 2020). Collusion corresponds to Ang's concept of "access money," while extractive corruption encompasses both "petty theft" and "speed money." Our classification does not address what Ang terms "grand theft," as this category primarily involves theft and embezzlement by public officials without the direct involvement of businesses. In this paper, we focus on business-politician interactions to align with the scope of our analysis.

## 2.2 Collusive Corruption: A U-shaped Relationship with Tenure

We will now lay out our theoretical expectations and explain the logic behind our argument. For collusion, we predict a U-shaped relationship between the level of corruption and the tenure of politicians. At the beginning of a politician's term, the level of corruption is high. Corrupt activities decrease in the middle of the term before rising again at the end.

At the start of a politician's tenure, rent-seeking businesses predominantly pay bribes to invest in relationships with officials. These businesses incur substantial fixed costs—both in money and time—to gain access to politicians' trusted circles. The earlier firms establish these ties, the greater the potential for future gains. By paying these costs early, firms position themselves to leverage politicians' networks and influence over a longer period,

benefiting from advantages such as securing government contracts, gaining exclusive market access, and reducing competition (Gamboa-Cavazos et al., 2007). A first-mover advantage also exists: firms that fail to establish relationships early in the term may find it increasingly difficult or costly to break into politicians' circle of trusted collaborators later.

In the middle of the term, the level of corruption decreases as firms and politicians develop stable relationships. During this period, firms no longer need to incur the high costs of network-building bribes. Businesses collude with the politicians with whom they are affiliated to bid for government contracts and pay kickbacks—a type of variable cost—for each contract won. Politicians, in turn, are less receptive to relationship-establishing bribes from new businesses since they have already cultivated a network of trusted accomplices.

Toward the end of the term, the level of collusive corruption rises again. Bribery in the form of kickbacks dominates during this period. Both politicians and firms have incentives to lock in future gains from their existing relationships before they expire, i.e., when politicians leave office. From politicians' perspective, since they receive kickbacks from every contract signed, they may seek to approve as many as possible before retiring or being promoted. Additionally, by that point, they are no longer accountable for the quality or effectiveness of government spending on projects that will materialize after they leave office. If these contracts prove to be wasteful or ineffective, it is their successors who will bear the political and economic consequences. C. V. Nguyen (2021) hints at this logic by showing that Vietnamese SOE managers intensify hiring to an abnormal degree in their last year in charge, with most of the new hires turning out to be unnecessary and redundant. Sidorkin and Vorobyev (2018) also propose a similar argument to explain why corruption increases in the last 12-18 months of Russian regional governors' terms.

Similarly, firms seek to maximize their returns on the relationships they have cultivated. Having already invested substantial fixed costs in building trust earlier in the term, they aim to lock in future benefits while they still have a reliable ally in power, by paying the variable

cost of kickbacks to secure multiple contracts. Uncertainty about incoming politicians further reinforces this urgency. As a result, both firms and politicians have strong incentives to ramp up collusion toward the end of politicians' tenure, leading to a surge in corrupt dealings before the transition of power.

## 2.3 Extractive Corruption: An Inverse U-shaped Relationship with Tenure

On the other hand, the level of extractive corruption follows an inverse U-shaped pattern over politicians' tenure. At the beginning of politicians' term, the level of extraction is low. In the middle of the term, extractive corruption rises, and at the end of the term, it falls again.

At the beginning of their term, politicians tend to keep extraction levels low. This aligns with the logic that politicians with longer time horizons have incentives to maintain a vibrant economic environment. By extracting only modestly, they foster conditions that encourage economic growth and ensure a steady and growing stream of rents over time (Olson, 1993). As politicians' tenure in office continues, they become roving bandits. Due to the shortened time horizons and uncertainty over whether they will continue to be in power, politicians ramp up extractive activities.

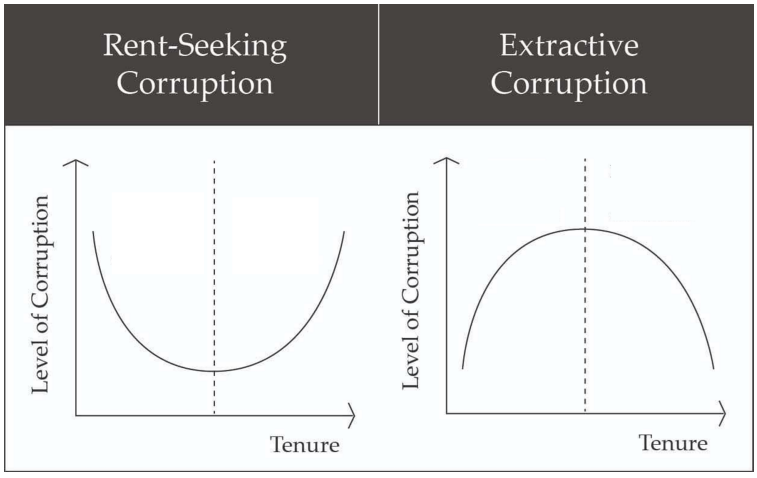
Other factors keep the level of extraction low during politicians' early years in power. This period is typically marked by heightened scrutiny and oversight from the local populace, business community, and government agencies. This external pressure compels politicians to avoid excessive extraction early on to maintain a positive image. Moreover, corruption is a skill that requires time to perfect. As previously discussed, extractive corruption involves a complex network of benefits that extends from low-level bureaucrats to the highest levels of power (H. Duyen, 2024b). Politicians may require this period to adapt to their new role, gain

control over bureaucratic networks, and learn how to navigate these relationships effectively.

In the middle of a politician's term, a combination of greater confidence, stronger networks, and reduced scrutiny allows for an increase in extractive activities. However, as the term nears its end, extraction declines. Politicians seeking promotion or future roles avoid highly visible corruption that could jeopardize their career prospects. Scandals are particularly costly near the end of a term due to recency bias, which makes voters and superiors weigh recent events more heavily when evaluating performance (Besley, 2006; Huber et al., 2012; Pereira & Waterbury, 2019). Promotion promises greater future rents, and research shows that officials may reduce corruption temporarily to extend their long-term gains (Niehaus & Sukhtankar, 2013). As a result, politicians scale back extraction in the final stretch to minimize complaints and boost economic activity.

The inverse U-shaped relationship reflects these dynamics: extraction starts low due to scrutiny and learning curves, rises as politicians maximize personal gains mid-term, and decreases toward the end as the risks and consequences of corruption become more salient. Figure 1 presents a stylized summary of the argument.

**Figure 1** Type of Corruption and Tenure



## 2.4 Classification of Existing Studies by Type of Corruption

When applying our typology to corruption studies in the literature, a broad pattern—similar to that illustrated in Figure 1—emerges from the conflicting findings. The results, summarized in Table 4 in the Appendix, show that studies identifying a U-shaped relationship between corruption and tenure primarily focus on collusion. For instance, in Vietnam, C. V. Nguyen (2021) documented a rise in wrongdoing at the end of SOE managers' tenures, evidenced by unnecessary new hires. Taking bribes in exchange for cushy jobs represents a classic case of collusive corruption. In Russia, Mironov and Zhuravskaya (2016) found an increase in tunneling—the illegal transfer of cash from firms to politicians—toward the end of politicians' terms, particularly among firms winning government procurement contracts, another form of collusive corruption. Similarly, Sidorkin and Vorobyev (2018) identified a U-shaped pattern in Russia, where gifts and informal payments were used to expedite services. In Argentina, Figueroa (2021) showed that politicians increased bribe collection toward the end of their tenures to finance political campaigns. This form of corruption, involving inflated public contracts in exchange for bribes, also reflects collusion between businesses and politicians.

In contrast, studies on extortion typically find the opposite pattern, though the results are more mixed. Buckley-Farlee (2017) examined the extortion of Russian citizens during routine administrative procedures and found that corruption levels were lower in governors' final year in office. Buckley attributed this decline to increased political competition. In India, Vadlamannati (2015) found evidence of political cycles in corruption, where incumbents tightened control over public-sector corruption as elections approached. This pattern aligns with our hypothesis that political horizons and electoral pressures drive extortion down. Notably, this effect was observed only in scheduled elections, not unscheduled ones, and was strongest in swing states where incumbents faced greater uncertainty. However, because their measure relies on registered corruption cases, it is difficult to determine precisely what

type of corruption was involved.[1]

In the next sections, we test our theory's hypotheses in the context of Vietnam, focusing on actors who have both the incentives and the ability to influence the levels of collusive and extractive corruption.

# 3 Context

## 3.1 Provincial People's Committee Chairmen (PCOMs)

Vietnam is a centralized single-party regime governed by the Communist Party (VCP) from Hanoi. Provinces serve as the primary sub-national administrative units. This paper focuses on provincial People's Committee Chairmen (PCOMs), who lead the provincial executive branch. PCOMs oversee provincial bureaucracies and wield considerable discretion in governance. They preside over lower-level administrative units—districts, communes, and villages—as well as provincial departments of key ministries, including education, planning and investment, commerce and industry, health, resources and environment, and transport (H. Nguyen, 2015).

