

One Bullet Property Rights: Leader Turnover Causes Expropriation of FDI in Personalist Autocracies

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Abstract

Autocracies vary greatly in their tendency to expropriate foreign direct investment. We identify a new source of variation: the degree of instability caused by leadership transitions. We exploit plausibly exogenous changes in leadership caused by leaders' terminal illnesses and accidents. We find that the effect of turnover depends on the power of the leader. In personalist regimes, where leaders are weakly constrained by elite supporters, leader turnover increases expropriation. This implies that the same institutions that coordinate supporters to constrain leaders also manage successions. When these constraining institutions are weak, successions cause greater instability which incentivizes expropriation. We find no effect of turnover for non-personalist regimes. We demonstrate that the heterogeneity in treatment is robust to controlling for democracy, regime type, and natural resource rents.

“We are surrounded by one-bullet regimes, and when the regime changes, it doesn’t change a little; it can change 180 degrees. There is one exception — the Saudis. They have all those princes, and one can replace another without dramatic changes. They have this principle of the ‘shura’ — the council of royals who make deliberative, collective decisions. So the king may change but policy remains consistent.” - Anonymous Israeli MFA Official

1 Introduction

An expansive literature in political science has looked at regime type and expropriation. [Olson \[1993\]](#) argues that more secure autocrats protect citizens’ property rights more than “roving bandits” because secure rights increase the leader’s future tax take. North and Weingast (1989) argue that democratic institutions constrain leaders from reneging on their promises to protect property rights, inducing higher investments [[North and Weingast, 1989](#)]. Similarly, Li and Resnick (2003) demonstrate a strong association between democracy and foreign direct investments (FDI) based on the former’s property rights regime. However, there exists a significant variation in protecting property rights even among authoritarian nations. For example, monarchies protect FDI as well as democracies, while multi-party regimes protect FDI to a lesser extent despite possessing parliaments and party competition.

The existing literature on expropriation (capture of private assets by the state) focuses on slow moving or time invariant political factors, such as international treaties, parliaments, competitive elections and regime type. Because expropriations are rare even in the most predatory regimes, these approaches fail to explain what drives expropriations. Temporary economic factors such as debt and currency crisis have received greater attention in the existing literature, but temporary political factors have not.

We address the effect of leader succession on expropriation. Successions often

cause severe crisis in autocracies: over half of authoritarian political parties do not survive their first succession [Meng, 2020]. Because autocracies lack external enforcement mechanisms, supporters and new leaders have good reason to distrust one another [Albertus and Menaldo, 2012]. Successions are associated with greater expropriation of national (non-FDI) assets [Albertus and Menaldo, 2012], higher turnover in ministerial appointments [?], and a heightened risk of removal for both leader and the regime [Geddes et al., 2018][Kendall-Taylor and Frantz, 2016].

We argue that effect of leadership turnover on expropriation varies with the degree of within-regime constraints. When supporters lack constraining institutions they cannot protect themselves from purges by the leader. New leaders are more likely to purge, given their new preferences over supporters and policies, and supporters are more likely to launch coups in response. As result regime members are unlikely to enjoy the long-run benefits of strong property rights, but can benefit from expropriated assets immediately. Greater instability during the succession period thus increases expropriation. In non-personalist regimes power is dispersed across the elite and supporters can coordinate against the leader. Those institutions facilitate smooth successions and protect insiders access to rents, leading to a constant discount rate over the succession.

We test the empirical implications of our theory on a panel dataset of all major FDI expropriations from 1950 to 2010. We measure supporter institutionalization with a year-by-year measure of personalism from Geddes et al. [2017]. We measure expropriation using a binary event dataset collected by [Kobrin, 1984][Minor, 1994][Hajzler, 2012][Tomz and Wright, 2008].

Because political, economic and debt crises may cause both leader turnover and expropriation, a naive regression of expropriation on turnover is biased. To identify the effect of turnover, we exploit plausibly random variations in turnover from terminal illnesses and accidents. There is no reason to believe that cancer or strokes are strongly associated with known determinants of political risk like commodity shocks. Following

Jones and Olken [2005], this ensures “the timing of the transfer from one leader to the next was essentially random” relative to changes in economic and political variables. We include leaders who die in office, retire due to ill health, or die of publicly-known chronic illnesses shortly after departure. We depart from past studies by including leaders that leave their country to treat their terminal illnesses abroad and die within two calendar years, using only publicly known illnesses collected by [Mesquita and Smith, 2018]. Our data includes 86 exogenous leader turnovers from 1950 to 2010.

Regressing across all autocracies, we find that turnover does increase expropriation risk. In the country fixed effect logit model, the average observation has a 0.066 probability of expropriation. Observing an exogenous turnover increases the probability to 0.16 in the model.

Furthermore, we find the effect varies by the degree of personalism (elites ability to constrain leader). The effect is large and positive in high-personalism country-years a leader. There is no effect in non-personalist country-years.

This research makes several theoretical contributions. The independent variable is previously untested despite a large literature on drivers of property rights protection and violation. Studies have rarely investigated the variation *over time* in property rights of autocracies (but see [Li, 2009] on long-serving autocrats).

Furthermore, our theory contributes to a growing literature on the differential behavior of personalist and non-personalist autocracies. Personalist regimes grant more monopolies to foreign investors resulting in FDI concentrated in the primary sector [Wright and Zhu, 2018]. Legislatures increase property rights and growth in non-personalist autocracies, but not personalist regimes [Wilson and Wright, 2017]. Jones and Olken [2005] observe a larger effect of leader death on growth in unconstrained autocracies. Coups in personalist regimes are more likely to use violence [Chin et al., 2020] [Grundholm, 2020]. When personalist regimes collapse, they are less likely to become stable democracies [Geddes et al., 2018], but this effect is weaker when per-

sonalists create support parties [Frantz and Kendall-Taylor, 2017].

The most similar past work to our study is Fails [2014]. Fails constructs a metric of autocrats’ “replacement risk” using the number of past turnovers in the country per year. We have a similar theoretical mechanism, except that our model endogenous leader-supporter negotiation. Unlike Fails [2014], we explain variance in the exact years expropriations take place, rather than stable estimations of risk. Also, our use of exogenous turnovers reduces the endogeneity problem.

Our work is also similar to Albertus and Menaldo [2012]. Albertus finds that new autocrats are more likely to expropriate land held by private citizens, and that doing so increases their tenure. Like our paper, Albertus proposes a supporter-leader trust deficit as the driving force. However, Albertus’s mechanism suggests that expropriation destroys alternative support bases, leaving the existing supporters the only game in town. This mechanism cannot explain the expropriation of FDI, since foreign investors are not essential supporters. Also, Albertus does not resolve potential confounding between turnover and expropriation.

The paper proceeds as follows. Section I reviews the current literature on the drivers of FDI expropriations. Section II gives several causal models that predict the effect of leadership change conditional on the nature of support-group institutionalization. Section III describes the methodology and data sources. We provide empirical results in section IV, with further robustness checks in section V.

2 Drivers of Expropriation

This section argues that leader turnover should only increase expropriation risk when regimes lack constraining institutions. It is based on two key past findings. First, governments are deterred from expropriation primarily by long term costs to their economies, so political crises that shorten government time horizons should increase risk. Second, autocratic stability depends on either constraining institutions or per-

sonal relationships with the leader. When autocracies rely on relationships rather than institutions, exogenous turnovers should shorten government time horizons causing expropriation. We show this in a simple selectorate model below.

The past 70 years have seen a great variation in the extent of expropriation. Expropriations rapidly increased in the 1960s and 70s as newly independent states asserted themselves [Kobrin, 1984]. Then, in the 1980s and 90s, the number of expropriations collapsed to less than one per year as seize-able assets were exhausted and societies realized the long-term costs of contract violation [Minor, 1994]. Since 2000s expropriation levels have risen due to increased FDI in developing countries. These trends are represented graphically in figure 1.

