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POLITICAL CONNECTIONS, INVESTMENT EFFICIENCY, AND THE REGIME CHANGE IN MALAYSIA

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ABSTRACT

Purpose – This study examines how Malaysia's 2018 political regime change affected investment efficiency among politically connected firms (PCFs). **Design/methodology/approach** – Treating the transition as a quasi-natural experiment, the study applies a difference-in-differences design to listed Malaysian firms from 2015–2020. **Findings** – Investment efficiency declined significantly among PCFs relative to non-connected firms after the transition, primarily through increased over-investment. Capital allocation inefficiency and managerial overconfidence emerge as possible channels, and the effect is concentrated among firms affiliated with the former ruling coalition. **Research limitations/implications** – Evidence from one political transition may not generalise to other institutional settings; future work should test comparable transitions using more granular investment data. **Practical implications** – Firms should strengthen governance and investment oversight during political transitions. **Social implications** – Reducing political patronage and improving institutional governance can support more efficient capital allocation and sustainable development. **Originality/value** – The study provides novel quasi-experimental evidence that changes in political alignment shape corporate investment efficiency.

Keywords: political connections; investment efficiency; regime change; Malaysia
JEL Classification: D72; G31; G32

INTRODUCTION

A growing body of research suggests that political connections can undermine firm-level investment efficiency (Chen et al., 2018; Du et al., 2018; Ghazali et al., 2022; Tan & Wong, 2024; Tan et al., 2018). Politically connected firms (PCFs) often engage in suboptimal investment practices, largely due to heightened agency conflicts and informational asymmetries that hinder optimal resource allocation (O'Toole et al., 2016; Su et al., 2013; Yu et al., 2020). Rather than prioritising shareholder value, these firms may align their investment strategies with the political, economic, or social agendas of their connected stakeholders, thereby compromising efficiency and long-term value creation (Phan et al., 2020; Yi, 2023).

Nevertheless, the association between political connections and firms' investment efficiency is not consistently negative (Opie et al., 2019; Pan & Tian, 2020; Zhang et al., 2024). This is because PCFs frequently enjoy preferential access to critical resources, including capital financing, government procurement opportunities, and subsidies (Fung et al., 2015; Gomez et al., 2017; Wong & Hooy, 2018). Such advantages can enhance investment capacity by easing financial constraints and facilitating access to capital, thus mitigating underinvestment risks (Xu et al., 2013).

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Accordingly, evidence on how political ties influence investment behaviour remains inconsistent across empirical studies, underscoring the need for further research to clarify these complex dynamics.

Existing research on political connections predominantly relies on static empirical settings and focuses on politically stable environments, including prior work in Malaysia such as Ghazali et al. (2022) and Tan and Wong (2024). This approach typically employs cross-sectional comparisons between PCFs and their non-connected counterparts, offering limited insight into how the value and consequences of political connections evolve over time. In particular, relatively little is known about how firms adjust when they are abruptly exposed to a shift in political power that severs or weakens their political ties. This limitation is nontrivial, as political connections are inherently contingent on the prevailing political regime. A disruption in political alignment may fundamentally transform firms' incentives, governance structures, and access to resources, reshaping investment behaviour in ways that may not be observable in stable settings. By examining firms' responses to political disruptions, this study provides a more comprehensive perspective on the economic role of political connections and demonstrates how firms adapt to shifts in the political landscape.

Against this backdrop, this study examines how an exogenous regime change affects the investment efficiency of PCFs. Specifically, we explore whether the loss of political alignment leads to systematic changes in investment behaviour, and whether such changes manifest in the form of overinvestment or underinvestment. In addition, investigate the channels through which political regime change influences investment efficiency, with particular attention to capital allocation efficiency and managerial overconfidence. By revisiting the contested empirical evidence on political connections and corporate investment within a dynamic political setting, this study enriches the literature by moving beyond static frameworks and providing a more nuanced perspective of how political ties shape firm behaviour when the underlying institutional environment undergoes a structural shift.

To address these questions, we exploit the regime change in Malaysia as a quasi-natural experiment. Malaysia's 14th General Election (GE14) in 2018 produced a historically unprecedented and largely unexpected transfer of political power, ending the long-standing dominance of the *Barisan Nasional* coalition (the National Front; hereinafter "BN"). After ruling since independence in 1957 and securing victory in every prior election, the BN coalition was unseated by the opposition alliance, *Pakatan Harapan* (Alliance of Hope; hereinafter "PH"), marking a decisive turning point in Malaysian political history (Nadzri, 2018). This transition was largely driven by political dynamics and was unlikely to have been anticipated by market participants, thereby introducing an exogenous shock to firms' political alignment. We leverage this setting within a difference-in-differences (DiD) framework, comparing changes in investment efficiency between PCFs and non-PCFs across the pre- and post-regime change periods. Firms without political ties serve as a credible control group, allowing us to isolate the impact of political realignment while controlling for time-invariant differences and common shocks affecting all firms. This empirical strategy enables a more rigorous identification of the causal effects of political connections on corporate investment behaviour in a dynamic political environment, while mitigating endogeneity concerns.

The Malaysian market presents a compelling empirical context for this analysis, given the prominence of political connections within its institutional setting. Malaysia ranks highly in the most recent crony capitalism index (The Economist, 2023), reflecting the widespread presence and visibility of PCFs. This feature is closely tied to the country's institutional evolution. Since the introduction of the New Economic Policy (NEP) in 1970, the government has played an active and sustained role in shaping economic outcomes and financial markets (Gomez & Jomo, 1999; Johnson & Mitton, 2003). A key legacy of this policy framework is the expansion of government-linked companies (GLCs), which continue to exert substantial influence across major sectors of the economy. These entities are widely recognised as reinforcing political patronage networks and

sustaining crony capitalist structures. Although the NEP formally ended in 1990, strong government involvement in economic affairs has persisted under subsequent policy regimes (Gomez et al., 2017). In this context, political connections remain deeply embedded in corporate decision-making. This institutional environment, coupled with access to a detailed dataset on PCFs, provides a strong and well-suited foundation for examining the investment consequences of political regime change for PCFs.

Our findings extend the limited but expanding literature on the association between political connections and investment efficiency (e.g., Chen et al., 2018; Ghazali et al., 2022; Opie et al., 2019; Pan & Tian, 2020; Tan & Wong, 2024; Tan et al., 2018; Zhang et al., 2024). Three closely related studies are Pan and Tian (2020), Ghazali et al. (2022), and Tan and Wong (2024). While this literature has established an important association between political connections and corporate investment outcomes, our study advances it by explicitly identifying how political turnover redefines the strategic value of political connections and reshapes firm investment behaviour.

First, we extend the literature by exploiting an exogenous regime change that alters the distribution of political power to examine the consequences of political connections for corporate investment efficiency. Pan and Tian (2020) study China's anti-corruption campaign, which occurs within a socialist one-party system where political shocks primarily involve the removal of corrupt officials rather than a transition of governing authority. By contrast, Malaysia operates under a parliamentary democracy modelled on the Westminster system, where electoral outcomes can lead to an actual change in the ruling coalition. This institutional feature allows us to study how a shift in political power, rather than disciplinary anti-corruption enforcement, affects corporate investment efficiency. Accordingly, our setting captures a fundamentally different economic mechanism, namely the reallocation of political capital following a change in government.

Second, we make a distinct contribution relative to existing Malaysian studies such as Ghazali et al. (2022) and Tan and Wong (2024), which examine PCFs in relatively stable political environments. While these studies document average associations between political connections and investment efficiency, they do not capture how the value of political connections changes when political power is reallocated. In contrast, we exploit the 2018 Malaysian regime change as an exogenous political shock and employ a DiD framework that controls for time-invariant firm heterogeneity as well as common macroeconomic shocks. This identification strategy enables us to isolate the causal effect of political turnover on investment efficiency and, more importantly, to distinguish between firms that lose versus retain political capital. Our findings show that the decline in investment efficiency is concentrated among PCFs affiliated with the outgoing coalition, while firms connected to the incoming government are largely unaffected. This asymmetric effect is not identified in prior Malaysian studies and represents a key empirical contribution of this study.

Third, we contribute to the literature by identifying the mechanisms through which regime change affects investment efficiency. Our evidence suggests that the decline in investment efficiency is primarily driven by overinvestment. To further unpack this pattern, we examine capital allocation efficiency and managerial overconfidence as potential channels. Our results suggest that regime change intensifies inefficient capital allocation and reinforces managerial tendencies toward excessive investment, consistent with distortions arising from political rent-seeking. These findings extend existing knowledge by demonstrating that the consequences of political transitions extend beyond average effects to influence firms' behavioural responses.