PCOMs hold significant power within their provinces. They have the authority to suspend or annul decisions made by People's Councils—the legislative branch—and People's Committees at the district and commune levels. Both horizontal accountability to provincial legislatures and vertical accountability to the central government remain weak. The

[1] An anomaly among studies on extortion is found in Cooper et al. (2021), which examined the extortion of truck drivers in three West African democracies. The study revealed that the intensity—but not the frequency—of extortion increased during the buildup to elections. While this finding contradicts our theory's predictions, a closer look at the dynamics offers possible explanations. In these countries, politicians have weaker control over bureaucratic activities, leaving bureaucrats more independent. Cooper argued that bureaucrats intensify extortion near election times as an insurance strategy against uncertain future political leadership, which could result in reassignments to different posts or changes in budgetary priorities. These findings diverge from the predictions of our model, which assumes that politicians exert strong influence over the level of extortion through their control of the bureaucratic apparatus.

provincial People's Councils, which are meant to provide oversight, convene only a few times a year. These meetings are largely ceremonial, with Councils routinely approving whatever is presented to them, effectively granting PCOMs broad autonomy (Kerkvliet & Marr, 2004). Additionally, due to Vietnam's large number of local units[2], the central government struggles to exert strong oversight at the provincial level. As a result, some provinces become fiefdoms under long-standing local leaders (K. Duyen, 2015; P. Nguyen & Hoa, 2022).

Corruption is a major issue in Vietnam. In the 2018 Corruption Perception Index (CPI) by Transparency International, Vietnam ranked 117th out of 180 countries, lagging behind China, Indonesia, Thailand, and the Philippines. Business-to-government corruption is widespread. According to the Vietnam Provincial Competitiveness Index (PCI), the country's leading enterprise survey, 30.8 percent of businesses reported paying informal charges to expedite land procedures, while 39.3 percent admitted to bribing officials during inspections. Additionally, 48.4 percent agreed that commissions are necessary to secure government procurement contracts (Malesky et al., 2019). Most business-government interactions in Vietnam occur at the provincial level, rather than the national level (Bai et al., 2019, p. 654). As key provincial actors, PCOMs can directly or indirectly influence the scale and nature of corruption to serve their own objectives.

## 3.2 PCOMs and Promotion Incentives

One of these objectives is promotion to the position of provincial Party Secretary or a central government role in Hanoi. These positions confer prestige, exposure to the national audience, and opportunities for further enrichment (Jensen & Malesky, 2018a). While lower-level officials must retire by age 60, provincial Party Secretaries and high-ranking officials in the central government have their retirement age extended to 65. Thus, a promotion prolongs the window for politicians to enact policies with nationwide implications, leave a

[2]Vietnam has 63 provinces and major cities, compared to 34 in China.

lasting political legacy, and accumulate personal wealth. In general, the PCOMs' support base within the province places significant value on promotion. With the large number of sub-national units in Vietnam, having a local representative in high national government positions is regarded as prestigious. As illustrated in Figure 2, at the end of their tenure, only 53 percent of PCOMs are promoted, while 38 percent retire within the province. Research also indicates that provinces, districts, and communes benefit financially from having native-born politicians in influential positions in the central government (Do et al., 2017).

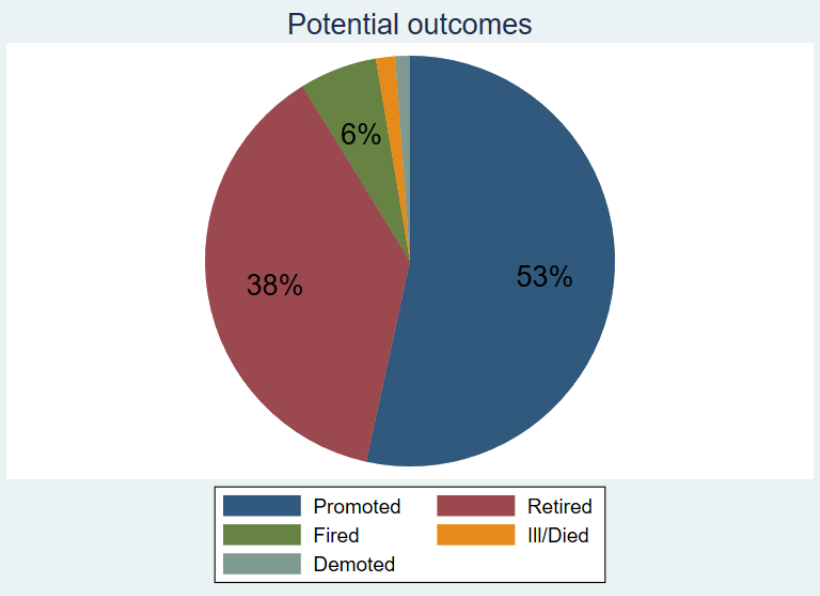
The importance of promotion is also evident in the efforts PCOMs make to enhance their CVs for higher positions. Studies on both Vietnam and similar contexts like China show that subnational leaders strategically use government spending, tax incentives, and even manipulate GDP data to garner favorable performance numbers in alignment with promotion cycles (Chen & Zhang, 2020; Guo, 2009; Jensen & Malesky, 2018a; Wallace, 2016).

## 3.3 Corruption and Promotion

A full term for PCOMs lasts five years. As shown in Figure 7 in the Appendix, most local chairmen who are eventually promoted do so between their fourth and sixth year in office. The five-year term is also mandated by law. According to the Ministry of Internal Affairs' regulations on cadre appointments, an initial appointment must allow sufficient time to complete a full term (B. Nguyen, 2012; Phan, 2003). The period leading up to the fifth year is therefore critical, as it coincides with performance evaluations and promotion considerations.

While PCOMs have significant discretion in managing provincial affairs, their career trajectories are tightly controlled by the central government. If promoted, they may become Party Secretaries within their province or move to positions in the central government

**Figure 2** Outcomes Of PCOMs' Tenures




ministries, key Party organs, or the National Assembly. Regardless of their destination, all promotions must be approved by the Communist Party's Central Committee, Politburo, and Party Secretariat (Kerkvliet & Marr, 2004). This marks a shift from their initial selection as PCOMs, which, at least in theory, is determined by provincial People's Council elections without requiring central approval (H. Nguyen, 2015). As a result, despite their considerable autonomy in provincial governance, PCOMs have strong incentives to align with central Party expectations to improve their chances for promotion.

The central government assesses candidates based on a broad range of socio-economic achievements prioritized by the Party, including economic growth, corruption control, poverty reduction, employment, investment attraction, and pollution control (Jensen & Malesky, 2018a; Shen, 2014). Aspirants seeking promotion and higher Party status strategically time their performance to align with key evaluation windows. This strategic behavior leads to political cycles in public investment (Guo, 2009), pollution levels (Shen, 2014), and tax incentives (Chen & Zhang, 2020). Sometimes, the drive to meet higher-ups' expectations results in excessive fiscal extraction (Yu & Li, 2019) and even loss of human lives (Kung & Chen, 2011). At other times, provincial leaders resort to manipulating or fabricating performance

data (Wallace, 2016). Consequently, corruption allegations significantly tarnish PCOMs' perceived performance in the eyes of the central government, diminishing their chances of promotion.

# 4 Data and Variables

## 4.1 Data on Provincial Leaders

Currently, no publicly available dataset exists on Vietnamese political leaders. The information on PCOMs used in this paper was gathered through a multi-year data collection effort. We documented the tenures and key characteristics of all provincial leaders from the late 1990s to 2020, sourcing data from various scattered references, including Wikipedia pages and the Administrative Almanacs (*Niên giám hành chính*), which provide snapshots of provincial leadership every five years. The bulk of the information was obtained from online news articles from national and local outlets, which often include brief biographies of incoming and outgoing officials.

To ensure accuracy, we cross-checked these sources to compile a comprehensive dataset covering 265 PCOM tenures. The dataset includes details such as the exact years of each leader's term, their year of birth, hometown, and educational background. Most importantly, we classified the outcome of each leader's tenure into five categories: (1) Retired, (2) Promoted, (3) Fired, (4) Demoted, and (5) Ill or Died in Office.

## 4.2 Data on Firm-Level Corruption

Data on our outcome variables, which capture various forms of collusive and extractive corruption, come from the Vietnam Provincial Competitiveness Index (PCI) survey—a compre-

hensive, nationally representative survey of businesses across Vietnam. Established in 2005, the PCI is the country's largest annual enterprise survey. In the 2020 wave, it collected responses from 8,633 domestic private firms across all 63 provinces and 1,564 foreign-invested enterprises (FIEs) from the 20 provinces and cities with the highest concentrations of foreign direct investment.