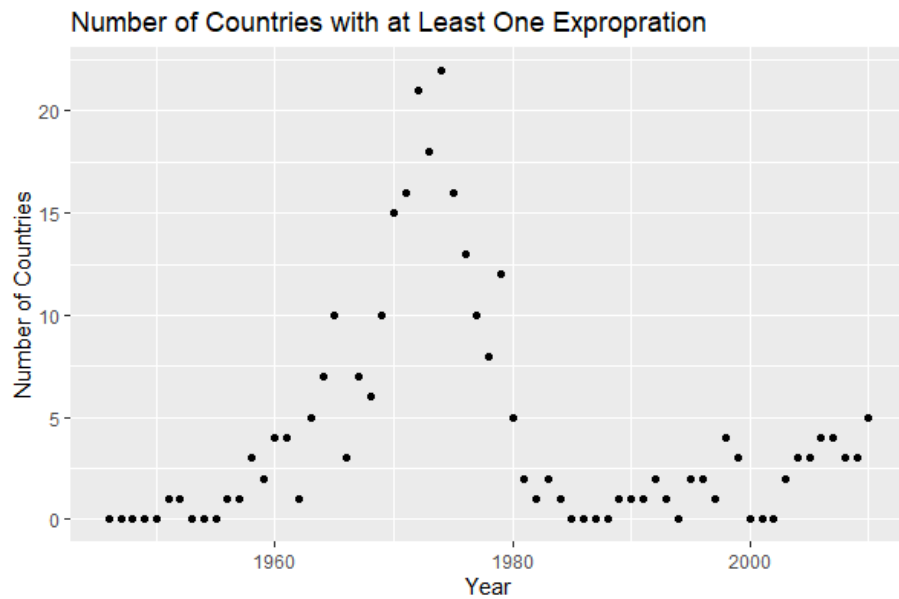


Figure 1: This figure shows that the major spike in expropriations took place in the 1970s. Note the gradual return of expropriation in 2000s as FDI in developing countries increased. Per dollar of FDI, the number of countries with expropriation cases are fewer in the latter period due to stronger constraints from both domestic democratic institutions and international organizations.

A constant stream of state revenue is the most obvious advantage of expropriation.

Petróleos Mexicanos, was created by expropriating foreign oil companies in 1938, and provided a third of government revenue in 2013 [Garcia, 2013]. Nationalization is particularly appealing to weak states because state-owned businesses are easier to tax than the private or informal sectors [Menaldo, 2016]. States also seize assets and resell them for immediate cash to a third party. In 2010, the Democratic Republic of the Congo seized investments worth \$ 750 million in a copper mine and immediately sold it to an Israeli mining speculator [Macnamara and Thompson, 2010].

Early work also posited that leaders expropriate to appease their opposition [Jodice, 1980]. Multinational companies are appealing scapegoats because they lack local political connections and are easily accused of hiring too few local workers or transferring wealth offshore. In two cases states violated contracts to mandate pay raises for domestic workers [dun, 2006]. States have also violated utilities contracts to mandate lower prices to prevent unrest [Jensen et al., 2020]. However, most studies find no relationship between political unrest and expropriation [Duncan, 2006] [Jensen et al., 2020] [Jodice, 1980].

Expropriations are rare because they come with steep costs that usually outweigh these advantages. An expropriation occurs in just 5% of autocracy years in our sample. Reputation effects are the most obvious cost of expropriation. Investors avoid states with a history of expropriation to secure their assets. Akhtaruzzaman et al. [2017] find that “A one-standard-deviation reduction in expropriation risk is associated with a 72% increase in FDI”, larger than any other institutional factor. Sectors experience slower growth after an expropriation [Duncan, 2006]. Reputation effects are important enough that states increase nationalization when they receive investment from multiple nationalities, as investors are less able to communicate and coordinate across nations [?].

Expropriators are also subject to sanctions from international organizations or host governments [Jodice, 1980] [Biglaiser et al., 2016]. Betz and Pond [2019] find that

investor protection treaties sufficiently strong that domestic firms prefer to share stock with foreign firms to gain access to international arbitration.

This pattern suggests that governments weigh the long term costs of expropriation against short term political and financial gains. Economic downturns decrease the chance of expropriation because governments must attract recovery capital, making reputations costs sharper. Positive growth shocks increase expropriation for all sectors because states' need for investment is lesser and the value of their assets has increased [Jensen et al., 2020] [Duncan, 2006].

Following Fails [2014], we expect expropriation to increase when elite instability increases. Because expropriation provides immediate benefits and short term costs, expropriation is more attractive to regimes that expect brief tenures. This mirrors political economy findings that unstable governments adopt myopic policies. Political instability is associated with higher taxation and lower growth [Devereux and Wen, 1998], and expropriation is positively associated with leader turnover in autocracies [Fails, 2014]. Autocracies with the most stable leader-supporter alliances (monarchies and party states) also have the strongest foreign property rights protection [Knutsen and Fjelde, 2013].

Therefore, political crisis should increase expropriation when current beneficiaries of government rents expect to be less powerful in the future. For simplicity, we will use the term “instability” to refer to instances when current beneficiaries have lower expected future power. In the following section we discuss under what circumstances leader turnovers create instability.

2.1 Supporter Leader Commitment Problems

Autocratic rule is based on repeated exchange of support from elites for influence and rents from the leader (or the ruling group) [Svolik, 2012][De Mesquita et al., 2005]. In autocracies the set of essential leaders (aka selectors) is small relative to the population.

As a result providing direct rents to supporters is more efficient than public goods and the benefits to being an essential supporter are large per-person.

However, both parties face a serious credible commitment problem in this exchange [Wintrobe, 2000]. Leaders may claim to prefer their current supporters to prevent a coup and supporters may claim to prefer the leader to prevent a purge. Because opportunities for purges and coups are not constant, both parties may be uncertain that they are the “true favorite” of the other. We propose that this uncertainty causes instability which induces expropriation.

Three solutions to the commitment problem have been discussed in the literature. One is to create institutions which constrain the leader, preventing purges or reneging on agreements [Myerson, 2008][Meng, 2020]. We explain the “constraint” in detail in the following section. Alternatively, leader may amass immense personal power such that supporters can no longer challenge them. For example, Saddam Hussein terrorized his supporters and destroyed their ability to coordinate a coup [Talmadge, 2013]. Finally, the problem is reduced if the leader personally selects their elite supporters. Directly appointed supporters have a strong signal of confidence from the leader and are more likely to be removed following a turnover [Bratton and Van de Walle, 1994]. De Mesquita et al. [2005] argues that the security of being personally appointed gives leaders a competitive advantage over challengers that enables them to personally control resources.

Expropriation should therefore increase when states lack constraining institutions, leaders have not selected the current elites, and supporters can succeed in a coup. Crucially, when unconstrained leaders die or retire all of these conditions are met. The constraining institutions are not immediately available. The current elites are appointed by the predecessor. The new leader is not powerful, having just assumed their position and lacking a core of loyal supporters. Coups are much more common in the first years of a leaders rule [Geddes et al., 2018]. As a result, the strongest parties lack a secure

future position, creating an incentive for expropriation from the regime.

Laurent-Desire Kabila (LDK) took over the DRC after the dying Mobutu Sese Seko fled. Because Mobutu held total personal power, LDK did not inherit stable power-sharing institutions. LDK murdered a supporter whom he suspected of plotting a coup, but this caused many soldiers to go on strike. LDK was desperate for cash to pay more supporters to fight. Among other expropriations, he sold a total monopoly on diamond mining to an Israeli firm. Kabila's investment advisor said of the expropriations "The war was still raging. The equipment had to be paid for, the soldiers had to be paid for (...) New ways of raising money had to be found"[Zajtmán and Rabaud, 2011] (time 29:17).

2.2 A formal model

This section formalizes the above section with a modified version of selectorate theory [De Mesquita et al., 2005], a popular authoritarian coalitions model. To emphasize our mechanism, we simplify selectorate theory to include only two policies, a distribution of rent and an expropriation (formalized as a costly transfer of rents from the future to the present). The game is an infinitely repeated coalition formation process with two contenders for leader and a vector of S selectors. Unlike in democratic coalition games, only a subset of S called the winning coalition W are essential for a leader. A challenger must attract W selectors and at least one member of the current coalition to become leader.

Each round proceeds as follows: both contenders simultaneously propose policies. A policy is a vector of transfers to each selector and a binary decision to expropriate or not. The sum of all transfers must be less than a pie of rents, whose size depends on the presence of FDI (explained below). All residual rents are consumed by the leader, if selected. Selectors then "vote" for either candidate. Whichever candidate wins has their policy implemented immediately, distributing benefits to whoever they promised.

Finally, the leader can then choose their preferred winning coalition for the next round, based on candidate-specific random preferences over selectors. Those selected become the new winning coalition and the process repeats.

In the base model an incumbent and a challenger would compete each round with a constant rent (see [Gehlbach, 2021]). The incumbent has had the opportunity to purge previously, so the current winning coalition know that they are the incumbents favorites and will not be purged. The challenger cannot credibly commit not to purge, and supporters have a $\frac{W}{S}$ probability of surviving a purge. As a result the challengers offers are less valuable, so the incumbent can keep a portion of the rent for himself.

We model expropriation with an additional policy decision to expropriate or not, proposed alongside rent transfers. The pie for distribution is 1 prior to expropriation, $1 + E$ when expropriation is implemented, and $1 - C$ every subsequent round. Expropriation can only occur once. This ensures a simple output of the model: the threshold of $\frac{E}{C}$ above which expropriation is implemented.

