“Debt policy of military-connected firms in Indonesia”

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DEBT POLICY OF MILITARY-CONNECTED FIRMS IN INDONESIA

Abstract

Indonesia has a thin capitalization policy since 2015. It restricts the maximum interest expense that can be deductible from corporate tax payable. This paper discusses the association between boards with military background and the debt policy of firms, taking into account the thin capitalization policy. This study used a sample of 2,330 firm-year observations from companies listed on Indonesia Stock Exchange during 2010–2019. A moderated analysis regression was employed to analyze the association of each variable. The result reveals a significant positive correlation with a t-value of 2.14 at a confidence level of 95% between military-connected firms and debt policy. The same correlation also occurred between board of commissioners with the military background and debt policy with a t-value of 2.18 at a 95% confidence level. Meanwhile, the correlation between these variables became significantly negative after the implementation of thin capitalization policy. CEM and Heckman's two-stage method were used to validate the findings. This study is for a listed company to consider the appointment of military background in a board of commissioner position after a period of thin capitalization policy.

Keywords military-connected firms, debt-to-asset ratio, thin capitalization policy, debt restriction, Indonesia, two-tier system, governance

JEL Classification G38, L50

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INTRODUCTION

For more than 50 years, Indonesia has been led by military personnel such as Soeharto and Susilo BambangYudhoyono (Harymawan, 2018). The presence of retired military personnel in business and government also continues to this day. In business, board with the military background has two contrast characteristics. Benmelech and Frydman (2015) describe the character of ex-military personnel who is conservative, organized, and tactical in each decision. On the other hand, Elder et al. (1991) found other possibilities of former military personnel to use power excessively, to take risks, to make aggressive decisions, and to be overconfident because of their strategic position in a firm.

Previous research has documented mutual benefits from board with the military background such as low interest rate (Harymawan, 2018), minimizing corporate tax avoidance (Mills & Law, 2015; Law & Mills, 2017), increasing good corporate governance (Lin et al., 2012; Koch-Bayram & Wernicke, 2018), easiness of financial resources (Agrawal & Knoeber, 2001; Goldman et al., 2013). However, previous research has not already connected between former military personnel's characteristic and mutual benefits. The need for these connections is motivated by two contrast characteristics from ex-military personnel that supposed to lead to different mutual benefits. This might be explained by Upper Echelon Theory (Hambrick & Mason, 1984).

Furthermore, Indonesia has been implemented thin capitalization policy since 2015, as declared in the regulation of Ministry of Finance 169/PMK.010/2015. It restricts the maximum of interest expense that can be deducted from corporate tax payable. The results of this paper discover that military-connected firms use higher loans comparedto non-military-connected firms. Otherwise, after the issuance of PMK No. 169/PMK.010/2015 showing that military-connected firms are more likely to use lower loans compared to non-military-connected firms. In particular, the study shows that the significant relation between the military background boards and debt policy of the firms are only applied to the position of board of commissioners.

This paper is contributed in an academic and practical way. First, it expands the literature onboard with the military background and firm debt policy in a two-tier system. Second, this studyis expected to be a source of evaluation from Indonesian thin capitalization policy. The firms'debt does not show significant changes after the implementation of the Regulation of the Ministerof Finance No. 169/PMK.010/2015 through the descriptive statistics results. This means thatthis policy has not effectively minimized debt intensity of Indonesian listed firms. However, this paper shows that the roles of commissioners with the military background can effectively thin capitalization policy to encourage lower debt. The results of this paper can inform interested parties in making decisions related to the appointment of the military background of the board of commissioners after the application of thin capitalization policy.

1. LITERATURE REVIEW AND HYPOTHESES

According to Upper Echelon Theory, decision making is influenced by the characteristics of a leader (Abatecola & Cristofaro, 2020; Hambrick & Mason, 1984; Hambrick, 2007; Wang et al., 2018; Wang et al., 2022). The strong leadership brings conservative decisions (Benmelech & Frydman, 2015). However, Nasih et al. (2019) found that rent seeking practice from power and networking benefits military connections in terms of easier access of funding from a financial institution (Agrawal & Knoeber, 2001; Goldman et al., 2013; Wong et al., 2003). Harymawan (2018) found that military-connected firms in Indonesia get lower interest than non-militarily firms. This has a possibility to use debt financing intensively because the cost of debt tends to be lower than the cost of capital and interest payments can be deducted from tax payable (Sharma, 2018). According to Panda and Nanda (2018), a firm with highleverage has better firm performance than unleveraged firms. Instead, aggressive debt policycontains higher default risk (Al-Hadi et al., 2019; Fathi & Jean-Pierre, 2001; Nugrahanti et al., 2020; Zhang et al., 2020). This paper argues that a firm has a tendency to seek rent from a military-connected firm because of the benefits and opportunities.