Finally, this study extends the broader literature by examining the heterogeneous effects associated with political connections (e.g., Nguyen et al., 2023; Peranginangin et al., 2021; Phan et al., 2020; Tee et al., 2021; Wong & Hooy, 2018). In particular, our results highlight that the impact of political turnover is not uniform but depends critically on whether firms are aligned with the outgoing or incoming political coalition. More broadly, our findings suggest that institutional challenges such as political patronage, agency conflicts, and governance weaknesses, together with information asymmetry and limited disclosure quality, remain relevant within Malaysia's emerging-market institutional environment.

The subsequent sections of this paper are organized as follows. Section 2 outlines the institutional context and develops the research hypothesis. Section 3 describes the data and elaborates on the empirical strategy. Section 4 presents the main findings, and Section 5 offers concluding remarks and discusses broader implications.

LITERATURE REVIEW

Institutional background

Prior to GE14, Malaysia was regarded as one of the most politically stable nations globally. From its independence in 1957 until the watershed moment of 2018, the country was governed by a single dominant coalition (Wong & Hooy, 2021). This prolonged period of one-party rule allowed PCFs to exert sustained influence and consolidate their position within the corporate landscape. Nonetheless, Malaysia's political stability was periodically tested by pivotal historical events that signalled underlying vulnerabilities and ultimately foreshadowed the eventual shift in power. For instance, the racial riots of 1969 led to the implementation of redistributive policies aimed at addressing ethnic economic disparities (Ikemoto, 1985). In addition, the 1988 Malaysian constitutional crisis consisted of a series of political events that generated discontent among the public (Harding, 1990), while the 1998 Asian financial crisis marked a turning point in popular support, driven by internal political struggles and a loss of confidence in the ruling elite (Abbott, 2000; Johnson & Mitton, 2003).

In 2018, the BN coalition fell at the ballot box in GE14 after ruling for 61 years. The downfall of the ruling party was largely driven by salient issues surrounding Najib Razak's administration, including allegations of massive corruption, internal conflicts within the coalition, and the unpopular implementation of a goods and services tax (Nadzri, 2018). Following changes in power, large policy swings are more common in countries such as Malaysia that have parliamentary systems (Julio & Yook, 2012). From an economic and financial perspective, Malaysia's first democratic change of government generated a series of economic consequences affecting investment activity, potentially influencing investment decisions among firms with close ties to the outgoing regime. This illustrates the fundamental dynamics of political change and electoral coalitions while also introducing a powerful exogenous shock to investment decisions. It thus provides a unique empirical context to identify the causal impact of political connections on firm-level investment efficiency.

Hypothesis development

According to neoclassical investment theory, firms should allocate capital to projects with positive net present value, ceasing investment when the marginal cost equals the marginal return (Modigliani & Miller, 1958). Under this benchmark, investment decisions are driven purely by value maximisation, and capital allocation is efficient. However, a substantial body of empirical research documents systematic deviations from this ideal. Managerial incentives, information asymmetry, and institutional frictions often lead firms to misallocate resources, resulting in both overinvestment in low-return projects and underinvestment in profitable opportunities (Cherkasova & Kuzmin, 2018; He et al., 2019; Naeem & Li, 2019; Zhou & Zhao, 2022). These deviations are particularly pronounced when managers pursue objectives that are not aligned with shareholder value, including political or personal considerations (Yu et al., 2020). Accordingly, understanding these deviations requires moving beyond the neoclassical benchmark and adopting a political economy perspective grounded in political patronage and crony capitalism, where firm investment decisions are shaped by both market incentives and political considerations, including connections with political actors and access to government-controlled resources.

A parallel stream of research explores how political and policy-related uncertainty further exacerbates these inefficiencies. Studies have found that heightened political instability tends to erode firm-level investment efficiency (Chen et al., 2020; Jackson & Orr, 2019; Kong et al., 2022;

Wang et al., 2014). Emerging evidence suggests that political uncertainty, in particular, is positively associated with underinvestment by PCFs. For instance, An et al. (2016) document a contraction in corporate investment activity in China following shifts in political power, while other studies identify similar patterns during periods marked by electoral ambiguity or unclear policy directions (Gulen & Ion, 2016; Julio & Yook, 2012). Moreover, a recent study by Pan and Tian (2020) demonstrates that following the displacement of corrupt political actors in China, PCFs are particularly prone to underinvestment, as their privileged access to state resources is curtailed, diminishing their comparative advantage in capital acquisition. This stream of literature highlights the potential benefits of political connections under stable conditions, where preferential access to financing, subsidies, and government support can relax constraints and facilitate investment, but also underscores their fragility when political alignment is disrupted.

However, insights from the political economy literature, particularly theories of crony capitalism and political patronage (Shefter, 1977; Shleifer & Vishny, 1993), suggest that political uncertainty may also result in overinvestment rather than underinvestment. In this context, political ties may incentivise firms to engage in strategic overinvestment as a means of maintaining favour with political elites. For example, Zhang et al. (2020) explore the relationship between anti-corruption initiatives and firms' investment behaviour, concluding that higher levels of government subsidies tend to encourage excessive investment. In particular, PCFs tend to engage in policy-arbitrage behaviours, providing economic support and political donations to politicians in exchange for government resources (Tong & Junarsin, 2013; Zeiss & Carlson, 2021). In line with this perspective, political transitions may prompt PCFs to signal loyalty to new leaders by aligning their investment strategies with government priorities, regardless of commercial logic (Tong et al., 2014). Such alignment can result in overcommitment to unprofitable projects when firms pursue government-endorsed initiatives without due regard for their economic viability (Yu et al., 2020). This perspective emphasises the costs of political affiliations, whereby crony capitalist structures weaken market discipline, create soft budget constraints, and encourage rent-seeking behaviour, ultimately leading to systematic overinvestment and reduced investment efficiency.

Understanding how regime change influences the investment efficiency of PCFs can be aided by integrating insights from capital allocation efficiency across firms and managerial behavioural biases. Because regulatory power and financial resources are vested in the government, its policy preferences for selected firms may be reflected in its capital allocation strategy (Gomez et al., 2017). Theoretically, the new government's revitalisation strategy could promote capital acquisition by its favoured firms for several reasons. First, Malaysian PCFs are often expected to contribute to national development goals, such as infrastructure investment, job creation, support for strategic sectors, and participation in affirmative action programmes, regardless of whether these objectives align with their own corporate priorities (Jamil & Nelson, 2011; Phan et al., 2020; Putrajaya Committee, 2015). In return, these firms may benefit from direct and indirect state support such as government contracts, tax incentives, monopoly rights, and subsidies (Nguyen et al., 2023; Wong & Hooy, 2018). Second, regime change can amplify these dynamics through the signalling effect it generates in capital markets. Firms aligned with the incoming administration may be perceived as politically favoured, enhancing their access to credit and attracting favourable investor expectations (Chen et al., 2017; Zhou & Zhao, 2022). This perceived alignment may not only increase firms' financing capacity but also create implicit pressure to demonstrate political loyalty through visible investment initiatives. Within a political patronage system, this politically mediated allocation of capital implies that investment flows are not solely determined by economic fundamentals, but are instead influenced by shifting political alignments following regime change.

Viewed through the lens of behavioural finance, managerial overconfidence represents an additional channel through which political connections may impair investment efficiency.

Managers often operate under conditions of asymmetric information and bounded rationality, leading them to overestimate expected returns while underestimating associated risks and costs (Dao et al., 2023; Malmendier & Tate, 2005; Wang et al., 2016). Within PCFs, such cognitive biases are often magnified by the dynamics of crony capitalism. For example, managers may undertake politically motivated investment projects, irrespective of their commercial viability, in order to secure or strengthen access to government support, even when the firm continues to experience financial underperformance (Fraser et al., 2006; Gomez & Jomo, 1999). Furthermore, the political backing of such firms may generate a signalling effect that distorts capital allocation, as market participants and financial institutions interpret political alignment as a proxy for reduced investment risk, thereby facilitating easier access to financing (Duchin & Sosyura, 2012; Johnson & Mitton, 2003). These behavioural and institutional distortions reinforce one another, further amplifying the tendency of PCFs to overinvest under crony capitalist conditions.