Secondly, instead of an incumbent we assume the incumbent has disappeared and competition now occurs between a successor and a challenger. As both have not previously lead, their preferences over supporters is private knowledge. Neither can credibly commit to a purge and winning coalition members survive a purge with probability $\frac{W}{S}$.

We solve the infinite game by backward induction. Like many authoritarian coalition models [Svolik, 2012][De Mesquita et al., 2005], we restrict our focus to Markov perfect equilibria. Selectors condition their behavior only on the offers presented and their knowledge of leaders preferred coalition partners. If both candidates make identical valued offers, the successor or incumbent wins. If one player cannot win they offer the maximum possible.

Because both successor and challenger are functionally identical, they make the same offer. This offer includes an expropriation if

$$\frac{N}{W}(1 + E) + \delta \frac{W}{S} V_{INoFDI} > \frac{N}{W} + \frac{W}{S} V_{IFDI} \quad (1)$$

where V_{INoFDI} is the value of being in an incumbents coalition after an expropriation (with reduced rent). V_{IFDI} is the value of being in an incumbents coalition if no expropriation has occurred. Solving for V_{INoFDI} is simple because expropriation can only occur once, so after expropriation the game is identical to the baseline with a lower value. Adapting the conventional solution ([Gehlbach, 2021] simplifying [De Mesquita et al., 2005]) gives

$$V_{INoFDI} = (1 - C) \left(\frac{1}{1 - \delta \frac{W}{S}} \right)$$

. V_{IFDI} is harder to find because the incumbent must increase their bids when challengers can offer an expropriation. We solve this model in appendix B, finding

$$V_{IFDI} = \frac{1}{W}(1 + E) + \delta \frac{W}{S} \left(\frac{1}{1 - \delta \frac{W}{S}} \right) \frac{1}{W}(1 - C)$$

.

When we sub all these values into the equation 1, we get

$$\frac{1}{W}(1+E) + \delta \frac{W}{S} (1-C) \left(\frac{1}{1 - \delta \frac{W}{S}} \right) \frac{1}{W} > \frac{1}{W} + \delta \frac{W}{S} \left[\frac{1}{W}(1 + E) + \delta \frac{W}{S} \left(\frac{1}{1 - \delta \frac{W}{S}} \right) \frac{1}{W}(1 - C) \right]$$

.

Fortunately this intractable-seeming equation simplifies elegantly. The $\frac{1}{W}$ cancels on both sides (recall W is the minimum coalition, so this simply scales the size of the benefit pool). The unit rent of the first round also cancels, because with or without expropriation at least 1 is distributed in round one.

$$E + \delta \frac{W}{S} (1 - C) \left(\frac{1}{1 - \delta \frac{W}{S}} \right) > \delta \frac{W}{S} \left[(1 + E) + \delta \frac{W}{S} \left(\frac{1}{1 - \delta \frac{W}{S}} \right) (1 - C) \right]$$

Next sort the E's onto one side and combine the $\delta \frac{W}{S}$ terms.

$$E(1 - \delta \frac{W}{S}) > \delta \frac{W}{S} \left[1 + \delta \frac{W}{S} \frac{1}{1 - \delta \frac{W}{S}} (1 - c) - \frac{1}{1 - \delta \frac{W}{S}} (1 - c) \right]$$

Now we can combine the $(1 - c)$ terms on the right hand side.

$$E(1 - \delta \frac{W}{S}) > \delta \frac{W}{S} \left[1 + (1 - c) \frac{\delta \frac{W}{S} - 1}{1 - \delta \frac{W}{S}} \right]$$

The right hand side simplifies further to

$$E(1 - \delta \frac{W}{S}) > \delta \frac{W}{S} C$$

Solving this for $\frac{E}{C}$ gives the minimum cost of expropriation necessary to deter

$$\frac{E}{C} > \frac{\delta W}{S} \frac{1}{1 - \delta \frac{W}{S}}$$

Recall that $\frac{W}{S}$ is the probability of surviving a purge. Because both candidates propose a purge and equal transfers the successor wins the tie and expropriation on the first round is implemented.

This argument gives a much lower cost threshold than if an incumbent exists who will not purge, or if supporters are strong enough to prevent purge. Under either condition, the threshold becomes

$$\frac{E}{C} > \frac{\delta}{1 - \delta}$$

Therefore when neither candidate can be trusted not to purge, a much stronger cost is

needed to deter expropriation.

An intuitive summary of the model is as follows. When the personal relationship between the leader and supporters is disrupted, no leader candidate can credibly commit not to purge. However, expropriations can deliver faster windfalls before a purge opportunity. As a result, a candidate who proposes expropriation is appealing because current elites benefit from the windfall, but from the long-run gains of strong property rights. Therefore elites select candidates the deliver the immediate benefit, causing expropriation.

2.3 Leader death and political instability in personalist and non-personalist autocracies

We only expect the model to hold as far as the underlying assumptions do. The assumption that purges are cost-less and always succeed does not hold for all autocracies. In 2021 Guinea leader Alpha Conde attempted to purge his security forces, but was soon overthrown and arrested by the purge's intended victims.

The internal power struggle between the leader and supporters may result in two stable balances of power, often called personalist and non-personalist regimes[Svolik, 2012]. In non-personalist regimes supporters constrain leaders with the threat of a coup. In personalist regimes, by contrast, leaders amass sufficient appointment power and degrade their supporters' coordination to secure themselves. In the personalist equilibrium a coup is unlikely to succeed and the costs of failure are high enough to ensure that supporters never attempt one.

The most commonly used definition of personalism is as follows [Geddes et al., 2018]

We refer to dictatorships in which the leader has concentrated power at the expense of his closest supporters as personalist. The defining feature of personalist dictatorship is that the dictator has personal discretion and

control over the key levers of power in his political system. Key levers of power include the unfettered ability to appoint, promote, and dismiss high-level officers and officials, and thus to control the agencies, economic enterprises, and armed forces the appointees lead. In such regimes, the dictator's choices are relatively unconstrained by the institutions that can act as veto players in other dictatorships, especially the military high command and the ruling party executive committee. Personalist dictators juggle, manipulate, and divide-and-rule other powerful political actors. Like all dictators, they need some support, but they can choose from among competing factions which ones can join or remain in the ruling elite at any particular time. Personalist dictators are thus powerful relative to other members of the elite, but not necessarily relative to society or to international actors

By contrast, in the non-personalist equilibrium supporters coordinate to institutionalize power-sharing across the elites [Gandhi, 2010][Magaloni, 2008]. These institutions enable collective decision making across the elites and enforce a consistent distribution of rents. Supporters hold dictators to these rules by credibly threatening coups. Leader-constraining institutions are diverse; they include ruling parties, military high commands, royal courts and ministerial councils [Myerson, 2008]. Non-personalist regimes must disperse power to prevent consolidation. For example, the Saudi Royal family has historically dispersed its armed forces across different family factions to share the burden of defense [Stenslie, 2020]. Critically, these institutions empower supporters to coordinate their defense against outsiders and regulate successions without a strong leader.

In personalist regimes constraining institutions may exist nominally, but do not affect policy choice. Wilson and Wright [2017] show that legislatures affect expropriation risk only in non-personalist regimes. Legislatures increase property rights

and growth in non-personalist autocracies, but not in personalist regimes [Wilson and Wright, 2017]. Jones and Olken [2005] observe a larger effect of leader death on growth in unconstrained autocracies. However, their measurement of constraint is less reliable because it measures only de jure institutions. Personalist regimes more often produce "rubber stamp" institutions with de jure constraining powers but no de facto influence [Meng, 2020].

Personalism strongly affects the stability of leadership transitions [Kendall-Taylor and Frantz, 2016]. When autocracies have strong leader-constraining institutions and collective governance among supporters, a leader's death produces little political instability. Single-party and monarchic regimes survive leader deaths in 96 and 95% of cases, respectively. In highly personalist regimes where leaders dominate their supporters, death produces greater volatility in support. Personalist regimes survive leader deaths only in 78% of cases.

In non-personalist regimes, natural leader deaths rarely produce severe political crisis because the same institutions that constrain leaders can organize their smooth replacement [Kendall-Taylor and Frantz, 2016]. In autocracies, a narrow set of elites have privileged political rights while most social groups are excluded. Supporters know that internal fighting over the top job would signal vulnerability and invite attack from excluded groups. They may have preferences over candidates, but their preferences for staying in power are much greater. They therefore avoid the protracted internal debate of democratic transitions, as these invite a challenge from the excluded. They prefer to coalesce quickly around a new successor, then circle the wagons.

2.4 Hypothesis

Because personalist regimes rely on personal relationships to solve the credible commitment problem, a leader death should create instability. Both leader and supporters face a higher risk of removal from office. As a result, they should expropriate more

immediately after an exogenous succession.