The two-tier system in Indonesia separated the executive role by board of directors and monitoring roles by board of commissioners (Law No. 40 of 2007). The board of commissioners approved recommendations and supervision (Arifai et al., 2018). This is a possible threat from an aggressive debt policy. However, Siregar and Utama (2008), Jungmann (2006), and Arifai et al. (2018) stated that the board of commissioners in Indonesia is dominated by the majority shareholders. In terms of debt policy, a military background board of commissioners acts as a rent-seeker, since it does not reduce the share proportion of the majority (Murtini, 2019). According to Sharma et al. (2018), the use of debt financing is more profitable from the shareholder's point of view rather than the issuance of new shares, since the dividends from shares are taxed twice. As a result, the board of commissioners' military background promotes lower debt costs through rent seeking and impacts higher debt.

The business trend shifts from personal characteristic such as military background to personal skills after the end of Soeharto's regime (Rüland et al., 2012). The lack of proportion of the military background directors is able to reduce the overuse power (Harymawan, 2018). The upper echelon theory described the professionality and adaption of military connected board. The military is associated with organized, tactical, and strategic leadership characteristics(Benmelech & Frydman, 2015; Harymawan et al., 2021). Therefore, a mil-

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itary-connected director will more likely to be conservative in terms of debt policy. In addition, a two-tier system restricted the overuse authority of military-connected directors to carry out opportunistic actions.

Thin capitalization policy minimized the loan interest expense deduction from tax payable (Clemente-Almendros & Sogorb-Mira, 2016). The military tend to be republican and patriotic because it is their responsibility to secure societies (Wong et al., 2003). According to Law and Mills (2017), military-experienced boards share common values on the government legitimacy, as a result of demonstrating excellent compliance in taxation. Benmelech and Frydman (2015) also found excellent ethics and minimum involvement in fraud of former military. Even though the easier access in debt financing, the military excellent patriotism encourages them to comply with the established regulation by the government. Therefore, the study hypothesizes the following:

H1a: Military-connected firms have a significant and positive influence on debt policy.

H1b: Board of commissioners with military connection has a significant and positive influence on debt policy.

H1c: Board of directors with military background does not have an influence on debt policy.

H2a: After thin capitalization policy implementation, a military-connected firm has asignificant and negative influence on debt policy.

H2b: After thin capitalization policy implementation, commissioners with military backgroundhave a significant and negative influence on debt policy.

H2c: After thin capitalization policy implementation, directors with military background do not have an influence on debt policy.

2. RESEARCH METHOD

This paper uses the data pooled cross-section from firms listed on Indonesia Stock Exchange in 2012–2019. The sample period starts from 2012 because the study aims to compare prior and post effect of the Regulation of the Ministry of Finance No. 169/PMK.010/2015 that has been applied in 2015. As a result of the regulation, financial, mining, and income tax rate firm sectors are excluded from the paper.

Referring to Chua et al. (2022), this paper uses the debt to asset ratio (book value of debt divided by the book value of assets) as a proxy of debt policy (*DP*), since it is not affected by external factors such as stock price fluctuations (Chua et al., 2022). The explanatory variable is military-connected

Table 1. Sample selection and breakdown

Panel A. Sample selection for firm-year observations	
Description	**Firm-Year Observations**
Firm-Year Observation for 2012–2019	7,725 observations
Firms in the SIC1 code	(616) observations
Firms in the SIC6 code	(1,320) observations
Firm with the final PPh rate	(64) observations
Missing data for the ***MCON*** variable	(2,000) observations
Missing data for the ***DAR*** variable	(666) observations
Missing data for the ***BIG4*** variable	(565) observations
Missing data for the ***BOARD*** variable	(131) observations
Missing data for the ***FIRMAGE*** variable	(32) observations
Missing data for the ***ROE*** variable	(1) observation
Final Sample	2,330 observations