The PCI assesses and ranks provincial governments based on their efforts to foster a favorable business environment for private sector development. It employs a stratified random sampling strategy within each province, with strata based on firm age, sector, and investment type. In 2018, for example, the uncorrected response rate was 40 percent for domestic firms and 32 percent for foreign firms. After adjusting for incorrect addresses and contact information, the final response rate for both groups was approximately 50 percent. About 70 percent of the surveys were completed by owners, CEOs, or top managers, while the rest were filled out by other senior managers or financial officers.

For this study, we focus on domestic firms in the PCI dataset (PCI-DDI) to examine local Vietnamese businesses. Compared to FIEs, domestic firms are less mobile, have weaker bargaining power relative to the state, and are more vulnerable to extortion. The dataset includes responses from 119,987 firms over 15 years (2006–2020).

## 4.3 Descriptive Statistics

Table 1 presents summary statistics for key variables, with the top panel covering firm-level information and the bottom panel summarizing PCOM-level variables for 265 provincial leaders. Several of these questions were not included in all years of the PCI survey. For example, questions regarding bribery during inspections were only added to the survey in 2016. This accounts for the varying number of observations in this table and across different regression specifications in the results section.

**Table 1** Summary statistics

| | N | mean | sd | min | max | p25 | p75 |
|---|---|---|---|---|---|---|---|
| Bribe expenses (as % of revenues) | 77,484 | 3.29 | 5.85 | 0.00 | 35.00 | 0.50 | 3.50 |
| Bribes during inspections | 34,699 | 0.41 | 0.49 | 0.00 | 1.00 | 0.00 | 1.00 |
| Equity at formation | 104,499 | 2.53 | 1.20 | 1.00 | 8.00 | 2.00 | 3.00 |
| Employment at formation | 104,499 | 2.08 | 1.07 | 1.00 | 8.00 | 1.00 | 3.00 |
| Owner: Former govt | 75,235 | 0.03 | 0.16 | 0.00 | 1.00 | 0.00 | 0.00 |
| Owner: Former military | 75,235 | 0.03 | 0.18 | 0.00 | 1.00 | 0.00 | 0.00 |
| Owner: Former SOE manager | 75,235 | 0.08 | 0.28 | 0.00 | 1.00 | 0.00 | 0.00 |
| Owner: Former SOE employee | 75,235 | 0.11 | 0.32 | 0.00 | 1.00 | 0.00 | 0.00 |
| Owner: Bachelor degree | 75,235 | 0.57 | 0.50 | 0.00 | 1.00 | 0.00 | 1.00 |
| Owner: MBA degree | 75,235 | 0.03 | 0.18 | 0.00 | 1.00 | 0.00 | 0.00 |
| Owner: Male | 75,235 | 0.77 | 0.42 | 0.00 | 1.00 | 1.00 | 1.00 |
| PCOM's age at appointment | 265 | 51.56 | 3.60 | 36.00 | 58.00 | 50.00 | 54.00 |
| Female PCOM | 265 | 0.03 | 0.17 | 0.00 | 1.00 | 0.00 | 0.00 |
| Retired at end of term | 265 | 0.32 | 0.47 | 0.00 | 1.00 | 0.00 | 1.00 |
| Promoted at end of term | 265 | 0.37 | 0.48 | 0.00 | 1.00 | 0.00 | 1.00 |
| Fired | 265 | 0.05 | 0.21 | 0.00 | 1.00 | 0.00 | 0.00 |
| Length of tenure (Years) | 265 | 4.52 | 2.49 | 1.00 | 15.00 | 2.00 | 6.00 |

Overall, firms reported that bribe expenses account for approximately 3.3 percent of their total annual revenues. Among PCI respondents, 41 percent directly admitted to paying bribes during inspections. Regarding firm owners, 77 percent are male, 57 percent hold a bachelor's degree or higher, and three percent have an MBA. Additionally, 11 percent were previously SOE employees, eight percent were former SOE managers, and three percent each had experience in government and the military.

The average age at appointment among PCOMs in the regression sample is 51.56 years. Their average tenure is 4.52 years, with 75 percent having left the position by the end of their sixth year. There is considerable variation in their post-tenure career paths: 30 percent of PCOMs were promoted, five percent were fired, and 32 percent retired. The rest are actively serving PCOMs at the time of data collection. Gender imbalance is pronounced, as only three percent of provincial chairmen are female.

## 4.4 Dependent Variables

### Collusive corruption: Bribery during Procurement

We proxy collusive corruption using a measure of bribery in procurement activities. Government agencies issue tenders inviting firms to provide services such as construction and the supply of materials, including stationery, machinery, and medical devices. However, politicians often manipulate the selection process in exchange for kickbacks (Tuan & Hoang, 2021; Vietnamnet, 2021). Instead of selecting the most qualified firms, politicians favor cronies by using subjective criteria to eliminate competitors.

Manipulation can occur at multiple stages of the bidding process. During the call for tenders, officials selectively leak information to cronies, allowing them to prepare in advance while limiting visibility to other potential bidders (Li, 2011). They may also impose short preparation periods to disadvantage competitors. In setting selection criteria, politicians insert requirements that favor specific firms. Where corruption is deeply entrenched, officials orchestrate sham competitions in which multiple cronies submit bids, but all except the preselected firm deliberately fail. This maintains the illusion of competition and provides a façade of legitimacy (Blundo et al., 2008; Tuan & Hoang, 2021).

Such procurement manipulation is a classic form of collusive corruption (Coviello & Mariniello, 2014; Di Tella & Schargrodsky, 2003; Tran, 2008). Since both the bribing firms and government officials benefit, neither party has an incentive to expose the corruption. In Vietnam, corruption in government procurement is common, particularly in areas such as transportation services (Vietnamnet, 2021), school construction (Thanh, 2020), and medical supply contracts (Hoang, 2020). The problem is so pervasive that multiple corruption scandals emerged even amid the intense public scrutiny of the COVID-19 pandemic. Officials helped companies secure contracts and overcharge the state for COVID-19 diagnostic machines (Hoang, 2020), test kits (Hoang, 2021), and "rescue flights" for Vietnamese citizens

stranded overseas (Ban & May, 2022).

Our dependent variable is an estimated measure of a firm's propensity to have paid bribes to win government contracts, derived using the method proposed by Blair and Imai (2012). The PCI survey employs a LIST experiment—also known as the Unmatched Count Technique (UCT)—to measure the prevalence of this type of corruption. LIST experiments are designed to elicit honest responses to sensitive topics such as corruption, racial bias, or sexual behavior. In this application, respondents are randomly assigned to one of two versions of the questionnaire. The control group receives a question listing four common activities businesses undertake when applying for government contracts and is asked to report how many they have engaged in. The treatment group receives the same list with an additional item: *"Paid a special commission to ensure your business won the contract."* Because firms only report the number of activities, rather than identifying specific ones, they can indirectly acknowledge bribery without fear of reprisal. The difference between the average number of activities reported by the treatment and control groups provides an estimate of the prevalence of bribery in the population. LIST experiments have proven effective in uncovering sensitive behaviors such as racial bias (Kuklinski et al., 1997), bribery (Jensen & Malesky, 2018b), and vote buying (Gonzalez-Ocantos et al., 2012; Kiewiet de Jonge, 2015).[3] [4]

[3]The exact wording of the LIST questions is provided in the Appendix.

[4]While LIST experiments can estimate aggregate corruption levels, they do not identify corruption at the individual firm level. To address this, Blair and Imai (2012) developed a two-stage method. In the first stage, researchers regress the number of reported activities on key explanatory variables and controls using only the control group sample. These estimated coefficients are then applied to treatment group firms to generate predicted values—i.e., the number of activities the firm would have reported had it been in the control group. The difference between the actual response and this predicted value reflects the probability that the firm engaged in bribery. The larger the discrepancy, the more likely the firm has paid bribes to secure contracts.

In the second stage, this bribery probability measure is substituted as the dependent variable in the first-stage regression. Our regression tables report these results, where the second-stage coefficient represents the marginal effect of each covariate on the probability of bribery.

**Extractive corruption: Bribery during Inspections**

Our measure of extraction focuses on whether firms are required to pay bribes during regulatory inspections. Local government inspectors periodically visit firms to assess their compliance with various regulations, including those related to fire safety, food sanitation, environmental protection, labor safety, labor insurance, and tax payments. These inspections disrupt normal operations, as firms must allocate space for inspectors, assign staff to answer questions, and sometimes provide meals, entertainment, or other accommodations (Duc, 2022; Phuong, 2022).