Hypothesis 1: In personalist regimes, leader turnover due to illness increases the probability of expropriation.

Deaths in non-personalist autocracies are unlikely to trigger expropriations. The leader's death does not damage the core regime institutions, so the security of both the supporters and the successor remains unaffected. Supporters can anticipate a constant share of both the benefits and costs of any property rights regime. Figure 1 shows the expropriation and the time evolution of our personalism index. The constant low personalism score reflects the consistent dominance of the ruling Partido Revolucionario Institucional over the presidents they regularly chose then replaced.

Furthermore, we do not expect major ideological changes upon leader death. Low turnover means that supporters' identities and preferences stay constant [Kendall-Taylor and Frantz, 2016], and low personalism implies that they can replace a new leader that radically deviates from their preferences [Svolik, 2012]. Supporters control succession and can pick a successor that prefers the current property rights.

Hypothesis 2: In non-personalist regimes, leader death is not associated with heightened expropriation risk.

We propose a heterogeneous treatment effect; the effect of leader turnover is conditional on personalism.

An alternate mechanism, proposed by Albertus [2015], is that many regimes may expropriate to destroy the wealth of their predecessors. Predecessors pose a danger to autocrats, and seizing their property reduces their capacity. However, this mechanism mainly pertains to domestic capital. Foreign investments may be expropriated as collateral damage if they own a partial stake of target assets [noa, 2019] or are suspected of supporting the past leader [podolskaya, 2014].

Thirdly, the higher turnover may introduce a new group with radically different preferences for property rights. The smaller coalitions in autocracies allow for larger

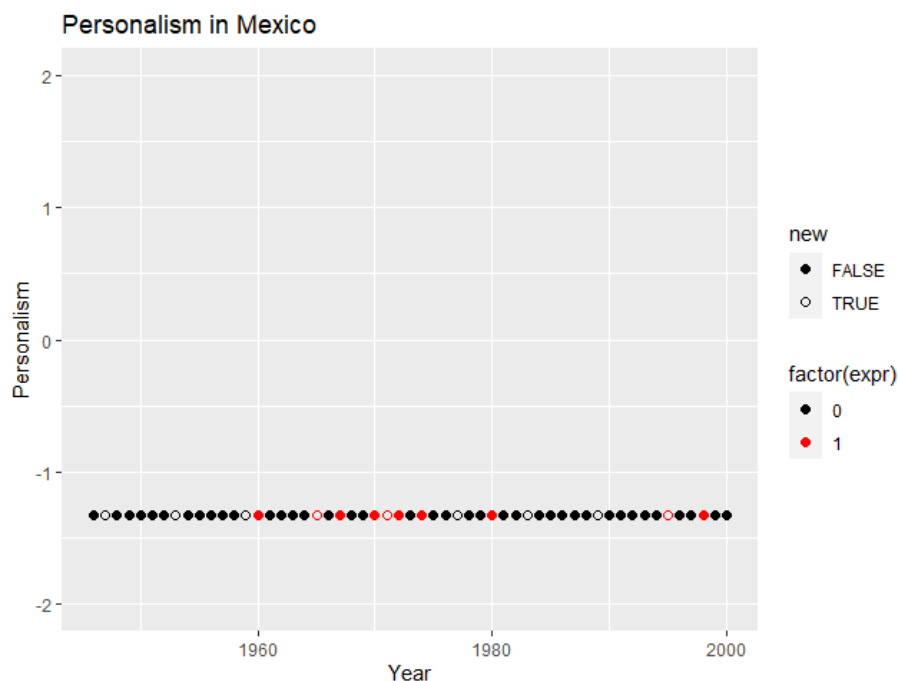


Figure 2: This plot shows the temporal variation in personalism (leader power over supporters) in Guinea. Triangles represent years in which a new leader came to power and years with an expropriation are colored red. In Mexico, the Institutional Revolutionary Party supporters successfully constrained each leader to resign every 6 years. Supporter leverage is constant over the leaders tenure, so supporters can demand constant rents. Therefore supporters have no special reason to demand an expropriation after a leadership change.

shifts in policy preferences. For example, when Reza Pahlavi Shah fled Iran while dying of leukemia, his appointed successor proved unable to deter a challenge from opposition leader Ali Khomeini. At first, Khomeini built a broad coalition including popular forces, leftists and surrendered generals, but he quickly purged these groups. The result was a rapid power shift from a pro-western alliance of court, parliament and army to an anti-western, populist clergy faction. However, we will later show that the effect is not driven by changes towards leftist ideology.

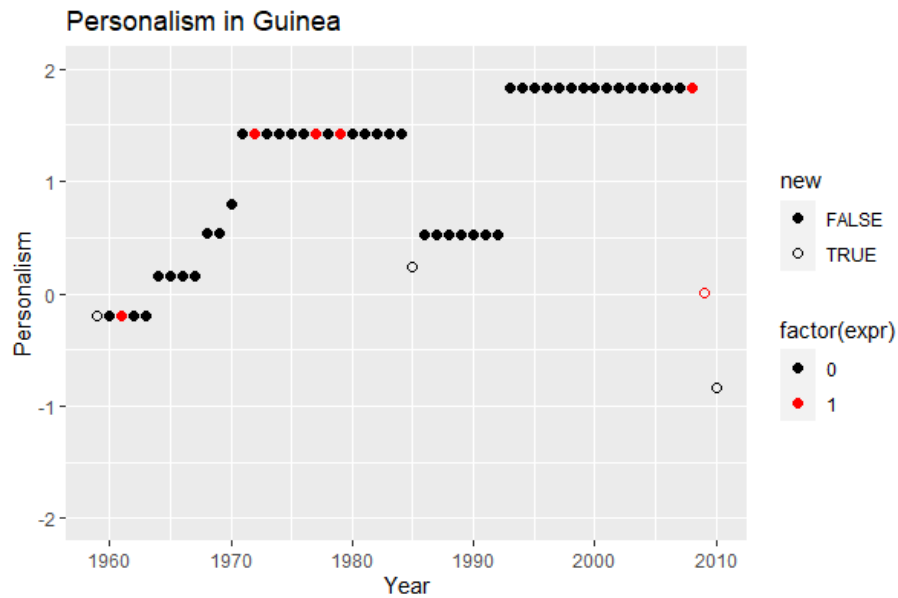


Figure 3: This plot shows the temporal variation in leader power in Guinea. Triangles represent years in which a new leader came to power and years with an expropriation are colored red. Notice the cyclical pattern in which new leaders are weaker but eventually return to a high equilibrium strength. Supporters have the most leverage at the start of the new regime, but lose leverage or are purged over time. Therefore leaders can renege on promises to compensate supporters in the future, leading supporters to prefer expropriations in early years. Leaders are also uncertain their purges will succeed. In this sample all purges succeeded, but in 2021 Guinea leader Alpha Conde was removed in a violent coup while attempting a purge.

3 Research Design

Leader changes in autocracies are not randomly assigned. The most common single form of leader removal is a coup. Coups may be triggered by purges, poor economic performance, changes in the power of social groups. The effect of economic performance on expropriation is well-documented [Jensen et al., 2020]. A newly empowered interest group may overthrow the regime then demand an expropriation. Civil wars may induce a coup or overthrow, while also compromising the states ability to protect property and creating immediate revenue needs. Less dramatically, a coup might result from a severe policy dispute over property rights.

To avoid endogeneity, we focus on turnover due to natural illnesses. This strategy was first used by Jones and Olken [2005] to assess leader effects on growth and monetary policy. Internal conflicts or economic changes are unlikely to cause terminal illnesses or accidents in leaders. The method is best for assessing immediate post-turnover effects because while all leaders lose power eventually, the particular year in which they contract an illness is unrelated to potential confounders.

Disease also sidesteps the leader strengthening effects of coups. Coming to power in a coup is a strong signal of support for a new leader. Because supporters prefer to join the winning side of a conflict, successful coup challengers enjoy a honeymoon of several years [Sudduth, 2017]. Coup leaders use their advantage to purge earlier and may also protect future taxes. Leaders than inherit via disease have no honeymoon period to bias the results.

A downside of this methodology is that we only observe variation in regimes where debilitating illnesses occur. The average age at time of illness-removal in our sample is 68. Because we observe less exogenous turnover of young, healthy leaders, they are out of sample.

We identify the effect of leader turnover on expropriation in both types of regimes, personalist and non-personalist. However, this *does not show that the heterogeneity in*

effect is caused by personalism. Personalism could be endogenous with the treatment effect. Some third variable such as natural resource rents might cause both personalism and the vulnerability to turnover. We use multivariate Logit to control for interactions of death with Polity Score, natural resource rents and regime type to show that the personalism effect is robust.