Panel B. Military Connection Firm Breakdown						
MCON	**MCON**		**NON-MCON**		**TOTAL**	
	N	**%**	**N**	**%**	**N**	**%**
Military Connection of Commissioners	367	15	1963	85	2330	100
Military Connection of Directors	33	1	2297	99	2330	100

firms as a dichotomous variable (Harymawan et al., 2021). Military-connected firms are identified when a firm has at least one board of directors or board of commissioners with the military background (Harymawan, 2018). It is categorized as military if the board has educational background and/or experience in the army, navy, air force, and police (Fisman, 2001). Based on a two-tier system, this paper divided the measurement of military-connected firms in three parts as follows: firms with military-connected commissioners (*MCON_C*), firms with military-connected directors (*MCON_D*), and firms with military-connected directors or commissioners (*MCON*). The interacting variable is thin capitalization policy through the regulation of the Ministry of Finance No.169/PMK.010/2015, which assessed 1 for the year after the implementation, and 0 otherwise. This paper used several control variables such as public accountant firm size (*BIG4*), board size (*BOARD*), independent commissioner size (*INDCOM*), firm size (*FSIZE*), firm age (*FAGE*), and return on equity (*ROE*) (Ataullah et al., 2018; Atmaja, 2010; Clemente-Almendros & Sogorb-Mira, 2016; Garcia & Herrero, 2021; Kurniawati et al., 2020). This paper also included year (*YEAR*) and industry fixed effects (*INDUSTRY*).

To gain the maximum possible observations, pooled panel crossed-section regression data are used. This study used moderated regression analysis. The general form of moderated regression analysis following J. Cohen and P. Cohen (1983) can be specified morecompactly as:

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \varepsilon, \quad (1)$$

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X1X2 + \varepsilon, \quad (2)$$

where Y represents a dependent variable in the model. $X1$ represents an independent variable, while $X2$ is a moderated variable. $X1$ and $X2$ represent an interaction between independent and moderated variables. $\beta 0$ is a constant value of the model. The empirical model takes the following form:

$$DPi,t = \beta 0 + \beta 1MCONi,t + \beta 2TCPi,t + \\ + \beta 3 - 8CONTROLSi,t + \beta 9YEARi,t + \\ + \beta 10INDUSTRYi,t + \varepsilon, \quad (1a)$$

$$DPi,t = \beta 0 + \beta 1MCON\_Ci,t + \\ + \beta 2TCPi,t + \beta 3 - 8CONTROLSi,t + \\ + \beta 9YEARi,t + \beta 10INDUSTRYi,t + \varepsilon, \quad (1b)$$

$$DPi,t = \beta 0 + \beta 1MCON\_Di,t + \\ + \beta 2TCPi,t + \beta 3 - 8CONTROLSi,t + \\ + \beta 9YEARi,t + \beta 10INDUSTRYi,t + \varepsilon, \quad (1c)$$

$$DPi,t = \beta 0 + \beta 1MCON \cdot TCPi,t + \\ + \beta 2MCONi,t + \beta 3TCPi,t + \beta 4 - \\ - 9CONTROLSi,t + \beta 10YEARi,t + \\ + \beta 11INDUSTRYi,t + \varepsilon, \quad (2a)$$

$$DPi,t = \beta 0 + \beta 1MCON\_C \cdot TCPi,t + \\ + \beta 2MCON\_Ci,t + \beta 3TCPi,t + \\ + \beta 4 - 9CONTROLSi,t + \\ + \beta 10YEARi,t + \beta 11INDUSTRYi,t + \varepsilon, \quad (2b)$$

$$DPi,t = \beta 0 + \beta 1MCON\_D \cdot TCPi,t + \\ + \beta 2MCON\_Di,t + \beta 3TCPi,t + \\ + \beta 4 - 9CONTROLSi,t + \\ + \beta 10YEARi,t + \beta 11INDUSTRYi,t + \varepsilon. \quad (2c)$$

3. RESULTS AND DISCUSSION

The results of descriptive statistics indicate there is no significant difference in the firms' debt policy both before and after thin capitalization policy. The maximum debt amount of 1,498 in the sample shows there are some firms that use debt more than allowed. This means that thin capitalization is still ineffective.