Taken together, these institutional and behavioural dynamics suggest that regime change can create strong incentives for PCFs to engage in overinvestment. Such investment behaviour is not necessarily driven by value maximisation, but rather by strategic attempts to demonstrate allegiance to the new political leadership, capitalise on perceived favouritism, and sustain privileged access to government-controlled resources. Although political uncertainty may, in isolation, lead to investment contraction, the logic of political patronage and crony capitalism suggests that the incentives to realign politically and secure future rents may become more influential, leading to an overall decline in investment efficiency. This framework underpins our hypothesis that PCFs are more likely to respond to regime change by increasing investment activity in ways that reflect political recalibration rather than economic optimisation. Therefore, we formulate the following hypothesis:

H1: There is a significant reduction in investment efficiency for politically connected firms compared with non-politically connected firms following the regime change.

RESEARCH DESIGN

Sample selection

The empirical analysis draws from a panel dataset of non-financial firms listed on Bursa Malaysia during the period from 2015 to 2020, encompassing balanced three-year windows before and after the 2018 general election. Financial data are sourced from the Refinitiv Eikon database, while information on political affiliations and corporate governance is meticulously compiled from firms' annual reports retrieved via the Bursa Malaysia website. Following common practice (Bae et al., 2017; Ghazali et al., 2022; Ismail & Abdul Wahab, 2024), firms operating in the financial services and utilities sectors are excluded due to the distinct regulatory frameworks and investment dynamics that characterise these industries. To ensure the reliability of the DiD estimation, we retain only firms with observations available in both the pre- and post-regime-change periods. After excluding observations with missing information on key control variables, the final dataset comprises 3,194 firm-year observations. Table 1 provides details of the sample selection process.

Table 1. Sample selection

Description	Observations
Firm-year observations in the Refinitiv Eikon database for 2015–2020 after excluding firms in the financial services and utilities industries:	3,733
Less:	
Observations with missing dependent or control variables	(377)
Observations available in only the pre- or post-period	(162)
Final firm-year observations	3,194
Unique treatment firms	92

Description	Observations
Unique control firms	487

Investment efficiency

We estimate investment efficiency using the accounting-based residual model introduced by Richardson (2006), specified as follows:

$$INV_{i,t} = \alpha + \beta_1 SIZE_{i,t-1} + \beta_2 AGE_{i,t-1} + \beta_3 Q_{i,t-1} + \beta_4 CFO_{i,t-1} + \beta_5 LEV_{i,t-1} + \beta_6 STOCKRET_{i,t-1} + \beta_7 INV_{i,t-1} + Firm\ FE + Industry \times Year\ FE + \varepsilon_{i,t} \quad (1)$$

where $INV_{i,t}$ is defined as the aggregate annual changes in fixed assets, intangible assets, and long-term investments, scaled by total assets. The residual $\varepsilon_{i,t}$ captures deviations from expected investment levels. Following Chen et al. (2018) and Ghazali et al. (2022), we construct our primary measure of investment efficiency as $INVEFF_1 = -|\varepsilon_{i,t}|$. A higher value of $INVEFF_1$ indicates smaller deviations from expected investment and therefore greater investment efficiency (Cao et al., 2020). Consistent with the literature, positive residuals $(\varepsilon_{i,t} > 0)$ indicate overinvestment $(OVERINV)$, while negative residuals $(\varepsilon_{i,t} < 0)$ indicate underinvestment $(UNDERINV)$. The absolute residual thus captures the overall magnitude of investment inefficiency regardless of direction.

As a robustness check, we employ an alternative specification proposed by Biddle et al. (2009), which models expected investment as a function of firm growth:

$$INV_{i,t} = \beta_0 + \beta_1 SG_{i,t-1} + \beta_2 NSG_{i,t-1} + \beta_3 SG_{i,t-1} \times NSG_{i,t-1} + \varepsilon_{i,t} \quad (2)$$

where SG denotes sales growth and NSG is a binary variable equal to one if a firm reports negative sales growth, and zero otherwise. We define the alternative investment efficiency measure as $INVEFF_2 = -|\varepsilon_{i,t}|$, where higher values again indicate more efficient investment outcomes.

Treatment definition

In line with Jia et al. (2019) and Nguyen et al. (2023), we define the treatment indicator $(TREAT)$ as a binary variable equal to one for firms classified as politically connected prior to Malaysia's 2018 regime change, and zero otherwise. Political-connection status is determined using firms' pre-election political ties and is held fixed throughout the empirical analysis, rather than being updated annually after the regime change. This treatment design is appropriate for our DiD setting because the objective is to investigate whether firms with established political connections before the loss of political power experienced differential changes in investment efficiency compared with non-connected firms following the political transition.

To identify PCFs, we primarily rely on the classification provided by Peranginangin et al. (2021), which likewise examines the Malaysian regime-change setting. Their classification is broadly consistent with the political-connection concept developed by Faccio (2006), under which a firm is regarded as politically connected when its major shareholders, top executives, or directors hold political office or maintain close personal ties to senior political actors. To enhance classification reliability and minimise potential misclassification, we further cross-check the firms identified by Peranginangin et al. (2021) against prior Malaysian political-connection studies, annual reports, corporate disclosures, and other reputable publicly available sources.[1]

Where political affiliation is ambiguous or cannot be verified with sufficient confidence across sources, the firm is retained in the sample but classified as non-connected, rather than being assigned to the politically connected category. This approach is intentionally conservative, as any residual misclassification would likely bias the estimated treatment effect towards zero rather than create a false positive association. Firms not identified as politically connected under this

[1] To enhance reliability, we cross-validate our list of PCFs against established studies, including Abdul Wahab et al. (2011), How et al. (2014), Fung et al. (2015), Wong and Hooy (2018), and Tee et al. (2021). We further verify political affiliations of controlling shareholders and senior executives using reputable sources such as Bloomberg, Finance Twitter, *The Edge Malaysia*, and LinkedIn.

procedure are classified as non-connected and form the control group for our empirical analysis. For transparency, a list of PCFs is documented in Appendix B.

Control variables

To mitigate concerns regarding correlated omitted variables, we incorporate a comprehensive set of control variables (V) that prior research has shown to be systematically associated with firms' investment behaviour and efficiency (Bae et al., 2017; Biddle et al., 2009; Ghazali et al., 2022; Mortal et al., 2020). These include firm size, proxied by the natural logarithm of total assets *(SIZE)*; firm age, measured as the natural logarithm of the number of years since listing (AGE); Tobin's Q, calculated as the market value of equity scaled by total assets (Q); cash flow from operations relative to total assets (CFO); leverage, defined as total liabilities divided by total assets (LEV); annual stock returns $(STOCKRET)$; and asset tangibility, proxied by the ratio of fixed assets to total assets $(TANG)$.

Recognising that governance structures can also influence investment decisions (Ismail & Abdul Wahab, 2024; Yi, 2023), we further control for board and executive characteristics. Specifically, we include the natural logarithm of board size $(BSIZE)$ the proportion of independent directors on the board $(INDDIR)$; a duality indicator equal to one if the CEO also serves as the board chair $(DUALITY)$; and the percentage of equity held by non-executive directors (DIR_OWN). We also control for governance diversity and monitoring quality using the percentage of female directors on the board (DIR_FEMALE), a CEO gender indicator (CEO_FEMALE), and a Big Four auditor indicator $(BIG4)$.

Research model

We employ a DiD framework to examine changes in the investment efficiency of PCFs following the regime change. This approach exploits within firm-variation over time and helps mitigate concerns that unobserved factors drive the results. Specifically, we estimate the following specification, where i and t represent firm and year, respectively:

$$INVEFF_{i,t} = \alpha + \beta_1 TREAT_{i,t} \times POST_t + \beta_2 V_{i,t} + Firm\ FE + Industry \times Year\ FE + \varepsilon_{i,t} \quad (3)$$

where $INVEFF_{i,t}$ denotes firm-level investment efficiency, measured by$INVEFF_1$ and $INVEFF_2$. $TREAT_{i,t}$ is an indicator equal to one for PCFs, and $POST_t$ equals one for the post-regime-change period from 2018 to 2020. $V_{i,t}$ represents a vector of control variables associated with investment behaviour, while $\varepsilon_{i,t}$ is the error term. Detailed descriptions for all variables are provided in Appendix A.