3.1 Dependent Variable

Our primary dependent variable is data set of FDI expropriation events from 1950-2010. It was first compiled by Kobrin [1984], then updated by Minor [1994] and Hajzler [2012]. We added several events identified by Tomz and Wright [2008] and two missing expropriation events in China and Cuba.

Unfortunately, we lack data on the value of the assets or the number of companies in the vast majority of events. In cases with data, there is often wide disagreement over asset value between host and owner, and in many cases there are no valuations recorded. We therefore use a simple binary outcome where 1 is any expropriation, else 0. To correct for country-years with no FDI we use both the FDI indicator from Tomz and Wright [2008] and an annual measure of FDI stocks from UNCTAD for years after 1970.

Following Kobrin, we define expropriation as the forced divestment of equity ownership of a foreign direct investor. The investment must entail international managerial control through equity ownership. While many national expropriations enter the dataset through minority foreign shareholders, the majority of national expropriations are not included. We include both formal expropriations (nationalizations) and covert expropriation through private actors, forced sales, and contract re-negotiations.

We do not include “creeping expropriations” or transfer risk in which states gradually alter regulations to capture foreign investments. Creeping expropriations are becoming more common since the 2000s [Graham et al., 2018]. Datasets on creep-

ing expropriation do not cover enough country-years to assess in our design because leader illnesses are rare events. Regulatory changes are included only if they are severe enough to drive out foreign firms [Hajzler, 2012].

Our dependent variable may exclude smaller expropriations, especially where investors did not report or take legal action. It is more comprehensive on cases with international legal action. In other words, the dataset mainly concerns large expropriations where the state was caught. Because these expropriations create the highest long-term reputational costs, they should be more affected by shocks to regime time horizons.

We did not use the popular International Country Risk Guide's (ICRG) scores for investor protections due to a lack of data. Exogenous turnovers occur only 86 times in the total sample but only 29 times in years with ICRG data. This includes Turkmenistan for the entire period.

In the following subsections we will discuss the independent variables. We first identified our independent variables based on theory and then used a Lasso regression framework to verify the relevance of our independent variables that describe the variation in expropriation. We find that the Lasso regression model validates our choice of independent variables.

3.2 Illness-and-Accident-Induced Transitions of Power

Our treatment variable is terminal or debilitating illness (such that the leader loses power). Coding departures from office due to natural causes is difficult because regimes hide health information and because supporters sometimes pre-defect when they realize death is imminent.

However, an illness may cause departure from office without causing immediate death. When King Fahd suffered a debilitating stroke in 1995, the royal family passed effective power to his son. However, he did not die for another 10 years. In regimes

with the least instability upon succession leaders are more likely to retire due to an illness than die in their boots. When personalist leader Abdelaziz Bouteflika suffered a stroke in 2013 he was so debilitated that he did not visit his ministers for his final year in office. But he did not voluntarily give up power until popular demonstrations forced his hands. Bouteflika was right to cling to power; months after he left office, his former supporters imprisoned his family members to secure themselves and retaliate against his predation upon them. Because leaders retire more easily when they expect no instability, excluding retirements would bias results upward.

Even worse, leaders flee when their illness creates sufficient instability. When supporters' positions depend on their personal relationship with the leader, a terminal illness dramatically decreases the value of the relationship [Mesquita and Smith, 2018]. A dead leader cannot reward and an unconstrained successor may change the ruling coalition. As supporters learn of the leader's illness, the returns to loyalty rapidly decrease, and former supporters often cease supporting the leader, sometimes going as far as joining the opposition. As a result chronic, observable illnesses cause a spike in removals by supporters and challengers, even relative to leaders equally close to death from observable natural causes [Mesquita and Smith, 2018]. Mobutu Sese Seko, Ferdinand Marcos and the Shah of Iran were all abandoned by their supporters during chronic illnesses, fled, and shortly died in exile of chronic illnesses. Unsurprisingly, this effect is larger in strong-leader autocracies [Mesquita and Smith, 2018].

Therefore, when a terminal illness produces a severe crisis, it tends to be miscoded as coups or revolutions. We solve this by including all instances in which the leader dies of an *observable* chronic illness immediately after departure. Therefore, we use two datasets for illnesses. We use Mesquita and Smith [2018]'s coding of chronic illnesses in autocrats. This dummy variable is positive if the leader died of a long-term terminal illness between their loss of power and the second following December

31st. The coding does not include sudden, unpredictable illnesses. Most cases are a result of cancer. We exclude cases

We use Archigos' coding of natural deaths and retirement due to ill health [Gommans et al., 2009]. The downside to the Archigos measure is that it follows the official reason for the succession, often coded by the successors themselves. Archigos therefore excludes instances in which supporters observe a terminal illness and abandon their leader. Archigos does recode retirements as coups when the leader's career continues afterward (autocratic governments sometimes intentionally label coups as retirements to project unity).

Our main coding is the combination of both measures. Effectively, we include leaders who:

- Died of natural causes in their boots (in office)
- Announced a retirement due to ill health and did not have subsequent political careers¹
- Died of observable, chronic illnesses shortly after leaving office.

The variable *Transition (total)* includes all successions by both codings. The variable *Transition (arch)* includes only official successions by the Archigos database. The variable *Transition (chronic)* includes only successions in which the leader died from a chronic, observable illness. To capture some variation in severity of expropriation we include the two years following a terminal illness, so that expropriation series that last into multiple years receive more weight. We reproduce our main results with these variables in appendix B.

We do not attribute Ahmadou Ahidjo's 1981 retirement from Cameroon to health reasons because Ahidjo's career continued for 7 years afterwards, including two coup attempts.

¹Archigos checked their subsequent careers.

3.3 Personalism of Departing Leaders

Studies of personalist autocracies have traditionally code multiple dummy variables dividing autocracies into different types: personalist, military, party, monarchy etc [Geddes, 1999]. We rejected this coding for several reasons. The first is that these classifications are constant over the life of a regime, but the actual balance of power usually shifts over time. The second is that personalism is a continuous aspect across regime types: Maoist China was highly personalist and a party state, the Shah’s Iran was unusually personalist and a monarchy. Most importantly, handcoding of regime-types might be biased by observed expropriations. Specifically we were concerned that states with weak property rights more likely to be classified as personalist [Knutsen and Fjelde, 2013].

We therefore use a continuous, annual measurement of personalism developed by Geddes et al. [2017]. It uses item-response theory to construct a continuous measure from 8 dummy variables, each coded for January 1st of each year. The variables are “dictator’s personal control over the security apparatus, creation of loyalist paramilitary force (...), dictator’s control of the composition of the party executive committee, the party executive committee behaving as a rubber stamp, dictator’s personal control of appointments, dictator’s creation of a new party to support the regime, dictator’s control over military promotions, and dictator’s purges of officers”. Together these variables capture the balance of power between leader and supporter, measurable for all autocracies. For robustness we check our results using Gandhi and Sumner [2020]’s coding which adds family appointments, political non-military purges among others.

A value of 0 represents the average personalism for all country years. The units are standard deviation, so that observations with personalism 1 are one standard deviation higher, and observations with personalism -1 are one standard deviation lower.

Finally, we emphasize that personalism is not a measure of democracy. It does not represent non-elite constraints on the leader or democratic institutions. The correlation

between personalism and polity score in our sample is .05.

Our primary variable of interest is the *personalism score of the leader who dies*. We call this variable Predecessor Personalism (PredPers). This variable is recorded for January 1st of the year the leader left office.

3.4 Control Variables

The presence of foreign investments is a necessary condition to expropriate FDI. Our FDI measure was originally connected by [Tomz and Wright, 2008]. We expanded it by filling in NA years back to 1970 and adding the UNCTAD FDI counts, available for all countries after 1980. We also checked all NA years after in 1960, including any observation with FDI presence worth more than \$1 million.

For gross domestic product (GDP) per capita we use World Development Indicators data supplemented by the Penn World Tables for missing years by Graham and Tucker [2019]. The variable "Natural Resource Rents" is total rents as a percent of GDP, collected by the World Development Indicators. To capture democracies we use the combined polity score from Polity IV. Our measure of regime type duration come from the same Geddes et al. [2017] dataset as the personalism variable.

Finally, our Lasso model recommends lagged personalism as an additional control.

Table ?? gives descriptive statistics about expropriation in successor years, describing January 1st of the year after a natural death or health retirement. We identify 86 such events in autocracies using the Archigos data. As expected, successor years have much lower personalism than average, due to the new leaders inexperience and lack of accumulated appointments. Successor years do have higher resource rents than average, which we control for subsequently. Their GDP per capita, polity scores and year are all similar to the average for autocracies in the sample.