Inspectors may leverage any infractions they find as bargaining chips to extract bribes. In many cases, businesses pay bribes simply to avoid further complications, even when they have not violated any regulations. Those that refuse may face heightened scrutiny or retaliation from government agencies in the future (Anh, 2014; Quan, 2020). This scenario exemplifies extractive corruption, where firms do not initiate or benefit from the corrupt transaction but are coerced into participating. In the PCI-DDI dataset, 40 percent of respondents agree or strongly agree that local governments use regulatory compliance requirements to extract rents. Our dependent variable is a binary indicator of whether a firm paid bribes during government inspections, coded as 1 if the firm paid and 0 if it did not. Among PCI-DDI respondents, 46 percent reported that they had paid bribes in these situations.

## 4.5 Independent Variables

Our primary independent variable measures the number of years a PCOM has been in office. At the firm-year level, this variable reflects the tenure of the current PCOM in the province where the business was located at the time of the interview, indicating how far along they

are in their term.[5]

Firm-level control variables include proxies for size—equity and employment at formation—and owner characteristics. We control for firm size because large firms often engage in bribery differently than SMEs. For example, well-known companies with strong brand recognition may secure contracts based on the quality of their proposals and the prestige they bring to government projects, influencing officials' preferences. We also account for owners' backgrounds, including prior employment in government agencies, the military, or state-owned enterprises (SOEs). Politically connected owners are more likely to participate in bids and can better leverage their networks during regulatory inspections. PCOM-level controls include age and gender. Younger PCOMs, with longer career horizons, may be more cautious about corruption, whereas older PCOMs nearing retirement may act with less restraint.

All primary specifications include fixed effects for province, sector, and firm legal form. Bribery behavior in both procurement and inspections can vary significantly across sectors, and firm age influences how businesses handle corruption. Newly established firms, lacking established connections, may face different bribery dynamics than older firms, which often have the networks needed to navigate corruption and secure contracts.

# 5 Research Design and Results

## 5.1 Model Specification

The main specification is a quadratic OLS regression. The main outcome variables are our measures of collusive corruption—the estimated propensity that the firm bribed during the procurement process— and extractive corruption—whether the firm bribed during inspec-

[5]To analyze corruption patterns within a PCOM's first term, we cap this variable at six years. While some PCOMs serve seven to eight years or longer, they are a minority.

tions. The main right-hand side variable is the number of years for which the PCOM member has been in his or her position. We also include the squared number of years to account for the quadratic relationship between tenure and level of corruption.

Our specifications also include the previously mentioned controls, such as owner gender, prior government experience, firm equity at formation, employment size, and PCOM characteristics. Additionally, we include sector, province, and legal form fixed effects.

Our basic model takes the form:

$$Corruption = \beta_0 + \beta_1 Year\_in\_Position + \beta_2 Year\_in\_Position^2 + \beta_3 X + \rho + \gamma + \epsilon$$

Where $Corruption$ is our outcome variable, capturing either extractive or collusive corruption,[6] $Year\_in\_Position$ is the number of years for which the PCOM member has been in his or her position, $X$ is a vector of controls at the firm level and at the PCOM level, $\rho$ is the province fixed effects, $\gamma$ is firm's legal form fixed effects, and $\epsilon$ is unobserved heterogeneity. Standard errors are clustered at the PCOM level.

## 5.2 Results: Collusive Corruption

We first examine the effect of political tenure on rent-seeking corruption. The outcome variable is the estimated probability that a firm bribed politicians to increase its chances of winning government contracts. As outlined in our theoretical discussion, we expect collusive corruption to follow a U-shaped pattern over a PCOM's tenure: starting high at the beginning, declining in the middle, and rising again toward the end. If this holds, we should observe a negative coefficient on years in position and a positive coefficient on years in position squared.

[6]For a detailed description of the two-stage procedure to obtain this variable for collusive corruption, see the "Two-Stage Design" section in the Appendix.

The results in Table 2 support these expectations. The model in column (1) includes control variables as well as province and legal form fixed effects. Consistent with our theory, the results show a statistically significant quadratic relationship between tenure and corruption. The coefficient on years in position is -0.087, while the coefficient on years in position squared is 0.014, indicating a U-shaped pattern with corruption reaching its lowest point around year 3. Column (2) introduces sector fixed effects, and the results remain consistent with our argument. The coefficient on years in position remains negative, while the coefficient on the squared term remains positive.

**Table 2** Political cycles in procurement bribes

| | (1) Base | (2) Sector FEs | (3) No SOE | (4) On-cycle PCOMs |
|---|---|---|---|---|
| **Years in position** | -0.087** | -0.076** | -0.075* | -0.104* |
| | (0.042) | (0.038) | (0.042) | (0.061) |
| **Years in position squared** | 0.014** | 0.012** | 0.012** | 0.012 |
| | (0.006) | (0.006) | (0.006) | (0.009) |
| Equity at formation | -0.037** | -0.032** | -0.027 | -0.054*** |
| | (0.015) | (0.015) | (0.017) | (0.021) |
| Employment size at formation | -0.020 | -0.038** | -0.037** | -0.013 |
| | (0.017) | (0.017) | (0.017) | (0.022) |
| Owner: Former govt | 0.215*** | 0.207** | 0.195** | 0.151 |
| | (0.081) | (0.088) | (0.090) | (0.109) |
| Owner: Former military | 0.027 | 0.023 | 0.006 | 0.017 |
| | (0.079) | (0.096) | (0.082) | (0.105) |
| Owner: Former SOE manager | 0.074 | 0.092 | 0.099* | 0.079 |
| | (0.051) | (0.057) | (0.060) | (0.067) |
| Owner: Former SOE employee | 0.081* | 0.071* | 0.061 | 0.143** |
| | (0.048) | (0.042) | (0.048) | (0.061) |
| Gender of Firm owner | -0.082*** | -0.077** | -0.111*** | -0.086** |
| | (0.030) | (0.032) | (0.032) | (0.040) |
| Age | -0.001 | -0.000 | 0.002 | 0.024* |
| | (0.007) | (0.007) | (0.007) | (0.012) |
| Female | -0.056 | -0.109 | -0.021 | 0.075 |
| | (0.171) | (0.159) | (0.183) | (0.308) |
| Constant | 0.635* | 0.253 | 0.531 | -0.590 |
| | (0.360) | (0.415) | (0.368) | (0.643) |
| Sector FEs | No | Yes | No | No |
| Province FEs | Yes | Yes | Yes | Yes |
| Legal Form FEs | Yes | Yes | Yes | Yes |
| Observations | 8159 | 8159 | 7466 | 4582 |
| $R^2$ | 0.034 | 0.048 | 0.037 | 0.049 |

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

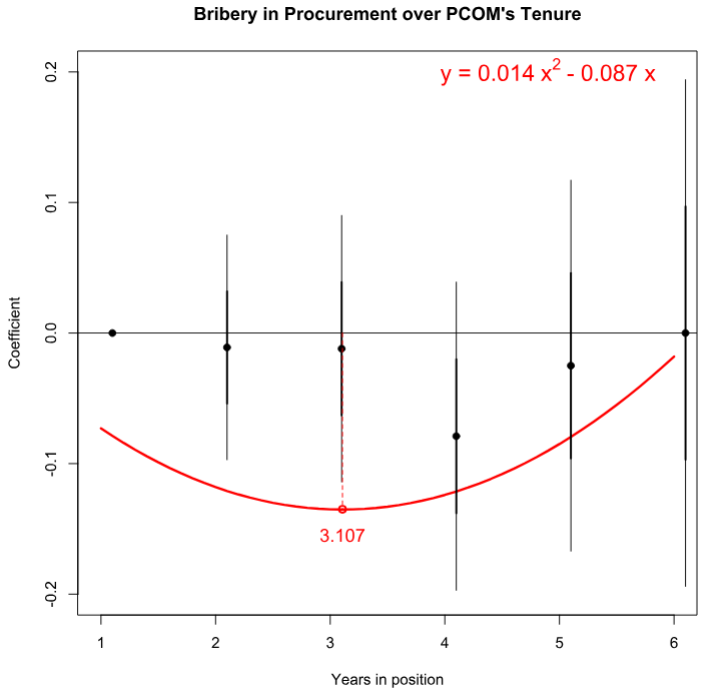
One potential concern is that the results may be driven by the inclusion of state-owned enterprises (SOEs). SOEs may exhibit higher levels of collusion and larger mid-tenure dips in corruption compared to non-SOEs due to their close ties to government officials, which facilitate bribery. To address this, Column (3) excludes all SOEs from the analysis. The results remain unchanged.

In Vietnam, the Communist Party Congress—the country's most significant political event—occurs every five years. During the Congress, Party members select the next cohort of top leaders, and PCOMs may receive promotions, sometimes before completing their full term. We define on-cycle PCOMs as those appointed in the same year as the Party Congress. Because their tenure aligns with the Congress, they are likely to serve a full five-year term. In contrast, off-cycle PCOMs face more uncertain incentives. It is unclear whether their political horizon extends for a full term or only until the next Party Congress. To address this possibility, column (4) restricts the analysis to on-cycle PCOMs whose political horizons are more predictable. The results remain consistent with the base model.