3.1. Univariate analysis

By using the Pearson correlation test, it can be implied that military-connected firms use higher debt levels. Furthermore, military-connected commissioners encourage higher debt utilization, while military-connected directors are insignificantly related to the firms' debt policy. Panel A in a two-sample t-test shows the differences in debt policies of military-connected firms. Panel B

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Table 2. Descriptive statistics

Variable	Mean	Median	Minimum	Maximum
Panel A. Descriptive statistics for all research years (2012–2019)				
DP	0.267	0.241	0.000	1.498
MCON	0.165	0.000	0.000	1.000
MCON_C	0.158	0.000	0.000	1.000
MCON_D	0.014	0.000	0.000	1.000
TCP	0.536	1.000	0.000	1.000
BIG4	0.384	0.000	0.000	1.000
BOARD	8.773	8.000	4.000	18.000
INDCOM	1.563	1.000	0.000	4.000
FSIZE	28.334	28.364	23.027	32.151
FAGE	3.358	3.434	1.386	4.745
ROE	0.057	0.058	–1.264	1.577
Panel B. Descriptive statistics before the implementation of thin capitalization policy (2012–2014)				
DP	0.263	0.235	0.000	1.498
MCON	0.173	0.000	0.000	1.000
MCON_C	0.170	0.000	0.000	1.000
MCON_D	0.005	0.000	0.000	1.000
TCP	0.000	0.000	0.000	0.000
Panel C. Descriptive statistics when the thin capitalization policy is initially implemented (2015–2016)				
DP	0.279	0.255	0.000	1.498
MCON	0.196	0.000	0.000	1.000
MCON_C	0.186	0.000	0.000	1.000
MCON_D	0.020	0.000	0.000	1.000
TCP	0.504	1.000	0.000	1.000
Panel D. Descriptive statistics after the implementation of thin capitalization policy (2017–2019)				
DP	0.263	0.242	0.000	1.498
MCON	0.139	0.000	0.000	1.000
MCON_C	0.130	0.000	0.000	1.000
MCON_D	0.018	0.000	0.000	1.000
TCP	1.000	1.000	1.000	1.000

Table 3. Pearson correlation

		[1]	[2]	[3]	[4]	[5]	[6]
[1]	*DP*	1.000					
[2]	*MCON*	0.048**	1.000				
		(0.020)					
[3]	*MCON_C*	0.054***	0.973***	1.000			
		(0.009)	(0.000)				
[4]	*MCON_D*	–0.025	0.270***	0.108***	1.000		
		(0.234)	(0.000)	(0.000)			
[5]	*TCP*	–0.011	–0.030	–0.040*	0.061***	1.000	
		(0.588)	(0.151)	(0.056)	(0.003)		
[6]	*BIG4*	–0.080***	0.075***	0.071***	0.032	–0.048**	1.000
		(0.000)	(0.000)	(0.001)	(0.118)	(0.020)	
[7]	*BOARD*	–0.030	0.154***	0.137***	0.069***	–0.043**	0.375***
		(0.142)	(0.000)	(0.000)	(0.001)	(0.040)	(0.000)
[8]	*INDCOM*	0.012	0.152***	0.142***	0.067***	–0.007	0.259***
		(0.558)	(0.000)	(0.000)	(0.001)	(0.754)	(0.000)
[9]	*FSIZE*	0.114***	0.145***	0.137***	0.030	0.063***	0.367***
		(0.000)	(0.000)	(0.000)	(0.142)	(0.002)	(0.000)
[10]	*FAGE*	–0.049**	0.020	0.024	–0.044**	0.034*	0.122***
		(0.017)	(0.338)	(0.249)	(0.035)	(0.100)	(0.000)
[11]	*ROE*	–0.087***	0.035*	0.035*	0.003	–0.064***	0.135***
		(0.000)	(0.087)	(0.090)	(0.880)	(0.002)	(0.000)

Table 3 (cont.). Pearson correlation

		[7]	[8]	[9]	[10]	[11]
[7]	*BOARD*	1.000				
[8]	*INDCOM*	0.675***	1.000			
		(0.000)				
[9]	*FSIZE*	0.646***	0.479***	1.000		
		(0.000)	(0.000)			
[10]	*FAGE*	0.192***	0.132***	0.078***	1.000	
		(0.000)	(0.000)	(0.000)		
[11]	*ROE*	0.132***	0.053**	0.103***	0.072***	1.000
		(0.000)	(0.011)	(0.000)	(0.001)	

and C show the presence of military-connected commissioners tends to havea higher level of debt. Meanwhile, the presence of military-connected directors shows an insignificant coefficient.