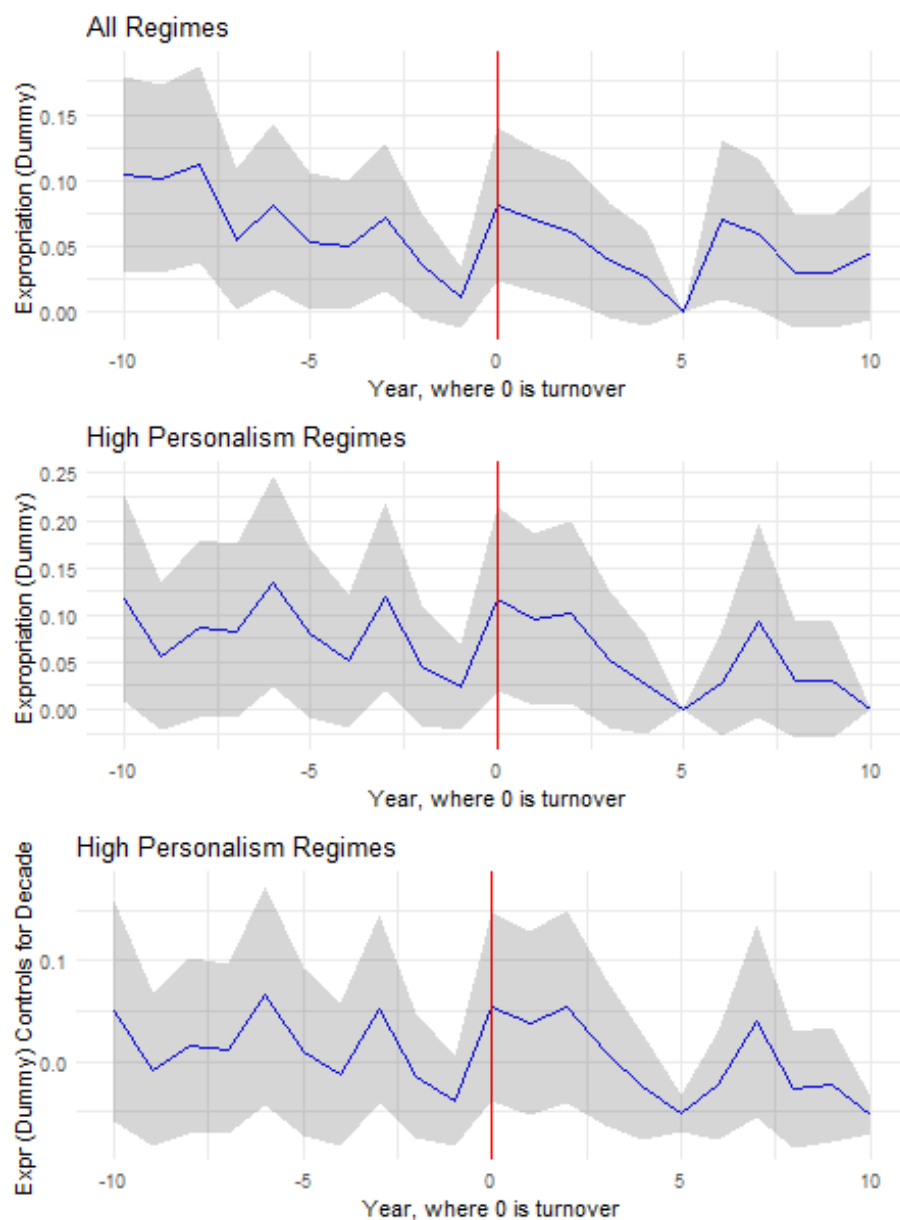


Figure 4: We plot the number of expropriations across all regimes before and after the year of turnover. The top plot includes all country-years. The downward trend over time is due to the spike in events in the 1970s and greater enforcement afterward (earlier years are more likely to occur in the 1970s). The second includes only regimes that are more personalist than the average. The final plot uses residuals in a regression of decade fixed effects on expropriation, to remove the variance in the international environment.

Table 1: T-Test: Difference in Autocracy Characteristics by Transition Period

	(1) Transition Years			(2) Non-Transition Years			(3) All Years		
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Expropriation	0.06	0.00	0.25	0.06	0.00	0.24	0.06	0.00	0.24
Predecessor Personalism	-0.00	0.05	0.85	-0.24	-0.20	0.83	-0.23	-0.20	0.83
Lag Personalism	-0.24	-0.16	0.82	0.01	0.04	0.87	0.00	0.02	0.87
FDI	0.98	1.00	0.15	0.98	1.00	0.14	0.98	1.00	0.14
Log of GDPPC	23.89	23.74	1.77	23.48	23.31	1.71	23.49	23.33	1.71
Natural Resource Rents	14.83	9.38	15.72	11.39	7.01	12.98	11.50	7.01	13.09
Log of Population	16.19	16.23	1.53	16.04	16.00	1.36	16.05	16.01	1.36
Leader Duration	1.96	1.00	2.14	10.41	8.00	9.15	10.10	7.00	9.13
Polity IV Score	-5.27	-7.00	4.45	-4.96	-7.00	4.45	-4.97	-7.00	4.45
Observations	170			4421			4591		

4 Results

Here we test our main hypothesis, that turnovers (referred to as transitions) increase expropriation only in personalist autocracies. The deaths of constrained autocrats should have no effect. We therefore expect a positive interaction between predecessor personalism and transition.

Table 2 summarizes findings from a series of logistic regression models that sequentially add control variables. Our independent variable of interest is *Transition:PredPers* in the third row. As expected, the value on the interaction term is both positive and significant. The interaction is also larger than the negative value on *Transition (total)* in general, indicating an increased total probability of expropriating when personalist leaders turnover (we confirm this below in an alternative specification). The effect of *Predecessor personalism* in general is small and usually non-significant. This suggests that predecessors are most relevant immediately following the transition, as we expect.

All models include decade fixed effects to account for large temporal patterns in expropriation [Hajzler, 2012]. Model 1 is the simplest, including only the IV components, FDI dummy and Log of GDP per capita. In model 2, we add natural resource

Table 2:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition (total)	−0.302 (0.524)	−0.585 (0.682)	−0.526 (0.677)	−0.103 (0.751)
Predecessor personalism	−0.013 (0.121)	−0.047 (0.142)	−0.020 (0.143)	0.455* (0.275)
Transition:PredPers	1.962*** (0.531)	2.400*** (0.615)	2.351*** (0.610)	1.684** (0.737)
Lag personalism	−0.135 (0.105)	−0.110 (0.121)	−0.065 (0.125)	−0.015 (0.241)
FDI dummy	1.579 (1.028)	13.764 (422.288)	13.699 (422.931)	17.217 (3,005.681)
Log of GDPPC		0.120 (0.089)	0.131 (0.089)	0.723 (0.643)
Natural resource rents		0.010 (0.007)	0.011 (0.007)	0.015 (0.017)
Log of population		0.003 (0.109)	−0.016 (0.110)	−5.738*** (1.694)
Polity IV combined score			0.036 (0.025)	0.079* (0.043)
Decade Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	2,751	2,150	2,147	2,147
Akaike Inf. Crit.	1,039.642	800.804	800.180	770.261

Note:

*p<0.1; **p<0.05; ***p<0.01

rents because rents are generally associated with higher personalism and higher expropriation. Model 2 also adds population, logged for normalcy. Model 3 adds polity score, which has no effect. Model 4 adds country fixed effects.

$$Pr(y_{it} = 1) = \frac{\exp(\alpha_{d(t)} + x_{it}\beta)}{1 + \exp(\alpha_{d(t)} + x_{it}\beta)} \quad (2)$$

Equation 2 is the baseline empirical framework where y_{it} is expropriation for country i in year t . $d(t)$ refers to the decade that the year lies in, and therefore $\alpha_{d(t)}$ are the decade level fixed effects. x_{it} are all the independent variables that have been listed in the previous sections, and, as mentioned above, change based on the model. Model 4 builds on this baseline empirical model by adding one other term γ_i for country fixed effects.

In Appendix B we reproduce the above table when changing the coding of departures. We show that results are robust to: restricting to only observable chronic illnesses (the [Mesquita and Smith, 2018] coding), and to including only accidents and retirements (which excludes departures for medical care), and to including only the single year after the transition.