To strengthen identification, we incorporate firm fixed effects and industry-year fixed effects into the model. Firm fixed effects account for time-invariant firm-specific characteristics, whereas industry-year fixed effects capture time-varying shocks common to firms within the same industry, including macroeconomic conditions. This is particularly important given that the sample period overlaps with the Covid-19 pandemic, during which changes in investment may reflect shifts in financing conditions or investment opportunities rather than the effect of political connections (Campello et al., 2010; Chen et al., 2023).

Standard errors are clustered at the firm level, and all continuous variables are winsorised at the top and bottom 1 percent. The coefficient of interest is β_1, which captures the differential change in investment efficiency among PCFs compared with non-connected firms following the regime transition. Consistent with our prediction, a negative β_1 indicates that the regime transition is associated with a relative decline in investment efficiency among PCFs.

RESULTS AND DISCUSSION

Descriptive statistics

Table 2 reports the descriptive statistics. Panel A summarises the distributional characteristics of the full sample. The mean (median) values of the investment efficiency measures, $INVEFF_1$ and

$INVEFF_2$, are -0.096 (-0.101) and -0.102 (-0.107), respectively. These figures are comparable to prior studies in Malaysia (Ghazali et al., 2022; Tan & Wong, 2024), which document that firms in emerging economies exhibit higher levels of investment inefficiency than those in developed markets.[2] On average, 15.2 percent of firm-year observations are politically connected $(TREAT = 1)$, based on firms' pre-election political-connection status. Approximately 50.0 percent of observations fall within the regime-change year or the post-regime-change period $(POST = 1)$. The interaction term $TREAT \times POST$ takes the value of one for observations involving PCFs after the regime change, accounting for 7.6% of the sample. Thus, this figure should be interpreted as the share of post-regime-change PCF-year observations.

Panel B presents summary statistics for the treatment and control groups, disaggregated across the pre- and post-regime-change periods. Column (11) reports the results of univariate tests comparing the two groups. We find that investment efficiency declines significantly ($p < 0.01$) for PCFs relative to their non-connected counterparts, providing preliminary support for the hypothesis that the regime change disproportionately impaired the investment efficiency of the treatment group. Importantly, we do not observe meaningful differences in control variables across groups, suggesting that the documented effect is unlikely to be explained by changes in observable firm characteristics.

Table 2. Descriptive statistics

Panel A: Full Sample

Variables	Obs.	Mean	S.D.	25%	Median	75%
$INVEFF_1$	3,194	-0.096	0.271	-0.162	-0.101	-0.044
$INVEFF_2$	3,194	-0.102	0.277	-0.164	-0.107	-0.049
$TREAT$	3,194	0.152	0.253	0.000	0.000	0.000
$POST$	3,194	0.500	0.500	0.000	0.000	1.000
$TREAT \times POST$	3,194	0.076	0.282	0.000	0.000	0.000
$SIZE$	3,194	5.764	0.629	5.325	5.712	6.139
AGE	3,194	1.426	0.184	1.322	1.441	1.613
Q	3,194	0.609	0.194	0.481	0.621	0.767
CFO	3,194	0.045	0.089	-0.004	0.039	0.085
LEV	3,194	0.459	0.200	0.234	0.421	0.521
$STOCKRET$	3,194	0.055	0.097	0.005	0.047	0.082
$TANG$	3,194	0.317	0.233	0.123	0.284	0.478
$BSIZE$	3,194	0.885	0.106	0.845	0.903	0.954
$INDDIR$	3,194	0.447	0.129	0.333	0.429	0.538
$DUALITY$	3,194	0.119	0.313	0.000	0.000	1.000
DIR_OWN	3,194	0.036	0.033	0.011	0.025	0.049
DIR_FEMALE	3,194	0.114	0.123	0.000	0.167	0.375
CEO_FEMALE	3,194	0.073	0.147	0.000	0.000	1.000
$BIG4$	3,194	0.392	0.491	0.000	0.000	1.000

Panel B: Pre- and post-regime change

	Treatment					Control					
	Pre		Post			Pre		Post			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Variables	Obs.	Mean	Obs.	Mean	(4)-(2)	Obs.	Mean	Obs.	Mean	(9)-(7)	(5)-(10)
$INVEFF_1$	243	-0.096	242	-0.155	-0.059[a]	1,354	-0.084	1,355	-0.098	-0.014[c]	-0.045[a]
$INVEFF_2$	243	-0.097	242	-0.163	-0.066[a]	1,354	-0.088	1,355	-0.107	-0.019[c]	0.047[a]
$SIZE$	243	5.770	242	5.784	0.014	1,354	5.751	1,355	5.773	0.022	-0.008
AGE	243	1.542	242	1.587	0.045[a]	1,354	1.427	1,355	1.478	0.051[a]	-0.006
Q	243	0.543	242	0.537	-0.006	1,354	0.622	1,355	0.621	-0.001	-0.005
CFO	243	0.045	242	0.044	-0.001	1,354	0.048	1,355	0.043	-0.005	0.004
LEV	243	0.378	242	0.386	0.008	1,354	0.462	1,355	0.485	0.023[c]	-0.015

[2] Investment efficiency tends to be significantly higher in advanced economies. For instance, the United States has been reported to exhibit an efficiency measure approximately equal to zero, reflecting an optimal alignment between investment levels and firm fundamentals (Verdi, 2006).

						Panel A: Full Sample					
STOCKRET	243	0.072	242	0.051	-0.011[b]	1,354	0.061	1,355	0.046	-0.015[a]	0.004
TANG	243	0.314	242	0.284	-0.030	1,354	0.322	1,355	0.319	-0.003	-0.027
BSIZE	243	0.896	242	0.886	-0.010	1,354	0.883	1,355	0.886	0.003	-0.013
INDDIR	243	0.448	242	0.450	0.002	1,354	0.445	1,355	0.448	0.003	-0.001
DUALITY	243	0.107	242	0.084	-0.023	1,354	0.131	1,355	0.116	-0.015	-0.008
DIR_OWN	243	0.055	242	0.058	0.003	1,354	0.032	1,355	0.033	0.001	0.002
DIR_FEMALE	243	0.136	242	0.187	0.051[a]	1,354	0.081	1,355	0.129	0.048[a]	0.003
CEO_FEMALE	243	0.077	242	0.079	0.002	1,354	0.068	1,355	0.076	0.008	-0.006
BIG4	243	0.448	242	0.459	0.011	1,354	0.381	1,355	0.382	0.001	0.010

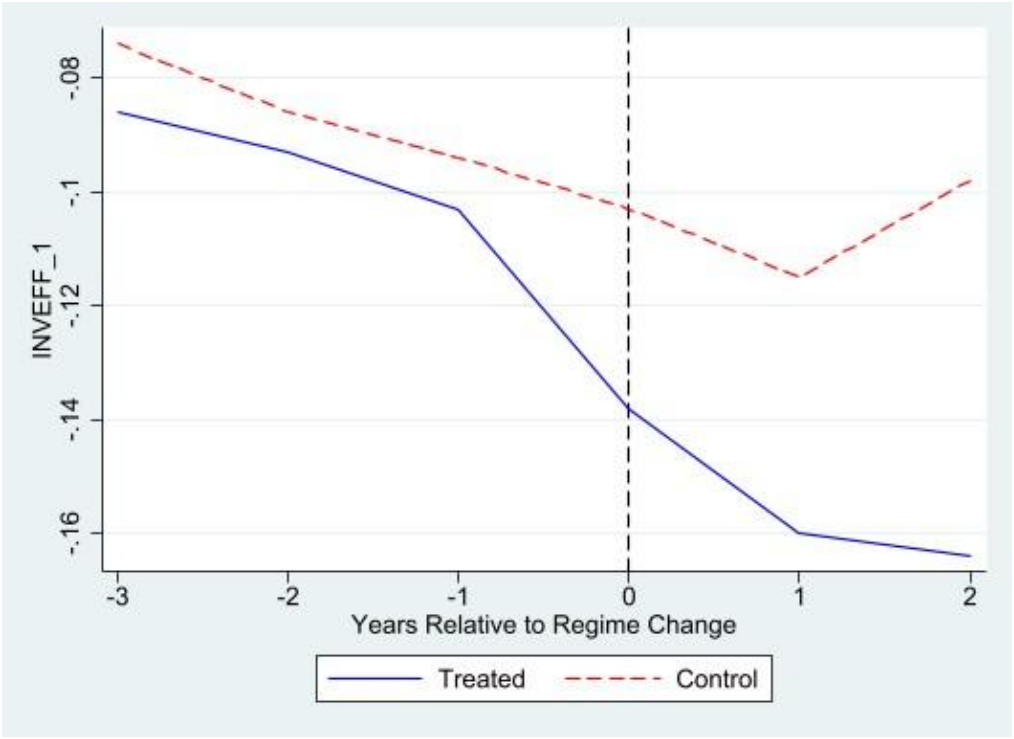
Note: *This table reports summary statistics for our main variables of interest. Panel A contains summary statistics for the full sample (2015–2020), whereas Panel B presents univariate comparisons of changes in the mean values of the variables from the pre-regime-change period to the post-regime-change period for treatment and control firms. The superscripts a, b, and c denote significance at the confidence levels of 99%, 95%, and 90%, respectively. See Appendix A for the variable definitions.*

Multivariate results

We begin by assessing the credibility of the parallel trends assumption required for the DiD framework. Figure 1 plots the average investment efficiency of PCFs and non-PCFs before and after the regime change. The pre-treatment trends are broadly parallel, while a clear divergence emerges following the regime change, with investment efficiency among treatment firms declining substantially. This evidence provides support for the parallel trends assumption and indicates that the regime transition is associated with meaningful changes in investment efficiency.