We display the results graphically in Figure 3. The red line indicates the quadratic relationship between the prevalence of bribes in procurement and PCOMs' time in position, using the statistically significant coefficients from Column (1) of Table 2. Corruption is high early on in PCOMs' tenure, drop steadily to its nadir around year 3 before rising again toward the end of their term.

The dot-and-whisker bars indicate the coefficient and confidence intervals obtained from regressing bribery prevalence on a set of dummies indicating the PCOMs' years in position (Table 6 in the Appendix). In this regression, year 1 serves as the reference group. Although it is not statistically significant, we can see a quadratic pattern where corruption drops after the first year until the middle of PCOMs' term, before rising again at the end. Firms are about eight percent more likely to engage in procurement bribes in PCOMs' first and last

**Figure 3** The Political Cycle of Bribery in Procurement




years in power compared to year 4.[7]

In summary, we find strong empirical support for the U-shaped relationship between collusion and political horizons. These results are also robust to a variety of empirical specifications, such as the inclusion of several different control variables, restricting the sample in various ways, and alternative constructions of the dependent variable.

[7]Appendix Table 7 includes even more robustness tests. Column (1) removes outliers on the dependent variable—defined as the top and bottom five percent of all observations. Column (2) increases the number of simulations during bootstrapping from 1,000 to 10,000. Column (3) removes joint-stock corporations from the analysis. Joint-stock companies are legally obligated to publicize their financial statements, which might change their approach to collusion. In column (4), we removes the two major cities—Hanoi and Ho Chi Minh City. PCOMs in these important cities tend to occupy much more prominent positions in the Party than those in other provinces. The results remain generally robust and similar to the main analysis.

## 5.3 Results: Extractive Corruption

We now examine the relationship between tenure and extractive corruption. We expect an inverse U-shaped pattern: extraction starts low, increases in the middle, and declines toward the end of the term.

The dependent variable is a binary indicator of whether firms admitted to paying bribes during inspections. If our argument holds, we should observe a positive coefficient on years in position and a negative coefficient on years in position squared—indicating that extraction peaks mid-tenure before declining.

**Table 3** Political cycles in bribery during inspections

| | (1) Base | (2) Sector FEs | (3) No SOE | (4) On-cycle PCOMs |
|---|---|---|---|---|
| **Years in position** | 0.104*** | 0.077** | 0.104*** | 0.140*** |
| | (0.022) | (0.038) | (0.022) | (0.030) |
| **Years in position squared** | -0.018*** | -0.013* | -0.018*** | -0.026*** |
| | (0.003) | (0.007) | (0.003) | (0.003) |
| Equity at formation | -0.009*** | -0.003 | -0.009*** | -0.009*** |
| | (0.002) | (0.005) | (0.003) | (0.003) |
| Employment size at formation | 0.001 | -0.004 | -0.001 | 0.000 |
| | (0.003) | (0.006) | (0.004) | (0.003) |
| Owner: Former govt | 0.079*** | 0.047* | 0.085*** | 0.060** |
| | (0.022) | (0.026) | (0.022) | (0.028) |
| Owner: Former military | 0.105*** | 0.066** | 0.100*** | 0.109*** |
| | (0.017) | (0.030) | (0.017) | (0.020) |
| Owner: Former SOE manager | 0.084*** | 0.050*** | 0.090*** | 0.074*** |
| | (0.010) | (0.016) | (0.010) | (0.011) |
| Owner: Former SOE employee | 0.066*** | 0.032** | 0.070*** | 0.077*** |
| | (0.010) | (0.016) | (0.011) | (0.012) |
| Gender of Firm owner | 0.005 | -0.006 | 0.007 | 0.005 |
| | (0.005) | (0.011) | (0.006) | (0.006) |
| Age | 0.005 | -0.042*** | 0.005 | 0.003 |
| | (0.004) | (0.003) | (0.004) | (0.007) |
| Female | -0.135*** | 0.164*** | -0.130** | 0.027 |
| | (0.043) | (0.025) | (0.056) | (0.026) |
| Constant | 0.065 | 2.512*** | 0.030 | 0.124 |
| | (0.150) | (0.177) | (0.154) | (0.300) |
| Sector FEs | No | Yes | No | No |
| Province FEs | Yes | Yes | Yes | Yes |
| Legal Form FEs | Yes | Yes | Yes | Yes |
| Observations | 28866 | 10301 | 26474 | 20661 |
| $R^2$ | 0.041 | 0.046 | 0.042 | 0.055 |

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

**Figure 4** The Political Cycle of Bribery in Inspections

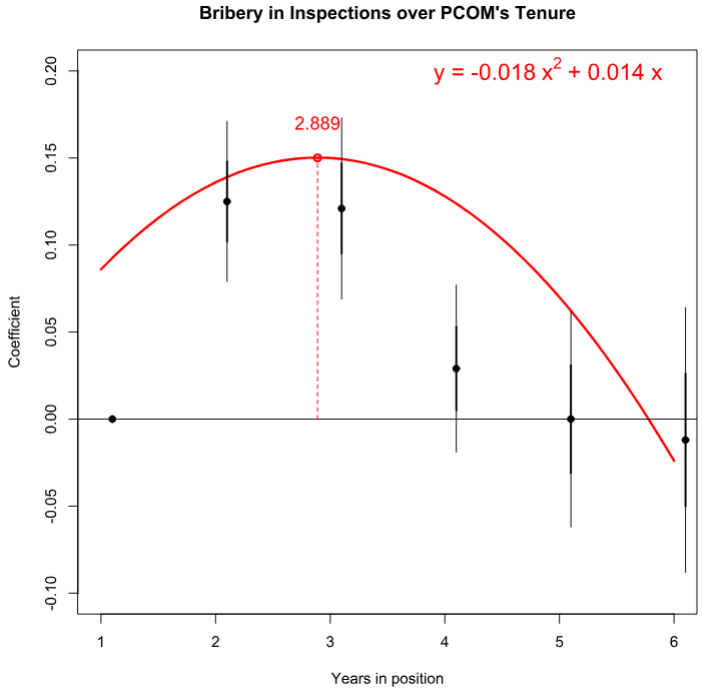



Table 3 presents the results. Column (1) includes the full set of controls along with legal form and province fixed effects. Consistent with our argument, the results indicate a quadratic relationship, with bribery peaking mid-term around year 3 and being less prevalent at the beginning and end of a PCOM's tenure.

As in the previous analysis, Column (2) adds sector fixed effects to account for time-invariant differences across industries. The results remain unchanged. Column (3) excludes SOEs, while Column (4) restricts the analysis to on-cycle PCOMs. Across all specifications, the findings remain robust and statistically significant.

We present the results graphically in Figure 4. The red line illustrates the quadratic relationship estimated in Column (1) of Table 3. Bribery in inspections rises steadily, peaking around year 3 of a PCOM's tenure, before declining in later years. The dot-and-whisker bars reinforce this pattern: extraction is most severe mid-term, with firms 12 percent more likely to pay bribes during inspections in a PCOM's second and third year compared to year 1

and year 5. This effect is substantial, given that 41 percent of respondents reported paying bribes across the full sample.[8]

In summary, we find strong empirical support for an inverse U-shaped relationship between extraction and political time horizons. The results hold across various empirical specifications, including different control variables, sample restrictions, and alternative constructions of the dependent variable.

# 6 The Role of Promotability

It is clear from our analysis that promotion plays a significant role in politicians' decision-making. For PCOMs who are no longer eligible for promotion, the pressure to maintain economic performance and avoid scandal is greatly reduced. As a result, we expect behavioral differences between promotable and non-promotable PCOMs. Moreover, we anticipate this distinction to be particularly evident in extractive corruption, given its strong link to promotion incentives.

## 6.1 Promotability: Age at Appointment

We use two approaches to evaluate the role of promotability. First, we classify PCOMs based on their age at initial appointment, distinguishing between promotable and non-promotable officials. In short, PCOMs appointed before age 55 remain eligible for promotion, while those appointed at 55 or older can no longer advance to higher office.[9]

[8] We conduct additional robustness tests in Appendix Table 8. Column (1) excludes joint-stock corporations, while Column (2) removes the outlier cities of Hanoi and Ho Chi Minh City. The results remain robust across these more restricted samples.

[9] According to Vietnam's Labor Law, the retirement age for public officials is 60 for men and 55 for women (H. Nguyen, 2012, Clause 187, Item 1). However, key Party positions—including vice ministers, National Assembly leadership, and provincial Party Secretaries—are exceptions (D. Nguyen, 2015). For these roles, retirement age is extended by five years, making it 65 for men and 60 for women (H. Nguyen, 2012, Clause

Regulations from the Ministry of Internal Affairs state that an official's first appointment must allow for a full five-year term, aligning with earlier government resolutions (B. Nguyen, 2012; Phan, 2003). In practice, this means outgoing PCOMs must be selected for central government or provincial Party leadership positions before age 60. To be eligible for promotion, a PCOM's first appointment must occur before age 55, ensuring they can complete a full term.