In Appendix C, we reproduce the main specification corrected for autocorrelation. To our knowledge, there are no models to correct for autocorrelation in a logit panel model. We instead use a simple linear probability model with a cochrane-orcutt adjustment for autocorrelation. The results are nearly identical. A regime one standard deviation more personalist than average, a leader death causes a 10-14 percentage point increase in expropriation probability. Statistical significance is slightly higher.

with an effect of 10-14 percentage points higher expropriation chance during transition for personalist regimes

The interaction term could pick up a reduction in expropriation during low-personalism successions. It is possible that non-personalist regimes reduce expropriations during transitions. We therefore reproduce the test with a split sample, shown in 3. *Transition*

Table 3:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition high pers	1.150** (0.450)	1.451*** (0.495)	1.453*** (0.496)	1.082* (0.636)
Transition low pers	−0.336 (0.620)	−0.607 (0.764)	−0.599 (0.766)	0.081 (0.858)
Predecessor personalism	0.068 (0.126)	0.048 (0.144)	0.072 (0.145)	0.538** (0.254)
Personalism	−0.129 (0.114)	−0.151 (0.126)	−0.109 (0.129)	−0.136 (0.225)
FDI dummy	1.622 (1.029)	13.755 (420.835)	13.697 (421.340)	17.186 (3,000.830)
Log of GDPPC	0.103* (0.053)	0.106 (0.088)	0.116 (0.088)	0.701 (0.638)
Natural resource rents		0.010 (0.007)	0.012 (0.007)	0.018 (0.017)
Log of population		0.007 (0.108)	−0.010 (0.110)	−5.466*** (1.686)
Polity IV combined score			0.035 (0.024)	0.074* (0.041)
Decade Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	2,619	2,150	2,147	2,147
Akaike Inf. Crit.	1,010.299	813.002	812.380	775.935

Note:

*p<0.1; **p<0.05; ***p<0.01

high pers is one for all transition years with a *PredPers* above the median ($=0.045$) for a turnover. All other transition years are 1 for *Transition low pers*. We keep the other covariates constant. We choose the median as the threshold for defining high and low personalism in order to avoid p-hacking concerns.

Our selection of the median is arbitrary, so we test alternative cutoffs to identify the threshold where effects begin. We test cutoffs at .5 and 1 standard deviations. We find the effect size increases with higher cutoff values. This corroborates our interaction term result that higher personalism is associated with a larger treatment effect of turnover. These results are available in Appendix D.

4.1 Does Personalism Cause the Treatment Effect Heterogeneity Through Alternative Channels?

The section above shows that turnover increases expropriation in personalist autocracies only. The intuitive case for personalism is compelling: personalist leaders shape regime institutions and appointments to make themselves indispensable [Jones and Olken, 2005] [Svolik, 2012] [Geddes et al., 2018]. By appointing people through personal connections rather than merit and incentivizing pro-regime effort through their personal rewards, they increase the cost of removing them for the political class. Leaders who personalize more successfully should therefore create a larger power vacuum when they turnover.

However, the predecessor's personalism might correlate with other variables that similarly affect turnover instability.

Personalism (and predecessor's personalism) are correlated with natural resource rents [Fails, 2020]. Resource rents could therefore be a confounder, especially if rentier states expropriate more during succession crises. Jensen and Johnston [2011] argue that rentier states may face weaker reputational costs from expropriation and therefore respond more to a succession crisis.

Alternatively, democratic institutions might affect succession crisis severity. Autocracies also vary slightly in their democratic institutions [Gandhi and Przeworski, 2007], although variance in de jure parliaments and elections is low [?]. Vertical constraints have a major effect on expropriation in frequency and type [Graham et al., 2018]. Personalism has a correlation of -.24 with polity score..

That is, the heterogeneity in effect might be driven by regime type rather than personalism. Monarchies tend to have lower personalism scores while military and single-party states have higher scores by .2 standard deviations on average across all country years. Each regime type has different succession mechanisms, most obviously in the case of monarchies.

We test the robustness of the personalism-treatment-effect relationship to these alternative controls in 4. To test for the heterogeneity in treatment effect, we include each variable in its own interaction term. Model 1 adds an interaction with resource rents. Model 2 adds Polity IV combined Scores. Model 3 adds Wahman et al. [2013]’s coding of regimes by type into monarchy, military, single-party and multi-party. We did not use the Geddes Personalism-Military-Party coding [?] to avoid contamination via coding with the dependent variable, expropriation. In model 4 we include all interaction terms. We do not interact with country fixed effects because there are too few exogenous turnovers for meaningful variation to remain (86 turnovers in 62 countries).

Our results might alternatively be driven by ideology. One possibility is that because personalist regimes collapse more frequently on leader deaths, they are replaced by populist left-wing governments. If such governments prefer to expropriate foreign investment, they are likely to enact the policy in their early years. This is a possible mechanism behind our effect.

Even worse, we could get spurious results if personalism is correlated with left ideology and left ideology causes expropriation especially during turnover years. Leftist regimes might expropriate after turnover to enact their policy agenda or to signal their

Table 4:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition (total)	−0.955 (0.833)	−0.958 (1.144)	−4.765 (2.930)	−6.635* (3.899)
Predecessor personalism	−0.004 (0.147)	0.011 (0.148)	0.028 (0.157)	0.046 (0.159)
Transition:PredPers	2.414*** (0.625)	2.476*** (0.667)	4.863*** (1.828)	5.239** (2.149)
Transition:Resource rents	0.020 (0.022)			−0.001 (0.034)
Transition:Polity IV		−0.061 (0.124)		−0.269 (0.216)
Transition:Monarch			5.684* (3.102)	5.229 (3.850)
Transition:Military			0.619 (1.347)	0.996 (1.460)
Transition:One party			1.580 (1.938)	0.809 (2.495)
Transition:Multiple parties			1.038 (1.644)	1.219 (1.789)
Monarchy			−1.794*** (0.562)	−1.553** (0.614)
Military			0.112 (0.281)	0.246 (0.304)
One party			−0.981** (0.393)	−0.868** (0.409)
Multiple parties			−0.675** (0.291)	−0.725** (0.290)
Decade Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	No
Observations	2,150	34 2,147	2,047	2,044
Akaike Inf. Crit.	801.108	801.254	696.080	698.506

Note: *p<0.1; **p<0.05; ***p<0.01
Note: All include controls for lag personalism,FDI, GDPPC, population, and natural resource rents.

ideological commitment. However, the Pearson correlation between personalism and leftism in our observations is -0.1 (presumably because the soviet communist parties were effective leader-constraining institutions).

We test both mechanisms using political orientation data from [Scartascini et al. \[2018\]](#). We selected it for its comprehensiveness; It covers 180 countries from 1975 onward. From it we construct *Left Executive* which is 1 for every country year in which the ruling party is "communist, socialist, social democratic, or left-wing", and 0 otherwise. To mirror our predecessor consolidation variable, the variable *Transition:Left Executive* extends the predecessor's ideology to two years if they experience an exogenous turnover.

5 gives the results of the model. The inclusion of ideology variables makes no substantive difference in the results. Most importantly, *Transition:Left Executive* is insignificant suggesting that it is indeed the predecessor's personalism and not the successor's ideology that is driving the variation in expropriation during transition years. Further, the lasso regression model we had described above also did not select these variables, thereby confirming our result that the government's ideological stance does not explain the variation in expropriation.

We considered using the predecessors ideology instead, however, there is only one case in which ideology changed over an exogenous succession in the entire dataset, rendering the exercise underpowered.

5 Robustness Checks

In addition to the checks mentioned in the previous sections, we include some more robustness checks to validate our results.

Table 5:

	<i>Dependent variable:</i>	
	Expropriation (binary)	
	(1)	(2)
Transition (total)	−5.111 (3.285)	−5.420 (4.763)
Predecessor personalism	0.164 (0.175)	0.330 (0.323)
Left Executive	0.327 (0.300)	1.118* (0.672)
Transition:PredPers	5.234*** (1.994)	6.187* (3.555)
Transition:Left Executive	1.548 (2.010)	−1.881 (2.672)
Lag Personalism	0.081 (0.159)	−0.028 (0.321)
FDI dummy	14.429 (720.436)	18.165 (4,454.818)
Log of GDPPC	0.187 (0.119)	1.918** (0.938)
Natural resource rents	0.004 (0.009)	0.029 (0.027)
Log of population	0.011 (0.143)	−5.432** (2.297)
Decade Fixed Effects	Yes	Yes
Country Fixed Effects	No	Yes
Observations	1,937	1,937
Akaike Inf. Crit.	548.840	556.616
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

5.1 Alternative Personalism Measure

Gandhi and Sumner [2020] produce an alternative measure of personalism (they prefer the term consolidation). The underlying theory for both models (theirs and Geddes et al. [2018]) is similar. Both draw heavily from Svolik [2012]’s model of leader-supporter competition and Myerson [2008]’s original courts model. However, Gandhi and Sumner differ in their view of monarchies. They consider monarchies highly consolidated because relationships to the leader (family) are crucial for appointment. The Geddes et al. [2017] measure tends to place monarchies low in personalism because individual leaders share power across their families in surviving modern monarchies. Because monarchic leaders die of illness more frequently than in other regime types, this could seriously affect our results. Regardless, it is important to include multiple metrics in a new research area to learn which ones have predictive validity.

