

# 9. Political connection and stock price crash risk

*by Iman Harymawan*

---

**Submission date:** 01-Sep-2021 09:40PM (UTC+0800)

**Submission ID:** 1639449246



**File name:** 9\_Political\_connection\_and\_stock\_price\_crash\_risk.pdf (288.62K)

**Word count:** 8633

**Character count:** 43007

Article

# Political Connections and Stock Price Crash Risk: Empirical Evidence from the Fall of Suharto

Iman Harymawan <sup>1,\*</sup> , Brian Lam <sup>2</sup>, Mohammad Nasih <sup>1</sup> and Rumayya Rumayya <sup>3</sup> 

<sup>1</sup> Department of Accountancy, Universitas Airlangga, Surabaya 60286, Indonesia; mohnasih@feb.unair.ac.id

<sup>2</sup> Division of Business and Management, BNU-HKBU United International College, Zhuhai 519087, China; brianmolam@uic.edu.hk

<sup>3</sup> Department of Economics, Universitas Airlangga, Surabaya 60286, Indonesia; rumayya@feb.unair.ac.id

\* Correspondence: harymawan.iman@feb.unair.ac.id; Tel.: +62-819851154

Received: 14 May 2019; Accepted: 6 September 2019; Published: 11 September 2019



**Abstract:** This study examines the relationship between firm-level political connections and stock price crash risk in Indonesia. It employs the difference-in-difference design to deal with the self-selection bias issue regarding the choice of the firms to become a politically connected firm. We use the sudden resignation of the former President of Indonesia, Suharto, to show that politically connected firms are associated with lower stock price crash risk and that the risk for these politically connected firms increased after Suharto resigned. Furthermore, we found evidence that these negative associations are more pronounced in firms with more complex firm structures.

**Keywords:** politically connected firms; stock price crash risk; complex firm structure

**JEL Classification:** D72; G10; L10

## 1. Introduction

Previous studies have found that firms with political connections receive preferential treatment to finance, enjoy lower debt and equity costs, and have more procurement contracts (Claessens et al. 2008; Boubakri et al. 2012; Houston et al. 2014; Goldman et al. 2013; Harymawan 2018). Other studies have shown, however, that connected firms pay higher audit fees to auditors and charge higher prices for debt to debtholders as a cost of political connections (Bliss and Gul 2012; Gul 2006). Grier et al. (1994) have also examined the benefit–cost model across industries and the contributions of political action committees in each industry, finding that industries with higher potential benefits from government connections contribute more to their connections.

This study extends these prior findings in the political connections literature by investigating the effect of political connections on firms' stock price crash risk. Recent studies have provided evidence that establishing political connections (i.e., hiring a politician as a director) can decrease the firm's stock price crash risk (Luo et al. 2016; Hu and Wang 2018). In contrast, Lee and Wang (2017) and Tee (2018) have shown that connected firms tend to have a higher stock price crash risk. Meanwhile, Roberts (1990) found a relationship between committee seniority in the US Congress and the distribution of federal benefits. He also found that the stock market reacted significantly to the death of Senator Henry Jackson, especially across his various constituent interests. Using the unexpected resignation of former Indonesian President, Suharto, this study was able to investigate the stock price crash risk of connected firms in the period before and after his resignation. This unique event provides a better setting than a simple relationship model for answering the question of whether connected firms have a higher or lower stock price crash risk than unconnected firms.

3 Investigating the relationship between political connections and stock price crash risk in the pre- and post-Suharto era provides us with a better research setting for several reasons. First, as Fisman (2001) shows, during the Suharto era, political connections in Indonesia were centralized, which provides a better proxy than a decentralized country for evaluating political connections; measuring the value of political connections in a country with decentralized political decision-making is more complex due to the variety of connection types. Second, the unexpected resignation of Suharto is an exogenous event which allows us to make clearer estimates when evaluating the relationship between political connections and stock price crash risk.

In this study, we first employed some univariate tests to describe our data and test the hypotheses. The correlation matrix shows that firms connected to Suharto have a significantly higher stock price crash risk. Then we compared the mean between a group of connected versus non-connected firms. The results also show that firms with Suharto connections had a significantly higher mean of stock price crash risk than firms with no connections.

2 In the multivariate analyses, we used the ordinary least square regression to test the hypotheses. We found that firms with political connections had a negative and significant association with stock price crash risk. To deal with the endogeneity issue, this study employed the difference-in-difference model, using the unexpected resignation of Suharto as a natural experiment. We found that in the period prior to the Suharto resignation, connected firms were more likely to have a lower stock price crash risk. Interestingly, we found that after Suharto resigned, there was a positive and significant association between political connections and stock price crash risk.

2 This study contributes to the existing literature of political connections in several ways. Prior studies have examined the relationship between political connections to stock price crash risk (citation). This study adds to this literature by being the first in providing evidence on how political connections affect stock price crash risk by comparing when the political connections are in and out of power. In addition, this study also extends the literature by examining the role of firm complexity on the relationship between political connections and stock price crash risk. For practitioners, this study provides useful information about the changes of stock price crash risk of politically connected firms between pre and post political power. For a regulator, these findings provide an insight that political activities disclosure might help the investor to reduce the information asymmetry between firms and stakeholders to reduce the likelihood of stock price crash risk for politically connected firms in the period post to political power resignation. The remainder of this article discusses the institutional setting of political connections in Indonesia and presents the hypotheses, data, methods, results, discussion, and conclusion.

## 2. Literature Review

### 2.1. Corporate Governance in Indonesia

Since the late 1970s, Indonesia has experienced economic transformation from state-owned enterprise and a small and traditional business-dominated economy to modern private enterprise. Unfortunately, rather than signaling the development of entrepreneurship and healthy business sectors, the transformation marked the beginning of an era where political connections in business became increasingly widespread, with Suharto's cronies at the center. The success of these politically connected firms heavily depended on their ability to acquire and maintain relationships with Suharto's regime in order to secure special privileges from the state.

As noted by McLeod (2000), these privileges included import protection, import licenses, no-bid contracts from government and state-owned enterprises, cheap loans from the state and central banks, rights to extract natural resources, tax relief, and even the right to collect taxes.

At first, the majority of these politically well-connected firms were dominated by the Sino-Indonesian (of Chinese descent) business elites who had been close to Suharto since the 1950s. Suharto's administration granted them special rights to monopolize the import and distribution of sugar,



rice, forestry products, and automobiles. Over time, two other elite groups emerged: the well-connected pribumi enterprises and businesses owned by Suharto's children. These three groups formed a core group of cronies in Suharto's regime (Schwarz 1994).