We argue that age 55 serves as a threshold separating promotable and non-promotable PCOMs. This distinction is illustrated by Figure 8 in the Appendix, which shows a sharp drop in promotion rates at this cutoff. Among PCOMs appointed at age 53 or 54, 26 percent are promoted, but for those appointed at 55, this probability drops to 13 percent, and for those appointed at 56, it falls further to just five percent.

For promotable PCOMs, performance matters. They have an incentive to curtail extractive activities near the end of their term to improve their promotion prospects. In contrast, non-promotable PCOMs face no such constraints. Without career advancement incentives, they are likely to escalate extraction further as their tenure progresses.

Table 9 in the Appendix provides strong evidence for this prediction. The inverse U-shaped relationship between tenure and extraction holds only for promotable PCOMs, as shown by Column (1). Among non-promotable leaders—examined in Column (3)—the relevant coefficients are statistically insignificant.

In Columns (2) and (5), we replace $Year\_in\_Position$ with dummy variables, using year 1 as the reference group. The results remain robust. For promotable PCOMs, bribery in inspections rises in years 2 and 3 before declining, while non-promotable PCOMs continue escalating extraction throughout their tenure. This aligns with the positive linear relationship between tenure and extraction shown in Column (4).

187, Item 3). For brevity, we use the male cutoff in our analysis, as only three percent of the politicians in our dataset are female.

**Figure 5** The Political Cycle of Bribery in Inspections: Promotable vs. Non-promotable PCOMs

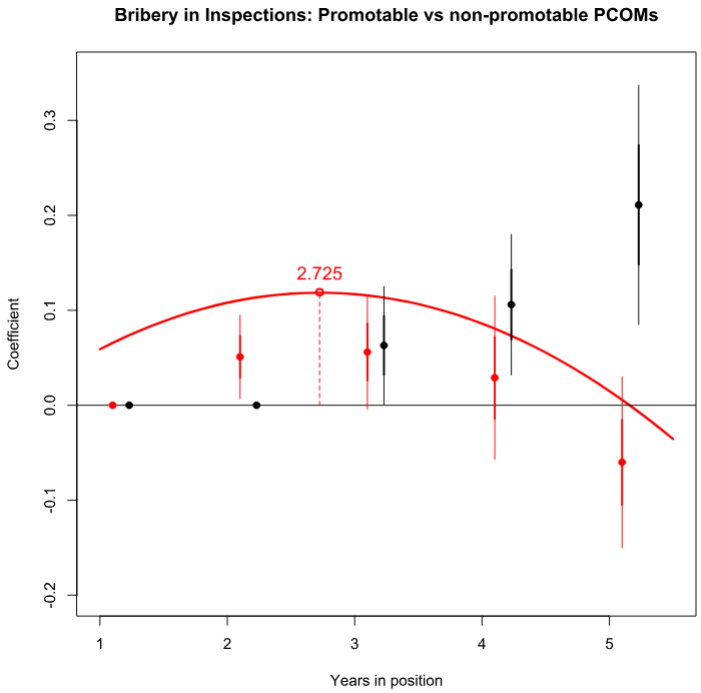



Figure 6 demonstrates these results graphically. The red curve line depicts the statistically significant quadratic relationship displayed in Column (1) of Table 9 in the Appendix. Extortion increases in the early years of the promotable PCOMs' tenure, peaking around year 2.725, before declining toward of the end of the term. The red and black dot-and-whisker bars illustrate the results of the dummy analyses for promotable and non-promotable leaders, respectively. For promotable leaders, firms are between five and six percent more likely to have to pay bribes in year 2 and 3 compared to the first and last years of the PCOM's tenure. On the other hand, for non-promotable leaders, extractive corruption worsens steadily and becomes 21 percent more common in year 5 than at the beginning of the term.

## 6.2 Promotability: Second-Term PCOMs

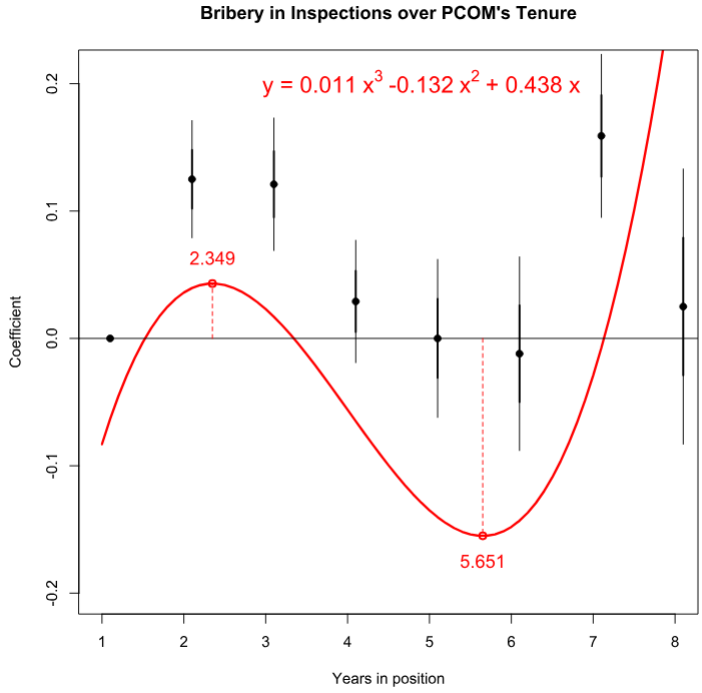
Most PCOMs who are promoted advance by the end of their sixth year. Few provincial leaders enter a second term (i.e., serving beyond year 6), and those who do rarely reach higher positions. As shown in Figure 7, only 6.4 percent of PCOMs are promoted in year 7, and just 2.9 percent in year 8. By contrast, 61.4 percent are promoted within the primary promotion window between years 4 and 6.

Given these patterns, PCOMs who remain beyond year 6 are likely aware of their limited promotability and adjust their behavior accordingly. Without the incentive of promotion, they are expected to increase extraction once the promotion window has passed. Empirically, this suggests a cubic relationship between time in office and extraction when extending the analysis to later years in power.

For the first six years of a PCOM's tenure, extractive corruption should follow the same pattern observed in our main results: bribery starts low, increases and peaks mid-term, and then declines in years 5 and 6. However, after year 6, bribery during inspections is expected to rise again.

The results in Table 10 in the Appendix confirm this prediction. We find a statistically significant cubic relationship between time in position and extractive activities. As shown in Figure 6, the red line illustrates this trend: extraction peaks between year 2 and 3, declines to its lowest point between year 5 and 6, and then rises again after the promotion window has passed.

**Figure 6** The Political Cycle of Bribery in Inspections: Second-Term PCOMs




Our results demonstrate a clear relationship between political tenure and corruption, with distinct patterns emerging for collusive and extractive corruption. Collusion follows a U-shaped trajectory, while extraction follows an inverse U-shape. Additional analyses show that these patterns are partially driven by promotion incentives: promotable PCOMs scale back extraction near the end of their term, while non-promotable politicians continue escalating extraction. Extending the analysis beyond year 6 further reveals that PCOMs who remain in office after the promotion window has passed also ramp up extraction.

# 7 Conclusion

A substantial body of research in political science and economics has shown that politicians' time horizons influence their engagement in corruption (Campante et al., 2009; Gamboa-Cavazos et al., 2007; Mironov & Zhuravskaya, 2016; C. V. Nguyen, 2021; Sidorkin &

Vorobyev, 2018). However, the direction of this effect remains contested, with studies in different contexts finding conflicting patterns. We propose that the type of corruption—collusive versus extractive—helps reconcile these findings. Specifically, collusive corruption follows a U-shaped pattern, decreasing initially and then increasing later in tenure, while extractive corruption exhibits an inverse U-shape, peaking mid-term before declining. Combining 15 years of nationally representative firm data with biographical data on Vietnamese provincial chairmen, we find that politicians' corruption behaviors align with this theoretical framework. Although our analysis focuses on Vietnam, the theory likely applies to democratic settings where elected officials, such as mayors and governors, face distinct career incentives and electoral pressures.

Our study opens several avenues for further research. First, while we establish a quadratic relationship between corruption and tenure, we do not directly test the underlying mechanisms. Future studies could investigate these mechanisms in greater detail. Second, future research could extend the analysis to firm-level outcomes. While we identify opposing cycles of collusion and extraction, it remains unclear how these cycles affect business performance and long-term firm success. Finally, while our analysis treats politicians as individual actors, party affiliation and factional ties may shape their time horizons. If a politician's successor belongs to the same political faction, it could mitigate uncertainty, diluting the upward pressure on collusive corruption. Future research should explore how party networks and factional politics shape political cycles of corruption.