Table 4. T-test

Panel A. Military-Connected Firms				
Variable	MEAN		Coef	t-value
	MCON	NON-MCON		
DP	0.292	0.262	0.030**	2.329
TCP	0.503	0.543	–0.040	–1.438
Panel B. Military-Connected Commissioners				
Variable	MEAN		Coef	t-value
	MCON_C	NON-MCON_C		
DP	0.296	0.261	0.035***	2.622
TCP	0.490	0.545	–0.054*	–1.909
Panel C. Military-Connected Directors				
Variable	MEAN		Coef	t-value
	MCON_D	NON-MCON_D		
DP	0.219	0.268	–0.049	–1.190
TCP	0.788	0.532	0.255***	2.926

3.2. Multivariate analysis

3.2.1. Base results

Table 5 shows a significant positive association between military-connected firms and debtpolicy. This paper also found that military-connected commissioners are positively and significantly associated with corporate debt policy. On the other hand, there is no significant association between military-connected directors and debt policy. These results indicate the first hypothesis is not rejected and confirm the assumption that military-connected firms havelower cost of debt (Harymawan, 2018) and easier access to financing (Agrawal & Knoeber, 2001; Goldman et al., 2013). Furthermore, the existence of military-connected commissioner promotes rent seeking practice. Meanwhile, the position of a director as an executive role tendsto be conservative and does not have overpower in debt policy.

This paper found a significant negative association between military-connected firms and debt policy after the thin capitalization policy. This result means the existence of a thin capitalization policy weakens the association between military-connected firms and debt policy. Furthermore, thin capitalization policy reacts to the association between military-connected commissioners and debt policy but does not react to the association between military-connected directors and debt policy. Thus, the second hypothesis is not rejected. The characteristics of nationalism encourage boards with military background to comply the regulations. Harymawan (2018) stated the benefits of having a military-connected board are allowed if itis in accordance with regulations, since military personnel have a high sense of nationalism. These results indirectly support the research of Law and Mills (2017) who stated boards with military experience have a high sense of nationalism so that they have compliance in the field of taxation.

According to test results in Table 6, another interesting fact has been found that thincapitalization policy is not significantly related to debt policy. This finding indicates the application of thin capitalization policy is not effective enough to stimulate lower debt usage. Interestingly, the first column of Table 6 shows a significant negative association between military-connected firms and debt policy after the implementation of thin capitalization policy. It can be interpreted that thin capitalization policy is effective in stimulating lower debt utilization when firms have boards with military backgrounds.

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Table 5. Military-connected firms and debt policy

Variable	(1)	(2)	(3)
	DP	DP	DP
MCON	0.031**		
	(2.14)		
MCON_C		0.032**	
		(2.18)	
MCON_D			–0.031
			(–0.80)
TCP	–0.004	–0.003	–0.007
	(–0.20)	(–0.18)	(–0.42)
Controls	Yes	Yes	Yes
_cons	–0.407***	–0.405***	–0.420***
	(–2.82)	(–2.81)	(–2.93)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
R^2	0.115	0.115	0.113
Adjusted R^2	0.108	0.108	0.106
N	2330	2330	2330

Table 6. Military-connected firms, debt policy, and thin capitalization policy

Variable	(1)	(2)	(3)
	DP	DP	DP
MCON_TCP	–0.057**		
	(–2.05)		
MCON_CTCP		–0.053*	
		(–1.85)	
MCON_DTCP			–0.046
			(–0.59)
MCON	0.059***		
	(2.70)		
MCON_C		0.058***	
		(2.62)	
MCON_D			0.005
			(0.08)
TCP	0.002	0.002	–0.007
	(0.12)	(0.09)	(–0.40)
Controls	Yes	Yes	Yes
_cons	–0.402***	–0.402***	–0.420***
	(–2.79)	(–2.79)	(–2.93)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
R^2	0.117	0.117	0.113
Adjusted R^2	0.109	0.109	0.105
N	2330	2330	2330

3.3. Robustness test

This paper used endogeneity tests to ensure endogeneity problems were minimized in theresults. It is important to carry out endogeneity tests in order to gain confidence that this paper has met the necessary condition to obtain valid results (Roberts & Whited, 2013).