Hill (2000) has shown that the 20 largest conglomerates in 1993, with a total turnover valued at around 21% of GDP, were all connected to Suharto. Three of those twenty conglomerates were owned by Suharto's children. Claessens et al. (1999) has also shown that in 1996 Suharto's cronies controlled 417 listed and non-listed companies on the Indonesian stock market. Together, these companies contributed 16.6% of total stock market capitalization.

## 2.2. After the Fall of Suharto

In 1998, Indonesia was severely hit by a financial crisis. The crisis started in Thailand and South Korea and then spread throughout Asia. During the crisis, the rupiah depreciated by 30%, exports declined, the inflation rate escalated to almost 100%, the poverty rate doubled to over 27%, and economic growth contracted to almost 14% (Hofman et al. 2004). The financial crisis then evolved into a political crisis which led to the resignation of Suharto after 32 years in power. Pangestu and Habib (2002) have argued that the favorable treatment to politically connected firms created moral hazard and caused the crisis as these firms became reckless in their business practices, violating legal lending limits and generating non-performing loans.

Sato (2004) has found that the performance of Suharto-connected firms varied after the crisis. The firms that survived were those established in the 1970s and ranked among the top 20 or top 30 richest in the 1980s and 1996. In contrast, the firms that suffered severely were younger firms established in the 1980s and either ranked in the top 20 in 1996 or else outside the top 20 in the 1980s but inside the top 10 in 1996. Carney and Hamilton-Hart (2015) also found that a significant number of large firms shrank tremendously in 1996 and fell outside the top 200, including the firms of Suharto's children. Ultimately, Suharto's old, well-established cronies seemed to successfully reconsolidate their businesses and actively reconnect with current political actors and government officials in the post-Suharto administration, who were possibly motivated to secure the benefits they had gained under the Suharto government (Winter 2013).

## 2.3. Stock Price Crash Risk

Conceptually, stock price crash risk is premised on the tendency of managers to withhold bad news, which leads to bad news being stockpiled in firms. At a certain point, it becomes too costly or impossible for managers to withhold the bad news any longer. When such a point arrives, all the hidden bad news is revealed to the market at once, resulting in a significant stock price drop, that is, a stock price crash (Kim et al. 2011). Extant studies have investigated various determinants of stock price crash. For instance, Kim et al. (2011) found that corporate tax avoidance enables managers to hoard bad news, which leads to the risk of a stock price crash. He and Ren (2019) have provided evidence that financial constraints are positively associated with future stock price crash risk, via both bad news hoarding and default risk channels. Chen et al. (2016) have found that firms with a higher degree of earnings smoothing are more prone to stock price crashes. For their part, Chauhan et al. (2017) have shown that stock liquidity, which is identified through the threat of intervention and price informativeness, decreases stock price crash risk as it works as a governance mechanism to discipline managers for withholding bad news. In addition, prior research has shown that firms' corporate social responsibility significantly mitigates stock price crash risk (Lee 2016). Our research extends this stream of literature by examining the relationship between stock price crash risk and political connections, using the sudden resignation of Suharto to address the self-selection bias issue.

## 2.4. Hypothesis Development

There are two possible relationships between politically connected firms and stock price crash risk. The first possibility is that firms with political connections are more likely to have higher stock

price crash risk. Prior literature has suggested that politically connected firms can derive significant benefits in terms of financing, whereas non-politically connected firms are more likely to suffer from financing constraints (Luo and Zhen 2008). To meet financing requirements, managers are encouraged to whitewash financial statements and hide negative information. These actions may result in an increase in information asymmetry, and the accumulation of bad news may eventually lead to a stock price crash. He and Ren (2019) have also argued that if the institutional setting of the country is not well developed (i.e., inefficient stock market, weak corporate governance, etc.), it will increase the ability of firms to hoard bad news. This situation (hoarding bad news) thus increases the stock price crash risk of connected firms. Based on this, we could say there is a positive association between political connections and stock price crash risk, which is the first possible relationship.

On the other hand, Hu and Wang (2018) have also found that with the preferential access of financing, politically connected firms can reduce bad news hoarding activities to avoid government regulation and maintain access to government subsidies. In this way, the degree of information asymmetry can be reduced, thus decreasing the likelihood of a stock price crash. Furthermore, He and Ren (2019) have argued that if a country has a good institutional setting (i.e., efficient stock market, good governance, pro-business policies, etc.) there is a lower probability of firms hoarding bad news, therefore decreasing stock price crash risk. From this, we could argue that politically connected firms actually have a lower stock price crash risk. Based on above discussion of the possible relationships between politically connected firms and stock price crash risk, the formal hypothesis is as follows:

**Hypothesis 1 (H1).** *There is a relationship between firms with political connections and the level of stock price crash risk.*

Fisman (2001) has found that politically connected firms in Indonesia strongly relied on the benefits from their connections under the Suharto regime and often had privileged access to financing. Suharto's resignation in 1998 represented a fundamental transition in Indonesia's political economy at the national level. The shift is evidenced by the decline in the number of people with military and state backgrounds and the rise of those with private sector backgrounds in Indonesia's political elite (Pocztar and Pepinsky 2016). Leuz and Oberholzer-Gee (2006) have also found that political connections can lose their value through election losses. Connected firms thus need to be more responsive to market pressures since they can no longer rely on the same benefits from their connections (Harymawan and Nowland 2016). Suharto's resignation and the subsequent regime change triggered financial and operational shocks for politically connected firms. They then needed to face all kinds of market pressures by themselves, resulting in a higher stock price crash risk. Therefore, we predict that the resignation of Suharto increased the need for politically connected firms to respond to market pressures, resulting in a higher stock price crash risk.

**Hypothesis 2 (H2).** *After Suharto resigned, the risk of a stock price crash for firms with political connections increased.*

The complexity of firm structure may affect stock price crash risk. We measured the complexity of firm structure according to the number of subsidiaries owned by the company. As the number of subsidiaries increases, so too do the benefits derived from political connections.

**Hypothesis 3 (H3).** *The negative relationship between stock price crash risk and political connections is more pronounced for firms with a more complex firm structure.*



### 3. Methodology

#### 3.1. Data

Our sample covers the period from 1995 to 2001. We obtained political connection data from the Indonesia Capital Market Directory (ICMD) and information on the total number of subsidiaries from Osiris. Accounting and financial data were retrieved from Compustat Global. We deleted observations with missing Compustat data, stock prices, returns, and trading volume data when estimating our crash risk measures and control variables. We excluded the year of Suharto's resignation (1998) to achieve an unambiguous pre-event and post-event period for the main tests, especially for the difference-in-difference test. The main sample includes 730 firm-year observations.