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# Online Appendix

## TABLE OF CONTENTS

# Extant Literature on Tenure and Levels of Corruption

**Table 4** Extant Literature on Tenure and Levels of Corruption

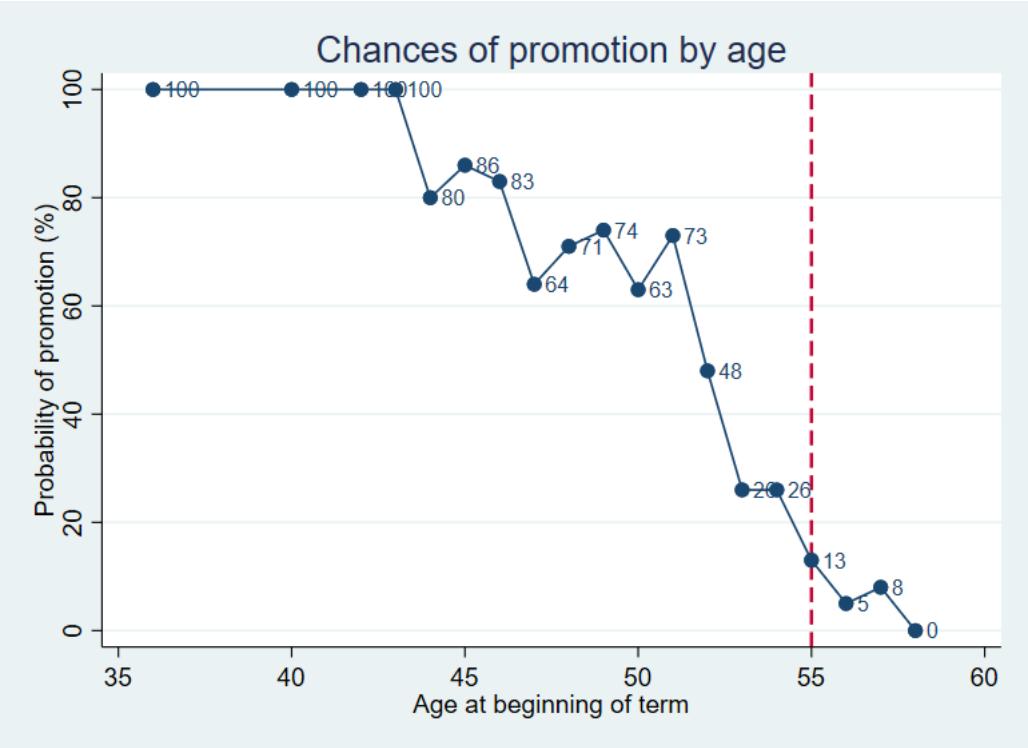
| **Extractive Corruption** | | | | **Collusive Corruption** | | | |
|---|---|---|---|---|---|---|---|
| Paper | Setting | Relationship | Variable | Paper | Setting | Relationship | Variable |
| Buckley (2017) | Russia | Inverse U-shape | Whether citizens are asked by bureaucrats to pay bribes in everyday admin procedures | Campante et al. (2009) | Cross-country | U-shape | World Bank Control of Corruption Index |
| Vadlaman-nati (2015) | India | Inverse U-shape | Anti-corruption effort against lower-level bureaucrats, i.e. number of corruption cases registered by politicians | Gamboa-Cavazos et. al. (2007) | Mexico | U-shape | Percentage of total revenues devoted to extra-official payments |
| Cooper (2021) | Five West African states | U-shape | Average extortion price of truck drivers by state officials such as police officers and customs officials | Sidorkin and Vorobyev (2018) | Russia | U-shape | Gifts and informal payments to get things done (as % of revenues) |
| | | | | Nguyen (2021) | Vietnam | U-shape | Number of unnecessary new hires at state-owned enterprises |
| | | | | Mironov and Zhuravskaya (2016) | Russia | U-shape | Tunneling, i.e. illegal transfer of cash out of firms to politicians |
| | | | | Figueroa (2021) | Argentina | U-shape | Businessmen bought price-inflated public contracts in exchange for bribes |

## Timing of PCOMs' Promotion

**Figure 7** Timing Of Promotion

## Probability of Promotion by Age at Appointment

**Figure 8** Probability of Promotion by Age at Appointment



## LIST question

The specific wording of the question in the "treatment" form:

"Please look at the following list of common activities that firms usually engage in to make their goods or services more attractive to government clients.

- Dropped off pamphlets or fliers at government offices advertising your goods or services
- Opened your business or a branch of your business near government offices for better approach to the decision-makers
- Paid a “commission” to ensure your business won the contract to deliver goods and services
- Appealed to a friend or relative in the office to win the contract to deliver goods and services
- Attended government functions or meetings in order to meet officials and make them aware of your goods or services

Please do not indicate any one of these activities specifically, we are only interested in the total number you may have utilized to win government business.

How many of the above activities did you engage in when competing for such a government contract?"

## Two-Stage Design

In estimating the pattern of collusive corruption, we follow Blair and Imai (2012) and Jensen and Malesky (2018b) in implementing this two-stage analysis using the LIST question.

1. $NumberItems = \beta_0 + \beta_1 Year\_in\_Position + \beta_2 Year\_in\_Position^2 + \beta_3 X + \rho + \gamma + \epsilon$ (only for the **control** group)
2. $Difference = \delta_0 + \delta_1 Year\_in\_Position + \delta_2 Year\_in\_Position^2 + \delta_3 X + \rho + \gamma + \epsilon$ (only for the **treatment** group)

$X$ is a vector of controls at the firm level and at the PCOM level, $\rho$ is the province fixed effects, $\gamma$ is firm's legal form fixed effects, and $\epsilon$ is unobserved heterogeneity. Standard errors are clustered at the PCOM level.

In the first stage, $NumberItems$ is the number of activities that that a firm in the control group reported to have done when competing for a government contract. We obtain a set of estimated coefficients in the first stage, and plug them in to generate predicted number of items for firms in the treatment group.

$Difference$ is the difference between the actual number of items that a firm in the treatment group reported and this predicted value. We present the results from the second stage in the Main Results section. Results from the first stage can be found in the Appendix.

## Additional Results

**Table 5** First Stage (LIST Analysis for Bribery in Procurement)

| | (1) |
|---|---|
| | Control group only |
| **Years in position** | -0.072** |
| | (0.032) |
| **Years in position squared** | 0.011** |
| | (0.005) |
| Equity at formation | -0.021* |
| | (0.012) |
| Employment size at formation | -0.033*** |
| | (0.013) |
| Owner: Former govt | 0.246*** |
| | (0.065) |
| Owner: Former military | 0.137** |
| | (0.063) |
| Owner: Former SOE manager | 0.210*** |
| | (0.038) |
| Owner: Former SOE employee | 0.111*** |
| | (0.035) |
| Gender of Firm owner | 0.010 |
| | (0.023) |
| Age | -0.003 |
| | (0.005) |
| Female | -0.092 |
| | (0.134) |
| Constant | 1.679*** |
| | (0.288) |
| Legal Form FEs | Yes |
| Observations | 9336 |
| $R^2$ | 0.040 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

**Table 6** Political cycles in procurement and inspection (dummy variables)

| | (1) Procurement | (2) Inspection |
|---|---|---|
| **Year in Position =1** | 0.000 | 0.000 |
| | (0.000) | (.) |
| **Year in Position =2** | -0.013 | 0.124*** |
| | (0.040) | (0.024) |
| **Year in Position =3** | -0.013 | 0.120*** |
| | (0.050) | (0.027) |
| **Year in Position =4** | -0.084 | 0.027 |
| | (0.056) | (0.026) |
| **Year in Position =5** | -0.033 | -0.003 |
| | (0.070) | (0.033) |
| **Year in Position =6** | -0.012 | -0.019 |
| | (0.096) | (0.039) |
| Equity at formation | -0.036** | -0.009*** |
| | (0.015) | (0.002) |
| Employment size at formation | -0.022 | 0.000 |
| | (0.016) | (0.003) |
| Owner: Former govt | 0.239*** | 0.076*** |
| | (0.079) | (0.022) |
| Owner: Former military | 0.006 | 0.105*** |
| | (0.083) | (0.017) |
| Owner: Former SOE manager | 0.070 | 0.083*** |
| | (0.053) | (0.010) |
| Owner: Former SOE employee | 0.084* | 0.066*** |
| | (0.047) | (0.010) |
| Gender of Firm Owner | -0.093*** | 0.006 |
| | (0.031) | (0.005) |
| Age | -0.001 | 0.004 |
| | (0.007) | (0.003) |
| Female | -0.046 | -0.158*** |
| | (0.181) | (0.039) |
| Legal Form FEs | Yes | Yes |
| Observations | 7960 | 28866 |
| $R^2$ | 0.033 | 0.047 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