Table 3 reports our primary analysis. The coefficient on the interaction term $TREAT \times POST$ is negative and statistically significant when investment efficiency is measured using $INVEFF_1$ ($p < 0.05$) and $INVEFF_2$ ($p < 0.05$) in columns (1) and (2), respectively. In economic terms, treatment firms experience a decline in $INVEFF_1$ of approximately 29.2 percent (-0.028/0.096) and in $INVEFF_2$ of about 36.3 percent (-0.037/0.102) relative to control firms following the regime change. These findings provide support for H1, which predicts that the political transition adversely affects the investment efficiency of PCFs compared with their non-connected counterparts. The results are consistent with prior evidence (Ghazali et al., 2022; Tan and Wong, 2024) and align with theories of crony capitalism and political patronage, suggesting that PCFs' reliance on expected political benefits weakens market discipline and leads to inefficient capital allocation.

A



B

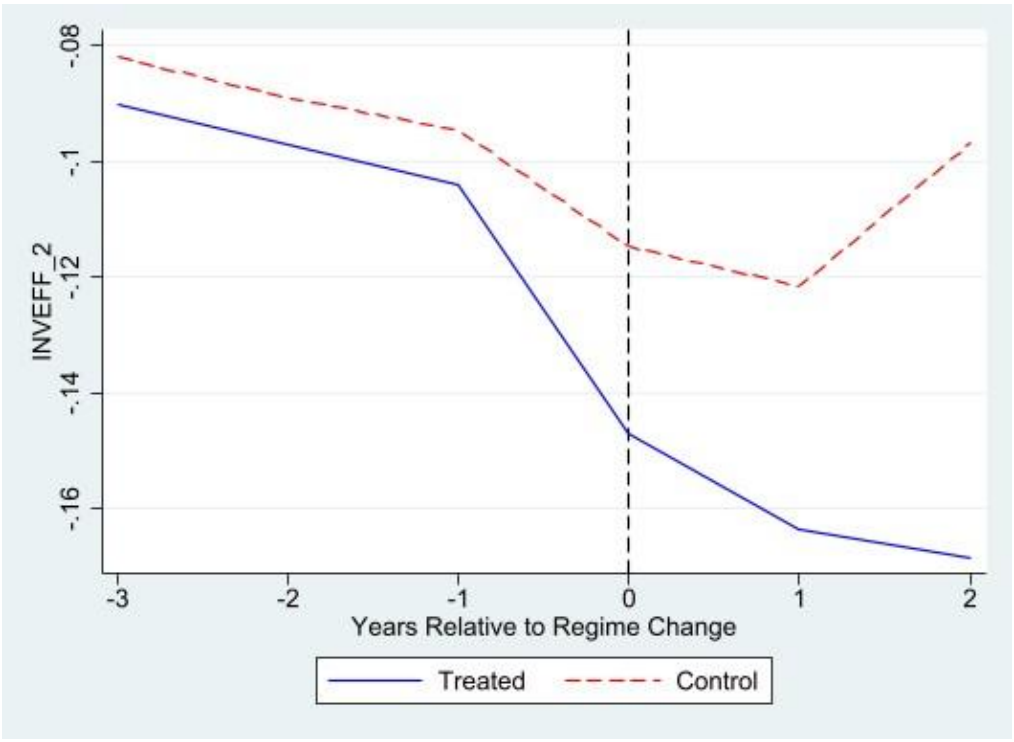


Figure 1. Firm investment efficiency around regime change

Note: *This figure plots the trends of continuous investment efficiency measures (INVEFF_1 and INVEFF_2) for treatment and control firms around the regime change. Panel A: Mean of INVEFF_1 for treatment and control firms around the regime change. Panel B: Mean of INVEFF_2 for treatment and control firms around the regime change.*

Table 3. DiD regression of corporate investment efficiency on regime change

Dependent variable =	$INVEFF_1$	$INVEFF_2$
	(1)	(2)
$TREAT \times POST$	-0.028** (-2.19)	-0.037** (-2.33)
$SIZE$	0.070*** (2.65)	0.122*** (2.82)
AGE	0.362* (1.76)	0.379* (1.84)
Q	-0.096*** (-4.48)	-0.107*** (-4.63)
CFO	0.032** (2.21)	0.048** (2.11)
LEV	-0.082*** (-2.84)	-0.086*** (-3.12)
$STOCKRET$	0.264** (1.98)	0.293** (2.05)
$TANG$	0.012 (0.060)	0.018 (1.15)
$BSIZE$	-0.022 (-0.27)	-0.025 (-0.38)
$INDDIR$	-0.001 (-0.18)	-0.001 (-0.13)
$DUALITY$	0.003 (0.27)	0.005 (0.39)
DIR_OWN	0.115 (0.73)	0.158 (0.95)
DIR_FEMALE	0.032 (1.41)	0.036 (1.25)
CEO_FEMALE	0.118* (1.77)	0.121* (1.85)
$BIG4$	0.178** (1.96)	0.193** (2.18)
Firm fixed effects	Yes	Yes
Industry-by-year fixed effects	Yes	Yes
Observations	3,194	3,194
Adjusted R^2	0.383	0.408

Note: *The superscripts *, **, and *** denote significance at the confidence levels of 90%, 95%, and 99%, respectively. Parentheses indicate t-statistics. See Appendix A for the variable definitions.*

Dynamics of regime change and corporate investment efficiency

Recognising the path-dependent and potentially non-linear nature of political transitions, we explore the dynamic effects of regime change on the PCFs' investment efficiency. To capture the temporal dimension of this effect, we re-estimate Equation (3) by replacing the post-treatment indicator with a set of year-specific dummy variables, allowing us to trace the evolution of the impact of the regime change over time. The resulting specification is as follows:

$$INVEFF_{i,t} = \alpha + \beta_1 TREAT_{i,t} \times POST_18_t + \beta_2 TREAT_{i,t} \times POST_19_t + \beta_3 TREAT_{i,t} \times POST_20_t + \beta_4 V_{i,t} + Firm\ FE + Industry \times Year\ FE + \varepsilon_{i,t} \quad (4)$$

where $POST_18$, $POST_19$, and $POST_20$ are indicator variables equal to one for observations in 2018, 2019, and 2020, respectively. All other covariates are defined as in previous models. The coefficients of interest, β_1, β_2, and β_3, capture the year-by-year marginal effect of the regime change on investment efficiency among PCFs.

The results in Table 4 show that the coefficients on $TREAT \times POST_18$ and $TREAT \times POST_19$ are negative and statistically significant, with magnitudes diminishing over time. Although the coefficient on $TREAT \times POST_20$ is statistically insignificant, its direction suggests that PCFs reassess their investment decisions after the political transition and the onset of the Covid-19 recession, leading to reduced risk-taking.[3] In sum, the changing coefficients indicate a temporal adjustment process, whereby the effect of regime change on investment efficiency emerges immediately and diminishes as political and economic conditions evolve.