#### 3.2. Measuring Stock Price Crash Risk

We followed Hutton et al. (2009) and Kim et al. (2016) to construct the three measures of stock price crash risk. Our first measure was the firm-specific return crashes. The indicator variable CRASH equals one for a firm-year that experiences one or more crash weeks during the fiscal year and zero otherwise.

To calculate the first measure of crash likelihood for each firm-year, we first estimated the weekly returns by firm and by year with the following regression model:

$$r_{j,k} = \alpha_j + \beta_1 r_{m,k-2} + \beta_2 r_{m,k-1} + \beta_3 r_{m,k} + \beta_4 r_{m,k+1} + \beta_5 r_{m,k+2} + \beta_6 r_{i,k-2} + \beta_7 r_{i,k-1} + \beta_8 r_{i,k} + \beta_9 r_{i,k+1} + \beta_{10} r_{i,k+2} + \varepsilon_{jk}, \quad (1)$$

where  $r_{j,k}$  is the return on stock  $j$  in week  $k$ ,  $r_{m,k}$  is the return on the value-weighted market index in week  $k$  provided by the Center for Research in Security Prices, and  $r_{i,k}$  is the return on the Fama–French value-weighted industry index in week  $k$ . As in Dimson 1979, the lead and lag terms for the market and industry indexes were used to control for nonsynchronous trading. The firm-week return was measured by the natural logarithm of one plus the residual return in Equation (1), with at least 26 weekly return observations available per firm-year. Crash weeks are firm-week returns which are below 3.2 standard deviations of the mean firm-week return of the fiscal year.

For the second measure, we used the volatility of below-mean versus above-mean returns (DUVOL) for each firm-year. The variable DUVOL was calculated by the natural logarithm of the ratio of the standard deviation of weekly returns below the annual mean divided by the standard deviation of weekly returns above the annual mean.

For the third measure, we used the negative skewness of firm-specific weekly returns (NCSKEW). For each firm-year, we multiplied minus one to the third power of weekly returns and then divided it by the third power of the standard deviation of weekly returns. Appendix A presents a summary of all variables used in this research.

#### 3.3. Main Model

To test our hypotheses, we performed multiple regression tests with a series of control variables to ensure the results were not subject to some crucial factors which have systematic effects on the cross-sectional variation in stock price crash risk.

To examine our first hypothesis (H1), we estimated the following linear regression, which regresses stock crash risk (CRASH, DUVOL, or NCSKEW) on political connection (PCON) and the control variables.

$$DepVar = \beta_0 + \beta_1 PCON + \sum \beta_i X_i + \sum \beta_j YRD_t + \sum \beta_k INDD_t + \varepsilon_t, \quad (2)$$

where  $DepVar$  is CRASH, DUVOL, or NCSKEW;  $X$  is a set of the control variables,  $YRD$  is the year dummy, and  $INDD$  is the industry dummy.

To examine our second hypothesis (H2), we estimated the following linear regression, which regresses stock crash risk (*CRASH*, *DUVOL*, or *NCSKEW*) on the difference-in-differences dummy (*DID*), political connection (*PCON*), and control variables.

$$DepVar_t = \beta_0 + \beta_1 DID_t + \beta_2 PCON_t + \sum \beta_i X_t + \sum \beta_j YRD_t + \sum \beta_k INDD_t + \epsilon_t, \quad (3)$$

where *DepVar* is *CRASH*, *DUVOL*, or *NCSKEW*. *X* is a set of the control variables, *YRD* is the year dummy, and *INDD* is the industry dummy.

To examine our third hypothesis (H3), we estimated the linear regression using Equation (1), which regresses stock crash risk (*CRASH*, *DUVOL*, or *NCSKEW*) on the political connection (*PCON*). However, this time we divided the full sample into complex and less-complex subsamples. In the complex subsample, the total number of subsidiaries was greater than the median. In the less-complex subsample, the total number of subsidiaries was not greater than the median.

### 3.4. Sample Selection

Our sample consisted of listed companies from Indonesia, covering the period from 1995 to 2001. We adopted the two-digit Standard Industrial Classification (SIC) system to classify the different industrial sectors and removed observations that did not have firm-specific control variables. The final sample for the main model contained 730 firm-year observations. Continuous variables were winsorized at 1% or 99% to control for the effects of outliers.

## 4. Empirical Analysis

Table 1 presents the sample distribution for the period 1995–1997 and 1999–2001. We excluded the year of Suharto's resignation (1998) to achieve an unambiguous pre-event and post-event period for the main tests, especially for the difference-in-difference test. Among the 730 firm-year observations, the number of firms with political connections was 149 and those without political connections 581.

Table 1. Sample distribution.

Year	Number of Firms with Political Connections	Number of Firms without Political Connections	Total
1995	13	29	42
1996	23	62	85
1997	29	106	135
1999	27	126	153
2000	28	125	153
2001	29	133	162
Total	149	581	730

Note: We excluded the year of Suharto's resignation (1998) to achieve an unambiguous pre- and post-event period for the difference-in-difference model.

Table 2 presents descriptive statistics for the period 1995–1997 and 1999–2001, totaling 730 firm-year observations. All variables are defined in the appendix. The sample mean of *PCON* is 0.204, indicating that about 20% of the sample was connected politically to Suharto and the remaining 80% was not. The dependent variables (*CRASH*, *DUVOL*, and *NCSKEW*) and variable of interest (*PCON*) are presented in current-year values. The control variables are presented in lag-one-year values because lag-one-year values of these variables are used in the regression model.

Table 2. Summary statistics (n = 730).

Variables	Mean	Std	Min	Q1	Median	Q4	Max
CRASH	0.563	0.496	0.000	0.000	1.000	1.000	1.000
DUVOL	-0.066	0.298	-1.026	-0.251	-0.079	0.100	2.092
NCSKEW	-0.114	1.068	-3.861	-0.608	-0.139	0.268	17.407
PCON	0.204	0.403	0.000	0.000	0.000	0.000	1.000
SIZE <sub>(t-1)</sub>	4.800	1.446	1.328	3.763	4.666	5.743	8.865
ROA <sub>(t-1)</sub>	-0.013	0.193	-1.175	-0.065	0.028	0.083	0.473
LEVERAGE <sub>(t-1)</sub>	0.477	0.317	0.000	0.242	0.468	0.646	1.613
MTB <sub>(t-1)</sub>	1.323	2.252	-8.558	0.385	0.908	1.711	23.928
NCSKEW <sub>(t-1)</sub>	-0.089	1.257	-8.230	-0.545	-0.107	0.326	10.310
DTURN <sub>(t-1)</sub>	0.001	0.004	-0.022	-0.001	0.000	0.001	0.026
SIGMA <sub>(t-1)</sub>	0.063	0.038	0.015	0.036	0.055	0.078	0.421
RET <sub>(t-1)</sub>	0.554	2.551	-0.979	-0.465	-0.146	0.555	21.187
Observations							

This table presents summary statistics for our sample for the period 1995–1997 and 1999–2001.