This paper used Coarsened Exact Matching (CEM) analysis for additional observed variables, self-selection bias test. Table 7 reports the CEM regression result. This paper's CEMregression employs *TCP, BIG 4, BOARD, INDCOM, FSIZE, FAGE,* and *ROE* for matched variables based on three strata. The results are similar to the main findings in Tables 5 and 6. Thus, it can be confirmed the main findings did not change when using the matched approach.

Table 7. CEM regression

Panel A. Military-connected firms		
	0	**1**
All	1946	384
Matched	1830	371
Unmatched	116	13
	(1)	**(2)**
	DP	**DP**
MCON_TCP		−0.053*
		(−1.87)
MCON	0.025*	0.052**
	(1.71)	(2.30)
TCP	−0.007	−0.001
	(−0.39)	(−0.08)
Controls	Yes	Yes
_cons	−0.474***	−0.471***
	(−3.35)	(−3.32)
Year FE	Yes	Yes
Industry FE	Yes	Yes
R^2	0.120	0.122
Adjusted R^2	0.112	0.113
N	2201	2201

Panel B. Commissioners and directors with military background				
	0	**1**	**0**	**1**
All	1963	367	2297	33
Matched	1844	354	872	33
Unmatched	119	13	1425	0
	(1)	**(2)**	**(3)**	**(4)**
	DP	**DP**	**DP**	**DP**
MCON_CTCP		−0.049*		
		(−1.67)		
MCON_DTCP				−0.056
				(−0.73)
MCON_C	0.027*	0.051**		
	(1.76)	(2.22)		
MCON_D			−0.019	0.026
			(−0.47)	(0.42)
TCP	−0.007	−0.002	0.015	0.018
	(−0.37)	(−0.11)	(0.45)	(0.52)
Controls	Yes	Yes	Yes	Yes
_cons	−0.472***	−0.470***	−0.497**	−0.499**
	(−3.34)	(−3.32)	(−2.27)	(−2.29)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.120	0.121	0.150	0.150
Adjusted R^2	0.112	0.113	0.130	0.130
N	2198	2198	905	905

3.3.1. Heckman's two-stage regression

Following Harymawan (2020), this paper used Heckman's two-stage regression to overcome the problem of the potential sample-selection bias. This paper estimated the possibility of potential sample-selection bias problems, since the firms have discretion to hire boards with military experience or not. Following Heckman's (1979) two-stage procedure, this paper estimated the probit model to predict factors related to military connections but not having a direct association with

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Table 8. Heckman's two-stage regression

Panel A. Military-Connected Firms			
	First Stage	Second Stage	
	(1)	(2)	(3)
	MCON	*DP*	*DP*
AVE_MCON	4.150***		
	(3.73)		
MCON_TCP			–0.057**
			(–2.05)
MCON		0.032**	0.060***
		(2.17)	(2.72)
TCP	–0.288	–0.022	–0.018
	(–1.28)	(–0.63)	(–0.50)
Controls	Yes	Yes	Yes
MILLS		0.027	0.029
		(0.64)	(0.67)
_cons	–4.774***	–0.520**	–0.522**
	(–6.14)	(–2.32)	(–2.32)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Pseudo R^2	0.090		
Adjusted R^2		0.107	0.109
N	2330	2330	2330
Panel B. Commissioners with military background			
	First Stage	Second Stage	
	(1)	(2)	(3)
	MCON_C	*DP*	*DP*
AVE_MCONC	4.154***		
	(3.30)		
MCON_CTCP			–0.053*
			(–1.85)
MCON_C		0.033**	0.059***
		(2.20)	(2.63)
TCP	–0.378	–0.021	–0.017
	(–1.54)	(–0.52)	(–0.41)
Controls	Yes	Yes	Yes
MILLS		0.023	0.024
		(0.51)	(0.52)
_cons	–4.889***	–0.506**	–0.505**
	(–6.09)	(–2.07)	(–2.06)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Pseudo R^2	0.088		
Adjusted R^2		0.107	0.109
N	2330	2330	2330
Panel C. Directors with military background			
	First Stage	Second Stage	
	(1)	(2)	(3)
	MCON_D	*DP*	*DP*
AVE_MCOND	29.350***		
	(3.94)		
MCON_DTCP			–0.046
			(–0.59)
MCON_D		–0.031	0.005
		(–0.79)	(0.07)