Table 4. Dynamics of regime change

Dependent variable =	$INVEFF_1$	$INVEFF_2$
	(1)	(2)
$TREAT \times POST_18$	-0.045** (-2.00)	-0.063*** (-2.81)
$TREAT \times POST_19$	-0.031* (-1.78)	-0.038* (-1.82)
$TREAT \times POST_20$	-0.014 (-0.28)	-0.016 (-0.55)
Observations	3,194	3,194
Adjusted R^2	0.351	0.358

Note: *Control variables, firm fixed effects, and industry-by-year fixed effects are included, but not reported for brevity. The superscripts *, **, and *** denote significance at the confidence levels of 90%, 95%, and 99%, respectively. Parentheses indicate t-statistics. See Appendix A for the variable definitions.*

Mechanism

While the preceding analyses demonstrate that regime change significantly undermined corporate investment efficiency, they do not yet clarify whether this decline is driven by overinvested firms increasing their investment levels or by underinvested firms further reducing their capital expenditures. To disentangle these effects, we investigate whether the deterioration in investment efficiency varies between PCFs exhibiting overinvestment and those experiencing underinvestment. Such heterogeneity provides a useful opportunity to identify the underlying mechanism through which political transitions affect investment behaviour.

To test this, we first obtain the fitted value $\widehat{INV_{i,t}}$ from Equation (1) and sort firms into overinvestment ($OVERINV_1$) and underinvestment ($UNDERINV_1$) based on the residual values (Phan et al., 2022). Following the investment efficiency framework, positive deviations from expected investment are interpreted as overinvestment, while negative deviations indicate underinvestment. We define the overinvestment proxy as $OVERINV_1_{i,t} = \left|\varepsilon_{i,t}\right|$ if $INV_{i,t} > \widehat{INV_{i,t}}$ and zero otherwise, and the underinvestment proxy as $UNDERINV_1_{i,t} = \left|\varepsilon_{i,t}\right|$ if $INV_{i,t} < \widehat{INV_{i,t}}$ and zero otherwise. A similar procedure is applied to Equation (2) to obtain alternative measures of investment inefficiency (i.e., $OVERINV_2$ and $UNDERINV_2$). We then re-estimate Equation (3) using these measures to assess whether the regime change affects investment efficiency through overinvestment or underinvestment.

The results for the overinvestment subsample are shown in columns (1) and (2) of Table 5. We find positive and significant coefficients on $TREAT \times POST$ when $OVERINV_1$ ($p < 0.05$) and $OVERINV_2$ ($p < 0.05$) are the dependent variables. These findings indicate that the regime change exacerbates overinvestment among PCFs, providing further support for H1 that political connections erode investment efficiency. In contrast, the coefficients on $TREAT \times POST$ for the underinvestment subsample, presented in columns (3) and (4), are insignificant. These results suggest no meaningful association between regime change and underinvestment. Overall, the evidence

[3] The 2020 political turmoil in Malaysia was triggered after several Members of Parliament changed their allegiances, leading to the loss of a parliamentary majority and the collapse of the new coalition government (The Edge Financial Daily, 2020).

indicates that the deterioration in investment efficiency following the regime change is driven primarily by overinvestment behaviour rather than capital constraints among PCFs.

Table 5. Over- and underinvestment

Dependent variable =	$OVERINV_1$	$OVERINV_2$	$UNDERINV_1$	$UNDERINV_2$
	(1)	**(2)**	**(3)**	**(4)**
$TREAT \times POST$	0.015** (2.17)	0.019** (2.43)	0.001 (1.18)	0.004 (1.02)
Observations	3,194	3,194	3,194	3,194
Adjusted R^2	0.369	0.388	0.321	0.335

Note: *Control variables, firm fixed effects, and industry-by-year fixed effects are included, but not reported for brevity. The superscripts *, **, and *** denote significance at the confidence levels of 90%, 95%, and 99%, respectively. Parentheses indicate t-statistics. See Appendix A for the variable definitions.*

Channels

Building on the evidence that regime change is associated with lower investment efficiency through overinvestment, we examine two potential mechanisms: capital allocation efficiency and managerial overconfidence. To do so, we employ a mediation framework and estimate the following equations:

$$OVERINV_{i,t} = \alpha + \beta_1 TREAT_{i,t} \times POST_t + \beta_2 V_{i,t} + Firm\ FE + Industry \times Year\ FE + \varepsilon_{i,t} \quad (5)$$

$$CHANNEL_{i,t} = \alpha + \beta_1 TREAT_{i,t} \times POST_t + \beta_2 V_{i,t} + Firm\ FE + Industry \times Year\ FE + \varepsilon_{i,t} \quad (6)$$

$$OVERINV_{i,t} = \alpha + \beta_1 TREAT_{i,t} \times POST_t + \beta_2 CHANNEL_{i,t} + \beta_3 V_{i,t} + Firm\ FE + Industry \times Year\ FE + \varepsilon_{i,t} \quad (7)$$

where $CHANNEL_{i,t}$ denotes either capital allocation efficiency $(CAPEFF)$ or managerial overconfidence (MO). Following Zhou and Zhao (2022), $CAPEFF$ captures capital allocation efficiency by measuring the deviation between a firm's capital cost, proxied by interest expenses divided by total liabilities, and the corresponding industry-average capital cost. MO is measured as the proportion of total executive compensation received by the top three executives.[4] All other variables are defined as in earlier models.

The results for Equations (5)-(7) are presented in Table 6. Our results show that the regime change leads to a decline in capital allocation efficiency and an increase in managerial overconfidence. Overall, the evidence is consistent with capital allocation inefficiency and managerial overconfidence as possible channels through which political transitions are associated with higher overinvestment among PCFs.

[4] Due to data availability constraints and the institutional structure of Malaysia's securities market, several alternative proxies commonly used in prior studies, including stock options, management earnings forecasts, and media-based measures, are not available in Malaysian databases and therefore cannot be consistently constructed for the sample period.

Table 6. Channel analysis

	(1) Mediator = capital allocation efficiency			(2) Mediator = managerial overconfidence		
Dependent variable =	$CAPEFF$	$OVERINV_1$	$OVERINV_2$	MO	$OVERINV_1$	$OVERINV_2$
	(1a)	(1b)	(1c)	(2a)	(2b)	(2c)
$TREAT \times POST$	0.250***	0.018*	0.022*	0.128**	0.012**	0.017**
	(4.21)	(1.66)	(1.81)	(2.45)	(2.14)	(2.28)
$CAPEFF$		0.311**	0.255**			
		(2.22)	(2.41)			
MO					0.226*	0.281*
					(1.68)	(1.74)
Indirect effect (bootstrap)		0.077	0.064		0.029	0.036
Bootstrap standard error		(0.016)	(0.013)		(0.014)	(0.013)
95% confidence intervals		[0.048, 0.106]	[0.039, 0.089]		[0.002, 0.056]	[0.011, 0.061]
Observations	3,194	3,194	3,194	3,194	3,194	3,194
Adjusted R^2	0.376	0.394	0.411	0.340	0.356	0.372

*Note: Control variables, firm fixed effects, and industry-by-year fixed effects are included but not reported for brevity. The superscripts *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Parentheses report t-statistics. Indirect effects in the mediation analysis are estimated using bootstrap procedures with 5,000 bias-corrected percentile resampling iterations. Bootstrap standard errors and 95% confidence intervals are used to assess the significance of indirect effects. Variable definitions are provided in Appendix A*

Do political affiliations matter?

Following Peranginangin et al. (2021), we conduct a more detailed analysis by splitting the sample according to political affiliation, distinguishing firms connected to the winning coalition from those linked to the losing coalition, and re-estimating Equation (3). Panel A of Table 7 indicates that firms connected to the incoming coalition do not experience a significant change in investment efficiency following the regime transition. However, Panel B reveals a significant decline among firms associated with the former ruling coalition. These results imply that the aggregate effect is largely attributable to firms losing political alignment. This may occur because such firms may adjust their investment behaviour following the regime change in response to altered political incentives and uncertainty under the new leadership.