Table 3 presents the Pearson correlations. It displays the correlations between dependent variables, the independent variable, and the control variables. The significance level is denoted at 10%, 5%, and 1%.

Table 4 presents the characteristics of politically connected and non-politically connected firms. We observed that firms with political connections are in general larger in terms of total assets than those without political connections. These politically connected firms also have higher leverage.

Table 5 presents the regression results for the relationship between political connection and stock price crash risk. The coefficient of political connection (PCON) was negative and significant for all three risk models (CRASH and DUVOL at the 1% level and NCSKEW at the 5% level) after controlling the firm-specific control variables. This result was consistent with our prediction, which is that the stock price crash risk is lower for politically connected firms. Therefore, hypothesis 1 is supported.

To use the difference-in-difference model, we needed to test whether the parallel trend assumption holds. The visual inspection method was not appropriate for this study because the main dependent variable (stock crash) is an indicator variable. Therefore, we conducted a formal test on the parallel trend. Our sample contained three pre-treatment periods and three post-treatment periods. Following Autor (2003), we specify the following model:

$$Y_{it} = B_{-2}D_{it} + B_{-1}D_{it} + B_1D_{it} + B_2D_{it} + B_3D_{it} + \text{Firm Fix Effects} + \text{Year Fixed Effects} + e_{it} \quad (4)$$

where  $Y$  is the outcome for firm  $i$  at time  $t$ . We included the interactions of the time dummies and the political connection indicator for the first two pre-Suharto-resignation periods and dropped the one for the year of Suharto's resignation. Therefore, all the other interactions are shown with reference to this omitted period. If the coefficients  $B_{-2}$  and  $B_{-1}$  were not significant, then the difference in differences was not significantly different between the politically connected firms and non-politically connected firms in the pre-Suharto-resignation periods, indicating that the parallel trend assumption holds.

As we included all the Suharto-connected firms as a treatment group and all the non-Suharto-connected firms as a control group during the sample period, the random sampling assumption for the treatment group and control group was not a concern in our study.

Table 6, panel A presents regression results testing the parallel trend. The coefficients for  $PCON_{1996}$  and  $PCON_{1997}$  were insignificant, indicating that the parallel trend assumption holds. Besides, it can be observed from the coefficients for  $PCON_{1999}$ ,  $PCON_{2000}$ , and  $PCON_{2001}$  that the increased stock crash risk for Suharto-connected firms fades across the years in the post-Suharto period.



Table 3. Pearson correlations (n = 730).

Variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
[1] CRASH	1.000											
[2] DUVOL	0.303 ***	1.000										
[3] NCSKEW	0.296 ***	0.851 ***	1.000									
[4] SIZE	0.042	-0.096 ***	-0.069 *	1.000								
[5] SIZE <sub>(t-1)</sub>	0.168 ***	-0.064 *	0.008	0.391 ***	1.000							
[6] ROA <sub>(t-1)</sub>	0.053	-0.029	-0.022	0.093 **	0.132 ***	1.000						
[7] LEVERAGE <sub>(t-1)</sub>	-0.068 *	0.044	0.043	0.063 *	0.141 ***	-0.589 ***	1.000					
[8] MTR <sub>(t-1)</sub>	0.070 *	-0.013	0.006	0.082 **	0.191 ***	0.115 ***	-0.115 ***	1.000				
[9] NCSKEW <sub>(t-1)</sub>	-0.059	0.060	0.064 *	-0.008	-0.008	-0.061	0.029	-0.000	1.000			
[10] DTURN <sub>(t-1)</sub>	0.077 **	-0.020	0.005	0.018	0.051	0.027	-0.054	0.058	-0.041	1.000		
[11] SIGMA <sub>(t-1)</sub>	-0.151 ***	0.113 ***	0.045	-0.065 *	-0.328 ***	-0.136 ***	0.170 ***	-0.081 **	-0.029	-0.054	1.000	
[12] RET <sub>(t-1)</sub>	0.007	-0.012	-0.049	0.051	-0.030	0.165 ***	-0.035	0.209 ***	-0.117 ***	-0.007	0.239 ***	1.000

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

**Table 4.** Characteristics of politically connected and non-politically connected firms.

Variables	Firms with Political Connections	Firms without Political Connections	Coef	t-Value
	N = 149	N = 581		
CRASH	0.604	0.552	0.052	-1.131
DIVOL	-0.123	-0.052	-0.071 ***	2.601
NCSKEW	-0.258	-0.077	-0.182 *	1.854
SIZE <sub>(t-1)</sub>	5.916	4.514	1.402 ***	-11.458
ROA <sub>(t-1)</sub>	-0.014	-0.013	-0.001	0.065
LEVERAGE <sub>(t-1)</sub>	0.535	0.462	0.074 **	-2.533
MTB <sub>(t-1)</sub>	1.601	1.252	0.350 *	-1.692
NCSKEW <sub>(t-1)</sub>	-0.293	-0.037	-0.256 **	2.220
DTURN <sub>(t-1)</sub>	0.001	0.001	0.000	-0.492
SIGMA <sub>(t-1)</sub>	0.058	0.064	-0.006 *	1.761
RET <sub>(t-1)</sub>	0.811	0.488	0.323	-1.381

The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

**Table 5.** Main results: results of regression of political connections on stock price crash risk.

Variables	(1)	(2)		(3)	
	CRASH	DIVOL	NCSKEW	CRASH	DIVOL
CON	-0.366 ***	-2.92	-0.087 ***	-2.95	-0.276 **
SIZE <sub>(t-1)</sub>	0.275 ***	4.47	0.010	0.68	0.053
ROA <sub>(t-1)</sub>	-0.119	-0.12	0.058	0.91	0.256
LEVERAGE <sub>(t-1)</sub>	-0.741 ***	-2.65	0.010	0.19	0.090
MTB <sub>(t-1)</sub>	0.035	0.64	0.001	0.31	0.013
NCSKEW <sub>(t-1)</sub>	-0.069	-1.16	0.007	0.80	0.031
DTURN <sub>(t-1)</sub>	6.830	0.39	-4.586 ***	-2.97	-12.449 ***
SIGMA <sub>(t-1)</sub>	-5.672 *	-1.93	0.666	1.48	1.465
RET <sub>(t-1)</sub>	0.041	1.57	-0.000	-0.02	-0.004
Constant	2.261 *	1.70	0.109	0.30	1.832
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Observations	704	730	730		
R <sup>2</sup>		0.151	0.118		
Adjusted R <sup>2</sup>		0.078	0.042		
Pseudo R <sup>2</sup>	0.120				