**Table 7** Political cycles in procurement bribes

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | No outliers | 10,000 reps | No joint-stock | No HCMC/HN |
| **Years in position** | -0.131*** | -0.087** | -0.072** | -0.044 |
| | (0.036) | (0.041) | (0.032) | (0.030) |
| **Years in position squared** | 0.019*** | 0.014** | 0.010*** | 0.007** |
| | (0.005) | (0.006) | (0.003) | (0.003) |
| Equity at formation | -0.036*** | -0.037** | -0.029 | -0.033** |
| | (0.014) | (0.015) | (0.018) | (0.016) |
| Employment size at formation | -0.053*** | -0.020 | -0.031 | -0.015 |
| | (0.014) | (0.017) | (0.020) | (0.017) |
| Owner: Former govt | 0.307*** | 0.215*** | 0.238** | 0.205** |
| | (0.072) | (0.083) | (0.101) | (0.082) |
| Owner: Former military | 0.129* | 0.027 | -0.043 | -0.036 |
| | (0.067) | (0.080) | (0.089) | (0.080) |
| Owner: Former SOE manager | 0.219*** | 0.074 | 0.125** | 0.086 |
| | (0.045) | (0.052) | (0.060) | (0.053) |
| Owner: Former SOE employee | 0.191*** | 0.081* | 0.060 | 0.068 |
| | (0.040) | (0.046) | (0.051) | (0.045) |
| Gender of Firm owner | -0.054** | -0.082*** | -0.105*** | -0.096*** |
| | (0.027) | (0.030) | (0.036) | (0.032) |
| Age | 0.004 | -0.001 | 0.004 | -0.004 |
| | (0.006) | (0.007) | (0.008) | (0.007) |
| Female | -0.048 | -0.056 | -0.199 | -0.065 |
| | (0.155) | (0.174) | (0.192) | (0.177) |
| Constant | 0.256 | 0.635* | 0.413 | 0.797** |
| | (0.324) | (0.371) | (0.394) | (0.395) |
| Sector FEs | No | No | No | No |
| Province FEs | Yes | Yes | Yes | Yes |
| Legal Form FEs | Yes | Yes | Yes | Yes |
| Observations | 7345 | 8159 | 6726 | 7836 |
| $R^2$ | 0.049 | 0.034 | 0.038 | 0.030 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

**Table 8** Political cycles in bribery during inspections

| | (1) No Joint-stock | (2) No HCMC/HN |
|---|---|---|
| **Years in position** | 0.101*** | 0.092*** |
| | (0.024) | (0.024) |
| **Years in position squared** | -0.017*** | -0.016*** |
| | (0.003) | (0.003) |
| Equity at formation | -0.010*** | -0.009*** |
| | (0.003) | (0.003) |
| Employment size at formation | -0.002 | 0.001 |
| | (0.004) | (0.003) |
| Owner: Former govt | 0.083*** | 0.076*** |
| | (0.024) | (0.023) |
| Owner: Former military | 0.098*** | 0.102*** |
| | (0.018) | (0.017) |
| Owner: Former SOE manager | 0.071*** | 0.086*** |
| | (0.012) | (0.010) |
| Owner: Former SOE employee | 0.068*** | 0.070*** |
| | (0.011) | (0.011) |
| Gender of Firm owner | 0.011* | 0.003 |
| | (0.006) | (0.006) |
| Age | 0.006* | 0.007* |
| | (0.004) | (0.004) |
| Female | -0.144** | -0.130*** |
| | (0.056) | (0.040) |
| Constant | -0.021 | 0.002 |
| | (0.158) | (0.167) |
| Sector FEs | No | No |
| Province FEs | Yes | Yes |
| Legal Form FEs | Yes | Yes |
| Observations | 22937 | 26575 |
| $R^2$ | 0.043 | 0.043 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

**Table 9** Impact of promotability: Bribery during inspections

| | (1) Promotable | (2) Promotable: Dummies | (3) Not Promotable | (4) Not Promotable | (5) Not Promotable: Dummies |
|---|---|---|---|---|---|
| **Years in position** | 0.109*** | | 0.020 | 0.063** | |
| | (0.038) | | (0.079) | (0.021) | |
| **Years in position squared** | -0.020*** | | 0.005 | | |
| | (0.007) | | (0.010) | | |
| Equity at formation | -0.006 | -0.006 | 0.010 | 0.010 | 0.009 |
| | (0.005) | (0.006) | (0.011) | (0.011) | (0.011) |
| Employment size at formation | -0.003 | -0.000 | -0.005 | -0.005 | -0.005 |
| | (0.006) | (0.006) | (0.015) | (0.015) | (0.015) |
| Owner: Former govt | 0.063** | 0.068** | -0.038 | -0.038 | -0.040 |
| | (0.029) | (0.030) | (0.052) | (0.052) | (0.051) |
| Owner: Former military | 0.040 | 0.035 | 0.162** | 0.162** | 0.162** |
| | (0.033) | (0.033) | (0.059) | (0.059) | (0.059) |
| Owner: Former SOE manager | 0.057*** | 0.059*** | 0.040 | 0.040 | 0.040 |
| | (0.017) | (0.017) | (0.046) | (0.046) | (0.046) |
| Owner: Former SOE employee | 0.040** | 0.040** | 0.004 | 0.004 | 0.003 |
| | (0.019) | (0.019) | (0.024) | (0.024) | (0.024) |
| Gender of Firm owner | -0.004 | -0.008 | -0.011 | -0.011 | -0.011 |
| | (0.012) | (0.012) | (0.027) | (0.027) | (0.027) |
| Age | -0.040*** | -0.040*** | -0.092** | -0.103** | -0.103*** |
| | (0.004) | (0.004) | (0.032) | (0.038) | (0.029) |
| Female | 0.142*** | 0.135*** | 0.000 | 0.000 | 0.000 |
| | (0.027) | (0.029) | (.) | (.) | (.) |
| **Years in position =1** | | 0.000 | | | |
| | | (.) | | | |
| **Years in position =2** | | 0.051** | | | 0.000 |
| | | (0.022) | | | (.) |
| **Years in position =3** | | 0.056* | | | 0.063* |
| | | (0.030) | | | (0.031) |
| **Years in position =4** | | 0.029 | | | 0.106** |
| | | (0.043) | | | (0.037) |
| **Years in position =5** | | -0.058 | | | 0.211*** |
| | | (0.045) | | | (0.063) |
| Constant | 2.414*** | 2.467*** | 5.569*** | 6.166** | 6.270*** |
| | (0.205) | (0.195) | (1.814) | (2.136) | (1.632) |
| Province FEs | Yes | Yes | Yes | Yes | Yes |
| Legal form FEs | Yes | Yes | Yes | Yes | Yes |
| Sector FEs | Yes | Yes | Yes | Yes | Yes |
| Observations | 8213 | 7836 | 2088 | 2088 | 2088 |
| $R^2$ | 0.048 | 0.050 | 0.076 | 0.076 | 0.076 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

**Table 10** Political cycles in bribery during inspections after promotion window

| | (1) Continuous | (2) Discrete |
|---|---|---|
| **Years in position** | 0.438*** | |
| | (0.053) | |
| **Years in position squared** | -0.132*** | |
| | (0.015) | |
| **Years in position cubed** | 0.011*** | |
| | (0.001) | |
| Equity at formation | -0.009*** | -0.009*** |
| | (0.002) | (0.002) |
| Employment size at formation | 0.000 | -0.000 |
| | (0.003) | (0.003) |
| Owner: Former govt | 0.077*** | 0.076*** |
| | (0.022) | (0.021) |
| Owner: Former military | 0.105*** | 0.106*** |
| | (0.017) | (0.017) |
| Owner: Former SOE manager | 0.082*** | 0.082*** |
| | (0.010) | (0.010) |
| Owner: Former SOE employee | 0.066*** | 0.068*** |
| | (0.010) | (0.010) |
| Gender of Firm owner | 0.006 | 0.005 |
| | (0.005) | (0.005) |
| Age | 0.004 | 0.003 |
| | (0.003) | (0.003) |
| Female | -0.154*** | -0.158*** |
| | (0.037) | (0.039) |
| **Years in position =1** | | 0.000 |
| | | (.) |
| **Years in position =2** | | 0.125*** |
| | | (0.023) |
| **Years in position =3** | | 0.121*** |
| | | (0.026) |
| **Years in position =4** | | 0.029 |
| | | (0.024) |
| **Years in position =5** | | -0.000 |
| | | (0.031) |
| **Years in position =6** | | -0.012 |
| | | (0.038) |
| **Years in position =7** | | 0.159*** |
| | | (0.032) |
| **Years in position =8** | | 0.025 |
| | | (0.054) |
| Constant | -0.128 | 0.205 |
| | (0.135) | (0.140) |
| Province FEs | Yes | Yes |
| Legal Form FEs | Yes | Yes |
| Observations | 28866 | 29854 |
| $R^2$ | 0.046 | 0.046 |

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$