Table 7. Subsample analysis

Dependent variable =	$INVEFF_1$	$INVEFF_2$
	(1)	**(2)**
Panel A: Subsample with political connections to the winning coalition		
$TREAT \times POST$	0.003 (0.49)	0.010 (1.05)
Observations	2,819	2,819
Adjusted R^2	0.298	0.314
Panel B: Subsample with political connections to the losing coalition		
$TREAT \times POST$	-0.058*** (-2.71)	-0.066*** (-3.13)
Observations	3,084	3,084
Adjusted R^2	0.392	0.411

Note: *Control variables, firm fixed effects, and industry-by-year fixed effects are included, but not reported for brevity. The superscripts *, **, and *** denote significance at the confidence levels of 90%, 95%, and 99%, respectively. Parentheses indicate t-statistics. See Appendix A for the variable definitions.*

Robustness tests

To examine the robustness of the main findings reported in Table 3, we conduct a series of supplementary analyses. First, we test the parallel trends assumption, recognising that estimated treatment effects may be affected by non-random differences in firm characteristics across groups. To do so, we re-estimate Equation (3) by replacing $POST$ with five indicator variables: PRE_{t-2} for 2016, PRE_{t-1} for 2017, $POST_t$ for the first regime-change year, $POST_{t+1}$ for the second year, and $POST_{t+2}$ for the third year. All these variables are interacted with $TREAT$ and included in the DiD regressions.

The results of the event-time specification are presented in Panel A of Table 8. We find that the coefficients on the interaction terms $TREAT \times POST_1$, $TREAT \times POST_{t+1}$, and $TREAT \times POST_{t+2}$ are negative and statistically significant across both dependent variables. In contrast, the interaction terms with PRE_{t-2} and PRE_{t-1} are insignificant. These findings suggest that the regime change drives our results and provide support for the parallel trend assumption.

Second, we conduct a falsification analysis to address whether our results reflect broader temporal patterns rather than a regime-specific effect. We artificially redefine 2017 as the treatment year ($PSEUDO_POST$) and re-estimate the DiD regressions. As shown in Panel B of Table 8, the interaction term $TREAT \times PSEUDO_POST$ is insignificant across both model specifications. These findings alleviate concerns that the observed decline in investment efficiency reflects pre-existing trends in corporate investment.

Third, we address potential differences in covariate distributions between the treatment and control groups by applying entropy balancing following Hainmueller (2012) and McMullin and

Schonberger (2020). This procedure ensures statistical equivalence between groups across the first three moments of the covariate distributions. The findings from the entropy-balanced sample, presented in Panel C of Table 8, are consistent with our baseline results, suggesting that they are not driven by imbalances in observed characteristics.

Fourth, we examine whether macroeconomic disruptions affect our findings by excluding 2020, a year marked by the Covid-19 pandemic. The results reported in Panel D of Table 8 remain qualitatively similar, indicating that our findings are not attributable to pandemic-related disruptions.

Finally, to address potential timing contamination associated with the 2018 transition year, we re-estimate the baseline specification after removing observations from fiscal year 2018. The results reported in Panel E of Table 8 remain qualitatively similar to the baseline estimates, indicating that our findings are robust to alternative definitions of the post-treatment period.

Table 8. Robustness checks

Dependent variable =	$INVEFF_1$	$INVEFF_2$
	(1)	**(2)**
Panel A: Parallel trend assumption tests		
$TREAT \times PRE_{t-2}$	0.002 (0.39)	0.003 (0.65)
$TREAT \times PRE_{t-1}$	0.023 (0.90)	0.041 (1.10)
$TREAT \times POST_1$	-0.083** (-2.04)	-0.097*** (-2.69)
$TREAT \times POST_{t+1}$	-0.062** (-1.97)	-0.074** (-2.33)
$TREAT \times POST_{t+2}$	-0.014* (-1.66)	-0.052* (-1.83)
Observations	3,194	3,194
Adjusted R^2	0.386	0.403
Panel B: Falsification tests based upon the pseudo-regime change year		
$TREAT \times PSEUDO_POST$	0.007 (0.24)	0.016 (0.80)
Observations	3,194	3,194
Adjusted R^2	0.338	0.327
Panel C: Entropy balancing		
$TREAT \times POST$	-0.024** (-2.19)	-0.056** (-2.43)
Observations	3,194	3,194
Adjusted R^2	0.372	0.395
Panel D: Narrowing post window		
$TREAT \times POST$	-0.013** (-2.47)	-0.019** (-2.55)
Observations	2,662	2,662
Adjusted R^2	0.394	0.406
Panel E: Excluding the 2018 transition year		
$TREAT \times POST$	-0.023** (-2.17)	-0.035** (-2.29)
Observations	2,658	2,658
Adjusted R^2	0.387	0.411

Note: *Control variables, firm fixed effects, and industry-by-year fixed effects are included, but not reported for brevity. The superscripts *, **, and *** denote significance at the confidence levels of 90%, 95%, and 99%, respectively. Parentheses indicate t-statistics. See Appendix A for the variable definitions.*

DISCUSSION

This study exploits the regime change in Malaysia as a quasi-natural experiment to investigate how political ties shape firm-level investment efficiency. Within the framework of political patronage and crony capitalism, regime change represents a reallocation of political capital that alters firms' access to state resources and reshapes their investment incentives. This setting allows for a clearer identification of how PCFs respond when established patronage networks are disrupted.

Our empirical findings indicate a decline in investment efficiency among PCFs following the regime change, consistent with the hypothesis that disruptions in political alignment weaken investment discipline. This result aligns with prior evidence on the adverse effects of political connections on investment efficiency (Ghazali et al., 2022; Tan and Wong, 2024). The effect is driven primarily by increased overinvestment, while underinvestment remains largely unaffected, providing insight into the underlying mechanism. Although the political uncertainty literature typically predicts investment contraction in response to heightened risk and policy ambiguity (An et al., 2016; Julio & Yook, 2012; Pan & Tian, 2020), our findings suggest that, in a patronage-based system, regime change may instead induce expansionary and inefficient investment behaviour. In particular, the regime change appears to act as a catalyst for excessive investment among PCFs, consistent with a strategic response to shifting political conditions and the reallocation of political influence.

This pattern is consistent with the logic of political patronage and crony capitalism. When access to government resources depends on political alignment, firms have incentives to use investment as a signalling device to demonstrate loyalty and secure future rents (Peranginangin et al., 2021; Zeiss & Carlson, 2021). As a result, investment decisions become closely tied to the preservation of commercial advantages and alignment with the socio-economic agenda of the incoming government. Firms may therefore sustain elevated investment in anticipation of political benefits, including access to subsidies, tax concessions, and preferential financing (Phan et al., 2020; Wong & Hooy, 2018). Consistent with this view, PCFs appear to operate under softened market discipline and implicit support, which lowers the cost of undertaking marginal or unprofitable projects (Fraser et al., 2006; Yu et al., 2020). This effect is particularly pronounced among firms that face greater exposure to the loss of political support, as these firms have stronger incentives to increase investment as a means of rebuilding ties with the new government. Collectively, these dynamics contribute to capital misallocation and a deterioration in investment efficiency.

Further analysis provides indicative evidence on the channels through which this effect operates. The observed deterioration in capital allocation efficiency is consistent with a reallocation of resources towards less productive uses following the regime change. At the same time, managerial overconfidence offers a potential behavioural channel, whereby managers may overestimate the expected returns of politically motivated investments, particularly in environments where political backing may be perceived as providing implicit risk protection (Duchin & Sosyura, 2012; Fung et al., 2015). These mechanisms are not interpreted as definitive causal pathways, but rather as complementary explanations that are consistent with the documented empirical patterns and the broader theoretical framework. Taken together, the findings suggest that electoral shocks may not only alter the capacity of PCFs to extract benefits from the government but also reshape investment behaviour in ways that tilt resource allocation towards political alignment rather than economic efficiency.

The heterogeneity analysis further strengthens this interpretation. The decline in investment efficiency is concentrated among firms affiliated with the outgoing coalition, suggesting that the loss of political alignment is a key driver of the observed behaviour. This finding aligns with the view that firms facing a deterioration in political access have stronger incentives to engage in

strategic overinvestment in order to re-establish connections with the new ruling coalition. This is also in line with prior evidence highlighting the heterogeneous effects of political connections across firms and political contexts (Nguyen et al., 2023; Phan et al., 2020; Tee et al., 2021). In contrast, firms without such exposure exhibit relatively muted responses, highlighting the importance of political ties in shaping firm-level adjustment dynamics during periods of institutional change.

Overall, the results contribute to the growing literature examining the economic consequences of political connections for corporate investment by reconciling competing theoretical predictions. While prior studies emphasise the contractionary effects of political uncertainty (Gulen & Ion, 2016; Julio & Yook, 2012), our findings demonstrate that, in environments characterised by entrenched patronage networks, regime change can instead induce inefficient investment expansion. More broadly, our evidence supports the view that political connections can distort market competition and inhibit the growth prospects of non-connected firms, thereby entrenching structural inefficiencies within the wider economy.