Notes: This table presents regression results testing the effect of political connections on stock price crash risk. The second column displays t statistics. Standard errors were clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

**Table 6. Panel A.** Test on parallel trend; **Panel B.** Difference-in-difference results.

	Panel A					
	(1)		(2)		(3)	
	Crash	DIVol	Crash	DIVol	Crash	DIVol
PCON1996	0.258	0.40	-0.073	-1.02	-0.271	-0.99
PCON1997	0.063	0.10	-0.050	-0.73	-0.118	-0.45
PCON1999	1.662 ***	2.81	0.222 ***	3.32	0.551 **	2.15
PCON2000	0.976 *	1.72	0.196 ***	2.88	0.488 *	1.87
PCON2001	0.591	1.04	0.107	1.57	0.480 *	1.84
Constant	-11.897	-0.02	-0.804 ***	-2.86	-3.286 ***	-3.06
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	765	886	886			
R <sup>2</sup>		0.317	0.248			
Adjusted R <sup>2</sup>		0.129	0.041			
Pseudo R <sup>2</sup>	0.138					

Notes: this table presents regression results testing the parallel trend. The second column displays t statistics. Standard errors are clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

Table 6. Cont.

Panel B						
Variables	(1)		(2)		(3)	
	CRASH		DUIVOL		NCSKEW	
<i>DID</i>	2.142 ***	2.74	0.284 ***	3.84	0.933 ***	2.64
<i>CON</i>	-1.576 *	-1.79	-0.251 ***	-2.61	-0.816 ***	-2.92
<i>SIZE</i> <sub>(t-1)</sub>	0.281 ***	4.61	0.010	0.74	0.054	1.27
<i>ROA</i> <sub>(t-1)</sub>	-0.203	-0.22	0.045	0.87	0.213	1.13
<i>LEVERAGE</i> <sub>(t-1)</sub>	-0.835 ***	-3.25	-0.004	-0.08	0.045	0.26
<i>MTB</i> <sub>(t-1)</sub>	0.041	0.70	0.002	0.42	0.015	0.82
<i>NCSKEW</i> <sub>(t-1)</sub>	-0.051	-0.94	0.008	1.10	0.036	1.41
<i>DTURN</i> <sub>(t-1)</sub>	-0.147	-0.01	-5.234 ***	-3.97	-14.581 ***	-2.71
<i>SIGMA</i> <sub>(t-1)</sub>	-5.082	-1.61	0.713 *	1.65	1.620	1.40
<i>RET</i> <sub>(t-1)</sub>	0.043 *	1.73	0.000	0.18	-0.003	-0.30
Constant	2.637 **	2.21	0.163	0.50	2.010	1.03
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Observations	704		730		730	
R <sup>2</sup>			0.188		0.148	
Adjusted R <sup>2</sup>			0.116		0.073	
Pseudo R <sup>2</sup>	0.142					

Notes: This table presents regression results testing effect of Suharto's resignation on stock price crash risk. The second column displays t statistics. Standard errors are clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

Table 6, panel B presents the regression results for the effect of the fall of Suharto on the relationship between political connection and stock price crash risk. The coefficient for differences in differences (*DID*) is positive and significant at the 1% level for all three risk models after controlling the firm-specific control variables and country-level control variables. This result is consistent with our prediction, which is that the stock price crash risk of politically connected firms increased after the fall of Suharto. Therefore, hypothesis 2 is supported.

Table 7 reports the results of the sensitivity test for Table 5 on the regression of stock price crash risk on political connection because this test includes the year in which Suharto resigned, 1998. The coefficient of political connection (*PCON*) for all three models was negative (*CRASH* at the 1% level, and *NCSKEW* at the 10% level), indicating that political connection lowers stock price crash risk. The significance level for *NCSKEW* and *DUIVOL* in Table 7 was lower than in Table 5. This is because the inclusion of observations for 1998, the year in which Suharto resigned, may have introduced some noise into the regression model.

Table 8 reports the results of the sensitivity test for Table 5 on the regression of stock price crash risk on *DID* because this test includes the year in which Suharto resigned, 1998. The coefficient of *DID* for all three models was significantly positive, indicating that the stock price crash risk of politically connected firms increased after the fall of Suharto.

To investigate whether a political connection exerts distinct impacts on stock price crash risk when interacting with the differential complexity of firm structure (H3), the full sample was divided into two subsamples according to the complexity of firm structure. Table 9 presents the regression results for the effect of complexity of firm structure on the relationship between political connection and stock price crash risk. The coefficient for political connection (*PCON*) was negative and significant at the 1% level for all three risk models for complex firms after controlling the firm-specific control variables. This result was consistent with our prediction, which is that the negative relationship between political connection and stock price crash risk is more pronounced for firms with complex firm structures. Therefore, hypothesis 3 is supported. In addition, we also tested (non-tabulated results) whether the negative associations between political connection and stock price crash risk in complex firms are due to the size effect (Dang et al. 2018). Hence, we run similar regression model except we exclude the *SIZE* variable. We find that the coefficients of *PCON* are still negative.



3  
Table 7. Results of regression of political connections on stock price crash risk (including year of Suharto's resignation, 1998).

Variables	(1)		(2)		(3)	
	CRASH		DIVOL		NCSKEW	
4 CON	-0.373 ***	-3.32	-0.059	-1.54	-0.200 *	-1.65
SIZE <sub>(t-1)</sub>	0.255 ***	4.85	0.002	0.11	0.016	0.33
ROA <sub>(t-1)</sub>	-0.283	-0.32	0.049	0.85	0.230	1.28
LEVERAGE <sub>(t-1)</sub>	-0.591 **	-2.22	0.011	0.28	0.045	0.34
MTB <sub>(t-1)</sub>	0.050	1.10	0.001	0.24	0.010	0.98
NCSKEW <sub>(t-1)</sub>	-0.087	-1.50	0.009	0.95	0.038	1.15
DTURN <sub>(t-1)</sub>	5.944	0.42	-1.445	-0.52	-2.049	-0.22
SIGMA <sub>(t-1)</sub>	-4.252 *	-1.80	0.616 *	1.73	1.681 *	1.91
RET <sub>(t-1)</sub>	0.040	1.63	-0.001	-0.37	-0.003	-0.31
Constant	1.737	1.25	0.113	0.38	1.616	1.00
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Observations	879		886		886	
R <sup>2</sup>			0.125		0.088	
Adjusted R <sup>2</sup>			0.062		0.022	
Pseudo R <sup>2</sup>	0.111					

5  
Notes: This table presents regression results testing the effect of political connections on stock price crash risk. The second column displays t statistics. Standard errors are clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

Table 8. Difference-in-difference results (including year of Suharto's resignation, 1998).