Tables 6 and 7 replicate the above analysis using the Gandhi and Sumner [2020] measure of personalism. It is pertinent to note that while these results are not directly comparable with our above analysis because the coding of dictatorships in this measure differs from that of Geddes et al. [2017]’s by a slight margin. This implies that the sample of the analysis changes by a small degree. The results must be compared with Tables ?? and ?? in Appendix E. We have added a dummy variable for monarchies as an additional explanatory variable in order to account for the differences in coding of monarchies by these two distinct methodologies.

We find that in contrast to our main model, our interaction term is no more significant. However, despite the differences in the measure for personalism used, the result is strengthened when we consider the heterogeneity driven by the predecessor’s degree of personalism (categorized as either above or below the median). On average, transitions from regimes with high personalism have a 15.15% higher probability of expropriating than those countries that are not transitioning from high personalist regimes.

Table 6:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition (total)	1.023** (0.402)	1.096** (0.443)	0.703 (0.458)	0.944 (0.581)
Predecessor personalism	0.129 (0.191)	0.073 (0.210)	0.105 (0.229)	−0.998* (0.543)
Transition:PredPers	0.217 (0.385)	0.253 (0.414)	0.209 (0.410)	0.438 (0.553)
Lag Personalism	0.021 (0.188)	0.050 (0.199)	0.013 (0.219)	0.354 (0.434)
FDI dummy	1.210 (1.045)	14.234 (707.339)	14.420 (696.901)	18.496 (5,555.981)
Log of GDPPC		0.208* (0.109)	0.206* (0.109)	0.822 (0.705)
Natural resource rents		0.019** (0.008)	0.021** (0.009)	0.009 (0.019)
Monarchy Dummy	−0.780* (0.450)	−1.528*** (0.552)	−1.425** (0.605)	18.787 (29,232.460)
Log of population		−0.140 (0.139)	−0.179 (0.141)	−6.544*** (2.086)
Leader tenure			−0.058*** (0.022)	−0.009 (0.036)
Polity IV combined score			0.009 (0.029)	0.102** (0.051)
Decade Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	2,021	1,777	1,775	1,775
Akaike Inf. Crit.	668.994	600.037	594.409	612.984

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition high pers	1.580*** (0.505)	1.702*** (0.524)	1.283** (0.542)	1.726*** (0.667)
Transition low pers	0.254 (0.663)	0.150 (0.804)	−0.194 (0.807)	−0.214 (1.006)
Predecessor personalism	0.078 (0.197)	0.052 (0.209)	0.084 (0.228)	−1.022* (0.552)
Lag Personalism	0.078 (0.193)	0.046 (0.199)	0.010 (0.219)	0.377 (0.440)
FDI dummy	1.166 (1.045)	14.226 (706.109)	14.409 (696.003)	18.433 (5,548.286)
Log of GDPPC	0.105 (0.065)	0.205* (0.108)	0.201* (0.109)	0.743 (0.703)
Natural resource rents		0.019** (0.008)	0.022** (0.009)	0.008 (0.019)
Monarchy	−0.907** (0.456)	−1.535*** (0.549)	−1.438** (0.601)	18.701 (29,232.440)
Log of population		−0.132 (0.140)	−0.172 (0.141)	−6.763*** (2.058)
Leader tenure			−0.058*** (0.022)	
Polity IV combined score			0.011 (0.029)	0.103** (0.051)
Decade FE	Yes	Yes	Yes	Yes
Country FE	No	No	No	Yes
Observations	1,926	1,777	1,775	1,775
Akaike Inf. Crit.	640.761	597.446	591.973	608.979

Note:

*p<0.1; **p<0.05; ***p<0.01

5.2 Missing Observations

Our current analysis relies on list-wise deletion, which is a serious source of bias. The main source of deletion is lack of FDI or GDP data in earlier, poorer country years. This focuses our sample on the more recent period after the expropriation slump of 1980.

We have missing observations in many cells of our dataset. The variables GDP, population, and natural resource rents are missing most observations before 1975. Only 19% of country years prior to 1975 have natural resource rents data. Similarly we have observations of FDI presence for 96% of observations after 1975 but only 56% before then, due to the superior UNCTAD dataset. These missing observations are likely to bias the sample toward more developed states.

Thus, in order to address this we imputed some of the missing values using the Multiple Imputation by Chained Equations (MICE) methodology. Imputing the co-variables will mainly affect the results through sample size because variation in natural resources and population play a modest role in expropriation.

This process imputes values by substituting them with predictions from on a regression model. The process involves regressing the variable of interest on the other variables. A dependent variable in one regression could become an independent variable in another regression. Thus, it involves an iterative process where a variable's missing observations are filled and then the new imputed vector of values can be used to help predict the missing values of another variable. The iterations also help to improve the prediction of the missing values of any given variable.

Tables 8 and 9 show the results of our regression model once we have imputed the missing values using MICE. With a few minor changes in values, the original results continue to hold with the interaction term indicating that, on average, a one standard deviation increase in the predecessor's personalism during the transition period increases the probability of expropriating by 15.06%.

Table 8:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition (total)	−0.443 (0.520)	−0.512 (0.518)	−0.933* (0.521)	−0.495 (0.562)
Predecessor personalism	−0.182** (0.089)	−0.218** (0.090)	−0.255*** (0.093)	−0.238* (0.122)
Transition:PredPers	1.914*** (0.523)	1.952*** (0.515)	1.797*** (0.515)	1.968*** (0.570)
Lag Personalism	−0.004 (0.080)	−0.019 (0.081)	0.236** (0.094)	−0.131 (0.133)
FDI dummy	0.664 (0.529)	0.839 (0.538)	0.783 (0.541)	−0.159 (0.702)
Log of GDPPC		−0.074 (0.055)	−0.026 (0.056)	0.028 (0.158)
Natural resource rents		0.021*** (0.005)	0.020*** (0.005)	0.012 (0.008)
Log of population		0.202*** (0.069)	0.182** (0.071)	−0.709** (0.291)
Leader tenure			−0.068*** (0.012)	−0.032** (0.014)
Polity IV combined score			0.007 (0.017)	−0.001 (0.027)
Decade Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	4,457	4,457	4,457	4,457
Akaike Inf. Crit.	1,834.223	1,819.095	1,779.833	1,644.440

Note:

* p<0.1; ** p<0.05; *** p<0.01

Table 9:

	<i>Dependent variable:</i>			
	Expropriation (binary)			
	(1)	(2)	(3)	(4)
Transition high pers	0.959** (0.412)	1.022** (0.412)	0.482 (0.421)	1.095** (0.482)
Transition low pers	−0.535 (0.603)	−0.652 (0.608)	−1.031* (0.612)	−0.283 (0.649)
Predecessor personalism	−0.146 (0.089)	−0.192** (0.090)	−0.232** (0.093)	−0.161 (0.120)
Lag Personalism	0.019 (0.081)	−0.009 (0.081)	0.249*** (0.094)	−0.198 (0.127)
FDI dummy	0.740 (0.530)	0.861 (0.537)	0.801 (0.540)	−0.232 (0.692)
Log of GDPPC	0.051 (0.038)	−0.079 (0.055)	−0.031 (0.055)	−0.033 (0.158)
Natural resource rents		0.021*** (0.005)	0.020*** (0.005)	0.014* (0.008)
Log of population		0.205*** (0.069)	0.185*** (0.071)	−0.691** (0.295)
Leader tenure			−0.069*** (0.012)	
Polity IV combined score			0.007 (0.017)	0.008 (0.026)
Decade FE	Yes	Yes	Yes	Yes
Country FE	No	No	No	Yes
Observations	4,457	4,457	4,457	4,457
Akaike Inf. Crit.	1,845.324	1,829.876	1,789.103	1,660.014

Note:

*p<0.1; **p<0.05; ***p<0.01

6 Conclusion

This paper proposes that terminal illnesses in autocrats affect expropriation of FDI only in personalist regimes. We propose that stronger support institutions in non-personalist regimes reduce volatility in policy, rent distribution and external threats during unexpected succession. Because personalist regimes lack these institutions they suffer greater instability and policy volatility during successions.

We found no effect of terminal illnesses on expropriation when the autocrat who died had a low personalism score. The effect is strongest for the most personalist autocracies in the sample. This is aligned with our theoretical predictions. In non-succession years we observed no relationship between personalism and FDI expropriation.

This result contributes to the literature by explaining the high variation in property rights across all autocracies. Monarchies have similar property rights protection to democracies, while multi-party states have the weakest [Knutsen and Fjelde, 2013]. We believe some variation is explained by the strength of succession / transition mechanisms.

Our results also have practical implications for allocating foreign investment and pricing insurance contracts. Terminal illness of leaders should not affect pricing in non-personalist regimes, while personalist regimes are less reliable clients than within-leader analysis suggests.

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