CONCLUSIONS

This study explores the investment efficiency consequences of political connections by exploiting Malaysia's regime change as an exogenous shock to political alignment. Drawing on a panel of Malaysian listed firms from 2015 to 2020, we document a significant decline in investment efficiency among PCFs following the transition. This decline is primarily driven by increased overinvestment rather than a contraction in investment activity and is concentrated among firms associated with the outgoing political coalition. Our findings suggest that regime change reshapes firms' investment incentives by altering access to political resources and the value of existing connections. From an academic perspective, we enrich the literature on political connections by revealing how corporate investment behaviour responds to changes in political power, particularly in environments characterised by entrenched political patronage and crony capitalist structures.

Our findings carry relevant implications for firms, practitioners, and policymakers. For firms, the results highlight the strategic risks associated with heavy reliance on political connections as a source of competitive advantage. While such ties may facilitate access to financing and government support under stable political conditions, they also expose firms to significant vulnerability when political alignment shifts. In response to such disruptions, firms may engage in excessive or strategically motivated investment, which can undermine long-term performance and value creation. This highlights the importance of strengthening internal governance, improving investment discipline, and reducing dependence on politically mediated advantages. For practitioners and policymakers, our results point to the broader economic costs of politically driven capital allocation. When investment decisions are shaped by political considerations, capital may be allocated to less productive uses, thereby reducing overall economic efficiency. We therefore suggest that policy efforts promote greater independence of corporate decision-making from political affiliations, strengthen institutional safeguards that promote transparency and accountability, and enhance market-based mechanisms that allocate capital more efficiently. In emerging markets such as Malaysia, where corporate activity remains closely linked to political patronage, such reforms are essential for fostering a more stable and sustainable investment environment.

Notwithstanding these contributions, several limitations should be acknowledged. Although our empirical design mitigates concerns related to endogeneity, the observed effects may still be partially influenced by contemporaneous macroeconomic events, such as the US-China trade tensions or other global shocks. In addition, the generalisability of our findings may be constrained by the country-specific institutional context, as the strength and structure of political patronage networks vary across settings. Finally, data limitations prevent us from examining in greater detail how regime change affects firms' investment composition, project selection, or portfolio allocation. Future research may address these limitations by exploiting more granular data and

extending the analysis to other institutional environments, thereby providing deeper insights into the mechanisms through which political transitions affect firm-level investment outcomes.

DECLARATIONS

Ethics approval: Not applicable, as this study did not involve human participants or animals.

Informed consent: Not applicable.

Conflict of interest: The authors declare no competing interests.

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Data availability: The data supporting the findings of this study were obtained from Bursa Malaysia and the Refinitiv Eikon database. These data are subject to licensing restrictions and are therefore not publicly available but may be available from the corresponding author upon reasonable request and with permission from the respective data providers.

Code/materials availability: No additional materials or statistical code are available.

Use of generative AI: No generative AI tools were used in the preparation or authorship of this paper.

CRediT authorship contribution: K.W.T.: Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Visualization, Writing – original draft. **M.F.W**.: Conceptualization, Methodology, Validation, Supervision, Writing – review & editing. Both authors have read and approved the final manuscript.

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APPENDIX A

Definition of variables

Variable	Definition
Dependent variables	
$INVEFF_1$	Absolute values of residuals from Equation (1) multiply by -1.
$INVEFF_2$	Absolute values of residuals from Equation (2) multiply by -1.
$OVERINV_1$	Positive residuals from Equation (1).
$OVERINV_2$	Positive residuals from Equation (2).
$UNDERINV_1$	Negative residuals from Equation (1).
$UNDERINV_2$	Negative residuals from Equation (2).
Variables of interest	
$TREAT$	Equals to 1 if the firm is politically connected and 0 otherwise.
$POST$	Equals to 1 for fiscal years beginning from 2018 and 0 otherwise.
$TREAT \times POST$	An interaction term between $TREAT$ and $POST$.
Control variables	
$SIZE$	Natural logarithm of total assets.
AGE	Natural logarithm of the number of years since listing.
Q	Market value of equity scaled by total assets.
CFO	Cash flow from operations relative to total assets.
LEV	Total liabilities divided by total assets.
$STOCKRET$	Annual stock returns.
$TANG$	Ratio of fixed assets to total assets.
$BSIZE$	Natural logarithm of board size.
$INDDIR$	Proportion of independent directors on the board.
$DUALITY$	Equal to 1 if the CEO also serves as the board chair and 0 otherwise.
DIR_OWN	Percentage of equity held by non-executive directors.
DIR_FEMALE	Percentage of female directors on the board.
CEO_FEMALE	Equal to 1 if the CEO is female and 0 otherwise.
$BIG4$	Equal to 1 if the firm is audited by a Big Four auditor (PwC, EY, KPMG, or Deloitte) and 0 otherwise.

APPENDIX B

List of Politically Connected Firms and Their Affiliations

Firms affiliated with the losing coalition	Firms affiliated with the winning coalition
AHMAD ZAKI RESOURCES BHD	7-ELEVEN MALAYSIA HOLDINGS
AIRASIA GROUP BHD	ADVANCE SYNERGY BHD
AIRASIA X BHD	ASTRO MALAYSIA HOLDINGS BHD
ANCOM BHD	BERJAYA FOOD BHD
AXIATA GROUP BHD	BERJAYA CORP BHD

BOUSTEAD HEAVY INDS CORP	BERJAYA MEDIA BHD
BOUSTEAD HOLDINGS BHD	BERJAYA SPORTS TOTO BHD
BOUSTEAD PLANTATIONS BHD	BERMAZ AUTO BHD
CAHYA MATA SARAWAK BHD	COUNTRY HEIGHTS HLDGS BHD
CHEMICAL CO OF MALAYSIA BHD	DIGI.COM BHD
DATASONIC GROUP BHD	DRB-HICOM BHD
DESTINI BHD	EDEN INC BHD
ECONPILE HLDGS BHD	EWEIN BHD
EDARAN BHD	EXCEL FORCE MSC BHD
EKOVEST BHD	GUOCOLAND (MALAYSIA) BHD
FELDA GLOBAL VENTURES HOLD	HONG LEONG INDUSTRIES BHD
GABUNGAN AQRS BHD	KUMPULAN POWERNET BHD
GAMUDA BHD	MALAYAN FLOUR MILLS BHD
GEORGE KENT (MALAYSIA) BHD	MALAYAN UTD INDS BHD
IJM CORP BHD	MALAYSIAN BULK CARRIERS BHD
ISKANDAR WATERFRONT CITY BHD	MALAYSIAN PACIFIC INDUS BHD
JOHAN HLDGS BHD	MAXIS BHD
KNUSFORD BHD	MMC CORPORATION BHD
KUB MALAYSIA BHD	PETRON MALAYSIA REFINING
KUMPULAN JETSON	PPB GROUP BHD
LINGKARAN TRANS KOTA HLDGS	SAPURA ENERGY BHD
LION FOREST INDUSTRIES	SAPURA INDUSTRIAL BHD
LION INDUSTRIES CORP BHD	SAPURA RESOURCES BHD
MALAYSIA AIRPORTS HLDGS BHD	SHANGRI-LA HOTELS (MALAYSIA)
MALAYSIAN RESOURCES CORP	SUNWAY BHD
MALTON BHD	SUNWAY CONSTRUCTION GROUP
MEDIA PRIMA BHD	TASEK CORP BHD
MISC BHD	THRIVEN GLOBAL BHD
MTD ACPI ENGINEERING BHD	TROPICANA CORP BHD
MY EG SERVICES BHD	
NAIM HLDGS BHD	
NYLEX (MALAYSIA) GROUP	
PETRA ENERGY BHD	
PETRONAS CHEMICALS GROUP	
PETRONAS DAGANGAN	
PHARMANIAGA BHD	
PINEHILL PACIFIC BHD	
POS MALAYSIA BHD	
PROTASCO BHD	
SARAWAK CABLE BHD	
SARAWAK CONS IND BHD	
SARAWAK OIL PALMS BHD	
SARAWAK PLANTATION	
SIME DARBY BHD	
STAR MEDIA GROUP BHD	
TELEKOM MALAYSIA BHD	
TH PLANTATIONS BHD	
TIME DOTCOM BHD	
UEM EDGENTA BHD	
UEM SUNRISE BHD	
UMW HOLDINGS BHD	
UTUSAN MELAYU (MALAY) BHD	
WCT HOLDINGS BHD	