Variables	(1)		(2)		(3)	
	CRASH		DIVOL		NCSKEW	
DID	2.441 ***	3.46	0.274 ***	4.18	0.961 ***	2.80
4 CON	-1.496 ***	-2.66	-0.190 **	-2.38	-0.662 ***	-2.78
SIZE <sub>(t-1)</sub>	0.262 ***	5.23	0.002	0.15	0.018	0.38
ROA <sub>(t-1)</sub>	-0.361	-0.44	0.040	0.85	0.197	1.35
LEVERAGE <sub>(t-1)</sub>	-0.657 **	-2.50	0.002	0.07	0.017	0.14
MTB <sub>(t-1)</sub>	0.064	1.22	0.002	0.67	0.016	1.26
NCSKEW <sub>(t-1)</sub>	-0.073	-1.25	0.010	1.14	0.041	1.40
DTURN <sub>(t-1)</sub>	1.527	0.10	-1.871	-0.62	-3.540	-0.33
SIGMA <sub>(t-1)</sub>	-3.713	-1.54	0.644 *	1.89	1.777 **	2.07
RET <sub>(t-1)</sub>	0.034	1.38	-0.001	-0.48	-0.005	-0.48
Constant	2.007	1.49	0.148	0.54	1.739	1.14
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Observations	879		886		886	
R <sup>2</sup>			0.161		0.121	
Adjusted R <sup>2</sup>			0.100		0.057	
Pseudo R <sup>2</sup>	0.142					

5  
Notes: This table presents regression results testing the effect of Suharto's resignation on stock price crash risk. The second column displays t statistics. Standard errors are clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

Table 9. Results of regression for complex and less-complex firms.

Variables	CRASH		DUVOL		NCSKEW	
	(1)	(2)	(3)	(4)	(5)	(6)
	Complex Firms	Less-Complex Firms	Complex Firms	Less-Complex Firms	Complex Firms	Less-Complex Firms
CON	-0.610 ***	-0.028	-0.154 ***	-0.103 *	-0.601 ***	-0.237
SIZE <sub>t-1</sub>	0.296 *	0.166	-0.005	0.030	0.055	0.075
ROA <sub>t-1</sub>	0.312	-0.067	0.046	0.066	0.251	0.222
LEVERAGE <sub>t-1</sub>	-2.047 **	-0.110	-0.042	0.006	0.015	0.071
MTB <sub>t-1</sub>	0.077	0.062	0.006	0.004	0.029	0.021
NCSKEW <sub>t-1</sub>	-0.071	-0.053	-0.002	0.011	0.017	0.046
DTURN <sub>t-1</sub>	-21.782	30.546	-5.211 **	-1.083	-19.726 ***	2.715
SIGMA <sub>t-1</sub>	-5.253	-6.479 ***	0.569	0.553	1.053	1.182
RET <sub>t-1</sub>	0.037	0.067 **	-0.007	0.008	-0.019	0.017
Constant	3.415 **	2.929 *	0.343	-0.197	2.270	-0.308
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	299	372	315	397	315	397
R <sup>2</sup>			0.278	0.165	0.167	0.151
Adjusted R <sup>2</sup>			0.148	0.058	0.016	0.042
Pseudo R <sup>2</sup>	0.197	0.131				

Notes: this table presents regression results testing the effect of political connections on stock price crash risk in complex and less-complex subsamples. Complex is a subsample where the total number of subsidiaries is greater than the median. Less-complex is a subsample where the total number of subsidiaries is not greater than the median. The second column displays t statistics. Standard errors are clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

To ensure that the assignment of observations into the treatment group and control group was random, we adopted the coarsened exact matching (CEM) method. We set each covariate into five equal bins, or strata. Eight covariates were input into the CEM model. Table 10, panel A presents the matching CEM summary. Out of a total of 171 strata generated by the CEM model, 36 strata contained both connected and unconnected observations. A total of 109 out of 149 connected observations were matched with 403 out of 581 unconnected observations.

**Table 10.** Panel A. Coarsened exact matching method—matching summary. Number of strata: 171; Number of matched strata: 36. Panel B. Coarsened exact matching method—diagnosis of matching quality. Panel C. Coarsened exact matching method—difference-in-difference results.

Panel A					
	PCON = 0		PCON = 1		
All	581		149		
Matched	403		109		
Unmatched	178		40		

Panel B		
	Pre-match L1 statistics	Post-match L1 statistics
SIZE	0.391	0.230
ROA	0.156	0.144
LEVERAGE	0.195	0.163
MTB	0.107	0.138
NCSKEW	0.153	0.149
DTURN	0.151	0.098
SIGMA	0.203	0.123
RET	0.069	0.083

Panel C					
Variables	(1)	(2)		(3)	
	Crash	DUIVol		NC skew	
DUI	1.077 **	2.10	0.312 ***	3.13	1.158 ***
PCON <sub>(t-1)</sub>	0.591 ***	3.11	-0.257 **	-2.05	-0.871 **
SIZE <sub>(t-1)</sub>	0.294 ***	5.91	0.009	0.82	0.061 *
ROA <sub>(t-1)</sub>	-1.337 **	-2.18	0.047	0.60	0.146
LEVERAGE <sub>(t-1)</sub>	-0.823 ***	-3.60	0.008	0.09	-0.047
MTB <sub>(t-1)</sub>	0.083	0.85	0.007	1.08	0.050 **
NCSKEW <sub>(t-1)</sub>	-0.099	-0.56	0.032 *	1.84	0.080
DTURN <sub>(t-1)</sub>	-2.268	-0.06	-4.079	-1.06	-17.753
SIGMA <sub>(t-1)</sub>	-6.599	-1.35	0.549	0.76	2.651
RET <sub>(t-1)</sub>	0.211	1.55	0.035 ***	2.77	0.087 ***
Constant	3.019 *	1.81	0.292	0.95	2.591
Year FE	Yes		Yes		Yes
Industry FE	Yes		Yes		Yes
Observations	475		512		512
R <sup>2</sup>			0.242		0.197
Adjusted R <sup>2</sup>			0.143		0.093
Pseudo R <sup>2</sup>	0.124				

Notes: this table presents regression results testing the effect of Suharto's resignation on stock price crash risk. Standard errors are clustered by firm and year. The asterisks \*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively.