Table 8 (cont.). Heckman's two-stage regression

Panel C. Directors with military background			
	First Stage	Second Stage	
	(1)	(2)	(3)
	MCON_D	*DP*	*DP*
TCP	0.436	–0.008	–0.008
	(0.94)	(–0.42)	(–0.40)
Controls	Yes	Yes	Yes
MILLS		–0.001	–0.001
		(–0.07)	(–0.07)
_cons	–0.416	–0.420***	–0.419***
	(–0.30)	(–2.91)	(–2.91)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Pseudo R^2	0.218		
Adjusted R^2		0.105	0.105
N	2330	2330	2330

debt policy. Referring to Harymawan et al. (2021), this paper used the *AVE_MCON* variable as an instrumental one. *AVE_MCON* measures the percentage of military-connected firms in an industry and year.

Through Heckman's two-stage analysis test, this paper included all control variables in both the first and second stages. The inverse mills ratio (*MILLS*) resulting from the first stage regression was included in the second stage regression with other variables. The results of the Heckman two-stage test are presented in Table 8. The main variables of interest were positive and significant coefficients on the instrumental variables. Models 2 and 3 show the results of the second stage of regression. These results confirm the main findings in Tables 5 and 6 after considering sample selection bias. The *MILLS* ratio showed insignificant results inall the models used so there were no endogeneity problems in the results of the main analysis.

3.3.2. Group test for robustness

To confirm the validity of the results, this paper conducted a group test based on thin capitalization policy before implementation (2012–2014), initial implementation (2015–2016), and after implementation (2017–2019). The results are listed in Appendix A. According to Table A1, *MCON* coefficient is positive and significant in the year before the implementation of thin capitalization policy. Meanwhile, in the initial implementation and after implementationof regulations, the results are not significant. Subsequently, this paper found similar results onthe association between a board of commissioners with a military background and debt policy. These results confirm the main finding in Tables 5 and 6.

3.3.3. Group test for additional analysis

Furthermore, the sample of firms is divided on firms' size. First, this paper calculated themedian firm size for each group of years, then classified the sample into large or small firms. Appendices B and C show that firms with total assets below the median are rated 1, and 0 otherwise. As a result, small firms have lower debt policies than large ones. This is because small firms are more vulnerable to changes in economic conditions, having fewer assets, higher default risk,and tend to be less profitable (Utami, 2021), thereby reducing creditor confidence in providingloans (Wahyuni, 2019). Therefore, small firms have a higher cost of debt, thereby encouraging lower use of debt. However, the existence of boards with military background in small firms prior to the thin capitalization policy helped them to obtain lower interest rates (Harymawan, 2018) and easier access to finance (Agrawal & Knoeber, 2001; Goldman et al., 2013). Therefore, the presence of boards with military background in small firms before thin capitalization policy led to higher use of debt.

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CONCLUSION

This study aims to examine boards with military backgrounds and the debt policy of firms listed on Indonesia Stock Exchange during 2012–2019. This paper specified the uniqueness of the contrasting characteristic of the military-connected board and its consequences for firm debt policy, taking into account the before and after thin capitalization policy. This paper shows that thin capitalization policy has not effectively minimized debt intensity of Indonesian listed firms. The results are expected to assist the government in assessing the effectiveness of thin capitalization policy. However, this paper shows the combined roles of commissioners with military background and thin capitalization policy can effectively encourage lower debt policy. The results can be taken into account by stakeholders in making decisions related to the appointment of the military background of the board of commissioners after the implementation of the thin capitalization policy.

However, the findings of this paper should be used carefully, given the limitations of the study. This paper measured the past experience of boards in military-related positions,so this can lead to the tip of the iceberg. This may be an opportunity for further research to more fully use measurements of military background boards.

AUTHOR CONTRIBUTIONS

Conceptualization: Gery Lusiano Firmansah, Iman Harymawan.
Data curation: Gery Lusiano Firmansah.
Formal analysis: Nurul Fitriani.
Investigation: Nurul Fitriani.
Methodology: Nurul Fitriani, Gery Lusiano Firmansah.
Project administration: Gery Lusiano Firmansah.
Resources: Iman Harymawan.
Software: Nurul Fitriani.
Supervision: Iman Harymawan.
Validation: Iman Harymawan.
Visualization: Nurul Fitriani.
Writing – original draft: Nurul Fitriani, Gery Lusiano Firmansah.
Writing – review & editing: Iman Harymawan.