We used L1 statistics to measure the matching quality (Iacus et al. 2012; He et al. 2019). L1 statistics are the absolute difference in the value of covariates between the connected and unconnected firms. Table 10, panel B presents the diagnosis of the matching quality of the CEM method. The results show that the post-match L1 statistics were generally lower than the pre-match L1 statistics, indicating there is a significant improvement in the matching quality with CEM.



Table 10, panel C<sup>1</sup> presents the result of the replication of the baseline model with the difference-in-difference model by the CEM method. The table reveals a consistent result with that in Table 6 Panel B, further supporting our hypothesis.

## 5. Conclusions

Establishing political connections can generate benefits and costs for firms. On the one hand, if politicians are involved in a firm, they can use their network and power to support that firm. However, this can also increase the firm's<sup>10</sup> risk due to potential conflicts of interest. This study has focused on providing some evidence on the relationship between political connections and stock price crash risk in a country with centralized political decision-making. In general, we have shown that firms with political connections have a lower stock price crash risk. This finding indicates that political connections can reduce the probability of a firm experiencing a stock price crash. Using the difference-in-difference method, we found that firms with political connections have a higher stock price crash risk after their connections fall from power. This result implies that the cost of having political connections<sup>10</sup> emerges only after these connections lose power. In addition, we also found that negative associations between political connections and stock price crash risk are more pronounced in firms with more complex firm structures. Despite the issue of the sample period, this study provides a better research setting which produces better information on how political connections affect the stock price crash risk of firms.

**Author Contributions:** Conceptualization, I.H., M.N., R.R., and B.L.; data curation, B.L.; formal analysis, I.H., M.N., R.R., and B.L.; methodology, I.H. and B.L.; software, I.H.; supervision, I.H., M.N., and R.R.; validation, I.H., M.N., and R.R.; visualization, I.H. and B.L.; writing—original draft, R.R.; writing—review and editing, I.H. and B.L.

**Funding:** This research was partially supported by the Ministry of Research Technology and Higher Education of Indonesia under the 2018 SIMLITABMAS Research Grant (PDUPT Scheme).

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

Table A1. Variable definitions.

Variable	Definition	Data Source
CRASH	1 for a firm-year that experiences one or more firm-specific weekly returns falling 3.2 standard deviations below the mean firm-specific weekly returns over the fiscal year, with 3.2 chosen to generate frequencies of 0.1% in the normal distribution during the fiscal year period, otherwise 0	Compustat
DUVOL	Down-to-up volatility of firm-specific weekly returns	Compustat
NCSKEW	Negative skewness of firm-specific weekly returns over the fiscal year period.	Compustat
PCON	1 for a firm that is politically connected with Suharto, otherwise 0	ICMD
DTURN	Average monthly share turnover over the current fiscal year period minus the average monthly share turnover over the previous fiscal year period, where monthly share turnover is calculated as the monthly trading volume divided by the total number of shares outstanding during the month	Compustat
SIGMA	Standard deviation of firm-specific weekly returns over the fiscal year period.	Compustat
RET	Mean of firm-specific weekly returns over the fiscal year period	Compustat
SIZE	Natural logarithm of the market value of equity	Compustat
MTB	Market value of equity divided by the book value of equity	Compustat
LEVERAGE	Total long-term debts divided by total assets	Compustat
ROA	Income before extraordinary items divided by lagged total assets	Compustat

## References

- Autor, David H. 2003. Outsourcing at will: The contribution of unjust dismissal doctrine to the growth of employment outsourcing. *Journal of Labor Economics* 21: 1–42. [CrossRef]
- Bliss, Mark A., and Ferdinand A. Gul. 2012. Political connection and cost of debt: Some Malaysian evidence. *Journal of Banking & Finance* 36: 1520–27. [CrossRef]
- Boubakri, Narjess, Omrane Guedhami, Dev Mishra, and Walid Saffar. 2012. Political connections and the cost of equity capital. *Journal of Corporate Finance* 18: 541–59. [CrossRef]
- Carney, Richard W., and Natasha Hamilton-Hart. 2015. What Do Changes in Corporate Ownership in Indonesia Tell Us? *Bulletin of Indonesian Economic Studies* 51: 123–45. [CrossRef]
- Chauhan, Yogesh, Satish Kumar, and Rajesh Pathak. 2017. Stock liquidity and stock prices crash-risk: Evidence from India. *The North American Journal of Economics and Finance* 41: 70–81. [CrossRef]
- Chen, Changling, Jeong-Bon Kim, and Li Yao. 2016. Earnings Smoothing: Does It Exacerbate or Constrain Stock Price Crash Risk? *Journal of Corporate Finance*. [CrossRef]
- Claessens, Stijn, Simeon Djankov, and Larry HP Lang. 1999. Who Controls East Asian Corporations, and the Implications for Legal Reform. *World Bank Policy Research*, 2054. [CrossRef]
- Claessens, Stijn, Erik Feijen, and Luc Laeven. 2008. Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics* 88: 554–80. [CrossRef]
- Dang, Chongyu, Zhichuan Frank Li, and Chen Yang. 2018. Measuring firm size in empirical corporate finance. *Journal of Banking & Finance* 86: 159–76.
- Fisman, Raymond. 2001. Estimating the Value of Political Connections. *The American Economic Review* 91: 1095–102. [CrossRef]
- Goldman, Eitan, Jörg Rocholl, and Jongil So. 2013. Politically connected boards of directors and the allocation of procurement contracts. *Review of Finance* 17: 1617–48. [CrossRef]
- Grier, Kevin B., Michael C. Munger, and Brian E. Roberts. 1994. The determinants of industry political activity, 1978–86. *American Political Science Review* 88: 911–26. [CrossRef]
- Gul, Ferdinand A. 2006. Auditors' response to political connections and cronyism in Malaysia. *Journal of Accounting Research* 44: 931–63. [CrossRef]
- Harymawan, Iman. 2018. Why do firms appoint former military personnel as directors? Evidence of loan interest rate in militarily connected firms in Indonesia. *Asian Review of Accounting* 26: 2–18. [CrossRef]
- Harymawan, Iman, and John Nowland. 2016. Political connections and earnings quality: How do connected firms respond to changes in political stability and government effectiveness? *International Journal of Accounting & Information Management* 24: 339–56. [CrossRef]
- He, Guanming, and Helen Ren. 2019. Are Financially Constrained Firms Susceptible to a Stock Price Crash? Working Paper. Durham University, Durham/Stockton-on-Tees, UK. Available online: <https://ssrn.com/abstract=3021307> (accessed on 21 June 2019).
- He, Guanming, David Marginson, and Xixi Dai. 2019. Do voluntary disclosures of product and business expansion plans impact analyst coverage and forecasts? *Accounting and Business Research*, 1–33. [CrossRef]
- Hill, Hal. 2000. *The Indonesian Economy*. Cambridge: Cambridge University Press.
- Hofman, Bert, Ella Rodrick-Jones, and Kian Wie Thee. 2004. Indonesia: Rapid growth, weak institutions. Paper presented at World Bank Shanghai Conference, Shanghai, China, May 25–27. Available online: <http://www.worldbank.org/wbi/reducingpoverty/case-Indonesia-PovertyReduction.html> (accessed on 15 April 2019).
- Houston, Joel F., Liangliang Jiang, Chen Lin, and Yue Ma. 2014. Political connections and the cost of bank loans. *Journal of Accounting Research* 52: 193–243. [CrossRef]
- Hu, Guoliu, and Yu Wang. 2018. Political connections and stock price crash risk: The role of intermediary information disclosure. *China Finance Review International* 8: 140–57. [CrossRef]
- Hutton, Amy P., Alan J. Marcus, and Hassan Tehrani. 2009. Opaque financial reports, R2, and crash risk. *Journal of Financial Economics* 94: 67–86. [CrossRef]
- Iacus, Stefano M., Gary King, and Giuseppe Porro. 2012. Causal inference without balance checking: Coarsened exact matching. *Political analysis* 20: 1–24. [CrossRef]
- Kim, Jeong-Bon, Yinghua Li, and Liandong Zhang. 2011. Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics* 100: 639–62. [CrossRef]

- Kim, Jeong-Bon, Zheng Wang, and Liandong Zhang. 2016. CEO overconfidence and stock price crash risk. *Contemporary Accounting Research* 33: 1720–49. [CrossRef]
- Lee, Ming-Te. 2016. Corporate Social Responsibility and Stock Price Crash Risk: Evidence from an Asian Emerging Market. *Managerial Finance* 42. [CrossRef]
- Lee, Wei, and Lihong Wang. 2017. Do political connections affect stock price crash risk? Firm-level evidence from China. *Review of Quantitative Finance and Accounting* 48: 643–76. [CrossRef]
- Leuz, Christian, and Felix Oberholzer-Gee. 2006. Political relationships, global financing, and corporate transparency: Evidence from Indonesia. *Journal of Financial Economics* 81: 411–39. [CrossRef]
- Luo, Donglun, and Liming Zhen. 2008. Private control, political relationship and financing constrain of private listed enterprises. *Journal of Financial Research* 12: 164–78.
- Luo, Jin-hui, Manning Gong, Yilong Lin, and Qifeng Fang. 2016. Political connections and stock price crash risk: Evidence from China. *Economics Letters* 147: 90–92. [CrossRef]
- McLeod, Ross H. 2000. Soeharto's Indonesia: A Better Class of Corruption. *Agenda: A Journal of Policy Analysis and Reform*, 99–112. [CrossRef]
- Pangestu, Mari, and Manggi Habir. 2002. *The Boom, Bust and Restructuring of Indonesian Banks*. IMF Working Paper WP/02/66. Washington: International Monetary Fund.
- Poczter, Sharon, and Thomas B. Pepinsky. 2016. Authoritarian Legacies in Post-New Order Indonesia: Evidence from a New Dataset. *Journal Bulletin of Indonesian Economic Studies* 52: 77–100. [CrossRef]
- Roberts, Brian E. 1990. A dead senator tells no lies: Seniority and the distribution of federal benefits. *American Journal of Political Science*, 31–58. [CrossRef]
- Sato, Yuri. 2004. *Corporate Ownership and Management in Business in Indonesia: New Challenges, Old Problems*. Singapore: Institute of South East Asian Studies.
- Schwarz, A. 1994. *A Nation in Waiting: Indonesia in the 1990s*. St. Leonards: Allen & Unwin.
- Tee, Chwee Ming. 2018. Political connections and stock price crash risk: Evidence of institutional investors' heterogeneous monitoring. *Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad*, 1–18. [CrossRef]
- Winter, Jeffrey A. 2013. Oligarchy and Democracy in Indonesia. *Indonesia* 96: 11–33. [CrossRef]



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).



## 9. Political connection and stock price crash risk

---

### ORIGINALITY REPORT

---

18%

SIMILARITY INDEX

16%

INTERNET SOURCES

20%

PUBLICATIONS

10%

STUDENT PAPERS

---

### PRIMARY SOURCES

---

1	<a href="http://www.tandfonline.com">www.tandfonline.com</a> Internet Source	3%
2	Iman Harymawan, Mohammad Nasih, Muhammad Madyan, Diarany Sucahyati. "The Role of Political Connections on Family Firms' Performance: Evidence from Indonesia", International Journal of Financial Studies, 2019 Publication	3%
3	<a href="http://www.emeraldinsight.com">www.emeraldinsight.com</a> Internet Source	2%
4	Submitted to University of South Florida Student Paper	2%
5	<a href="http://www.cpebr.com">www.cpebr.com</a> Internet Source	2%
6	<a href="http://aaajournals.org">aaajournals.org</a> Internet Source	1%
7	Submitted to University of Macau Student Paper	1%
8	<a href="http://pdf.xuebalib.com:1262">pdf.xuebalib.com:1262</a> Internet Source	

1 %

9

[ink.library.smu.edu.sg](http://ink.library.smu.edu.sg)

Internet Source

1 %

10

Wei Lee, Lihong Wang. "Do political connections affect stock price crash risk? Firm-level evidence from China", *Review of Quantitative Finance and Accounting*, 2016

Publication

1 %

11

[www.worldscientific.com](http://www.worldscientific.com)

Internet Source

1 %

12

[link.springer.com](http://link.springer.com)

Internet Source

1 %

13

Hamdi Ben-Nasr, Hatem Ghouma. "Employee welfare and stock price crash risk", *Journal of Corporate Finance*, 2018

Publication

1 %

Exclude quotes  On

Exclude matches  < 1%

Exclude bibliography  On

# 9. Political connection and stock price crash risk

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8

PAGE 9

PAGE 10

PAGE 11

PAGE 12

PAGE 13

PAGE 14

PAGE 15

PAGE 16