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APPENDIX A

Table A1. Based on the divided sample

	Before Implementation (2012–2014)			Initial Implementation (2015 –2016)			After Implementation (2017–2019)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	DP	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*
MCON	0.071***			0.027			−0.004		
	(2.58)			(1.02)			(−0.18)		
MCON_C		0.071**			0.024			0.001	
		(2.55)			(0.90)			(0.03)	
MCON_D			0.026			−0.045			−0.025
			(0.39)			(−0.86)			(−0.39)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
_cons	−0.189	−0.190	−0.272	−0.324	−0.322	−0.322	−0.550**	−0.549**	−0.546**
	(−0.83)	(−0.83)	(−1.24)	(−0.93)	(−0.92)	(−0.92)	(−2.46)	(−2.46)	(−2.43)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.123	0.123	0.110	0.129	0.129	0.128	0.116	0.116	0.116
Adjusted R^2	0.106	0.106	0.093	0.108	0.108	0.107	0.102	0.102	0.102
N	790	790	790	587	587	587	953	953	953

APPENDIX B

Table B1. Relationship between military-connected firms and debt policy

	Before Implementation (2012–2014)			Initial Implementation (2015–2016)			After Implementation (2017–2019)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	DP	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*
MCON	0.070***			0.032			−0.001		
	(2.62)			(1.22)			(−0.05)		
MCON_C		0.070***			0.031			0.004	
		(2.59)			(1.13)			(0.18)	
MCON_D			0.008			−0.041			−0.036
			(0.12)			(−0.76)			(−0.55)
SMALL	−0.093***	−0.093***	−0.098***	−0.087***	−0.087***	−0.085***	−0.069***	−0.069***	−0.069***
	(−5.25)	(−5.26)	(−5.72)	(−3.82)	(−3.82)	(−3.72)	(−3.85)	(−3.85)	(−3.82)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
_cons	0.430***	0.430***	0.423***	0.500***	0.500***	0.498***	0.407***	0.406***	0.406***
	(7.34)	(7.34)	(7.21)	(6.75)	(6.75)	(6.71)	(7.19)	(7.19)	(7.18)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.138	0.138	0.125	0.131	0.131	0.129	0.098	0.098	0.099
Adjusted R^2	0.121	0.121	0.108	0.110	0.109	0.108	0.084	0.084	0.084
N	790	790	790	587	587	587	953	953	953

APPENDIX C

Table C1. Interacting role of firm size in the relationship between military-connected firms and debt policy

	Before Implementation (2012–2014)			Initial Implementation (2015–2016)			After Implementation (2017–2019)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	DP	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*	*DP*
MCON_SMALL	0.141**			0.065			0.036		
	(2.19)			(1.20)			(0.81)		
MCON_CSMALL		0.143**			0.078			0.035	
		(2.20)			(1.40)			(0.77)	
MCON_DSMALL			0.000			0.027			0.043
			(.)			(0.24)			(0.37)
MCON	0.020			0.003			−0.015		
	(0.84)			(0.12)			(−0.60)		
MCON_C		0.019			−0.004			−0.010	
		(0.78)			(−0.14)			(−0.37)	
MCON_D			0.008			−0.055			−0.051
			(0.12)			(−0.54)			(−0.57)
SMALL	−0.116***	−0.116***	−0.098***	−0.101***	−0.103***	−0.085***	−0.074***	−0.074***	−0.069***
	(−6.34)	(−6.36)	(−5.72)	(−3.95)	(−4.04)	(−3.72)	(−3.99)	(−3.98)	(−3.85)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
_cons	0.437***	0.437***	0.423***	0.506***	0.507***	0.498***	0.411***	0.410***	0.406***
	(7.43)	(7.43)	(7.21)	(6.72)	(6.73)	(6.70)	(7.30)	(7.31)	(7.18)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.149	0.149	0.125	0.134	0.135	0.129	0.099	0.099	0.099
Adjusted R^2	0.132	0.132	0.108	0.111	0.112	0.106	0.084	0.084	0.083
N	790	790	790	587	587	587	953	953	953

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